THE INDIAN FINANCIAL SYSTEM

Markets, Institutions and Services

THIRD EDITION

BHARATI V. PATHAK

ALWAYS LEARNING

PEARSON

The Indian Financial System

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Markets, Institutions and Services

Third Edition

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PEARSON

Delhi • Chennai • Chandigarh

ISBN 9788131728178
eISBN 9789332500884

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Registered Office: 11 Local Shopping Centre, Panchsheel Park, New Delhi 110 017, India

To
my sweet little daughter,
Jahnavi

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Preface

The recent global financial crisis has demonstrated the extent to which our financial systems can go wrong and the ultimate impact of such scenarios on the world economic systems. As various financial systems integrate—demographically as well as geographically—they tend to gain certain synergies in terms of capacity and market access but also get exposed to high severity risks. The fact that the Indian economy was to a great extent spared from the spillover effect of the global crisis has been largely ascribed to the 'conservatism' exercised by the stakeholders including market players. Though this may not be the only reason behind this relative insulation from external risks, the importance of understanding the financial system in a holistic manner for anybody preparing to enter the economy, has been underlined beyond contention. The objective of this book, right since its first edition has been to provide a holistic view of the Indian economy. It is my pleasure to introduce the third edition of *The Indian Financial System*. Readers will find it all the more relevant in the context of recent developments.

Section I of the book is an introduction to the term 'financial system'. Chapter 1 describes the key elements and functions of a financial system, financial systems design, financial markets and the links between different types of financial markets. The second chapter puts the financial system in the context of the Indian economy by deploying a macro-economic framework analysis. The chapter also includes a literature review of studies in the Indian as well as international context in an attempt to explore the relationship between the financial system and economic growth. The third chapter gives a historical perspective of the Indian financial system in the pre-reform era, objectives of financial sector reforms and the achievements till now.

Section II of the book gives an in-depth view of Indian financial markets. Separate chapters deal with different elements of financial markets like the money market (Chapter 4), the capital market (Chapter 5) the primary market (Chapter 6), the secondary market (Chapter 8), the derivative market (Chapter 9) and the debt market (Chapter 10). In addition, disinvestment of public sector undertakings is discussed in Chapter 7 while the new financial instruments like floating rate bonds, zero coupon bonds, deep discount bonds, securitized paper, municipal bonds, etc. are discussed in Chapter 11.

Section III of the book delves into the institutional side of the financial system. An in-depth coverage of the concepts and institutional framework of various financial institutions like development finance institutions (Chapter 12), banking and non-banking institutions (Chapter 13), mutual funds (Chapter 15) and insurance sector (Chapter 16) has been provided for the benefit of the readers. A separate chapter has been dedicated to the management of non-performing assets by the banks (Chapter 14).

Section IV shifts focus to financial services that support the core financial system components like investment banking (Chapter 17), credit rating (Chapter 18), factoring and forfaiting (Chapter 20), housing finance (Chapter 21) and leasing and hire purchase (Chapter 22). The last chapter has been dedicated to the emerging issue of financial inclusion and microfinance (Chapter 23). The last section of the book deals with financial regulation and the role of regulators like RBI and SEBI.

In this edition, four new chapters—Investment Banking, Housing Finance, Leasing and Hire Purchase, and Financial Inclusion and Microfinance have been introduced. All amendments and updates till June 2010 have been incorporated in all chapters. A distinct feature of this edition is the inclusion of case studies in chapters such as primary market, derivatives, management of non-performing assets, mutual funds, insurance, and housing finance.

Acknowledgements

A herculean task of putting together a comprehensive piece on the Indian financial system with all its diversities and nuances can never be a solo effort. Acknowledging the profoundly collaborative nature behind this exercise is not only a matter of deep gratitude but also of emotion and is thus far from formal for me.

I am grateful to Arman Oza, an insurance consultant, for having shared his extensive experience of the insurance industry that made my task of writing the chapter on insurance quite easy. His expertise on microinsurance and risk management greatly

helped me in writing on this subject. I extend my sincere thanks to Professor Hiten M. Parikh, Lecturer and Chartered Accountant, for providing me a case on financial restructuring.

My parents, Harichand Gursahaney, my brother Pramod and my sisters Anita and Hema were highly supportive and provided me the much needed emotional support during times of stress—which every writer undergoes. I have also been fortunate to have a supporting daughter Jahnavi who provided me the space without asking for it so that I can relish the fruits of my academic enterprise. I have no words to describe the tolerance and composure displayed by Jahnavi while I was preoccupied in the composition of this book.

Finally, I owe a lot to my husband Professor V. A. Pathak. His intellectual companionship, emotional support and similar perspective of this academic enterprise have shaped this book in ways beyond my own imagination.

I am equally thankful to the editorial team of Pearson Education for taking good care of the design and style of the book.

Bharati V. Pathak

Part I

Financial System

1

The Financial System: An Introduction

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Meaning of a financial system*

2 *Components of a financial system*

3 *Functions of a financial system*

4 *Key elements of a well-functioning financial system*

5 *Bank-based and market-based financial systems*

6 *Nature and role of financial institutions and financial markets*

7 *Link between money markets and capital markets*

8 *Link between primary markets and secondary markets*

9 *Functions and characteristics of financial markets*

INTRODUCTION

A financial system plays a vital role in the economic growth of a country. It intermediates between the flow of funds belonging to those who save a part of their income and those who invest in productive assets. It mobilises and usefully allocates scarce resources of a country.

A financial system is a complex, well-integrated set of sub-systems of financial institutions, markets, instruments, and services which facilitates the transfer and allocation of funds, efficiently and effectively.

Formal and Informal Financial Sectors

The financial systems of most developing countries are characterised by coexistence and cooperation between the formal and informal financial sectors. This coexistence of these two sectors is commonly referred to as 'financial dualism.' The formal financial sector is characterised by the presence of an organised, institutional, and regulated system which caters to the financial needs of the modern spheres of economy; the informal financial sector is an unorganised, non-institutional, and non-regulated system dealing with the traditional and rural spheres of the economy.

The informal financial sector has emerged as a result of the intrinsic dualism of economic and social structures in developing countries, and financial repression which inhibits the certain deprived sections of society from accessing funds. The informal system is characterised by flexibility of operations and interface relationships between the creditor and the debtor. The advantages are: low transaction costs, minimal default risk, and transparency of procedures. Due to these advantages, a wide range and higher rates of interest prevail in the informal sector.

An interpenetration is found between the formal and informal systems in terms of operations, participants, and nature of activities which, in turn, have led to their coexistence. A high priority should be accorded to the development of an efficient formal financial system as it can offer lower intermediation costs and services to a wide base of savers and entrepreneurs.

Informal Financial System

Advantages
- Low transaction costs
- Minimum default risk
- Transparency of procedures

Disadvantages
- Wide range of interest rates
- Higher rates of interest
- Unregulated

The Indian Financial System

The Indian financial system can also be broadly classified into the formal (organised) financial system and the informal (unorganised) financial system. The formal financial system comes under the purview of the Ministry of Finance (MoF), the Reserve Bank of India (RBI), the Securities and Exchange Board of India (SEBI), and other regulatory bodies. The informal financial system consists of:

- Individual moneylenders such as neighbours, relatives, landlords, traders, and storeowners.
- Groups of persons operating as 'funds' or 'associations.' These groups function under a system of their own rules and use names such as 'fixed fund,' 'association,' and 'saving club.'
- Partnership firms consisting of local brokers, pawnbrokers, and non-bank financial intermediaries such as finance, investment, and chit-fund companies.

In India, the spread of banking in rural areas has helped in enlarging the scope of the formal financial system.

COMPONENTS OF THE FORMAL FINANCIAL SYSTEM

The formal financial system consists of four segments or components. These are: financial institutions, financial markets, financial instruments, and financial services (refer Figure 1.1).

Financial Institutions

Classification of Financial Institutions

- Banking and non-banking
- Term finance
- Specialised
- Sectoral
- Investment
- State-level

These are intermediaries that mobilise savings and facilitate the allocation of funds in an efficient manner.

Financial institutions can be classified as banking and non-banking financial institutions. Banking institutions are creators and purveyors of credit while non-banking financial institutions are purveyors of credit. While the liabilities of banks are part of the money supply, this may not be true of non-banking financial institutions. In India, non-banking financial institutions, namely, the developmental financial institutions (DFIs), and non-banking financial companies (NBFCs) as well as housing finance companies (HFCs) are the major institutional purveyors of credit.

Financial institutions can also be classified as term-finance institutions such as the Industrial Development Bank of India (IDBI), the Industrial Credit and Investment Corporation of India (ICICI), the Industrial Financial Corporation of India (IFCI), the Small Industries Development Bank of India (SIDBI), and the Industrial Investment Bank of India (IIBI).

Financial institutions can be specialised finance institutions like the Export Import Bank of India (EXIM), the Tourism Finance Corporation of India (TFCI), ICICI Venture, the Infrastructure Development Finance Company (IDFC), and sectoral financial institutions such as the National Bank for Agricultural and Rural Development (NABARD) and the National Housing Bank (NHB).

Investment institutions in the business of mutual funds Unit Trust of India (UTI), public sector and private sector mutual funds and insurance activity of Life Insurance Corporation (LIC), General Insurance Corporation (GIC) and its subsidiaries are classified as financial institutions.

There are state-level financial institutions such as the State Financial Corporations (SFCs) and State Industrial Development Corporations (SIDCs) which are owned and managed by the State governments.

In the post-reforms era, the role and nature of activity of these financial institutions have undergone a tremendous change. Banks have now undertaken non-bank activities and financial institutions have taken up banking functions. Most of the financial institutions now resort to financial markets for raising funds.

Financial Markets

Types

- Money market
- Capital market

Segments

- Primary market
- Secondary market

Financial markets are a mechanism enabling participants to deal in financial claims. The markets also provide a facility in which their demands and requirements interact to set a price for such claims.

The main organised financial markets in India are the money market and the capital market. The first is a market for short-term securities while the second is a market for long-term securities, i.e., securities having a maturity period of one year or more.

Financial markets can also be classified as primary and secondary markets. While the primary market deals with new issues, the secondary market is meant for trading in outstanding or existing securities. There are two components of the secondary market: over-the-counter (OTC) market and the exchange traded market. The government securities market is an OTC market. In an OTC market, spot trades are negotiated and traded for immediate delivery and payment while in the exchange-traded market, trading takes place over a trading cycle in stock exchanges. Recently, the derivatives market (exchange traded) has come into existence.

Financial Instruments

A financial instrument is a claim against a person or an institution for payment, at a future date, of a sum of money and/or a periodic payment in the form of interest or dividend. The term 'and/or' implies that either of the payments will be sufficient but both of them may be promised. Financial instruments represent paper wealth shares, debentures, like bonds and notes. Many financial instruments are marketable as they are denominated in small amounts and traded in organised markets. This distinct feature of financial instruments has enabled people to hold a portfolio of different financial assets which, in turn, helps in reducing

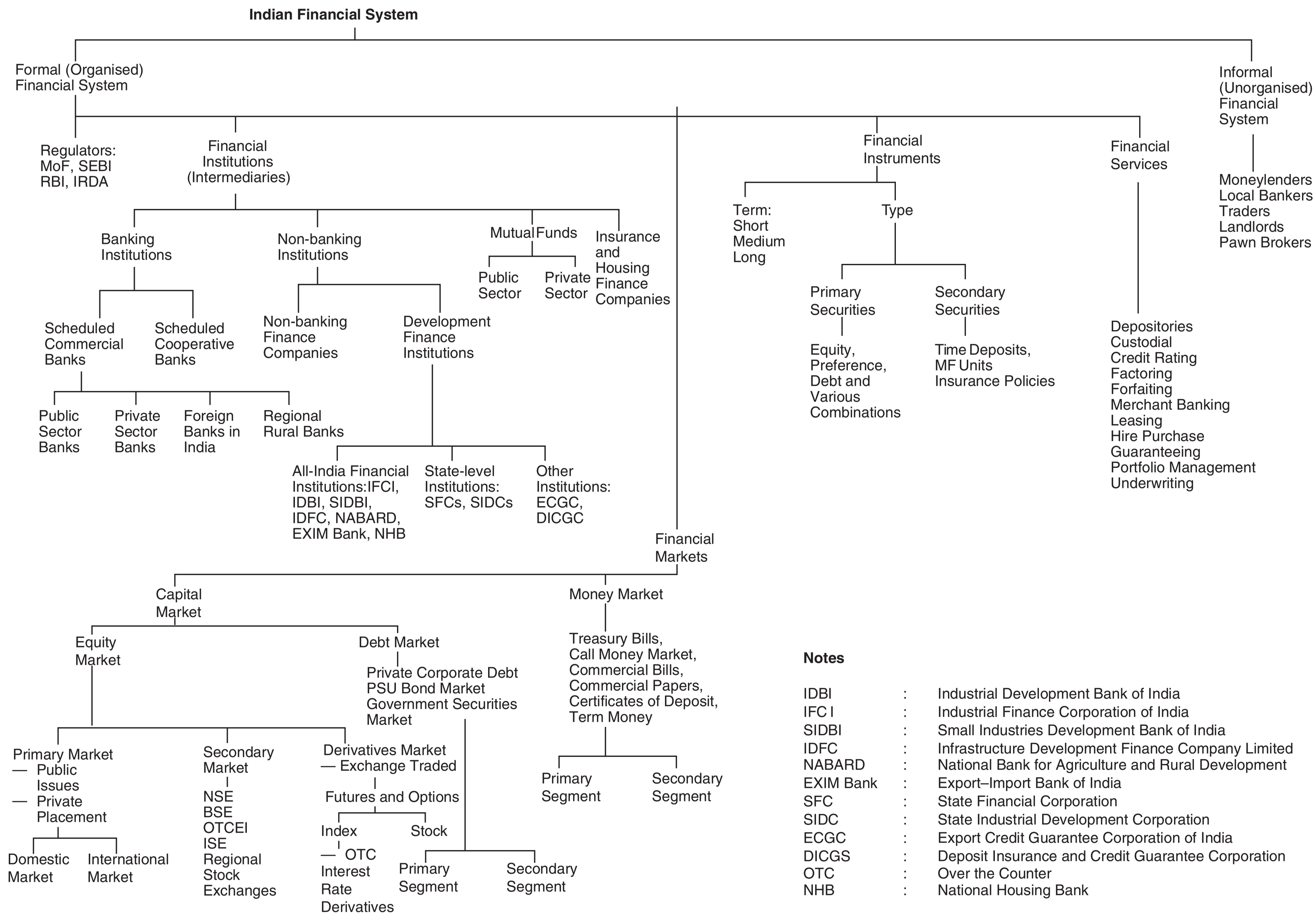


Figure 1.1 Indian Financial System

Types of Financial Securities

- Primary
- Secondary

Distinct Features

- Marketable
- Tradeable
- Tailor-made

risk. Different types of financial instruments can be designed to suit the risk and return preferences of different classes of investors.

Savings and investments are linked through a wide variety of complex financial instruments known as 'securities.' Securities are defined in the Securities Contracts Regulation Act (SCRA), 1956 as including shares, scrips, stocks, bonds, debentures, debenture stocks or other marketable securities of a similar nature or of any incorporated company or body corporate, government securities, derivatives of securities, units of collective investment scheme, security receipts, interest and rights in securities, or any other instruments so declared by the central government.

Financial securities are financial instruments that are negotiable and tradeable. Financial securities may be primary or secondary securities. Primary securities are also termed as direct securities as they are directly issued by the ultimate borrowers of funds to the ultimate savers. Examples of primary or direct securities include equity shares and debentures. Secondary securities are also referred to as indirect securities, as they are issued by the financial intermediaries to the ultimate savers. Bank deposits, mutual fund units, and insurance policies are secondary securities.

Financial instruments differ in terms of marketability, liquidity, reversibility, type of options, return, risk, and transaction costs. Financial instruments help financial markets and financial intermediaries to perform the important role of channelising funds from lenders to borrowers. Availability of different varieties of financial instruments helps financial intermediaries to improve their own risk management.

Financial Services

Need of Financial Services for

- Borrowing and funding
- Lending and investing
- Buying and selling securities
- Making and enabling
- Payments and settlements
- Managing risk

These are those that help with borrowing and funding, lending and investing, buying and selling securities, making and enabling payments and settlements, and managing risk exposures in financial markets. The major categories of financial services are funds intermediation, payments mechanism, provision of liquidity, risk management, and financial engineering.

Funds intermediating services link the saver and borrower which, in turn, leads to capital formation. New channels of financial intermediation have come into existence as a result of information technology. Payment services enable quick, safe, and convenient transfer of funds and settlement of transactions.

Liquidity is essential for the smooth functioning of a financial system. Financial liquidity of financial claims is enhanced through trading in securities. Liquidity is provided by brokers who act as dealers by assisting sellers and buyers and also by market makers who provide buy and sell quotes.

Financial services are necessary for the management of risk in the increasingly complex global economy. They enable risk transfer and protection from risk. Risk can be defined as a chance of loss. Risk transfer of services help the financial market participants to move unwanted risks to others who will accept it. The speculators who take on the risk need a trading platform to transfer this risk to other speculators. In addition, market participants need financial insurance to protect themselves from various types of risks such as interest rate fluctuations and exchange rate risk.

Growing competition and advances in communication and technology have forced firms to look for innovative ways for value creation. Financial engineering presents opportunities for value creation. These services refer to the process of designing, developing, and implementing innovative solutions for unique needs in funding, investing, and risk management. Restructuring of assets and/or liabilities, off balance sheet items, development of synthetic securities, and repackaging of financial claims are some examples of financial engineering.

The producers of these financial services are financial intermediaries, such as, banks, insurance companies, mutual funds, and stock exchanges. Financial intermediaries provide key financial services such as merchant banking, leasing, hire purchase, and credit-rating. Financial services rendered by the financial intermediaries bridge the gap between lack of knowledge on the part of investors and the increasing sophistication of financial instruments and markets. These financial services are vital for creation of firms, industrial expansion, and economic growth.

Before investors lend money, they need to be reassured that it is safe to exchange securities for funds. The financial regulator who regulates the conduct of the market and intermediaries to protect the investors' interests provides this reassurance. The regulator regulates the conduct of issuers of securities and the intermediaries to protect the interests of investors in securities and increases their confidence in markets which, in turn, helps in the growth and development of the financial system. Regulation is necessary not only to develop a system, but a system once developed needs to be regulated. The RBI regulates the money market and the SEBI regulates the capital market. The securities market is regulated by the Department of Economic Affairs (DEA), the Department of Company Affairs (DCA), the RBI, and the SEBI. A high-level committee on capital and financial markets coordinates the activities of these agencies.

Interaction Among Financial System Components

The four financial system components discussed do not function in isolation. They are interdependent and interact continuously with each other. Their interaction leads to the development of a smoothly functioning financial system.

Interaction Among the Components

- Interdependent
- Interactive
- Close links
- Competing with each other

Financial institutions or intermediaries mobilise savings by issuing different types of financial instruments which are traded in the financial markets. To facilitate the credit-allocation process, these institutions acquire specialisation and render specialised financial services.

Financial intermediaries have close links with the financial markets in the economy. Financial institutions acquire, hold, and trade financial securities which not only help in the credit–allocation process but also make the financial markets larger, more liquid, stable, and diversified. Financial intermediaries rely on financial markets to raise funds whenever the need arises. This increases the competition between financial markets and financial intermediaries for attracting investors and borrowers. The development of new sophisticated markets has led to the development of complex securities and portfolios. The evaluation of these complex securities, portfolios, and strategies requires financial expertise which financial intermediaries provide through financial services.

Financial markets have also made an impact on the functioning of financial intermediaries such as banks and financial institutions. The latter are, today, radically changed entities as the bulk of the service fees and non-interest income that they derive is directly or indirectly linked to financial market-related activities.

Moreover, liquid and broad markets make financial instruments a more attractive avenue for savings, and financial services may encourage further savings if the net returns to investors are raised or increased.

FUNCTIONS OF A FINANCIAL SYSTEM

One of the important functions of a financial system is to link the savers and investors and, thereby, help in mobilising and allocating the savings efficiently and effectively. By acting as an efficient conduit for allocation of resources, it permits continuous upgradation of technologies for promoting growth on a sustained basis.

Functions of a Financial System

- Mobilise and allocate savings
- Monitor corporate performance
- Provide payment and settlement systems
- Optimum allocation of risk-bearing and reduction
- Disseminate price-related information
- Offer portfolio adjustment facility
- Lower the cost of transactions
- Promote the process of financial deepening and broadening

A financial system not only helps in selecting projects to be funded but also inspires the operators to monitor the performance of the investment. Financial markets and institutions help to monitor corporate performance and exert corporate control through the threat of hostile takeovers for underperforming firms.

It provides a payment mechanism for the exchange of goods and services and transfers economic resources through time and across geographic regions and industries. Payment and settlement systems play an important role to ensure that funds move safely, quickly, and in a timely manner. An efficient payment and settlement system contributes to the operating and allocation efficiencies of the financial system and thus, overall economic growth. Payment and settlement systems serve an important role in the economy as the main arteries of the financial sector. Banks provide this mechanism by offering a means of payment facility based upon cheques, promissory notes, credit and debit cards. This payment mechanism is now increasingly through electronic means. The clearing and settlements mechanism of the stock markets is done through depositories and clearing corporations.

One of the most important functions of a financial system is to achieve optimum allocation of risk bearing. It limits, pools, and trades the risks involved in mobilising savings and allocating credit. An efficient financial system aims at containing risk within acceptable limits. It reduces risk by laying down rules governing the operation of the system. Risk reduction is achieved by holding diversified portfolios and screening of borrowers. Market participants gain protection from unexpected losses by buying financial insurance services. Risk is traded in the financial markets through financial instruments such as derivatives. Derivatives are risk shifting devices, they shift risk from those who have it but may not want it to those who are willing to take it.

A financial system also makes available price-related information which is a valuable assistance to those who need to take economic and financial decisions. Financial markets disseminate information for enabling participants to develop an informed opinion about investment, disinvestment, reinvestment, or holding a particular asset. This information dissemination enables a quick valuation of financial assets. Moreover, by influencing the market price of a firm's debt and equity instruments, this process of valuation guides the management as to whether their actions are consistent with the objective of shareholder wealth maximisation. In addition, a financial system also minimises situations where the information is asymmetric and likely to affect motivations among operators when one party has the information and the other party does not. It also reduces the cost of gathering and analysing information to assist operators in taking decisions carefully.

A financial system also offers portfolio adjustment facilities. These are provided by financial markets and financial intermediaries such as banks and mutual funds. Portfolio adjustment facilities include services of providing a quick, cheap and reliable way of buying and selling a wide variety of financial assets.

A financial system helps in the creation of a financial structure that lowers the cost of transactions. This has a beneficial influence on the rate of return to savers. It also reduces the cost of borrowing. Thus, the system generates an impulse among the people to save more.

A well-functioning financial system helps in promoting the process of financial deepening and broadening. Financial deepening refers to an increase of financial assets as a percentage of the Gross Domestic Product (GDP). Financial depth is an important measure of financial system development as it measures the size of the financial intermediary sector. Depth equals the liquid liabilities of the financial system (currency plus demand and interest-bearing liabilities of banks and non-bank financial intermediaries divided by the GDP). Financial broadening refers to building an increasing number and variety of participants and instruments.

KEY ELEMENTS OF A WELL-FUNCTIONING FINANCIAL SYSTEM

Basic Elements of a Well-functioning Financial System

- A strong legal and regulatory environment
- Stable money
- Sound public finances and public debt management
- A central bank
- Sound banking system
- Information system
- Well-functioning securities market

The basic elements of a well-functioning financial system are (i) a strong legal and regulatory environment, (ii) stable money, (iii) sound public finances and public debt management, (iv) a central bank, (v) a sound banking system, (vi) an information system, and (vii) a well-functioning securities market.

Since finance is based on contracts, strong legal and regulatory systems that produce and strictly enforce laws alone can protect the rights and interests of investors. Hence, a strong legal system is the most fundamental element of a sound financial system.

Stable money is an important constituent as it serves as a medium of exchange, a store of value (a reserve of future purchasing power), and a standard of value (unit of account) for all the goods and services we might wish to trade in. Large fluctuations and depreciation in the value of money lead to financial crises and impede the growth of the economy.

Sound public finance includes setting and controlling public expenditure priorities and raising revenues adequate to fund them efficiently. Historically, these financing needs of the governments world over led to the creation of financial systems. Developed countries have sound public finances and public debt management practices, which result in the development of a good financial system.

A central bank supervises and regulates the operations of the banking system. It acts as a banker to the banks, banker to the government, manager of public debt and foreign exchange, and lender of the last resort. The monetary policy of the central bank influences the pace of economic growth. An autonomous central bank paves the way for the development of a sound financial system.

A good financial system must also have a variety of banks both with domestic and international operations together with an ability to withstand adverse shocks without failing. Banks are the core financial intermediaries in all countries. They perform diverse key functions such as operating the clearing and payments system, and the foreign exchange market. The banking system is the main fulcrum for transmitting the monetary policy actions. Banks also undertake credit risk analysis, assessing the expected risk and return on the projects. The financial soundness of the banking system depends on how effectively banks perform these diverse functions.

Another foundational element is information. All the participants in a financial system require information. A sound financial system can develop only when proper disclosure practices and networking of information systems are adopted.

Securities markets facilitate the issue and trading of securities, both equity and debt. Efficient securities markets promote economic growth by mobilising and deploying funds into productive uses, lowering the cost of capital for firms, enhancing liquidity, and attracting foreign investment. An efficient securities market strengthens market discipline by exerting corporate control through the threat of hostile takeovers for underperforming firms.

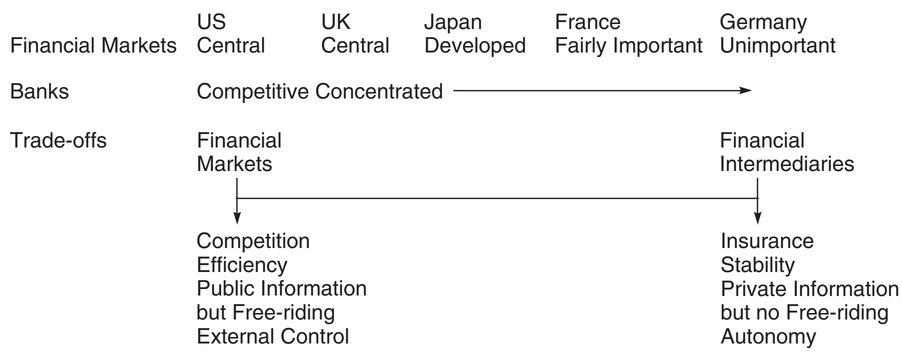
FINANCIAL SYSTEM DESIGNS

Financial System Designs

- Bank-based
- Market-based

A financial system is a vertical arrangement of a well-integrated chain of financial markets and institutions that provide financial intermediation. Different designs of financial systems are found in different countries. The structure of the economy, its pattern of evolution, and political, technical, and cultural differences affect the design (type) of financial system.

Two prominent polar designs can be identified among the variety that exists. At one extreme is the bank-dominated system, such as in Germany, where a few large banks play a dominant role and the stock market is not important. At the other extreme is the market-dominated financial system, as in the US, where financial markets play an important role while the banking industry is much less concentrated. The other major industrial countries fall in between these two extremes (Figure 1.2).



Source: Allen and Gale (2000), *Comparing Financial Systems*, MIT Press, Cambridge, Mass.

Figure 1.2 Overview and Trade-offs of Financial Systems

Demirguc Kunt and Levine (1999) have provided explanations of bank-based and market-based financial systems. In bank-based financial systems, banks play a pivotal role in mobilising savings, allocating capital, overseeing the investment decisions of corporate managers, and providing risk-management facilities. In market-based financial systems, the securities markets share centre stage with banks in mobilising the society's savings for firms, exerting corporate control, and easing risk management.

Bank-based systems tend to be stronger in countries where governments have a direct hand in industrial development. In India, banks have traditionally been the dominant entities of financial intermediation. The nationalisation of banks, an administered interest rate regime, and the government policy of favouring banks led to the predominance of a bank-based financial system.

Demirguc Kunt and Levine, using a database of 150 countries, have classified countries according to the structure and level of financial development (Table 1.1).

TABLE 1.1 Classification of Financial Structure and Level of Development of Select Economies

Extent of Development	*Bank-based*	*Market-based*
Developed	Japan, Germany, France, Italy	US, UK, Singapore, Malaysia, Korea
Under-developed	Argentina, Pakistan, Sri Lanka, Bangladesh	Brazil, Mexico, the Philippines, Turkey

Source: Demirguc Kunt, A. and R. Levine (1999), Bank-based and Market-based Financial System: Cross-Country Comparisons, World Bank Policy Research Working Paper No. 2143.

Their comparison of financial systems across different income groups reveals several patterns. First, financial systems are, on an average, more developed in rich countries. There is a tendency for a financial system to become more market-oriented as the country becomes richer. Second, countries with a common-law tradition, strong protection of shareholders' rights, and low levels of corruption tend to be more market-based and have well-developed financial systems.

Arnold and Walz (2000) have attempted to identify factors leading to the emergence of bank-based or market-based financial systems. When problems relating to information persist but banks are competent

Market-based Financial System

Advantages
- Provides attractive terms to both investors and borrowers
- Facilitates diversification
- Allows risk-sharing
- Allows financing of new technologies

Drawbacks
- Prone to instability
- Exposure to market risk
- Free-rider problem

enough right from the beginning and, with the passage of time, learn through experience to become more productive, they come to dominate the financial system. Conversely, if banks are initially incompetent and fail to improve themselves by experience, the bank-based system gives way to the growth of a market-based financial system.

Given these two types of financial systems, questions arise about the advantages and disadvantages of a bank-based financial system vis-a-vis a market-based financial system. Some researchers suggest that markets are more effective at providing financial services while some tout the advantages of intermediaries.

Proponents of the market-based view argue that efficiency is associated with the functioning of competitive markets. Financial markets are attractive as they provide the best terms to both investors and borrowers. Stock markets facilitate diversification and allow efficient risk-sharing. They provide incentives to gather information that is reflected in stock prices and these prices, in turn, provide signals for an efficient allocation of investment. An important area in which financial markets perform differently from financial intermediaries is in situations where a diversity of opinion is important, such as the financing of new technologies or when an unusual decision has to be made. Hence, in emerging industries with significant financial and technological risks, a market-based system may be preferable.

The drawbacks of the market-based system are that it is more prone to instability, its investors are exposed to market risks, and that there is a free-rider problem. The last drawback arises when no individual is willing to contribute towards the cost of something but hopes that someone else will bear the cost. This problem arises whenever there is a public good and separation of ownership from control. For example, shareholders take little interest in the management of their companies, hoping someone else will monitor the executives. In a market-based system, the free-rider problem blunts the incentives to gather information.

On the other hand, a bank-based system is perceived to be more stable, as the relationship with parties is relatively close. This leads to the formation of tailor-made contracts and financial products and efficient inter-temporal risk-sharing. Financial intermediaries can eliminate the risks that cannot be diversified at a given point of time but can be averaged over time through inter-temporal smoothing of asset returns. This requires that investors accept lower returns than what the market offers in some periods in order to get higher returns in other periods. This provides an insurance to investors who would otherwise be forced to liquidate assets at disadvantageous prices.

Bank-based Financial System

Advantages
- Close relationship with parties
- Provides tailor-made contracts
- Efficient intertemporal risk-sharing
- No free-rider problem

Drawbacks
- Retards innovation and growth
- Impedes competition

The banking system avoids some of the information deficiencies associated with the securities markets. The free-rider problem is eliminated as private incentives to gather information are higher in the case of a bank-based system. Moreover, banks can perform screening and monitoring functions on behalf of the investors; these functions, left to themselves, can be undertaken only at a high cost.

The greatest drawback of a bank-based system is that it retards innovation and growth as banks have an inherent preference for low-risk, low-return projects. Moreover, powerful banks may collude with firm managers against other investors, which, in some cases, could impede competition, effective corporate control, and entry of new firms.

The current trend is a preference for the market-based system. France and Japan have reformed their markets to make them more competitive. It is partly due to the growing volume of banking activity in the financial markets. The European Union is moving towards a single unified market to increase its global competitiveness. In India also, the role of stock markets has gained prominence. The government has put in substantial efforts to reform the financial markets. The Indian equity market, now, is at par with some of the developed markets of the world. Moreover, the ratio of market capitalisation to

Box 1.1 Evolution of Financial Systems

In the 1950s and 1960s, Gurley and Shaw (1955, 1960, 1967) and Goldsmith (1969) discussed the stages in the evolution of financial systems. According to them, there is a link between per capita income and the development of a financial system. At low levels of development, most investment is self-financed and financial intermediaries do not exist, as the costs of financial intermediation are high relative to benefits. As countries develop and per capita income increases, bilateral borrowing and lending take place leading to the birth of financial intermediaries. The number of financial intermediaries grows with further increases in per capita income. Among the financial intermediaries, banks tend to become larger and prominent in financial investment. As countries expand economically, non-bank financial intermediaries and stock markets grow in size and tend to become more active and efficient relative to banks. There is a general tendency for financial systems to become more market-oriented as countries become richer.

assets of scheduled commercial banks has risen sharply from 28.4 per cent in March 1991 to 79.3 per cent in March 2000. The relative share of banks in the aggregate financial assets of banks and financial institutions taken together, which stood at nearly three-fourths in the early 1980s, is now hovering around the two-thirds mark since the 1990s. This implies that there is considerable potential for growth in market financing.

Allen and Gale (2000) have put forward two explanations for the universal popularity of financial markets: (i) government intervention is regarded as a negative factor and government failures are as important a problem as market failures, (ii) economic theory, pertaining to firms, stresses the effectiveness of markets in allocating resources.

Empiral analysis in various researches do not emphatically suggest the superiority of one system over the other. Whatever be the type of financial system, both financial intermediaries and financial markets play a crucial role in the development of a sound financial system. Both systems can coexist as they encourage competition, reduce transaction costs, and improve resource allocation within the economy, leading to the development of a balanced financial system.

NATURE AND ROLE OF FINANCIAL INSTITUTIONS (INTERMEDIARIES) AND FINANCIAL MARKETS

Financial institutions (intermediaries) are business organisations serving as a link between savers and investors and so help in the credit-allocation process. Good financial institutions are vital to the functioning of an economy. If finance were to be described as the circulatory system of the economy, financial institutions are its brain. They make decisions that tell scarce capital where to go and ensure that it is used most efficiently. It has been confirmed by research that countries with developed financial institutions grow faster and countries with weak ones are more likely to undergo financial crises.

Financial Institutions Provide Three Transformation Services

- Liability, asset, and size transformation
- Maturity transformation
- Risk transformation

Lenders and borrowers differ in regard to terms of risk, return, and terms of maturity. Financial institutions assist in resolving this conflict between lenders and borrowers by offering claims against themselves and, in turn, acquiring claims on the borrowers. The former claims are referred to as indirect (secondary) securities and the latter as direct (primary) securities.

Financial institutions provide three transformation services:

- Liability, asset, and size transformation consisting of mobilisation of funds, and their allocation by providing large loans on the basis of numerous small deposits.
- Maturity transformation by offering the savers tailor-made short-term claims or liquid deposits and so offering borrowers long-term loans matching the cash-flows generated by their investment.
- Risk transformation by transforming and reducing the risk involved in direct lending by acquiring diversified portfolios.

Through these services, financial institutions are able to tap savings that are unlikely to be acceptable otherwise. Moreover, by facilitating the availability of finance, financial institutions enable the consumer to spend in anticipation of income and the entrepreneur to acquire physical capital.

The role of financial institutions has undergone a tremendous transformation in the 1990s. Besides providing direct loans, many financial institutions have diversified themselves into areas of financial services such as merchant banking, underwriting and issuing guarantees.

Financial Markets

Financial Markets

Types
- Money Market—a market for short-term debt instruments
- Capital Market—a market for long-term equity and debt instruments

Segments
- Primary—a market for new issues
- Secondary—a market for trading outstanding issues

Financial markets are an important component of the financial system. They are a mechanism for the exchange trading of financial products under a policy framework. The participants in the financial markets are the borrowers (issuers of securities), lenders (buyers of securities), and financial intermediaries. Financial markets comprise two distinct types of markets:

- the money market
- the capital market

Money Market A money market is a market for short-term debt instruments (maturity below one year). It is a highly liquid market wherein securities are bought and sold in large denominations to reduce transaction costs. Call money market, certificates of deposit, commercial paper, and treasury bills are the major instruments/segments of the money market.

The functions of a money market are

- to serve as an equilibrating force that redistributes cash balances in accordance with the liquidity needs of the participants;
- to form a basis for the management of liquidity and money in the economy by monetary authorities; and
- to provide reasonable access to the users of short-term money for meeting their requirements at realistic prices.

As it facilitates the conduct of monetary policy, a money market constitutes a very important segment of the financial system.

Capital Market A capital market is a market for long-term securities (equity and debt). The purpose of capital market is to

- mobilise long-term savings to finance long-term investments;
- provide risk capital in the form of equity or quasi-equity to entrepreneurs;
- encourage broader ownership of productive assets;
- provide liquidity with a mechanism enabling the investor to sell financial assets;
- lower the costs of transactions and information; and
- improve the efficiency of capital allocation through a competitive pricing mechanism.

Money Market and Capital Market

There is strong link between the money market and the capital market:

- Often, financial institutions actively involved in the capital market are also involved in the money market.
- Funds raised in the money market are used to provide liquidity for long-term investment and redemption of funds raised in the capital market.
- In the development process of financial markets, the development of the money market typically precedes the development of the capital market.

A capital market can be further classified into primary and secondary markets. The primary market is meant for new issues and the secondary market is one where outstanding issues are traded. In other words, the primary market creates long-term instruments for borrowings, whereas the secondary market provides liquidity through the marketability of these instruments. The secondary market is also known as the stock market.

Link Between the Primary and the Secondary Capital Market

- A buoyant secondary market is indispensable for the presence of a vibrant primary capital market
- The secondary market provides a basis for the determination of prices of new issues.
- Depth of the secondary market depends on the primary market.
- Bunching of new issues affects prices in the secondary market

Primary Capital Market and Secondary Capital Market

Even though the secondary market is many times larger than the primary market, they are interdependent in many ways.

- The primary market is a market for new issues, but the volume, pricing, and timing of new issues are influenced by returns in the stock market. Returns in the stock market depend on macroeconomic factors. Favourable macroeconomic factors help firms earn higher returns, which, in turn, create favourable conditions for the secondary market. This in turn, influences the market price of the stock. Moreover, favourable macroeconomic factors necessitate raising fresh capital to finance new projects, expansion, and modernisation of existing projects. A buoyant secondary market, in turn, induces investors to buy new issues if they think that is a good decision. Hence, a buoyant secondary market is indispensable for the presence of a vibrant primary capital market.
- The secondary market provides a basis for the determination of prices at which new issues can be offered in the primary market.
- The depth of the secondary capital market depends upon the activities in the primary market because the bigger the entry of corporate entities, the larger the number of instruments available for trading in the secondary market. The secondary market volume surge in 2007–08 was part driven by a rampant primary market, as newly listed stocks tend to have a high turnover.
- New issues of a large size and bunching of large issues may divert funds from the secondary market to the primary market, thereby affecting stock prices.

Characteristics of Financial Markets

- Financial markets are characterised by a large volume of transactions and the speed with which financial resources move from one market to another.
- There are various segments of financial markets such as stock markets, bond markets—primary and secondary segments, where savers themselves decide when and where they should invest money.
- There is scope for instant arbitrage among various markets and types of instruments.
- Financial markets are highly volatile and susceptible to panic and distress selling as the behaviour of a limited group of operators can get generalised.
- Markets are dominated by financial intermediaries who take investment decisions as well as risks on behalf of their depositors.
- Negative externalities are associated with financial markets. A failure in any one segment of these markets may affect other segments, including non-financial markets.
- Domestic financial markets are getting integrated with worldwide financial markets. The failure and vulnerability in a particular domestic market can have international 'ramifications.' Similarly, problems in external markets can affect the functioning of domestic markets.

In view of the above characteristics, financial markets need to be closely monitored and supervised.

Functions of Financial Markets

The cost of acquiring information and making transactions creates incentives for the emergence of financial markets and institutions. Different types and combinations of information and transaction costs motivate distinct financial contracts, instruments and institutions.

Financial markets perform various functions such as

- enabling economic units to exercise their time preference;
- separation, distribution, diversification, and reduction of risk;
- efficient payment mechanism;
- providing information about companies. This spurs investors to make inquiries themselves and keep track of the companies' activities with a view to trading in their stock efficiently;
- transmutation or transformation of financial claims to suit the preferences of both savers and borrowers;
- enhancing liquidity of financial claims through trading in securities; and
- providing portfolio management services.

A variety of services are provided by financial markets as they can alter the rate of economic growth by altering the quality of these services.

KEY TERMS

Formal Financial System, Informal Financial System, Financial Institutions, Financial Markets, Financial Instruments, Financial Services, Financial Deepening, Financial Broadening, Bank-based Financial System, Market-based Financial System, Free-rider, Money Market, Capital Market, Primary Market and Secondary Market.

SUMMARY

1. A financial system is a complex, well-integrated set of sub-systems of financial institutions, markets, instruments, and services which facilitates the transfer and allocation of funds, efficiently and effectively.
2. The financial systems of most developing countries are characterised by coexistence and co-operation between the formal and informal financial sectors.
3. Formal financial systems consist of four segments or components: financial institutions, financial markets, financial instruments, and financial services.
4. Financial institutions are intermediaries that mobilise savings and facilitate the allocation of funds in an efficient manner. Financial institutions can be classified into banking and non-banking, term finance, specialised, sectoral, investment, and state-level.
5. Financial markets are a mechanism enabling participants to deal in financial claims. The markets also provide a facility in which their demands and requirements interact to set a price for such claims.
6. The main organised financial markets in India are the money market and the capital market. The first is a market for short-term securities while the second is a market for long-term securities, i.e. securities having a maturity period of one year or more.
7. Financial markets are also classified as primary and secondary markets. While the primary market deals in new issues, the secondary market is meant for trading in outstanding or existing securities.
8. Financial services are those that help with borrowing and funding, lending and investing, buying and selling securities, making and enabling payments and settlements, and managing risk exposures in financial markets.
9. The RBI regulates the money market and the SEBI regulates the capital market.

10. The four sub-systems do not function in isolation. They are interdependent and interact continuously with each other. Their interaction leads to the development of a smoothly functioning financial system.
11. The functions of a financial system include mobilising and allocating savings, monitoring corporate performance, providing payment and settlement systems, optimum allocation of risk-bearing and reduction, disseminating price-related information, offering portfolio adjustment facility, lowering the cost of transactions, and promoting the process of financial deepening and broadening.
12. The basic elements of a well-functioning financial system are (i) a strong legal and regulatory environment, (ii) stable money, (iii) sound public finances and public debt management, (iv) central bank, (v) a sound banking system (vi) an information system, and (vii) a well-functioning securities market.
13. The two types of financial system designs are: bank-based and market-based.
14. At one extreme is the bank-dominated system, such as in Germany, where a few large banks play a dominant role and the stock market is not that important. At the other extreme, is the market-dominated financial system, as in the US, where financial markets play an important role while the banking industry is much less concentrated.

REVIEW QUESTIONS

1. What is a financial system? Discuss the components of a formal financial system.
2. Discuss the types of financial markets and their inter-relationship.
3. What are the characteristics and functions of financial markets?
4. 'A market-based financial system is preferable over a bank-based system.' Comment critically.
5. 'A financial system is a well-integrated system whose parts interact with each other.' Explain.

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2

The Financial System and the Economy

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *Types of economic units*
2. *Role of a financial system in the economy*
3. *National income accounts*
4. *Flow of funds analysis*
5. *Trends in saving and investment*
6. *Trends in household financial saving and liabilities*
7. *Relationship between a financial system and economic growth.*

INTRODUCTION

All economies operate with a stock of real and financial assets. Real assets may be tangible or intangible. Examples of tangible real assets are land and natural resources, buildings, inventories, equipment, durables, and infrastructure. Examples of intangible real assets are human capital, organisational systems, and governments. Every asset represents savings either by the owner himself or by lenders of surplus savings. Most of the real assets are financed through borrowings (suppliers of surplus savings). Financial assets, or claims, or securities, or instruments come into existence to enable transfer of savings for investment. Financial assets may be classified as equity instruments, debt instruments, deposits, units, and insurance policies. In a modern market economy, the real and financial assets must interact for the process of capital formation to take place.

Types of Economic Units

In any economy, there are two types of economic units or entities—surplus-spending economic units and deficit-spending economic units.

Types of Economic Units

- Surplus-spending economic units:
  Income > consumption + planned investment
- Deficit-spending economic units:
  Income < consumption + planned investment

Surplus-spending Economic Units These are units whose consumption and planned investment are less than their income. The surplus savings that they have is held in the form of cash balances or financial assets. The acquisition of financial assets or making of loans is, in fact, lending for productive investment. Such lending by the surplus-spending sector can be termed as demanding financial assets or supplying loanable funds. In India, the household sector is a net-surplus spending economic unit. The household and other sectors are discussed in detail in the flow of funds analysis.

Deficit-spending Economic Units These are units whose consumption and planned investment exceeds income. The deficit-spending economic units have negative savings; they finance their needs by borrowing or by decreasing their stock of financial assets. Borrowing by deficit-spending units creates a supply of financial securities or demand for loanable funds. In India, the government and the corporate sector are deficit-spending economic units.

The surplus savings of the surplus-spending household units have to be transferred to the deficit-spending economic units. A link in the form of a financial system is necessary to transfer surplus savings to deficit units. The surplus and deficit units can be brought together either directly through external financing or indirectly through intermediation (banks and other financial institutions).

Figure 2.1 illustrates how surplus-spending economic units lend funds to financial intermediaries and financial markets—two important components of the financial system. Financial intermediaries issue secondary securities like deposits, insurance policies, and units to the ultimate lenders. The ultimate borrowers may acquire funds either by issuing primary securities to financial intermediaries or by issuing primary securities in the financial markets. This transfer of funds from the surplus-spending sector to the deficit-spending sector through the financial system leads to capital formation and economic growth. Economic growth, in simple terms, is the increase in the real national product or output over time.

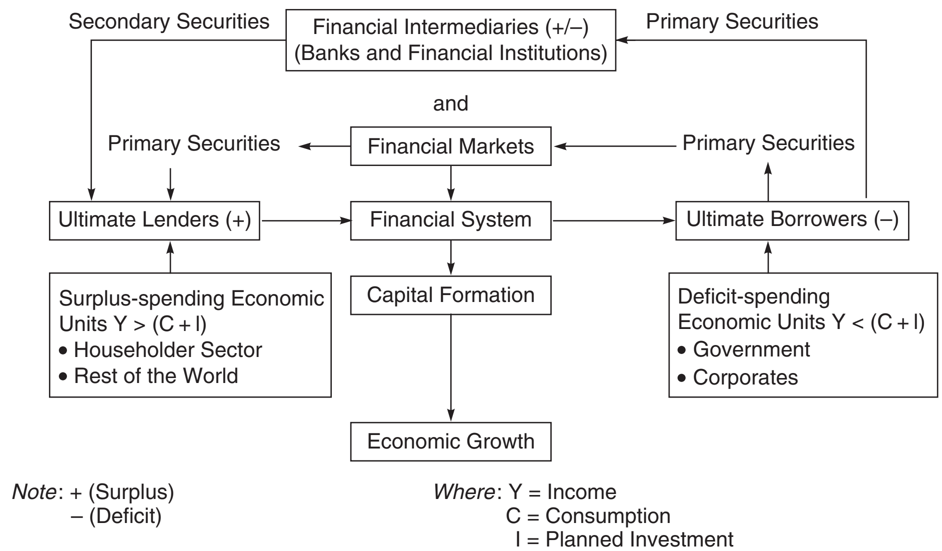

Figure 2.1 Financial System and Economic Growth

Besides linking savings and investment, the financial system helps in accelerating the rate of savings and investment by offering diversified financial services and instruments. This promotes a larger production of goods and services in the economy, leading to economic growth.

A MACRO-ECONOMIC FRAMEWORK ANALYSIS FOR EXPLORING THE ROLE OF THE FINANCIAL SYSTEM IN THE ECONOMY

The financial system is the most important institutional and functional vehicle for economic transformation. The pace of achievement of broader national objectives depends on the efficiency of the financial system.

To understand the role of the financial system in the economy, some frameworks and concepts of macroeconomics are deployed. The main tools of analysis are as follows.

National Income Accounts National income accounts extend the accounting concept to the economy as a whole. National income accounts of the sector-of-origin reveal the contribution made by different sectors of the economy to the national income and the portion of the national income they consume.

Flow of Funds Accounts The savings and investment process creates a flow of funds among sectors. Moreover, many transactions in the economy that are not included in the national income accounts take place as well. Hence, an analysis of the flow of funds accounts becomes necessary. Flow of funds brings out patterns of financing economic activities and the financial relations among various sectors of the economy. The national income accounts are combined with the flow of funds accounts to form a framework for describing the transfer of funds and supply and demand in the securities market. This framework helps to grasp the saving–investment process in the economy, essential for comprehending the working of the financial system.

Trends in Saving and Investment One of the basic influences of financial development on growth is the saving and investment rate. Among the many roles of the financial system is the augmenting and channelising of savings into productive avenues for economic growth. A study of trends in saving and investment is necessary to evaluate this role.

NATIONAL INCOME ACCOUNTS

National Income Accounts

- Use: To measure production in the economy and earnings derived from production

National income accounts is the best-known system of macro-economic flow statistics. It is used to measure production in the economy and earnings derived from production.

Both national income and product are flow concepts and are measured over a given or specified period of time. National product refers to the flow of goods and services produced by the residents of a country during any given period of time. National income represents the flow of total factor earnings available for purchasing the net flow of goods and services in the economy during any given period of time.

The data furnished by the national income accounts can be put to a variety of uses. The annual series on the economy's national income classified by industry-of-origin provides useful information about the structure of the economy. National income accounts classified by sector-of-origin show what kind of income has been generated in each sector of the economy and the total value of the goods and services produced by each sector.

In India, the task of national income estimation is entrusted to the Central Statistical Organisation (CSO). The CSO compiles the data and the Government of India publishes it. The base year has been shifted four times: from 1960–61 to 1970–71, then to 1980–81, and to 1999–2000 on June 31, 2006.

Classification of the Indian Economy

The Indian economy is classified into the following industrial sectors:

- **Primary sector:** agriculture, forestry and logging, fishing, and mining and quarrying
- **Secondary sector:** manufacturing, (registered and unregistered), construction, electricity, gas, and water supply
- **Transport, communication, and trade:** transport, storage and communication, trade, hotels, and restaurants
- **Finance and real estate:** banking and insurance, real estate ownership of dwellings, and business services
- **Community and personal services:** public administration and defence, other services
- **Foreign sector:** foreign sector

The combined gross output of all the sectors of the country except the foreign sector is called the Gross Domestic Product (GDP) at factor cost or the real GDP. The GDP is a broad measure of the output of goods and services in an economy. It is not merely a sum total of the value of all of the output but a sum total of 'value-added' of output. There are two ways in which the GDP can be measured. It can be measured at the production stage or as the sum total of consumption. Both the methods should yield the same result. When measured from the production side, the GDP is broadly divided with three sectors: agriculture, industry and services. In measuring output from the consumption side, the GDP is equal to the sum of private consumption, government consumption, investment and net exports.

GDP at Factor Cost

- It is a broad measure of the output of goods and services in an economy

The GDP at market price is inclusive of the indirect taxes levied by the government and profits. Hence, the GDP at market price would be higher than the GDP at factor cost. The GDP takes into account only what is produced within the country. The Gross National Product (GNP) at factor cost is arrived at by adding foreign income such as repatriated income, profits and loyalties from abroad to the GDP at factor cost.

GNP at Factor Cost

- It is arrived at by adding the net factor income from abroad to the GDP at factor cost

The Net National Product (NNP) is the net production of goods and services in a country during the year. It is simply the GNP adjusted for depreciation charges. The NNP gives an idea of the net increase in the total production of the country. It is helpful in the analysis of the long-run problem of maintaining and increasing the supply of physical capital in the country.

An analysis of Table 2.1 reveals that the growth rate of the GDP in the 1990s at 6.9 per cent was distinctly higher than that of the 1980s. The industrial and service sectors experienced high growth rates in the 1990s while agriculture registered a low growth rate in comparison with the 1980s. This reflects a major structural shift in the Indian economy in the 1990s wherein economic growth has become less vulnerable to agricultural performance and to the vagaries of the monsoon.

Box 2.1 The Gross Domestic Product

The GDP is not merely a sum total of the value of all of the output but a sum total of 'value-added' of the output. There are two ways in which GDP can be measured. It can be measured at the production stage or as the sum total of consumption. Both the methods should yield the same result. When measured from the production side, GDP is broadly divided with three sectors; agriculture, industry and services. In measuring output from the consumption side, GDP is equal to the sum of private consumption, government consumption, investment and net exports. The GDP at factor cost by economic activity is adjusted by adding indirect taxes net of subsidies to arrive at the estimated GDP at market prices, so that it equals the expenditure on gross domestic product.

Gross capital formation refers to the aggregate of gross additions to fixed assets (fixed capital formation), increase in stocks and inventories, or change in stocks and valuables. Gross fixed capital formation (GFCF) comprises two main components: (i) construction and (ii) machinery and equipment. Only new 'Construction' forms part of GFCF from construction. The GFCF from machinery and equipment includes the ex-factory value of capital goods produced in the registered and unregistered manufacturing sectors and the excise duties paid on them, net imports of capital goods and TTMs, software production, fixed assets in livestock and installation charges of wind energy systems.

TABLE 2.1 Periodwise Trend Growth Rates and Sectoral Composition of GDP (At 1999–2000 Prices)

Sector	1990–91 to 1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08*	2000–01 to 2007–08	2008–09*	2009–10#
1. Agriculture and Allied Activities	3.2	–02 (23.9)	6.3 (24.0)	–7.2 (21.4)	10.0 (21.7)	0.0 (20.2)	5.9 (19.6)	4.0 (18.5)	4.9 (17.8)	2.9 (20.9)	1.6 (15.7)	–0.2 (14.6)
2. Industry	5.7	6.4 (20.0)	2.4 (19.3)	6.8 (21.4)	6.0 (19.4)	8.0 (19.6)	8.0 (19.4)	10.7 (19.5)	7.4 (19.2)	7.1 (19.6)	3.1 (20.0)	8.8 (20.3)
2.1 Mining and Quarrying	4.8	2.4	1.8	8.8	3.1	8.2	4.9	8.8	3.3	4.9	1.6	8.7
2.2 Manufacturing	5.6	7.7	2.5	6.8	6.6	8.7	9.0	11.8	8.2	7.8	3.2	8.9
2.3 Electricity Gas and Water Supply	7.3	2.1	1.7	4.7	4.8	7.9	4.7	5.3	5.3	4.8	3.9	8.2
3. Services	7.1	5.7 (56.11)	6.9 (56.7)	7.5 (58.7)	8.8 (58.9)	9.9 (60.2)	11.0 (61.1)	11.3 (62.0)	10.8 (63.0)	9.0 (59.6)	9.3 (64.4)	8.5 (65.1)
3.1 Trade, Hotels and Restaurants	7.5	5.2	9.6	6.9	10.1	7.7	9.4	10.4	10.1	8.2	7.6	8.3
3.2 Transport, Storage and Communication	–	11.2	8.4	14.1	15.3	15.6	14.6	16.3	15.5	13.7	–	–
3.3 Financing, Insurance, Real Estate and Business Services	6.1	4.1	7.3	8.0	5.6	8.7	11.4	13.8	11.7	8.8	10.1	9.9
3.4 Community, Social and Personal Services	6.5	4.7	4.1	3.9	5.4	6.9	7.2	5.7	6.8	5.8	13.9	8.2
3.5 Construction	5.6	6.2	4.0	7.9	12.0	16.1	16.5	11.8	10.1	10.6	5.9	6.5
4. Real GDP at Factor Cost	5.7	4.4	5.8	3.8	8.5	7.5	9.4	9.7	9.0	7.3	6.7	7.2

Note: Figures in the brackets are periodwise sectoral composition.
* *Quick estimates.*
# *Advance estimates.*
Source: Central Statistical Organization.

There was a marked difference in the sectoral composition of growth within the industrial sector. The major impetus to growth came from manufacturing while the services sector experienced a higher growth in sectors such as trade, hotels, restaurants, financing/insurance, real estate and business services. This indicates an increase in finance-related activities and financial intermediation.

India recorded one of the highest growth rates in the world: 9.6 per cent in 2006–07 (Table 2.1), second only to China among the emerging market economies. A rebound in agriculture, increased investment and output in the manufacturing sector, a turnaround in electricity generation, buoyant software exports, and growth in new economy services such as trade, hotels, transport and communication contributed to this increase in the GDP. Competition, fall in interest rates, better infrastructure facilities and a growth in exports led to a manufacturing boom and made manufacturing grow faster than services.

The Indian economy is on a growth trajectory of 8 per cent since four years in a row (2003–04 to 2006–07). Investment led growth in the manufacturing and services sectors, coupled with comfortable foreign exchange reserves and a robust increase in exports continued till 2007. The pace of GDP growth rate slowed down in 2008 on account of the decelerating growth in the industrial sector, international price increases in oil and commodity prices, increasing inflation, increasing cost of funds, moderating capital inflows and depreciation in the rupee against the dollar. We can sustain this GDP growth rate by enhancing growth in all the three sectors.

One of the basic indicators of financial development of an economy is the contribution of finance-related activities towards the GDP, i.e., the contribution of banking and insurance.

The share of banking and insurance in the real GDP rose steadily from 2.2 per cent during the first half of the 1970s to 4.7 per cent during the later part of the 1990s and to a remarkable 6.7 per cent in 2006–07. Within the services sector also its share rose from 5.7 per cent during the first half of the 1970s to 11.8 per cent during the later half of the 1990s and to 47 per cent in 2006–07 (Table 2.2). Higher growth rate of the GDP was, to some extent, due to an upsurge in financial intermediation activities. The increased contribution of banking and finance in the real GDP reflects the importance of financial intermediation activities in the economy.

The national income accounts present macro-economic data such as GDP, GNP, NNP, savings, and investment. With the help of this data, surplus and deficit sectors can be identified but it does not provide information on issues such as inter-sectoral fund flows, linkages and instruments. For this the national

TABLE 2.2 Share of the Real GDP Originating in Banking and Insurance

Period	*Share of Banking and Insurance in the GDP (Per Cent)*	*Share of Banking and Insurance in Services Sector (Per Cent)*
1970–71 to 1974–75	2.2	5.7
1975–76 to 1979–80	2.7	6.8
1980–81 to 1984–85	3.1	7.5
1985–86 to 1992–93	4.9	11.2
1993–94 to 1998–99	4.7	11.8
1999–2000	5.9	45
2000–01	5.6	43
2002–03	5.7	43
2003–04	5.8	45
2004–05	5.9	43
2005–06	6.1	43
2006–07	6.7	47
2007–08	7.1	48.5

Note: While the shares from 1970–71 through 1992–93 are calculated with respect to the 1980–81 GDP as base, the same from 1993–94 through 1998–99 are with respect to 1993–94 as a base.
Source: RBI, *Report on Currency and Finance*, pp. III-2 1999–2000, 2003–2004 and 2007–2008.

income accounts have to be used in combination with the flow of funds accounts in order to have an understanding of the financial inter-relationship among various sectors of the economy.

FLOW OF FUNDS ACCOUNTS

Savings and investment in the economy can also be approached through an analysis of the flow of funds in the economy. The flow of funds accounts reflect the diversified savings and investment flows from the broad sectors of an economy through various credit and capital market instruments. In other words, the accounts bring out the pattern of financing economic activities and the financial inter-relationship among various sectors of the economy.

The flow of funds accounts are essential for any comprehensive analysis of financial market behaviour. They help identify the role of finance in the generation of income, savings, and expenditure. They also help identify the influence of economic activities on financial markets. A temporal and cross-section comparison of these accounts provides an insight into the changing pattern and degree of development in the process of intermediation. The channel through which savings find a way into the investment sectors is highlighted through these accounts. The volume of financial flows with respect to the index of economic activities, say the GNP, the NNP, or capital formation, provides a reliable indicator of the growing use of financial instruments. The flow of funds accounts are also employed as an important tool for financial planning and forecasting. By utilising historical flow of funds, emerging trends in the economy and changes in financial patterns can be tracked. This, in turn, can help in forecasting the flow of funds for the economy for a coming period of time. In short, they are very useful in understanding the financial institution structure, assets structure, financial inter-relationships, and the nature of financial development in the country.

Uses of Flow of Funds Accounts

- Help identify the role of finance in the generation of income, savings, and expenditure
- Help identify the influence of economic activities on financial markets
- An important tool for financial planning and forecasting
- Disclose the level, depth and nature of financial activities in the economy

The flow of funds accounts disclose the level, depth, and nature of financial activities in the economy. They are organised along two dimensions—economic sectors and financial instruments—to provide information on sector-wise and instrument-wise financial flows. The flow of funds accounts for the Indian economy provide information on the following six sectors—households, private corporate business sector, banking, other financial institutions, government, and the rest of the world (RoW). These sectors participate in the financial activities through borrowing (issuing claims on themselves) and lending (accepting claims on others). If the borrowing exceeds the lending, the sector is termed as a deficit sector; in the reverse case, it is a surplus sector. Financial assets and liabilities are classified under ten major categories of financial instruments—currency, deposits, investments, loans and advances, small savings, life funds, provident funds, trade debts, foreign claims not elsewhere classified and other claims not elsewhere classified. The instrument-wise analysis of financial flows reveals the aggregate preference pattern of various sectors for different financial instruments.

Flow of Funds Accounts for the Indian Economy

- Provide information on six sectors: households, private corporate business, banking, other financial institutions, government, and the rest of the world (RoW)

Financial claims are divided into two categories: (i) primary issues or securities signifying all forms of debt, marketable or otherwise, issued by the ultimate borrowers; and (ii) secondary issues or indirect

The Total Flow of Finance in an Economy

- Equals the aggregation of funds raised by primary issues and secondary issues

Primary Issues

- Funds which flow directly from surplus to deficit sectors

Secondary Issues

- Funds which flow through financial intermediaries

securities reflecting debt and claims issued by financial intermediaries in order to acquire and hold primary securities. The total flow of finance in the economy is represented by the total financial issues, which is the aggregation of funds raised by primary and secondary issues.

This system is designed as a matrix. The matrix is prepared by examining the balance sheets of the various sectors at the beginning and at the end of a period. The net increase in assets is treated as uses of funds and increase in liabilities as sources of funds. Tables 2.3 and 2.4 show changes or flow of funds between two points of time. They include only the inter-sectoral flows and not the intra-sectoral flow of funds. In other words, the flow of funds accounts present a net flow of funds between sectors and between two points of time.

Table 2.3 exhibits financial flows by different sectors. The RBI publishes this data and it is available upto 2007–08.

Among the financial intermediaries, the banking sector is the most dominant. The share of claims by all financial institutions in total claims averaged 42.2 per cent during the period 1994–95 to 200–01. This share, however, marginally declined to 40.2 per cent during the period 2000–01 to 2007–08. Deposits constitute the largest source of funds for the banks and they were mobilised primarily from the household sector. Table 2.4(B). The share of non-financial institutions led by the government and to an extent by the private corporate sector increased over this period and averaged 57.8 per cent during this period. The 'rest of the world' sector has played an important role in flow of funds since 1993–94. There were significant capital through the direct as well as portfolio routes between 2003–04 to 2007–08. The share of the private corporate sector in the total claims increased from 16 per cent in 1990–91 to 35 per cent in 2000–01. By that time, the private sector was in a position to garner huge fund due to prevalent buoyant capital market conditions. This share, however, declined to 30.4 per cent during 2007–08. The Banks are the major source of finance for the private corporate sector.

The total sources of funds or the total issues can be segregated into primary issues (i.e., funds which directly flow from surplus to deficit sectors) and secondary issues (i.e., funds which flow through financial intermediaries such as banks and other financial institutions). Table 2.4 reveals a rise in the total issues from Rs. 5,877 crore in 1970–71 to Rs. 386,951 crore in 1995–96. One can see that on the one hand, the share of secondary issues registered an increasing trend, while on the other hand, there was a steady decline in the share of primary issues. This trend continued till 1993–94. This indicates the importance of financial intermediation in the Indian economy. However, this trend has reversed since 1995–96 with primary issues registering an increasing trend. The primary issues were mostly in the form of domestic primary issues. Total financial issues rose by 203.4 per cent from Rs. 9,55,620 crore in 2001–02 to Rs. 29,17,987 crore in 2007–08. The rise in secondary issues was higher compared to the primary issues.

Flow of Funds-based Indicators of Financial Development

- Finance Ratio
- Financial Inter-relation Ratio
- New Issue Ratio
- Intermediation Ratio

Flow of Funds-based Indicators of Financial Development

The role of the Indian financial system in capital accumulation and formation can be best guaged by certain finance-deepening ratios. The financial development of a country is studied by examining changes in the following ratios which were constructed by Goldsmith (1969).

Finance Ratio (FR) It depicts the process of financial deepening in the economy. It is an indicator of the rate of financial development in relation to economic growth. It is a ratio of the total issues consisting primary and secondary claims in relation to the national income.

$$\text{FR} = \frac{\text{Total financial claims}}{\text{Net income}} = \frac{\text{Total issues}}{\text{Net national product at factor cost}}$$

Financial Inter-relation Ratio (FIR) It reflects the proportion of financial issues with respect to net capital formation in the economy. It reflects the relationship between the financial structure and the real-asset structure of the economy. In other words, the relationship between financial development and capital formation is best captured by this ratio.

$$\text{FIR} = \frac{\text{Financial assets}}{\text{Physical assets}} = \frac{\text{Total issues}}{\text{Net domestic capital formation}}$$

New Issue Ratio (NIR) It is the ratio of primary issues to net domestic capital formation. It measures the proportion of primary claims issued by non-financial institutions to net capital formation. In other words, NIR indicates how far direct issues to the savers have financed the investment by the investing sectors.

$$\text{NIR} = \frac{\text{Primary issues}}{\text{Net physical investments}} = \frac{\text{Primary issues}}{\text{Net domestic capital formation}}$$

TABLE 2.3 Financial Flow by Sectors

(Rs in Crore)

No.	*Sectors*	*1990–91*	*1991–92*	*1992–93*	*1993–94*	*1994–95*	*1995–96*	*1996–97*	*1997–98*	*1998–99*	*1999–2000*	*2000–01*
1.	Banking	39,828 (23.8)	57,481 (24.1)	59,874 (28.5)	82,109 (27.2)	1,16,217 (28.3)	73,495 (19.0)	87,585 (21.5)	1,40,616 (23.3)	1,77,055 (27.5)	1,54,433 (26.5)	1,88,495 (24.2)
2.	Other Financial Institutions	31,188 (18.6)	48,905 (20.5)	35,916 (17.1)	60,788 (20.1)	70,458 (17.2)	66,842 (17.3)	98,054 (24.0)	1,00,268 (15.6)	1,00,443 (15.6)	1,19,327 (20.5)	1,06,270 (13.6)
3.	All Financial Institutions (1+2)	71,016 (42.4)	1,06,386 (44.6)	95,790 (45.7)	1,42,897 (47.3)	1,86,675 (45.5)	1,40,337 (36.3)	1,85,638 (45.5)	2,40,884 (40.0)	2,77,498 (43.1)	2,73,754 (47.1)	2,94,765 (37.8)
4.	Private Corporate Business	27,535 (16.4)	57,662 (24.2)	39,614 (18.9)	44,167 (14.6)	1,11,876 (27.3)	1,36,244 (35.2)	91.633 (22.5)	1,06,850 (17.7)	1,32,745 (20.6)	79,674 (13.7)	1,82,126 (23.4)
5.	Government	66,756 (39.8)	61,006 (25.6)	63,145 (30.1)	81,371 (26.9)	71,801 (17.5)	84,985 (22.0)	83,675 (20.5)	2,10,145 (34.9)	1,89,962 (29.5)	1,77,612 (30.5)	2,20,669 (28.3)
6.	Rest of the World	–7,050 (–4.2)	7,252 (3.0)	–3,521 (–1.7)	19,121 (6.3)	15,064 (3.7)	6,765 (1.7)	28,849 (7.1)	19,650 (3.3)	16,986 (2.6)	14,602 (2.5)	49,888 (6.4)
7.	Households	9,267 (5.5)	5,998 (2.5)	14,752 (7.0)	14,541 (4.8)	24,771 (6.0)	18,620 (4.8)	18,194 (4.5)	25,365 (4.2)	27,367 (4.2)	36,067 (6.2)	31,778 (4.1)
8.	All Non-financial Institutions (4 to 7)	96,508 (57.6)	1,13,198 (55.4)	1,13,990 (54.3)	1,59,200 (52.7)	2,23,512 (54.5)	2,46,614 (63.7)	2,22,351 (54.5)	3,62,009 (60.0)	3,67,061 (56.9)	3,07,956 (52.9)	4,84,461 (62.2)
9.	**Total Claims Issued (3+8)**	**1 ,67,524**	**2,38,304**	**2,09,780**	**3,02,097**	**4,10,187**	**3,86,951**	**4,07,990**	**6,02,893**	**6,44,558**	**5,81,715**	**7,79,225**

Note: Figures in parentheses are a percentage share of the total financial flow.

Source: RBI Bulletin, September 2007

TABLE 2.3(A) Financial Flows by Sectors

Sectors	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08
1. Banking	2,09,044	2,75,497	2,95,078	3,74,411	4,60,259	5,98,267	8,30,477
	(21.9)	(27.2)	(26.6)	(31.9)	(29.9)	(28.5)	(28.5)
2. Other Financial Institutions	93,592	1,36,798	1,46,635	1,21,474	2,17,832	2,14,032	4,55,605
	(9.8)	(13.5)	(13.2)	(10.4)	(14.1)	(10.2)	(15.6)
3. All Financial Institutions (1+2)	3,02,636	4,12,295	4,41,713	4,95,885	6,78,092	8,12,299	12,86,082
	(31.7)	(40.8)	(39.9)	(42.3)	(44)	(38.7)	(44.1)
4. Private Corporate Business	2,86,571	1,16,756	1,04,042	1,34,310	3,08,172	6,77,979	8,86,994
	(30)	(11.5)	(9.4)	(11.4)	(20)	(32.3)	(30.4)
5. Government	2,52,555	3,58,063	3,49,987	2,97,930	2,68,654	2,01,949	1,92,381
	(26.4)	(35.4)	(31.6)	(25.4)	(17.4)	(9.6)	(6.6)
6. Rest of the World	62,131	63,648	1,41,760	1,24,392	1,02,111	2,29,761	3,79,395
	(6.5)	(6.3)	(12.8)	(10.6)	(6.6)	(10.9)	(13)
7. Households	51,727	60,304	69,982	1,20,566	1,83,424	1,76,787	1,73,136
	(5.4)	(6)	(6.3)	(10.3)	(11.9)	(8.4)	(5.9)
8. All Non-Financial Institutions (4 to 7)	6,52,984 (68.3)	5,98,771 (59.2)	6,65,771 (60.1)	6,77,199 (57.7)	8,62,361 (56)	12,86,476 (61.3)	16,31,905 (55.9)
9. **Total Claims Issued (3+8)**	**9,55,620** **(100)**	**10,11,067** **(100)**	**11,07,484** **(100)**	**11,73,084** **(100)**	**15,40,452** **(100)**	**20,98,776** **(100)**	**29,17,987** **(100)**

Note: Figures in parentheses indicate percentage shares to total Claim.
Source: RBI, Bulletin, Supplement, Flow of Funds Accounts of the Indian Economy, 2001–02 to 2007–08, October 2009.

TABLE 2.4 Primary and Secondary Issues

(Rs. in Crore)

Year	Secondary Issues	Primary Issues	Of which Domestic Primary Issues	Of which Issues of the Rest of the World	Total Issues
(1)	(2)	(3)=(4+5)	(4)	(5)	(6)
1970–71	2,336 (39.7)	3,541 (60.3)	3,479 (59.2)	62 (1.1)	5,877
1975–76	6,733 (42.8)	8,999 (57.2)	8,125 (51.6)	874 (5.6)	15,732
1980–81	14,731 (40.7)	21,452 (59.3)	21,408 (59.2)	44 (0.1)	36,183
1985–86	30,558 (42.1)	42,006 (57.9)	43,698 (60.2)	–1,692 (–2.3)	72,564
1990–91	71,016 (42.4)	96,508 (57.6)	1,03,558 (61.8)	–7,050 (–4.2)	1,67,524
1991–92	1,06,386 (44.6)	1,31,916 (55.4)	1,24,664 (52.3)	7,252 (3.0)	2,38,302
1992–93	95,790 (45.7)	1,13,990 (54.3)	1,17,511 (56.0)	–3,521 (–1.7)	2,09,780
1993–94	1,42,897 (47.3)	1,59,200 (52.7)	1,40,079 (46.4)	19,121 (6.3)	3,02,097
1994–95	1,86,675 (45.5)	2,22,512 (54.5)	2,08,448 (50.8)	15,064 (3.7)	4,10,187
1995–96	1,40,337 (36.3)	2,46,614 (63.7)	2,39,849 (62.0)	6765 (1.7)	3,86,951
1996–97	1,85,638 (45.5)	2,22,351 (54.5)	1,93,502 (47.4)	28,849 (7.1)	4,07,989
1197–98	2,40,884 (40.0)	3,62,009 (60.0)	3,42,359 (56.8)	19,650 (3.3)	6,02,893
1997–98	2,77,498 (43.1)	3,67,061 (56.9)	3,50,075 (54.3)	16,986 (2.6)	6,44,559
1998–2000	2,73,759 (47.1)	3,07,956 (52.9)	2,93,354 (50.4)	14,602 (2.5)	5,81,715
2000–01	2,94,765 (37.8)	4,84,461 (62.2)	4,34,573 (55.8)	49,888 (6.4)	7,79,226

Note: Figures in parentheses indicate percentage shares to total claim.
Source: RBI, *Report on Currency and Finance*, 1999–2000, pp. III-4. *Flow of Funds Accounts of the Indian Economy, RBI Bulletin, September 2007*

TABLE 2.4(A) Primary and Secondary Issues

	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08
1. Secondary Issues#	3,02,636	4,12,295	4,41,713	4,95,885	6,78,092	8,12,299	12,86,082
2. Primary Issues##	6,52,984	5,98,771	6,65,771	6,77,199	8,62,361	12,86,476	16,31,905
2.1 Domestic Sectors	5,90,853	5,35,123	5,24,011	5,52,807	7,60,250	10,56,715	12,52,510
2.2 Rest of the World	62,131	63,648	1,41,760	1,24,392	1,02,111	2,29,761	3,79,395
3. Total Issues (1+2)	9,55,620	10,11,067	11,07,484	11,73,084	15,40,452	20,98,776	29,17,987
4. Net Domestic Capital Formation@	2,92,359	3,67,528	4,79,277	6,82,171	8,92,318	10,84,768	13,36,064
5. National Income**	18,49,361	19,94,217	22,37,414	25,26,285	28,75,958	33,12,569	37,87,596

\# Refers to issues by financial intermediaries (i.e., Banks and Other Financial Institutions).
\## Refers to issues by all sectors other than financial intermediaries.
@ At Current Prices.
** Net National Product at Factor Cost at Current Prices.
Source: RBI, Bulletin, Supplement, Flow of Funds Accounts of the Indian Economy, 2001–02 to 2007–08, October 2009.

TABLE 2.4(B) Financial Flows by Type of Instruments

Instruments	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08
1. Currency and Deposits	2,00,220 (21)	2,12,376 (21)	2,66,387 (24.1)	3,04,983 (26)	3,80,777 (24.6)	5,97,551 (28.5)	7,28,936 (25)
2. Investments	2,78,470 (29.1)	3,06,277 (30.3)	3,96,147 (35.8)	3,22,096 (27.5)	3,90,091 (25.2)	4,45,342 (21.2)	10,14,479 (34.8)
(a) Central and State Governments' Securities	1,06,533 (11.1)	1,78,176 (17.6)	1,94,438 (17.6)	1,61,969 (13.8)	1,05,037 (6.8)	11,03,59 (5.3)	1,93,990 (6.6)
(b) Other Securities of which:	1,71,937 (18)	1,28,101 (12.7)	2,01,709 (18.2)	1,60,128 (13.7)	2,85,054 (18.4)	3,34,983 (16)	8,20,489 (28.1)
(i) Units of UTI	−2,660 (0.3)	−7,190 (0.7)	−10,893 (1)	−23,153 (2)	−28,617 (1.8)	−63,423 (3)	−13,751 (0.5)
(ii) Other Mutual Funds	9,204 (1)	10,008 (1)	21,723 (2)	−8,402 (0.7)	49,557 (3.2)	47,181 (2.2)	2,13,405 (7.3)
3. Loans and Advances	2,38,707 (25)	2,68,204 (26.5)	2,12,491 (19.2)	2,64,663 (22.6)	4,24,149 (27.4)	6,49,187 (30.9)	7,37,305 (25.3)
4. Small Savings	35,100 (3.7)	47,986 (4.7)	58,903 (5.3)	85,106 (7.3)	81,243 (5.2)	17,544 (0.8)	−13,601 (0.5)
5. Life Fund	41,088 (4.3)	51,348 (5.1)	51,931 (4.7)	66,296 (5.7)	81,243 (5.2)	1,12,075 (5.3)	1,25,561 (4.3)
6. Provident Fund	65,839 (6.9)	71,190 (7)	69,752 (6.3)	81,578 (7)	89,477 (5.8)	1,04,558 (5)	98,067 (3.4)
7. Trade Debt	10,535 (1.1)	8,126 (0.8)	11,508 (1)	12,554 (1.1)	8,223 (0.5)	21,682 (1)	36,922 (1.3)
8. Foreign claims not elsewhere classified	−3,661 (0.4)	−2,306 (0.2)	−7,955 (0.7)	−2,749 (0.2)	−4,778 (0.3)	−19,264 (0.9)	−36,476 (1.3)
9. Other claims not elsewhere classified	89,322 (9.3)	47,866 (4.7)	48,320 (4.4)	38,557 (3.3)	98,493 (6.4)	1,70,102 (8.1)	2,26,794 (7.8)
10. **Total Claims Issued**	**9,55,620**	**10,11,067**	**11,07,484**	**11,73,084**	**15,48,917**	**20,98,776**	**29,17,987**

Note: Figures in brackets are percentages to Total Claims Issued.
Source: RBI, Bulletin, October 2009.

Intermediation Ratio (IR) It is the ratio of secondary issues to primary issues and indicates the importance of financial intermediaries in channelising financial resources. It depicts the institutionalisation of financing in the economy. It is the ratio between the financial claims issued by the financial institutions and the financial instruments issued by non-financial institutions.

$$IR = \frac{\text{Total secondary issues}}{\text{Total primary issues}}$$

As indicated in Table 2.5 all four ratios significantly increased from 1970–71 to 1995–96. The FR increased from 0.401 in 1990–91 to 0.52 in 2001–02 and 0.77 in 2007–08. This indicates a deepening of the financial markets leading to a marked rise in the institutionalisation of financing investment. It also reflects increasing separation between the acts of saving and investment.

The FIR significantly increased in the 1990s, the range being 1.75 to 2.87. This indicates that the financial structure in India grew more rapidly than the national income and there was a higher level of participation of the financial system in capital formation. The FIR ratio declined during 2004–05 and 2005–06 on account of increase in investment activity and a decline in the claims issued. The FIR significantly improved during 2007–08.

The NIR which was at a high of 1.618 in 1991–92 declined to 1.161 in 1994–95 before increasing to 1.35 in 1995–96. This downward movement reflects sluggish capital market conditions and the importance of intermediation in the Indian economy. The NIR ranged between 0.97 and 2.23 from 2001–02 and 2007–08.

The importance of financial intermediaries in channelising the financial resources is reflected in the IR which touched an all-time high of 0.89 in 1999–2000. It reflects higher involvement of the financial intermediaries in secondary issues as compared to primary issues, and importance of financial intermediaries such as banks and financial institutions in financing real activities.

TABLE 2.5 Flow of Funds-based Indicators of Financial Development in India

Year	*Finance Ratio*	*Financial Inter-relations Ratio*	*New Issue Ratio*	*Intermediation Ratio*
1970–71 to 1974–75	0.168	1.379	0.788	0.770
1975–76 to 1979–80	0.274	1.818	1.042	0.743
1980–81 to 1984–85	0.344	2.421	1.429	0.690
1985–86 to 1989–90	0.400	2.402	1.401	0.721
1990–91	0.401	1.745	1.005	0.736
1991–92	0.497	2.922	1.618	0.806
1992–93	0.384	2.183	1.186	0.840
1993–94	0.473	2.825	1.489	0.898
1994–95	0.50	2.53	1.38	0.84
1995–96	0.41	1.96	1.25	0.57
1996–97	0.37	2.05	1.12	0.83
1997–98	0.49	2.53	1.52	0.67
1998–99	0.45	2.67	1.52	0.76
1999–2000	0.37	1.81	0.96	0.89
2000–2001	0.46	2.57	1.60	0.61
2001–02	0.52	3.27	2.23	0.46
2002–03	0.51	2.75	1.63	0.69
2003–04	0.49	2.31	1.39	0.66
2004–05	0.46	1.72	0.99	0.73
2005–06	0.54	1.73	0.97	0.79
2006–07	0.63	1.93	1.19	0.63
2007–08	0.77	2.18	1.22	0.79

Source: RBI Bulletin 2007 and *Bulletin,Supplement*, Flow of Funds Accounts of the Indian Economy, 2001–02 to 2007–08, October 2009.

All four ratios exhibit the growing importance of financial intermediation in the economy and the growth of financial flows in relation to economic activity both in the form of direct and indirect finance. This growth indicates a deepening and widening of the Indian financial system.

TRENDS IN SAVING AND INVESTMENT

The two most important concepts in economics and finance are saving and investment. Economic objectives like price stability, maintaining high levels of income and employment, and high rates of economic growth have a close relationship with the concepts of saving and investment.

Flow Concepts

- Saving is income that exceeds consumption
- Investment is investment in real assets

Saving is income minus expenditure. In other words, saving is the income that exceeds consumption. Investment involves the sacrifice of current consumption and the production of investment goods which are used to produce commodities. It includes the accumulation of inventories. Investment refers to investment in real assets and includes investment in expenditure for plant and equipment, residential and other construction, and additions to inventories. In other words, investment is capital formation, one of the most important factors that determines the rate of economic growth of a country. Capital formation is the net investment in fixed assets. In the national accounts, investment is the sum of Gross Fixed Capital Formation and the physical change in stocks and work in progress. Gross Fixed Capital Formation includes depreciation while Net Capital Formation excludes it.

Both saving and investment are flow concepts and refer to the addition of the stock of capital (wealth) that occurs over a period of time. The stock concept 'savings' refers to the holding of wealth in some form, usually financial claims. Savings refers to financial capital at a point of time and saving refers to addition to the capital over a period of time.

Many changes in the economy issues such as fluctuation in supply of money, creation of new capital, surplus/deficit of the government sector, and introduction of new types of claims determine the supply and demand for securities. These changes are essential to the study of financial markets. To understand these changes, one needs to look at the flow concept of saving and investment.

Why Study Saving and Investment

The concepts of saving and investment help analyse some important aspects of macro-economics such as fluctuations in economic activity between prosperity and recession, the process of economic growth, and the method of financing Gross Domestic Capital Formation.

Use of the Concepts of Saving and Investment

To analyse
- fluctuations in economic activity
- process of economic growth
- method of financing gross domestic capital formation

Changes or fluctuations in economic activity may occur when investment spending is greater or smaller than the savings at a given level of income. Moreover, the resources going into the productive process, i.e., capital formation, may have a direct relationship with economic growth. In other words, growth in economic activity may result either from widening the application of capital (capital widening) or intensifying its user—utilising more capital per unit of labour and output (capital deepening). Lastly, all economic activities—agricultural, industrial, or services—depend on the availability of financial resources. These resources needed for economic growth must be generated. The amount of financial resources and the volume of capital formation depend upon the intensity and efficiency with which savings are encouraged, gathered, and directed towards investment. An institutional mechanism—the financial system—performs this role to aid economic growth. As more saving moves through the financial system, financial depth increases.

Saving and Investment in India

Estimates of savings are prepared by the CSO. The organisation defines saving as the excess of current income over current expenditure. It is the balancing item on the income and outlay accounts of producing enterprises and households, government administration, and other final consumers.

Forms of Savings of the Household Sector

- Physical assets
- Financial assets

For the purpose of estimating the domestic saving, the economy has been divided into three broad institutional sectors: (i) household, (ii) private corporate, and (iii) public.

The household sector comprises heterogenous entities such as individuals, unincorporated business enterprises (sole proprietorships and partnership concerns), farm production units, and a number of non-profit institutions. Household saving equals income of households not allocated to current expenditure.

The saving of the household sector is measured as the total of financial saving and saving in the form of physical assets. Financial saving involves possession of currency, net deposits, investment in shares and debentures, net claims on government in the form of central and state government securities and small savings, net increase in the claims of life insurance, and provident funds. Physical assets include construction machinery and equipment and stocks held by individuals, firms, and other institutions constituting the household sector.

The private corporate sector comprises non-government, non-financial companies, private financial institutions, and co-operative institutions. The saving of the private corporate sector is the excess of its revenues over expenditure.

The public sector comprises the government, administrative departments, and enterprises both departmental and non-departmental. The saving of the government administration is defined as the excess of current receipts over current expenditure.

The term investment refers to domestic capital formation. Investment in an economy equals the savings available to it. Its size in any country depends on the domestic saving and capital inflow. There are two broad categories of investments: private and public. Public investment includes government's investment in infrastructure, health, and education. Private investment refers to investment in plant, machinery, and buildings by firms, and households.

The trend in saving and investment rates reveals the following features.

Trends in Saving and Investment

- Gross domestic and investment savings rate in the tenth plan was 34.1 per cent of the GDP
- Household sector—the largest saving sector—accounts for over three-quarters of the total savings in India
- Since 2000–01, the household sector's preference for investment in physical assets increased
- The saving and investment rates of the private corporate sector have improved
- There was a saving–investment surplus for the first time in 2001–02

- The Gross Domestic Savings (GDS) rose as a proportion of the GDP from 16.6 per cent in the 1970s to 23.9 per cent in the 1990s (Table 2.6). In the same period, there was a simultaneous increase in the rates of financial savings of the household sector and the private corporate sector. The saving rate improved in 2002–03 due to reduced public sector dissavings. The savings rate was still below the peak of 25.1 per cent achieved in 1995–96. The savings rate in the economy touched an all-time high of 37.7 per cent of the GDP in 2007–08 (Table 2.7).
- In India, the bulk of the saving is sourced from the household sector.
- Financial saving started assuming importance as a result of the financial deepening following bank nationalisation in 1969. The GDS rate fell during the first half of the 1980s due to an increase in household expenditure on consumer goods. During the 1990s, household sector saving and household financial saving emerged as the single greatest contributor to the GDS.
- The household sector accounts for over three-quarters of the total savings in India (Table 2.8). The increase in the share of financial saving of the household sector, which has been surpassing physical saving on a sustained basis, is indicative of increased financial intermediation, widening, and deepening of the financial system, as well as the movement of relative rates of return on assets of the household sector portfolio.
- The greater preference of the household sector for financial assets as against physical assets could be attributed to factors like removal of wealth tax on various forms of financial assets in the Union Budget 1992–93, growing financial intermediation and preference of households for less risky assets such as bank deposits, contractual savings, and small saving instruments. However, since 2000–01, the investment in physical assets has been in the form of gold and real estate. The declining interest rates coupled with lackluster capital markets has led to a spur in physical assets like housing, gold, and real estate.
- The government has been pre-empting an increasing proportion of the household sector's savings through the insurance and provident fund system, minimum investment recourse to banks under the Statutory Liquidity Ratio (SLR), and recourse to Reserve Bank through deficit financing.
- The saving rates of the private corporate sector exceeded that of the public sector in the 1990s. The private corporate sector's saving rate increased from 1 per cent in the 1950s to 1.7 per cent in 1980s and 3.8 per cent in 1990s. The investment rate of the private corporate sector surpassed that of the public sector in 1995–96. This improved investment rate in the 1990s could be attributed to the liberalisation measures introduced in the economy and the consequent impetus given to the private sector

TABLE 2.6 Trends in Gross Domestic Saving (As Per Cent of the GDP at Current Market Prices)

Items	*1970–71 to 1974–75*	*1975–76 to 1979–80*	*1980–81 to 1984–85*	*1985–86 to 1992–93*	*1993–94 to 1998–99*	*X Plan Average 2002–03 to 2006–07*
1. Household Sector	12	15.2	14.1	17.1	18.6	23.7
1.1 Financial Saving	4	5.7	6.7	8.4	10.6	11.0
1.2 Saving in Physical Assets	8	9.5	7.4	8.8	8	12.7
2. Private Corporate Sector	1.7	1.5	1.6	2.4	4.1	6.0
3. Public Sector	3	4.5	3.7	2	1.2	1.7
4. Gross Domestic Saving	16.6	21.2	19.4	21.5	23.9	31.4

Note: Data for the period 1970–71 to 1992–93 are based on 1980–81 series and data for the period 1993–94 to 1998–99 are based on 1993–94 series. Data for the X Plan Average are based on 1999–2000 series.

Source: RBI, *Report on Currency and Finance,* 2007–08.

TABLE 2.7 Rates of Gross Domestic Saving and Investment (As Per Cent of GDP at Current Market Prices) 1999–2000 Series

(Per Cent of GDP at Current Market Prices)

Item	*2001–02*	*2002–03*	*2003–04*	*2004–05*	*2005–06*	*2006–07 PE*	*2007–08 QE*	*Average 1999–2000 to 2007–08*
1. Household Saving	22.1	22.9	24.1	22.8	24.1	24.1	24.3	23
of which:								
(a) Financial assets	10.9	10.3	11.4	10.1	11.7	11.7	11.7	11
(b) Physical assets	11.3	12.6	12.7	12.7	12.4	12.4	12.6	12.1
2. Private Corporate Saving	3.4	4	4.6	6.7	7.7	8.3	8.8	5.8
3. Public Sector Saving	–2	–0.6	1.1	2.2	2.4	3.3	4.5	0.9
4. Gross Domestic Saving	23.5	26.3	29.8	31.7	34.2	35.7	37.7	29.7
5. Net capital inflow	–0.6	–1.2	–2.2	0.4	1.2	1.1	1.4	0.2
6. Gross Domestic Capital Formation #	22.8	25.2	27.6	32.1	35.5	36.9	39.1	29.9
7. Gross Capital Formation	24.2	25.2	26.8	31.6	34.8	36.4	38.7	29.8
of which:								
(a) Public sector	6.9	6.1	6.3	6.9	7.6	8	9.1	7.2
(b) Private corporate sector	5.4	5.9	6.8	10.8	13.7	14.8	15.9	9.5
(c) Household sector	11.3	12.6	12.7	12.7	12.4	12.4	12.6	12.1
(d) Valuables	0.6	0.6	0.9	1.3	1.2	1.2	1.1	0.9
8. Total Consumption Expenditure (a+b)	76.9	75.2	73.1	69.4	68.1	66.4	65.3	
(a) Private Final Consumption Expenditure	64.5	63.3	61.8	58.7	57.6	56.2	55.2	
(b) Government Final Consumption Expenditure	12.4	11.9	11.3	10.7	10.5	10.2	10.1	
Memo								
Saving-Investment Balance (4–6)	0.6	1.2	2.2	–0.4	–1.2	–1.1	–1.4	
Public Sector Balance	–8.9	–6.7	–5.3	–4.7	–5.2	–4.6	–4.6	
Private Sector Balance	8.8	8.4	9.2	6.1	5.7	5.2	4.7	
(a) Private Corporate Sector	–2.1	–1.9	–2.2	–4	–6	–6.5	–7	
(b) Household Sector	10.9	10.3	11.4	10.1	11.7	11.7	11.7	

PE: Provisional Estimates. QE: Quick Estimates. #: Adjusted for errors and omissions.
Note: Figures may not add up to the totals due to rounding off.
Source: RBI, Macroeconomic and Monetary Developments in 2008–09.

TABLE 2.8 Sector-wise Domestic Savings at Current Market Prices (Per Cent)

	1950–51 to 1959–60	*1960–61 to 1969–70*	*1970–71 to 1979–80*	*1980–81 to 1989–90*	*1990–91 to 1999–2000*	*2000–01 to 2006–07*
Household Sector	68.5	63.7	66.5	72.9	77.6	77.4
Financial Saving	20.3	21.0	26.6	35.5	43.3	36.2
Physical Saving	48.2	42.7	39.9	37.4	34.3	41.2
Private Corporate Sector	10.4	11.2	8.7	9.5	17.2	18.9
Public Sector	21.1	25.1	24.8	17.6	5.2	3.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: RBI, *Report on Currency and Finance,* 2007–08.

in the successive budgets in the 1990s. The saving rate of the private corporate sector, however, declined in the year 2001–02 but improved marginally in 2003–04 and 2004–05. The gradual reduction in corporate tax rates and debt servicing costs more than doubled the private corporate saving rate from 3.4 per cent in 2001–02 to 8.8 per cent in 2007–08 (Tables 2.7 and 2.8).

- The public sector saving rate declined tremendously in the 1990s. In the last two years of the decade, it turned negative and touched –2.5 per cent in 2001–02 on account of increasing dissaving by government administration. This negative public savings is a major constraint on domestic resource mobilisation and has lowered the aggregate domestic saving. This dissaving reduced marginally to –1.1 per cent in 2002–03 and further to –0.3 per cent in 2003–04. Savings of the public sector touched 2.2 per cent of the GDP in 2004–05, the highest level since the late eighties. The fast recovery from negative savings of 2 per cent of the GDP in 2001–02 was on account of the steady improvement in savings of the non-departmental enterprises—other public sector companies—from 1.5 per cent to 4.1 per cent of the GDP during 2003–04 to 2006–07. However, the savings of the department enterprises-mainly railways and telecom remained largely stagnant at 0.5 per cent of the GDP during this period. The saving rate of the overall public sector was 4.5 per cent in 2007–08 (Table 2.7).
- Gross Domestic Capital Formation (investment) reached a peak of 26.9 per cent of the GDP in 1995–96, but fell to 24 per cent in 2000–01. The fall in 2000–01 was due to a deterioration in the public sector savings rate. The private corporate sector investment decelerated to 7 per cent in 2000–01 from a high of 9.4 per cent in 1995–96, but improved in the years 2001–02 and 2002–03 on account of increased profits. The private sector investments exceeded the public sector investments during 2003–04 and 2004–05. The investment was higher in fixed assets—machinery and investments.Capital formation in the public sector fell in the 1990s but rose to 6.9 per cent in 1999–2000. The rise was due to a buffer food stock and was not related with investment in fixed assets. The gross domestic capital formation rate reached a peak of 39.1 per cent in 2007–08 due to improvements in both public and private corporate investments.
- Gross Domestic Capital Formation rates remained higher than the Gross Domestic Saving till 2000–01. This resulted in a saving–investment gap. This gap in the public sector represents a fiscal deficit. The rise in the fiscal deficit was more than the rise in private savings, creating a gap which was filled in by bringing in foreign savings. Foreign savings can be explained better if we understand two measures, external current account deficit and external capital account surplus. A current account deficit means that the country's exports are not sufficient to fully pay for its imports. This results in a gap which can be covered by sale of assets, equity or debt securities to foreigners. Capital account surplus is a result of large inflows of foreign savings in the form of foreign investment and remittances. Thus, current account deficit equals capital account surplus.

Domestic saving has traditionally financed over 90 per cent of investment in India. The recourse to external saving has averaged less than one per cent of the GDP since 1991–92. There was an increased flow of foreign funds in the form of foreign capital and remittances. However, there was a deceleration of the investment rate in 2000–01 which reflected a failure of the investment demand to absorb the available resources. This led to a saving–investment surplus of 0.6 per cent of the GDP for the first time in 2001–02 after the period 1975–78 (Table 2.7). This surplus was mirrored in the current account surplus of the balance of payments. The current account balance has turned negative since 2004–05 on account of a higher investment rate as compared to savings rate.

Household Sector Financial Saving

Household Sector Financial Assets Portfolio

- Deposits
- Contractual savings
- Shares and debentures

The household sector saves in the form of currency, bank deposits, non-banking deposits, life insurance funds, provident and pension fund claims on government, shares and debentures including units of the Unit Trust of India.

For economic growth, it is necessary that saving is held in financial assets such as deposits, shares and debentures, and in the form of contractual savings rather than in currency. If savings are held in the form of currency, it is probable that they might be invested in unproductive assets like gold. Hence, an analysis of the composition of household sector savings was undertaken.

Box 2.2 Low Confidence in the Stock Market

Studies conducted by the Society for Capital Market Research and Development have found that almost 40 per cent of the investors thought of the stock market as a place where one is likely to lose money and they listed volatility and price manipulation as the factors diminishing their confidence in the market. The survey also found that mutual funds ranked below direct equity investment.

This analysis indicated that households held a large portion of their savings in the form of deposits (both banking and non-banking). Rapid expansion of the commercial banking sector was one of the important factors in mobilising savings.

Contractual savings or savings under provident fund schemes, pension and life insurance funds were the next preferred form of savings by households. Funds raised from contractual savings are employed for long-term investment. An increase in household sector savings in the years 1999–2000 and 2000–01 was due to an increase in long-term contractual savings. In India, there is a great need for infrastructure projects and these projects can be financed through long-term contractual savings. Besides, contractual saving also has the potential of reviving the capital market and acting as a social security.

Financial saving in the form of shares and debentures showed a marked increase from 0.8 per cent during the period 1970–71 to 1973–74 to 3.9 per cent during the period 1993–94 to 1998–99, emerging as the third most popular financial asset (Table 2.9). This was due to reforms in the financial market undertaken by the government in July 1991 which led to a boom in new issues of shares and a rise in the Sensex. Besides this, the depth, size, and liquidity of financial markets had a significant impact on the household saving in financial assets. In 2005–06, financial saving in the form of shares and debentures declined to 0.1 per cent of the financial assets.

Small investors are the pillars of Indian capital markets. A large and active small investor base helps in price discovery and serves as a counterweight to large powerful investors such as foreign institutional investors (FIIs). Recurrent scams, price volatility, fraudulent company management, and poor corporate governance have contributed to the diminishing faith of the individual investor in the stock market. However, the proportion of investment in shares and debentures has increased since 2005–06 on account of buoyant stock markets and strong macro-economic fundamentals.

Hence, the household sector's saving is increasingly distributed between financial assets such as deposits, insurance policies, and shares and debentures rather than in the form of currency. This is indicative of an increasing preference of the household sector for financial intermediaries and productive investment of the saving mobilised by financial intermediaries.

Household Sector's Liabilities As shown in Table 2.10, a study of the household sector's liabilities shows that it borrows the majority of its funds from banks. In the years 1999–2000 and 2000–01, the borrowings from banks increased by 40 per cent as compared to the year 1998–99. To compare figures, the borrowings from banks increased sixfold from Rs. 43,354 crore in 2001–02 to Rs. 2,72,978 crore in 2006–07. This was due to a decline in interest rates. Taking advantage of this, the household sector purchased of durables and real estate. The second preferred source of finance of the household sector is loans and advances from other financial institutions. Table 2.10 also reflects that the household is a net surplus sector in the sense that the excess of saving and investment exceeds its financial liabilities.

Financial Liabilities of the Household Sector

- Bank advances
- Loans and advances from other financial institutions
- Loans and advances from government
- There was a rise in the financial liabilities of the household sector due to a regime of low interest rates

In a nutshell, the household sector in India has emerged as the single most important contributor to the GDS. The performance of the private sector improved in terms of both saving and investment, but there was a negative saving on the part of the government. The public sector was the largest deficit sector due to its large fiscal deficits and the government has had to resort to market borrowings on a large scale to fill up the gap.

An analysis of trends in savings and investment reveals that financial development and intermediation have led to improvement in the saving rate of the country.

Saving and Investment in the Long Run

India's saving rate seems to be fairly low when compared with East Asian economies.

There is considerable scope for improvement in the saving rate in India. An empirical estimate by the Reserve Bank of India (2001) indicates that the real per capita income and financial deepening have significant positive effects on the aggregate GDS rate and are its main determinants. Other things remaining the same, a 1 per cent increase each in income and intermediation ratio (secondary issues to primary issues ratio) would induce an increase in aggregate savings rate by 6.6 per cent points and 3.4 percentage points respectively.

There is potential for increasing the saving rate in India and this can be tapped by financial markets and intermediaries who can offer a higher rate of return.

Conclusion

In the 1990s—the post-reforms period—the trend in the growth rate of the GDP was 5.7 per cent. The GDP growth rate further rose to 7.3 per cent between 2000–01 and 2007–08 which was distinctly high

TABLE 2.9 Household Saving in Financial Assets

(Rs. in Crore)

Sr. No.	Item	2008–09#	2007–08P	2006–07	2005–06	2004–05	2003–04	2002–03	2001–02	2000–01	1999–00
A.	FINANCIAL ASSETS (GROSS)	7,46,865	7,15,994	6,50,412	3,80,090	3,36,609	2,89,953	2,48,774	2,36,351	7,68,967	7,34,699
	As Per Cent of GDP at Current Market Prices	14.0	15.2	15.8	13.8	13.6	12.7	11.9	12.2	18.5	15.6
	1. Currency	93,056	81,278	66,274	42,675	28,447	28,156	15,632	20,845	66,323	80,342
	a. As Per Cent of the GDP at Current Market Prices	1.7	1.7	1.6	1.5	1.2	1.2	0.7	1.1	1.6	1.7
	b. As Per Cent of Financial Assets (Gross)	12.5	11.4	10.2	11.2	8.5	9.7	6.3	8.8	8.6	10.9
	2. Deposits@	4,36,710	3,74,088	3,19,385	1,45,657	13,9701	11,4233	10,2017	85,850	4,25,050	4,15,245
	a. As Per Cent of the GDP at Current Market Prices	8.2	7.9	7.7	5.3	5.7	5.0	4.9	4.4	10.3	8.8
	b. As Per Cent of Financial Assets (Gross)	58.5	52.2	49.1	38.3	41.5	39.4	41.0	36.3	55.3	56.5
	3. Claims on Government	–23,479	–28,315	19,198	87,372	62,560	51,940	39,007	28,985	40.627	–27,042
	a. As Per Cent of the GDP at Current Market Prices	–0.4	–0.6	0.5	3.2	2.5	2.3	1.9	1.5	1.0	–0.6
	b. As Per Cent of Financial Assets (Gross)	–3.1	–4.0	3.0	23.0	18.6	17.9	15.7	12.3	5.3	–3.7
	4. Investment in Shares and Debentures+	19,349	89,134	58,598	492	5,504	7,777	10,214	18,119	51.086	19,828
	a. As Per Cent of the GDP at Current Market Prices	0.4	1.9	1.4	0.0	0.2	0.3	0.5	0.9	1.2	1.6
	b. As Per Cent of Financial Assets (Gross)	2.6	12.4	9.0	0.1	1.6	2.7	4.1	7.7	6.6	10.5
	5. Contractual Saving **	2,21,228	1,99,809	1,86,957	1,03,895	1,00,398	87,848	81,903	82,551	1,85,881	1,89,075
	a. As Per Cent of the GDP at Current Market Prices	4.2	4.2	4.5	3.8	4.1	3.8	3.9	4.3	4.5	4.0
	b. As Per Cent of Financial Assets (Gross)	29.6	27.9	28.7	27.3	29.8	30.3	32.9	34.9	24.2	25.7
B.	FINANCIAL LIABILITIES (Gross)	1,65,656	1,73,135	1,76,787	70,732	72,576	42,082	31,769	35,275	2,82,697	2,08,666
	a. As Per Cent of the GDP at Current Market Prices	3.1	3.7	4.3	2.6	2.9	1.8	1.5	1.8	6.8	4.4
C.	Saving in Financial Assets (Net) (A-B)	5,81,209	5,42,859	4,73,624	3,09,358	2,64,033	2,47,871	2,17,005	2,01,075	4,86,270	5,26,033
	a. As Per Cent of the GDP at Current Market Prices	10.9	11.5	11.5	11.2	10.7	10.9	10.4	10.4	11.7	11.2

Notes:
Components may not add up to the totals due to rounding off.
Preliminary P: Provisional.
@ : Comprising bank deposits, non-bank deposits and trade debt (net).
+ : Including units of UTI and other mutual funds.
** : Comprising life insurance, provident and pension funds.
Source: RBI, *Annual Report,* 2007–08.

TABLE 2.10 Changes in Financial Liabilities of the Household Sector

(Rs. in Crore) (At Current Prices)

Year	*Changes in Financial Liabilities*	*Bank Advances*	*Loans and Advances from Other Financial Institutions*	*Loans and Advances from Government*	*Loans and Advances from Cooperative Non-credit Societies*
1970–71	591	509	38	69	–25
1970–71	591	509	38	69	–25
1975–76	1,069	899	78	67	25
1980–81	3,508	3,093	182	151	82
1985–86	6,983	6,043	646	205	89
1990–91	9,267	7,429	1,154	611	73
1991–92	5,997	3,689	1,551	469	288
1992–93	15,056	11,421	2,897	443	295
1993–94	14,859	11,972	1,867	710	310
1994–95	24,770	21,618	2,409	417	326
1995–96	18,620	15,605	2,398	275	342
1996–97	16,857	13,675	2,593	229	360
1997–98	24,919	19,885	4,203	488	343
1998–99	26,773	20,793	4,688	944	348
1999–2000	36,067	29,859	4,631	1,227	350
2000–01	31,779	25,439	4,741	1,319	280
2001–02	51,727	43,354	6,878	1,111	384
2002–03	60,305	54,116	5,247	519	423
2003–04	69,982	57,885	12,261	–269	105
2004–05	1,20,566	1,11,667	8,318	277	304
2005–06	1,83,424	1,75,010	8,414	–277	277
2006–07P	1,76,797	1,67,820	9,388	–650	229
2007–08P	1,73,135	1,64,417	8,702	–229	245
2008–09$	1,65,656	1,56,683	8,832	–109	250

P : Provisional $: Preliminary estimates
Source: RBI, *Handbook of Statistics on Indian Economy,* 2006.

and a remarkable achievement. The GDS as a percentage of the GDP rose substantially in the 1990s at an average of 23.9 per cent of the GDP. It further improved to 37.7 per cent in 2007–08 (Table 2.7). The household sector savings had been generally in favour of financial assets as compared to physical assets.

The average investment (Gross Domestic Capital Formation) rate of 29.8 per cent of GDP was achieved in the tenth plan. The private corporate sector investment responded enthusiastically to the changes in the economic policies.

This post-reforms performance was achieved in the middle of both domestic and international uncertainties such as the South-east Asian crisis, uncertainties of the economic prospects of Japan and the economies of Europe, political uncertainty, economic sanctions imposed by several industrial countries following India's nuclear test, suspension of fresh multilateral lending (except for some sectors), downgrading by international rating agencies, and reduction in investment by FIIs. India was in a position to withstand all these uncertainties only with the help of domestic savings (Table 2.11). Again, domestic savings helped Indian markets recover in the turbulent global crisis. The Columbia University economist Ragnar Nurkse, in 1953, rightly said, 'Capital is made at home.'

Today the Indian economy has positioned itself amongst the top two fastest growing economies in the world. We are now aiming for 10 per cent GDP growth rate in the next five years and this can be achieved.

TABLE 2.11 Saving Rate and Growth Rate of GDP in India vis-à-vis Select Asian Countries (In Per Cent)

	Gross Domestic Saving (Per Cent of GDP)						*Growth Rate of GDP*					
Country	*1990*	*1995*	*2000*	*2005*	*2007*	*2008*	*1990*	*1995*	*2000*	*2005*	*2007*	*2008*
China	35.2	39.6	38.0	46.6	49.9	50.4	3.8	10.9	8.4	10.4	13.0	9.0
Hong Kong	35.7	29.6	31.9	33.0	31.8	31.2	3.9	2.3	8.0	7.1	6.4	2.4
Republic of Korea	37.3	36.5	33.3	32.3	31.0	30.3	9.2	9.2	8.5	4.0	5.1	2.2
India	22.8	24.4	23.7	34.2	35.7	37.7	5.3	7.3	4.4	9.5	9.0	6.7
Indonesia	32.3	30.6	31.8	27.5	28.2	30.6	9.0	8.2	4.9	5.7	6.3	6.1
Malaysia	34.4	39.7	46.1	42.8	42.0	42.2	9.0	9.8	8.9	5.3	6.2	4.6
Singapore	44.0	50.1	46.9	48.8	52.4	50.0	9.2	8.2	10.1	7.3	7.8	1.1

*Average for the period.
Note: Data for India is for April–March and for others on a calendar year basis.
Source: Asian Development Bank.

In the case of domestic savings, the public sector needs to generate positive savings. Foreign savings in the form of foreign direct investment (FDI) can be attracted only when macro-economic fundamentals are strong and there is a well-developed and sound financial system. The latter is a prerequisite for mobilising higher domestic and foreign savings and allocating them efficiently for economic growth.

RELATIONSHIP BETWEEN THE FINANCIAL SYSTEM AND ECONOMIC GROWTH: SOME THEORETICAL AND EMPIRICAL EVIDENCE

Importance of the Financial System

- Facilitates economic activity and growth
- Helps accelerate the volume and rate of savings
- Lower financial intermediation costs
- Makes innovation least costly
- Helps in evaluating assets
- Helps the central bank to conduct monetary policy
- Monitors the management of companies

The existence of an efficient financial system facilitates economic activity and growth. The growth of financial structure is a precondition to economic growth. In other words, markets, institutions, and instruments are the prime movers of economic growth. The financial system of a country diverts its savings towards more productive uses and so it helps to increase the output of the economy.

Besides mobilising savings, the financial system helps accelerate the volume and rate of savings by providing a diversified range of financial instruments and services through intermediaries. This results in an increased competition in the financial system which channelises resources towards the highest-return investment for a given degree of risk. This lowers financial intermediation costs and stimulates economic growth.

A sophisticated financial system makes innovation least costly and most profitable, thereby enabling faster economic growth. Countries whose financial systems encourage diverse financing arrangements are able to maintain international competitiveness through updating their productive capacities.

In addition to affecting the rate as well as the nature of economic growth, a financial system is useful in evaluating assets, increasing liquidity, and producing and spreading information.

Financial systems often develops in response to changing patterns of demand for funds. In the 1970s, there was a worldwide increase in the demand for risk management services. Many financial systems met this demand by increasing trading activity and by the development of many new risk management products. Hence, economic growth can also stimulate growth of the financial system.

Financial markets represent the deep end of the financial system; the deeper the system, greater its stability and resilence. A well-developed money and government securities market helps the central bank to conduct monetary policy effectively with the use of market-based instruments. Well-developed financial markets are also required for creating a balanced financial system in which both, financial markets and financial institutions play important roles. An imbalance between the two leads to financial crisis, as it happened in South-east Asia.

The financial system plays an important role in disciplining and guiding management companies, leading to sound corporate governance practices. The domestic financial system when linked to the international financial system increases capital flow with the help of financial markets. This link reduces risk through portfolio diversification and helps in accelerating economic growth.

There has been much theorising about a two-way and symbiotic relationship between the financial system and economic growth. A sophisticated and sound financial system accelerates the rate of economic growth, and the financial system, in turn, develops more with higher economic growth. This relationship between a financial system and economic growth has received considerable attention in empirical literature also.

Empirical Research Evidence on Relationship Between the Financial System and Economic Growth

Historical evidence of the relationship between the financial system and economic growth can be traced to observations by Gurley and Shaw (1955,1960) and Goldsmith (1969) which indicate that self-financed capital investment, as economies develop, first gives way to bank-intermediated debt finance and later to the emergence of equity markets as an additional instrument for raising external finance.

According to Hicks (1969), new technological inventions did not set off the industrial revolution in England in the eighteenth century. Rather, more liquid financial markets made it possible to develop projects that required large capital injections for long periods before the projects ultimately yielded results. The industrial revolution, therefore, had to wait for the financial revolution.

McKinnon and Shaw (1973) laid the theoretical grounds for the relationship between financial development and economic growth. According to them, government restrictions on the banking system (such as interest rate ceilings, high reserve requirements, and directed credit programmes—defined as financial repression) impede the process of financial development and, consequently, reduce economic growth. Hence, they advocated liberalisation of financial markets and it was their work which encouraged financial liberalisation in developing countries as part of economic reforms.

McKinnon and Shaw's views were further extended by Cho (1986), who argued that financial market liberalisation may remain incomplete without an efficient market for equity capital as a means of spreading risk. The development of both bank and equity market is a necessary condition for financial liberalisation.

Kumar and Tsetseko (1992) argued that substitutability and complementarity between banks and securities market appear to be sensitive to the level of economic growth. According to them, an economic environment with a flourishing private sector and well-established banking system is conducive to the growth and expansion of equity market.

A study by Atje and Jovanovic (1993) concluded that stock markets on their own can raise a typical developing country's economic growth by an outstanding 2.5 per cent per annum.

King and Levine (1993) used several measures for the level of development of financial intermediaries for a cross-section of 77 countries for the period 1960–89. They found a statistically and economically significant relationship between the measures of financial development and growth variables.

Levine and Zervos (1995) explored the effects of liberalisation of capital control. They indicated that countries which liberalised restriction on capital and dividend flows showed a marked improvement in the functioning of their stock exchanges.

Greenwood and Smith (1996) showed that large stock markets can lower the cost of mobilising savings and thereby facilitate investment in the most productive techniques.

Demiriguc Kunt and Levine (1996) found that in the long-term, stock return volatility is lower in countries with more open capital markets. They concluded also that as countries grow and reach middle income (about $2,000 per capita in 1990), the level of stock market development is positively correlated with the development of financial intermediaries. Thus, stock markets and financial institutions are generally complementary; they grow simultaneously.

Demitriade and Hussein (1996) found little to support the view that finance is a leading sector in the process of economic development. However, they found evidence that in quite a few countries, economic growth systematically causes financial development. On balance, however, most of the evidence seems to favour the view that the relationship between financial development and economic growth is a two-way one. The data provide support to the view that reforms, where they are able to contribute to the process of financial deepening, may also contribute to the more general process of economic development.

Levine and Sara Zervos (1996) focused on two measures of liquidity—the value traded ratio and the turnover ratio for a broad cross-section study of 49 countries over the period 1976–93 with the objective to measure the degree to which agents can cheaply, quickly, and confidently trade ownership claims of a large percentage of the economy's productive technologies. The researchers then assessed the strength of the empirical relationship among each liquidity measure and the three growth indicators—economic growth, capital accumulation, and productivity. Their results are consistent with views that the liquidity services provided by stock markets are independently important for long-term growth and that stock markets and financial intermediaries are complementary to one another and not substitutes. The research also shows that liberalisation of cash flows opening to foreign investment enhances stock market development and liquidity.

Levine (1997) stressed the importance of stock markets in stimulating the financing of investment in less liquid investment projects. He constructed an endogenous growth model with a two-way relation between the financial system and economic growth. According to Levine, the financial system influences

Market Frictions
- Information Costs
- Transaction Costs

↓

Financial Markets and Intermediaries

↓

Financial Markets Functions (Services)
- Transaction Costs
- Risk Diversification
- Rapid Information
- Corporate Control
- Savings Mobilisation

↓

Channels to Growth
- Capital Accumulation
- Technological Innovations

↓

Economic Growth

Source: Levin, 'Financial Development and Economic Growth: Views and Agenda,' *Journal of Economic Literature,* vol. 35, June 1997, p. 691.

Figure 2.2 Relationship Between the Financial System and Economic Growth

real sector activities through its functional ability. A need for reduction in information and transaction costs leads to the development of financial markets and intermediaries. Financial markets, through their functions (services), influence the rates of capital accumulation and technological innovations which are prerequisites for economic growth (Figure 2.2).

Singh (1997) concentrated his research on the stock exchanges of developing countries between 1982 and 1992 and found that the total market capitalisation of companies quoted on stock exchanges increased by a factor of 20, thereby highlighting the importance of the issue of financing through stock markets.

However, some researchers have found evidences contrary to the above. A cross-country study by Mayer (1990) covering the period 1970–85, concluded that internal savers finance bulk of corporate investment in major developed countries like the US, UK, Germany, Japan, Italy, Canada, and Finland and that the role of the stock market is very limited. Stigilitz (1994) criticised the financial liberalisation thesis on the grounds that financial markets are prone to market failures.

Nagaraj (1996) compiled and analysed some useful direct evidence for India for the period 1950–91. He concluded that capital market growth has changed domestic financial savings composition from bank deposits to shares and debentures, without favourably influencing the domestic savings rate or its share in financial assets. Equity capital's share in total market capitalisation has declined since a bulk of such mobilisation is in the form of debt. Capital market has little relation to the corporate investment rate and output growth rate. Corporate profitability declined in the 1980s, when the capital market boomed.

Singh (1997), while examining the implications of the rapid growth of market capitalisation in developing countries between 1982 and 1992, concluded that financial liberalisation, by making the financial system more fragile, is not likely to enhance long-term growth in developing countries.

Levine et al. (2000), on exploring the relationship between financial structure and economic development, find that financial structure does not help in understanding economic growth, industrial performance, or firm expansion. Instead, there was overwhelming evidence that legal and accounting reforms that strengthen creditors' rights, contract enforcement, and accounting practices boost financial intermediary development and, thereby, economic growth.

From the above empirical research evidences, we can conclude that there is a close, if not imperfect, relationship between the effectiveness of an economy's financial system and the level of its economic growth.

Many of the above studies have employed cross-section regression methodology to draw causal inferences. Moreover, their findings demonstrate that causality patterns vary across countries. Therefore, statistical inference based on cross-section studies which implicitly treat different economies as homogenous entities may not always be correct. In view of the above, empirical studies of individual countries are needed to determine the impact of the relationship between financial system and economic growth.

KEY TERMS

Surplus-spending Economic Units, Deficit-spending Economic Units, Gross Domestic Product, Gross National Product, Saving, Investment.

SUMMARY

1. In any economy, there are two types of economic units or entities—surplus-spending economic units and deficit-spending economic units.
2. Surplus-spending economic are those units whose consumption and planned investment are less than their income.
3. Deficit-spending economic those are those whose consumption and planned investment exceeds income.
4. The financial system is the most important institutional and functional vehicle for economic transformation. The pace of achievement of broader national objectives depends on the efficiency of the financial system.
5. National income accounts is the best-known system of macro-economic flow statistics. This system is used to measure production in the economy and earnings derived from the production.
6. India recorded one of the highest growth rates in the world: 9.6 per cent in 2006–07, second only to China among the emerging market economies.
7. The increased contribution of banking and finance in the real GDP reflects the importance of financial intermediation activities in the economy.
8. Savings and investment in the economy can also be approached through an analysis of the flow of funds in the economy. The flow of funds accounts reflect the diversified savings and investment flows from the broad sectors of an economy through various credit and capital market instruments. They are organised along two dimensions—economic sectors and financial instruments—to provide information on sector-wise and instrument-wise financial flows.
9. Flow of funds-based indicators of financial development are Finance Ratio, Financial Inter-relation Ratio, New Issue Ratio, and Intermediation Ratio. All the four ratios exhibit the growing importance of financial intermediation in the economy and the growth of financial flows in relation to economic activity both in the form of direct and indirect finance.
10. The concepts of saving and investment help to analyse some important aspects of macro-economics such as fluctuations in economic activity between prosperity and recession, the process of economic growth, and the method of financing Gross Domestic Capital Formation.
11. For the purpose of estimating domestic saving, the economy has been divided into three broad institutional sectors: (i) household, (ii) private corporate, and (iii) public.
12. The Gross Domestic Savings rate in 2006–07 was 34.8 per cent of the GDP. The household sector was the largest saving sector accounting for over three-quarters of the total savings in India. Since 2000–01 the household sector's preference for investment in physical assets has increased. The saving and investment rates of the private corporate sector have improved. There was a saving–investment surplus for the first time in 2001–02.
13. The household sector's saving is increasingly distributed between financial assets such as deposits, insurance policies, and shares and debentures rather than in the form of currency.
14. A financial system facilitates economic activity and growth, helps accelerate the volume and rate of savings, lowers financial intermediation costs, makes innovation least costly, helps in evaluating assets, helps the central bank to conduct monetary policy, and monitors the management of companies.

REVIEW QUESTIONS

1. Discuss the various indicators of financial development.
2. Examine critically the saving and investment trends in India.
3. 'There is a close relationship between financial system and economic growth.' Comment critically.
4. Explain surplus-spending and deficit-spending units briefly. What role do they play in economic growth?
5. Write notes on:
   a. Flow of funds accounts
   b. National income accounts
6. Why should saving and investment be studied? Discuss the trends in saving and investment in India.
7. What is GDP? How is it measured?
8. What are the flow-of-funds based indicators of financial development?
9. What are the different forms of household sector saving in India?

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3

Reforms in the Financial System

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Why reforms were initiated in India*

2 *What the state was of the Indian Financial System in the pre-reforms period*

3 *Objectives of financial system reforms.*

4 *Achievements of reforms*

Objectives of Economic Reforms

- Reorientation of the economy
- Macro-economic stability

BACKGROUND

The pre-reforms period, i.e., the period from the mid-1960s to the early 1990s was characterised by administered interest rates, industrial licensing and controls, dominant public sector, and limited competition. This led to the emergence of an economy characterised by uneconomic and inefficient production systems with high costs. This inefficient allocation and use of resources resulted in high capital-output ratios. Despite a rise in saving rates, there was greater dependence on aid and assistance from abroad to meet urgent situations. For 40 years, which by any count is a long period, India's growth rate averaged less than 4 per cent per annum, while other less-developing countries achieved a growth rate of over 5 per cent per annum. Moreover, countries such as Japan and other East Asian countries were able to catch up with the industrialised countries of the West by adopting a market-oriented pattern of industrialisation. The Indian government, therefore, initiated deregulation in the 1980s by relaxing the entry barriers, removing restrictive clauses in the Monopolies and Restrictive Trade Practices (MRTP) Act, allowing expansion of capacities, encouraging modernisation of industries, reducing import restrictions, raising the yield on long-term government securities, and taking measures to help the growth of the money market. These measures resulted in a relatively high growth in the second half of the 1980s, but its pace could not be sustained.

In the beginning of the 1990s, an increase in world oil prices due to the Gulf war coupled with a sharp drop in the remittances of migrant workers in the Gulf created a foreign exchange crisis in India. This crisis became aggravated as there was an outflow of foreign currency owing to a fear of default by the Indian government on its external commitments. The roots of the crisis, however, lay in the increasing deficit of the central government and an insular economic strategy that caused persistent macro-economic imbalances. Thus, the task before the government was twofold: to restore macro-economic stability by reducing the fiscal as well as the balance of payments deficit and to complete the process of economic reforms which had been initiated in the 1980s.

The government initiated economic reforms in June 1991 to provide an environment of sustainable growth and stability. Economic reforms were undertaken keeping in view two broad objectives.

1. Reorientation of the economy from one that was statist, state-dominated, and highly controlled to one that is market-friendly. In order to achieve this, it was decided to reduce direct controls, physical planning, and trade barriers.
2. Macro-economic stability by substantially reducing fiscal deficits and the government's draft on society's savings.

Both stabilisation and the Structural Adjustment Programme (SAP) needed liberalisation and globalisation as the principal instruments for achieving these goals. The government, therefore, adopted a phased approach to liberalise the various sectors of the economy.

The reform package included the liberalisation of domestic investment, opening up of key infrastructure areas for private sector participation, opening the economy to foreign competition by reducing protective barriers such as import controls and high tariffs, deregulation of interest rates, encouraging direct foreign investment as a source of technology upgradation and non-debt finance for investment, reform of the public sector to impart greater efficiency, disinvestment of public sector undertakings (PSUs), and reform of the tax system to create a broader base of taxation by moderating tax rates.

The deregulation of industry, liberalisation of foreign exchange markets and convertibility of currency require an efficient financial system. Hence the steps to improve the financial system were an integral part of the economic reforms initiated in 1991. The improved financial system is expected to increase the efficiency of resource mobilisation and allocation in the real economy, which, in turn, would induce a higher rate of economic growth. Moreover, the soundness of the financial system is one of the fundamentals for judging the health of an economy and these measures will impart it health as well as strength.

In August 1991, the government of India appointed a high level committee under the chairmanship of M. Narasimham, former governor of the Reserve Bank of India, to look into all aspects of the financial system and make comprehensive recommendations to reform it. The committee submitted its report in November 1991, recommending reforms in both the banking sector and in the financial markets. These recommendations were gradually implemented in the beginning of 1992.

INDIAN FINANCIAL SYSTEM IN THE PRE-REFORMS PERIOD

Financial System in the Pre-reforms Period

- Closed
- Highly regulated by the government
- Segmented

Financial systems in developing countries, some two decades ago, were viewed primarily as tools in the hands of the government to be used in the development process. Financial institutions, on the one hand, were tapped for funds to finance government and public expenditure and, on the other hand, used to direct credit to the priority sector. Such a view of the functions of the financial system has changed. In many developing economies, the emphasis has now shifted from the government and public sector to private sector due to the government's failure to attain social objectives. The private sector, in order to survive and grow, has to rely on a developed financial system. Moreover, in this era of globalisation and intense competition, a continuous flow of funds is needed, from within the country and from abroad. To attract this flow of funds, a developed domestic financial system is a prerequisite.

Price Discovery

It is the process whereby market participants attempt to find an equilibrium price

The role of the financial system in the development process has changed not only in the developing economies, but worldwide as well. The emphasis in the approach to the financial system in the growth process has moved from channelising of resources to efficient credit allocation, which is largely determined by market forces. Since the South-east Asian financial crisis, financial stability occupies as important a place in the system as does efficiency of allocation.

After independence, India adopted a state-dominated development strategy wherein all allocation decisions were made by the government and its agencies. Accelerated capital accumulation by increasing domestic savings was considered to be the key to development. An increase in domestic savings was achieved by levying high taxes, suppressing consumption, and appropriating profits through ownership of commercial enterprises. The role of the financial system was limited in this state-dominated environment. Banks were the dominant financial institutions for accumulation of savings and financing of trade and industrial activities. The financial system had a limited role in capital accumulation, since it could not provide incentives for higher savings as interest rates were not only controlled but also repressed. Moreover, the government pre-empted household saving through high levels of statutory and cash reserve requirements. Banks and financial institutions merely acted as deposit agencies.

The resource mobilisation in the primary capital market was also subject to several controls which prevented the process of price discovery. The allocation decisions were made by the government, limiting the allocative efficiency of the financial system. Banks and financial institutions directed credit to priority sectors at subsidised rates decided by the government. In order to offset the subsidised rates, banks charged higher interest rates from other borrowers and paid lower rates to depositors. These interest rate controls and high regulations inhibited proper pricing of resources and limited the allocative efficiency. Thus, the Indian financial system till the early 1990s was a closed, restricted, highly regulated, and segmented system.

In the 1990s, there was a paradigm shift in development from a state-dominated to a market-determined strategy. This shift was a result of the government's failure in achieving a higher growth rate. On the one hand, the government could not generate resources for investment or public services; on the other, there was an erosion in public savings. Thus, a failure of the government's restrictive and regulating policies and a need to adopt a market-determined strategy of development were the causes for undertaking reforms in the financial system. Reforms aimed at improving operational and allocative efficiency of the financial system.

OBJECTIVES OF FINANCIAL SYSTEM REFORMS

Reforms in the financial system aimed at increasing competitive efficiency in the operation of the system, making it healthy and profitable and imparting to it an operational flexibility and autonomy for working efficiently. These would result in giving the saver a wide choice with regard to instruments and institutions and enhance his confidence in the system. This would greatly augment the accumulation of capital funds.

The basic priority in the early reforms period was to remove structural rigidities and inefficiencies in the financial system. The financial system, in the 1980s and early 1990s, was characterised by controls over the pricing of financial assets, restrictions on flows or transactions, barriers to entry, low liquidity, and high costs. These characteristics hindered the development of the financial system into an efficient conduit for channelising and allocating resources. Hence, the reforms primarily aimed at structural transformation in the financial system to improve efficiency, stability, and integration of various components of the financial system. Some of the structural changes initiated are free pricing of financial assets, relaxation of quantitative restrictions, removal of barriers to entry, new methods and instruments of trading, and greater participation and improvement in clearing, settlement, and disclosure practices.

The structural transformation process is now almost complete. In the second phase, the reforms aim at attaining a balance between the goals of financial stability and integrated and efficient markets.

Financial Efficiency, Stability, and Integration

Improving the efficiency of the financial system is one of the basic objectives of regulators. An efficient financial system is one which allocates savings to the most productive uses. Besides allocating financial resources, it also ensures the following.

- Information arbitrage efficiency, i.e., whether market prices reflect all the available information.
- Fundamental valuation efficiency, i.e., whether company valuations are reflected in stock prices.
- Full insurance efficiency, i.e., whether economic agents can insure against all future contingencies.

Financial markets and financial institutions are the two important components of a financial system. A financial system's efficiency is reflected in the efficiency of both financial markets and financial institutions. Several steps have been undertaken to improve the efficiency of financial institutions and markets. Liberalisation of interest rates, reduction in reserve requirements, increasing competition by allowing new private sector players, advances in technology, introduction of prudential norms such as income recognition, provisioning, and capital adequacy, and laying down of standards for corporate governance are some of the steps undertaken to improve the efficiency of the banking sector. In case of financial markets, repealing of the Capital Issues (Control) Act, 1947, free pricing, rationalisation of the process of price discovery in the form of book building and auctions, enhancing transparency through strict disclosure norms, improved trading and settlement practices, enlarging the number of participants, introduction of a transparent takeover code, encouraging the growth of firms both at home and abroad, rationalised tax structures, encouraging good market practices, introduction of real time gross settlement (RTGS) and other electronic payment mechanisms are some of the measures which have helped in improving information efficiency and bringing down transaction costs.

Financial stability has been an important goal for the regulators after the South-east Asian currency and financial crisis. Financial stability is crucial in this era of globalisation, which has increased mobility of international capital flows, and the risk of contagion of financial crisis among countries. Liberalisation and deregulation also pose several risks to financial stability. Financial instability arises due to weak fundamentals and institutional failures, resulting in panic or information asymmetry. As stated in the RBI's Report on Currency and Finance (2004), financial stability in India would mean (a) ensuring uninterrupted financial transactions, (b) maintenance of a level of confidence in the financial system amongst all the participants, and (c) absence of excess volatility that adversely affects real economic activity. In order to ensure financial stability, the government has adopted a three-fold strategy.

1. Strengthening linkages across institutions and markets.
2. Promoting soundness of financial institutions through prudential regulation and supervision.
3. Ensuring the overall macro-economic balance.

The Reserve Bank has followed a three-pronged strategy to maintain financial stability.

1. Maintaining the overall macro-economic balance, especially through the twin objectives of price stability and growth.
2. Enhancing the macro-prudential functioning of institutions and markets.
3. Strengthening micro-prudential institutional soundness through regulation and supervision.

The Reserve Bank maintains orderly conditions in various financial markets by adopting flexible operating procedures and instruments of monetary policy. The LAF operations coupled with open market operations help in absorbing liquidity to maintain financial stability. The Reserve Bank instituted the Market Stabilisation Scheme (MSS) to absorb persistent capital flows. The stock markets and market participants could withstand the volatility that occurred on May 17, 2004 when the results of the general elections were declared.

The operation of a financial system is influenced by overall economic activity and macro-economic changes. Hence, assessment of financial soundness and stability requires the development of macro-prudential indicators. These indicators are quantitative variables, which comprise both micro-prudential indicators of the health of individual financial institutions, and macro-economic variables related with financial system soundness. Macro-prudential indicators can help a country to assess its banking system's vulnerability to crisis; they can be extended even to financial markets. The Reserve Bank monitors macro-prudential indicators and makes them publicly available through its reports to enhance the disclosure of key financial information to markets. Macro-economic indicators include sets of indicators on the real economy, trends in balance-of-payments level and volatility of inflation, interest and exchange rates, growth of credit, correlation among financial markets, trades spillover, and contagion from investor behaviour. Micro-prudential indicators include indicators on capital adequacy, asset quality of lending and borrowing entities, management soundness, liquidity, sensitivity to market risk, and some market-based indicators, such as market prices, ratings of financial instruments, and financial institutions. To ensure financial stability, the government replaced ad hoc T-bills with the system of ways and means advances to raise funds.

Financial Market Integration

- Integration between various market segments
- Correlation between different market rates
- International integration through trade and cross-border capital flows

Integrated markets are unified markets wherein participants in one market have unrestricted access to other markets. This brings about an overall equality of returns over markets. The money market, the capital market, and the foreign exchange market remained segmented till the early 1990s due to high level of regulation and restrictions. An integration of markets is necessary for effective transmission and implementation of policies and for facilitating better functioning of markets. To enable integration, interest rates were freed, foreign capital flows and foreign participants were allowed entry, domestic companies were permitted to raise funds from outside, and participants were allowed to operate in different markets simultaneously. Besides, introduction of new products such as repos and derivatives, and improvements in technology and payment and settlement infrastructure have facilitated integration of financial markets in India. The integration of the domestic financial markets within themselves and with the foreign exchange market is reflected in trends in turnover and prices of securities in financial markets. Besides this, an analysis of the transmission of volatility in one market to other markets also helps in knowing the extent of integration of financial markets. The linkage between the call money market and foreign exchange market is found during times of volatility in foreign exchange market as commercial banks have a dominant presence in both the markets. An increase in foreign investment flows increases cross-border financial integration. As a result, the sensitivity of the Indian technology stocks to movements in the NASDAQ composite index was high in 1999–2000. The movements in the Indian stock indices are correlated with the movements in the global stock indices. The domestic integration of various segments of financial markets has been facilitated by the expansion of the online operations of two major stock exchanges—the BSE and the NSE. The regional stock exchanges have been integrated with the Interconnected Stock Exchange of India Ltd (ISE). In addition, many regional stock exchanges have become members of both the BSE and the NSE.

Conclusion

The Indian financial system is fairly integrated, stable, and efficient. There are weaknesses in the system which need to be addressed. These include a high level of non-performing assets in some banks and financial institutions, disciplinary issues with regard to non-banking financial companies, government's high domestic debt and borrowings, volatility in financial markets, absence of a yield curve, and co-operative bank scams.

The reforms in the financial system have been more capital market-centric in nature. The crisis in financial institutions such as UTI, IFCI, and IDBI unfolded the failure of prudential regulations and the government had to bail them out by refinancing them. This eroded investor confidence in public sector institutions, leading to a deceleration in the rate of domestic saving. Foreign capital flows and foreign exchange reserves have increased but the actual absorption of foreign capital is quite low. The fiscal deficit has expanded, leading to a deteriorating fiscal scene. The spreading of the sub-prime mortgage crisis, high inflation and depreciating rupee has put a pressure on the GDP growth rate.

The growth rate of GDP has increased since 2003–04 but it needs to be sustained. India has still a long way to go. We can achieve a growth rate of 8 per cent for which we need reforms in key areas such as agriculture, power and labour. Greater consolidation and competition among banks and other financial intermediaries such as mutual funds and insurance companies is needed to lower the costs of intermediation and expand the

Box 3.1 Fifteen Years of Reforms

The economic reform process of liberalisation and globalisation was introduced in the 1990s to improve performance of all sectors and making India globally competitive. Structural reforms, encompassing all sectors of the economy, involved reorientation towards a market-based economy for fostering sustainable growth and stability.

The reforms have transformed India from a closed and trailing economy to a liberalised and steady economy. The financial sector reforms have aided growth, avoided crisis, enhanced efficiency and imparted resilience to the system. This could be achieved, as the reform process was gradually implemented, coordinated with other economic policies and sequenced with international trends. Reforms in the financial sector created a deregulated environment and enabled free play of market forces.

The growth rate of the economy had collapsed to only 0.8 per cent in 1991. However, with the advent of continuous economic reforms, the economy has recorded an average growth rate of around 6 per cent in the last decade. India has been able to break free from the dismal Hindu rate of growth of 3.5 per cent and is now on a 8 per cent growth trajectory. The Indian economy grew at 9.6 per cent in 2006–07, making it one of the world's fastest growing economies.

The abolishment of license raj and bottlenecks of control have given a lot of freedom to the Indian industry. The lowering of taxes, customs, and excise duties have triggered investments in manufacturing, improved margins, and given a greater choice to the consumer. A host of foreign players have entered the manufacturing sector leading to a significant increase in competition.

The economic fundamentals are improving. Exports are increasing and India is a destination for software services and business process outsourcing. New areas such as generic pharmaceuticals auto and ancillary and engineering products are contributing towards export growth. The Indian industry underwent a restructuring phase and is now moving into the investment cycle for expansion and modernisation. Indian industries have built world class size manufacturing capacities, acquired companies, improved quality and efficiency, and become globally competitive.

The core objectives of the financial sector reforms are strengthening of the financial sector and improving the functioning of the financial markets. Indian stock markets are one of the most exciting and vibrant markets of the world. They have the highest number of listed companies with a 300-million strong investor community. The average trading volume in these markets is now around a trillion dollars a day. The liquidity in the stock markets has increased. The return on equity in India is one of the highest in the world. Shares are trading at a price–earnings multiple of 15. A large number of foreign institutional investors (FIIs) have setup separate India sections for trading in these markets. In the US alone, there are more than 5,000 India–dedicated mutual fund schemes. The stock market index reached a peak of 21,000 in January 2008. Indian markets have come a long way since the 1992 scam. A lot of infrastructural issues such as on-line trading, demat, rolling settlement, and disclosures have been taken care of. Moreover the time period between issue closure and listing has been reduced to six days as against the earlier 15 days.

India's financial sector is integrating with that of the rest of the world. The interest rates have been freed, the statutory provisions have been reduced and prudential norms have been strengthened for players in the financial sector. Reforms have altered the organisation structure, ownership pattern, and domain of operations of financial institutions and infused greater competition.

availability of credit and insurance in the rural areas. Reforms in sectors such as retailing, manufacturing, mining, and insurance should be carried forward. The sectoral caps for FDI should be relaxed to attract large foreign capital inflows especially in the financial services sector.

KEY TERMS

Financial Efficiency, Financial Stability, Financial Integration, Price Discovery.

SUMMARY

1. The role of the financial system was limited in the state-dominated environment. Banks were the dominant financial institutions for accumulation of savings and financing of trade and industrial activities. The financial system had a limited role in capital accumulation.
2. A failure of the government's restrictive and regulating policies and a need to adopt a market-determined strategy of development were the causes for undertaking reforms in the financial system.
3. The government initiated economic reforms in June 1991 to provide an environment of sustainable growth and stability.
4. The basic priority in the early reforms period was to remove structural rigidities and inefficiencies in the financial system.
5. The structural transformation process is now almost complete. In the second phase, the reforms aim at attaining a balance between the goals of financial stability and integrated and efficient markets.

REVIEW QUESTIONS

1. Explain the profile of the Indian financial system in the pre-reform period.
2. Why were financial system reforms undertaken in India? Discuss.
3. Explain the following terms:
   a. Financial efficiency
   b. Financial stability
   c. Financial integrity
4. What is the strategy adopted by the Reserve Bank of India to maintain financial stability.
5. Describe the Indian financial system in the pre-reform and post-reform periods.

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Part II

Financial Markets

4

The Money Market

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Meaning of Money Market.*

2 *Characteristics, functions, and benefits of the money market*

3 *Development of the money market in India*

4 *Different money market instruments such as :*
- *Treasury bills : Types, importance, participants, and size*
- *Commercial papers : Meaning, participants, guidelines, and size*
- *Commercial bills : Types, features, and size*
- *Certificates of deposit : Features, size, and comparison of CDs and CPs*
- *Call/Notice Money Market: Importance, participants, call rate, size, and steps to convert call money market into pure inter-bank money market*
- *Collateralised lending and borrowing obligation*

5 *Money market intermediaries such as Discount and Finance House of India and Money Market Mutual Funds*

6 *Link between the money market and the monetary policy in India*

7 *Tools for managing liquidity in the money market.*

8 *Money market derivatives*

INTRODUCTION

The money market is a market for financial assets that are close substitutes for money. It is a market for overnight to short-term funds and instruments having a maturity period of one or less than one year. It is not a physical location (like the stock market), but an activity that is conducted over the telephone. The money market constitutes a very important segment of the Indian financial system.

The characteristics of the money market are as follows.

- It is not a single market but a collection of markets for several instruments.
- It is a wholesale market of short-term debt instruments.
- Its principal feature is honour where the creditworthiness of the participants is important.
- The main players are: the Reserve Bank of India (RBI), the Discount and Finance House of India (DFHI), mutual funds, insurance companies banks, corporate investors, non-banking finance companies (NBFCs), state governments, provident funds, primary dealers, the Securities Trading Corporation of India (STCI), public sector undertakings (PSUs), and non-resident Indians.
- It is a need-based market wherein the demand and supply of money shape the market.

Functions of the Money Market

A money market is generally expected to perform three broad functions.

- Provide a balancing mechanism to even out the demand for and supply of short-term funds.
- Provide a focal point for central bank intervention for influencing liquidity and general level of interest rates in the economy.
- Provide reasonable access to suppliers and users of short-term funds to fulfill their borrowings and investment requirements at an efficient market clearing price.

Besides the above functions, a well-functioning money market facilitates the development of a market for longer-term securities. The interest rates for extremely short-term use of money serve as a benchmark for longer-term financial instruments.

Benefits of an Efficient Money Market

An efficient money market benefits a number of players. It provides a stable source of funds to banks in addition to deposits, allowing alternative financing structures and competition. It allows banks to manage risks arising from interest rate fluctuations and to manage the maturity structure of their assets and liabilities.

A developed inter-bank market provides the basis for growth and liquidity in the money market including the secondary market for commercial paper and treasury bills.

An efficient money market encourages the development of non-bank intermediaries thus increasing the competition for funds. Savers get a wide array of savings instruments to choose from and invest their savings.

Benefits of an Efficient Money Market

- Provides a stable source of funds to banks
- Encourages development of non-bank entities
- Facilitates government market borrowing
- Makes effective monetary policy actions
- Helps in pricing different floating interest products

A liquid money market provides an effective source of long-term finance to borrowers. Large borrowers can lower the cost of raising funds and manage short-term funding or surplus efficiently.

A liquid and vibrant money market is necessary for the development of a capital market, foreign exchange market, and market in derivative instruments. The money market supports the long-term debt market by increasing the liquidity of securities. The existence of an efficient money market is a precondition for the development of a government securities market and a forward foreign exchange market.

Trading in forwards, swaps, and futures is also supported by a liquid money market as the certainty of prompt cash settlement is essential for such transactions. The government can achieve better pricing on its debt as it provides access to a wide range of buyers. It facilitates the government market borrowing programme.

Monetary control through indirect methods (repos and open market operations) is more effective if the money market is liquid. In such a market, the market response to the central bank's policy actions are both faster and less subject to distortion.

The Indian Money Market

The average turnover of the money market in India is over Rs. 1,00,000 crore daily. This is more than 3 per cent let out to the system. This implies that 2 per cent of the annual GDP of India gets traded in the money market in just one day. Even though the money market is many times larger than the capital market, it is not even a fraction of the daily trading in developed markets.

Role of the Reserve Bank of India in the Money Market

The Reserve Bank of India is the most important constituent of the money market. The market comes within the direct purview of the Reserve Bank regulations.

The aims of the Reserve Bank's operations in the money market are

- to ensure that liquidity and short-term interest rates are maintained at levels consistent with the monetary policy objectives of maintaining price stability;
- to ensure an adequate flow of credit to the productive sectors of the economy; and
- to bring about order in the foreign exchange market.

The Reserve Bank influences liquidity and interest rates through a number of operating instruments—cash reserve requirement (CRR) of banks, conduct of open market operations (OMOs), repos, change in bank rates, and, at times, foreign exchange swap operations.

Steps to Develop the Money Market in India

The money market in India is divided into the formal (organised) and informal (unorganised) segments. One of the greatest achievements of the Indian financial system over the last 50 years has been the decline in the relative importance of the informal segment and increasing presence and influence of the formal segment upto the mid-1980s, money market was characterised by lack of depth, small number of instruments, and strict regulation on interest rates. The money market consisted of the inter-bank call market, treasury bills, commercial bills, and participation certificates.

Several steps were taken in the 1980s and 1990s to reform and develop the money market. The reforms in the money market were initiated in the latter half of the 1980s.

In the 1980s A committee to review the working of the monetary system under the chairmanship of Sukhamoy Chakravorty was set up in 1985. It underlined the need to develop money market instruments. As a follow up, the Reserve Bank set up a working group on the money market under the chairmanship of N. Vagul which submitted its report in 1987. This committee laid the blueprint for the institution of a money market. Based on its recommendations, the Reserve Bank initiated a number of measures.

- The Discount and Finance House of India (DFHI) was set up as a money market institution jointly by the Reserve Bank, public sector banks, and financial institutions in 1988 to impart liquidity to money market instruments and help the development of a secondary market in such instruments.
- Money market instruments such as the 182-day treasury bill, certificate of deposit, and inter-bank participation certificate were introduced in 1988–89. Commercial paper was introduced in January 1990.
- To enable price discovery, the interest rate ceiling on call money was freed in stages from October 1988. As a first step, operations of the DFHI in the call/notice money market were freed from

the interest rate ceiling in 1988. Interest rate ceilings on inter-bank term money (10.5 per cent to 11.5 per cent), rediscounting of commercial bills (12.5 per cent), and inter-bank participation without risk (12.5 per cent) were withdrawn effective May 1989. All the money market interest rates are, by and large, determined by market forces. There has been a gradual shift from a regime of administered interest rates to market-based interest rates.

In the 1990s The government set up a high-level committee in August 1991 under the chairmanship of M. Narasimham (the Narasimham Committee) to examine all aspects relating to structure, organisation, functions, and procedures of the financial system. The committee made several recommendations for the development of the money market. The Reserve Bank accepted many of its recommendations.

- The Securities Trading Corporation of India was set up in June 1994 to provide an active secondary market in government dated securities and public sector bonds.
- Barriers to entry were gradually eased by (a) setting up the primary dealer system in 1995 and satellite dealer system in 1999 to inject liquidity in the market; (b) relaxing issuance restrictions and subscription norms in respect of money market instruments; (c) allowing the determination of yields based on the demand and supply of such paper; (d) enabling market evaluation of associated risks by withdrawing regulatory restriction such as bank guarantees in respect of commercial papers; and (e) increasing the number of participants by allowing the entry of foreign institutional investors (FIIs), non-bank financial institutions, and mutual funds.
- Several financial innovations in instruments and methods were introduced. Treasury bills of varying maturities and RBI repos were introduced. Auctioned treasury bills were introduced leading to market-determined interest rates.
- The development of a market for short-term funds at market-determined rates has been fostered by a gradual switch from a cash-credit system to a loan-based system, shifting the onus of cash management from banks to borrowers.
- Ad hoc and on-tap 91-day treasury bills were discontinued. They were replaced by Ways and Means Advances (WMA) linked to the bank rate. The introduction of WMA led to the limiting of the almost automatic funding of the government.
- Indirect monetary control instruments such as the bank rate—reactivated in April 1997, strategy of combining auctions, private placements, and open market operations—in 1998–99, and the liquidity adjustment facility (LAF)—in June 2000 were introduced.
- The minimum lock-in period for money market instruments was brought down to 7 days.
- The Reserve Bank started repos both on auction and fixed interest rate basis for liquidity management. Since June 5, 2000, the newly introduced liquidity adjustment facility has been effectively used to influence short-term rates by modulating day-to-day liquidity conditions. The transition to LAF was facilitated by the experiment with the interim liquidity adjustment facility (ILAF) from April 1999. This provided a mechanism for liquidity management through a combination of repos, export credit refinance, and collateralised lending facilities.
- The inter-bank liabilities were exempted from the cash reserve ratio and the statutory liquidity ratio (SLR) stipulations for facilitating the development of a term money market.
- New money market derivatives such as forward rate agreements (FRAs) and interest rate swaps (IRSs) were introduced in 1999.
- Money market instruments such as certificate of deposits and commercial paper are freely accessible to non-bank participants.
- The payment system infrastructure was strengthened with the introduction of the negotiated dealing system (NDS) in February 2002, setting-up of the Clearing Corporation of India Limited (CCIL) in April 2002 and the implementation of real time gross settlement (RTGS) system from April 2004.
- Collateral Borrowing and Lending Obligation (CBLO) was operationalised as a money market instrument through the CCIL on January 20, 2003.

Reforms in the Money Market

- New instruments
- New participants
- Changes in the operating procedures of monetary policy
- Fine tuning of liquidity management operations
- Technological infrastructure

The development and profile of the money market has changed in the nineties. A basic objective of money market reforms in the recent years has been to facilitate the introduction of new instruments and their appropriate pricing. The Reserve Bank has endeavoured to develop market segments which exclusively deal in specific assets and liabilities as well as participants. Accordingly, the call/notice money market is now a pure inter-bank market. In order to ensure systemic stability, prudential limits on exposures to the call money market have been imposed. Standing liquidity support to banks from the Reserve Bank and facilities for exceptional liquidity support have been rationalised. The various segments of the money market have integrated with the introduction and successful implementation of the LAF. The NDS and CCIL have improved the functioning of money markets. They have facilitated a speedier conversion of notice/call money market into a pure inter-bank money market and enabled the growth of a buoyant repo market outside the LAF.

Money Market Centres

There are money market centres in India at Mumbai, Delhi, and Kolkata. Mumbai is the only active money market centre in India with money flowing in from all parts of the country getting transacted there.

MONEY MARKET INSTRUMENTS

The instruments traded in the Indian money market are

1. Treasury bills (T-bills);
2. Call/notice money market—Call (overnight) and short notice (up to 14 days);
3. Commercial Papers (CPs)
4. Certificates of Deposits (CDs)
5. Commercial Bills (CBs)
6. Collateralised Borrowing and Lending Obligation (CBLO)

Call/notice money market and treasury bills form the most important segments of the Indian money market. Treasury bills, call money market, and certificates of deposit provide liquidity for government and banks while commercial paper and commercial bills provide liquidity for the commercial sector and intermediaries.

TREASURY BILLS

- T-Bills are short-term instruments used by the government to raise short-term funds

Treasury bills are short-term instruments issued by the Reserve Bank on behalf of the government to tide over short-term liquidity shortfalls. This instrument is used by the government to raise short-term funds to bridge seasonal or temporary gaps between its receipts (revenue and capital) and expenditure. They form the most important segment of the money market not only in India but all over the world as well.

T-bills are repaid at par on maturity. The difference between the amount paid by the tenderer at the time of purchase (which is less than the face value) and the amount received on maturity represents the interest amount on T-bills and is known as the discount. Tax deducted at source (TDS) is not applicable on T-bills.

Features of T-Bills

- They are negotiable securities.
- They are highly liquid as they are of shorter tenure and there is a possibility of inter-bank repos in them.
- There is an absence of default risk.
- They have an assured yield, low transaction cost, and are eligible for inclusion in the securities for SLR purposes.
- They are not issued in scrip form. The purchases and sales are effected through the Subsidiary General Ledger (SGL) account.
- At present, there are 91-day, 182-day, and 364-day T-bills in vogue. The 91-day T-bills are auctioned by the RBI every Friday and the 364-day T-bills every alternate Wednesday, i.e., the Wednesday preceding the reporting Friday.
- Treasury bills are available for a minimum amount of Rs. 25,000 and in multiples thereof.

Types of T-Bills

There are three categories of T-bills.

On-tap Bills On-tap bills, as the name suggests, could be bought from the Reserve Bank at any time at an interest yield of 4.66 per cent. They were discontinued from April 1, 1997, as they had lost much of their relevance.

Ad hoc Bills Ad hoc bills were introduced in 1955. It was decided between the Reserve Bank and the Government of India that the government could maintain with the Reserve Bank a cash balance of not less than Rs. 50 crore on Fridays and Rs. 4 crore on other days, free of obligation to pay interest thereon, and whenever the balance fell below the minimum, the government account would be replenished by the creation of ad hoc bills in favour of the Reserve Bank. Ad hoc 91-day T-bills were created to replenish the government's cash balances with the Reserve Bank. They were just an accounting measure in the Reserve Bank's books and, in effect, resulted in automatic monetisation of the government's budget deficit. A monetised deficit is the increase in the net Reserve Bank credit to the central government which is the sum of the increase in the Reserve Bank's holdings of: (a) the government of India's dated securities; (b) 91-day treasury bills; and (c) rupee coins for changes in cash balances with the Reserve Bank.

In the 1970s and 1980s, a large proportion of outstanding ad hocs were converted into long-term dated and undated securities of the Government of India. This conversion is referred to as 'funding.' Their expansion put a constraint on the Reserve Bank conduct of monetary policy and hence they were discontinued from April 1, 1997. The outstanding ad hoc T-bills and tap bills as on March 31, 1997 were funded on April 1, 1997 into special securities without any specified maturity at an interest rate of 4.6 per cent per annum. A system of Ways and Means Advances from April 1, 1997 was introduced to replace ad hoc bills and to accommodate temporary mismatches in the government of India receipts and payments.

Auctioned T-Bills Auctioned T-bills, the most active money market instrument, were first introduced in April 1992. The Reserve Bank receives bids in an auction from various participants and issues the bills subject to some cut-off limits. Thus, the yield of this instrument is market determined. These bills are neither rated nor can they be rediscounted with the Reserve Bank. At present, the Reserve Bank issues T-bills of three maturities—91-days, 182-days, and 364-days.

Importance of T-Bills

The development of T-bills is at the heart of the growth of the money market. T-bills play a vital role in the cash management of the government. Being risk free, their yields at varied maturities serve as short-term benchmarks and help in pricing different floating rate products in the market. The T-bills market is the preferred central bank tool for market intervention to influence liquidity and short-term interest rates. The development of the T-bills market is a pre-condition for effective open market operations.

Development of the T-Bills Market

Ad hoc 91-day T-bills were introduced in the mid-1950s. These bills were introduced to replenish on an automatic basis, the central government's cash balance with the Reserve Bank so that only the minimum required level was maintained. These bills opened up an era of uncontrolled monetisation of the central government's deficit. Before the 1960s, there was an active T-bills market owing to the weekly auctions of the 91-day T-bills.

In the mid-1960s, the auction system for the issue of 91-day T-bills was replaced by on-tap bills. Till 1974, the tap bills rate changed with changes in the bank rate which sustained the interest of the participants in the T-bills market. However, after 1974, the discount rate on ad hoc and tap bills was fixed uniformly at 4.6 per cent. The T-bills market lost lustre due to the administered rate regime.

However, the interest in T-bills revived with the introduction of the 182-day T-bills on an auction basis in November 1986. It also revived because of the constitution of the Discount and Finance House of India in 1988 as a money market institution.

The 182-day T-bills were discontinued in 1992 and replaced by the 364-day auction T-bills in April 1992 as part of reform measures. Subsequently, the 91-day auction T-bills were introduced in January 1993. The parallel existence of the 91-day tap T-bills and ad hoc T-bills continued till March 1997.

Thereafter, the 14-day intermediate T-bills and auction T-bills were introduced in April 1997 to provide an alternative avenue to state governments and to facilitate some foreign central banks to invest surplus funds.

The 182-day T-bills were reintroduced to provide variety in treasury bills. However, both the 182- and 14-day T-bills were discontinued from March 2001. The 182-day T-bills were reintroduced in April 2005.

The Reserve Bank's purchase and holding of T-bills have become totally voluntary with the discontinuation of the ad hoc and on-tap 91-day T-bills. Before the introduction of the auctioned T-bills, a substantial majority of the T-bills used to be held by the Reserve Bank. With the introduction of auctioned T-bills, more than 25 per cent of T-bills are held by investors other than the Reserve Bank. The auction procedures have been streamlined with notified amounts for all auctions being specified in case of competitive bids and non-competitive bids being accepted outside the notified amount. A uniform price-based auction for 91-day T-bills was introduced on an experimental basis in 1998–99. It has been successfully adopted.

Participants in the T-Bills Market

The Reserve Bank of India, banks, mutual funds, financial institutions, primary dealers, provident funds, corporates, foreign banks, and foreign institutional investors are all participants in the T-bills market. The state governments can invest their surplus funds as non-competitive bidders in T-bills of all maturities.

Sale of T-Bills

- In a competitive bid, participants submit their bids to the Reserve Bank who then decides the cut-off yield/price and makes the allotment
- In a non-competitive bid, participants are not allowed to bid, as they do not have the expertise in bidding and are allotted bids at the weighted average price determined in competitive bidding

The sale of T-bills is conducted through an auction. The method helps in price discovery, a process wherein prices in the market reflect the relative cost of production and consumption utilities with a view to achieving the optimum allocation of resources in the economy. In case of auctions, competitive bids are submitted by the participants to the Reserve Bank and the bank decides the cut-off yield/price and makes the allotment on such a basis. For an auction to be meaningful, it is necessary that auctions are conducted on a competitive bidding basis. For this purpose, the participation should be large and varied in nature. A wider participation in auctions results in increased competition, yielding better prices and improving the auction results. Primary dealers, banks, corporates, mutual funds, and others participate in the competitive bids.

Besides allotting T-bills through auction, the Reserve Bank accepts non-competitive bids from state governments, non-government provident funds, and other central banks. Non-competitive bids are accepted to encourage participants who do not have expertise in bidding. Such bids are a more efficient way of encouraging retail participation instead of having a large number of retail investors bidding competitively on their own. The Reserve Bank also participates on a non-competitive basis to primarily take up the under-subscribed issues. Non-competitive bidders are allotted T-bills at a weighted average price of the successful competitive bids. Non-competitive bids are accepted outside the notified amount.

Types of Auctions

There are two types of auctions: (i) multiple-price auction and (ii) uniform-price auction.

Multiple-price Auction

- Each winning bidder pays the price it bid

Multiple-price Auction The Reserve Bank invites bids by price, i.e., the bidders have to quote the price (per Rs. 100 face value) of the stock which they desire to purchase. The bank then decides the cut-off price at which the issue would be exhausted. Bids above the cut-off price are allotted securities. In other words, each winning bidder pays the price it bid.

The advantage of this method is that the Reserve Bank obtains the maximum price each participant is willing to pay. It can encourage competitive bidding because each bidder is aware that it will have to pay the price it bid, not just the minimum accepted price. The disadvantage is that bidders bid more cautiously (i.e., offer lower prices) in these auctions. This is so because it may happen that bidders who paid higher prices could face large capital losses if the trading in these securities starts below the marginal price set at the auction. This is known as the 'winner's curse.' The winner's curse can be a problem in those markets where price volatility is high. In order to eliminate the problem, the Reserve Bank introduced uniform price auction in case of 91-day T-bills.

Uniform-price Auction

- Each winning bidder pays the uniform price decided by the Reserve Bank

Uniform-price Auction In this method, the Reserve Bank invites bids in descending order and accepts those that fully absorb the issue amount. Each winning bidder pays the same (uniform) price as decided by the Reserve Bank. In other words, all winning bidders are awarded the auctioned amount at the same price.

The advantages of the uniform price auction are that they tend to minimise uncertainty and encourage broader participation. On the other hand, it may be possible that uniform price auctions could reduce the need to prepare for the auction as allotment at a uniform price reduces the incentive to bid. Moreover, there are dangers of irresponsible bidding or of collusion in a uniform price auction.

Most countries follow the multiple-price auction. However, now the trend is a shift towards the uniform-price auction.

Uniform-price auction was introduced on an experimental basis on November 6, 1998 in case of 91-day T-bills. Since 1999–2000, 91-day T-bill auctions are regularly conducted on a uniform price basis.

There exists a fixed calendar for auctions of all types of T-bills. The Reserve Bank issues a press communication, two to three days prior to the auction and invites bids, indicating the date of the auction and terms such as the amount of auction and type of auction.

The T-bill auction module was operationalised on October 22, 2003 on the Public Debt Office–Negotiated Dealing System (PDO–NDS). The auction is announced and processed on-line in a Straight-Through-Process (STP) on the system.

91-Day T-Bills

Treasury bills were sold on tap since 1965 throughout the week to commercial banks and the public at a fixed rate of 4.6 per cent. They were discontinued from April 1, 1997.

The 91-day ad hoc T-bills were created in favour of the Reserve Bank but in 1997–98 they were phased out under an agreement with the Reserve Bank and totally discontinued from April 1, 1997. The ad hoc and tap T-bills were converted into special securities without any specific maturity at an interest rate of 4.6 per cent per annum.

In 1992–93, a scheme for the issue of auctioned 91-day T-bills with a predetermined amount was introduced. The cut-off yields were significantly higher than the fixed discount rate on tap bills. The notified amount of each auction was consistent at Rs. 500 crore upto March 14, 1997. The notified amount of each auction was reduced to Rs. 100 crore with effect from March 21. Since May 2001, it has been increased from Rs. 100 to Rs. 250 crore. The notified amount was then increased to Rs. 500 crore in 2003 which was further raised to Rs. 2,000 crore from April 2004. The increase was on account of the introduction of the Market Stabilisation Scheme (MSS).

Size of the 91-Day T-Bills Market

The size of the treasury bills market is reflected in gross issues and the amount outstanding. As seen from Table 4.1, gross issues almost doubled in the year 1995–96. A gross amount of Rs. 24,050 crore was raised through 91-day T-bills. The gross issues declined substantially in the year 1997–98 as the notified amount of auctions was maintained in a narrow band of Rs. 100 crore to Rs. 300 crore. The volume of sales of the 91-day T-bills declined in the subsequent years again due to the low notified amount. In order to offer an increased amount of short-term paper the notified amount in each auction was raised from Rs. 100 to Rs. 250 crore from May 18, 2001. However, since 2001–02, due to high liquidity, persistent capital inflows and a reduction in the repo rate, both the gross issues and amount outstanding of 91-day T-Bills have increased.

The amount subscribed by the Reserve Bank as a percentage of gross issues declined in the year 1993–94 and 1994–95 but increased substantially in the year 1995–96 due to stringent liquidity conditions

TABLE 4.1 Government of India Auctions of 91-Day T-Bills

Year	Gross Issues (Rs. in Crore)	Amount Subscribed by the RBI		Amount Outstanding		Total
		(Rs. in Crore)	Per Cent of Gross Amount Raised	Outside the RBI	With the RBI	Amount Outstanding
1992–93	1,350	1,146.90	84.9	203.10 (15)	1,146.9 (85)	1,350
1993–94	15,750	838.50	12.8	524.50 (90)	605.0 (10)	5,850
1994–95	12,450	2,404.55	19.3	732.50 (92)	67.5 (8)	800
1995–96	24,050	7,789.00	32.4	3,233.89 (50)	3,266.10 (50)	6,500
1996–97	25,200	3,368.25	13.4	4,231.63 (74)	1,468.37 (26)	5,700
1997–98	13,200	1,095.60	8.3	973.55 (61)	626.65 (39)	1,600
1998–99	16,697	3,014.00	18.1	1,276.10 (85)	224.00 (15)	1,500
1999–2000	8,155	1,523.00	18.7	1,232.00 (81)	288 (19)	1,520
2000–01	7,255	855.00	11.8		–	
2001–02	20,216	–	–	5,001.00 (100)	–	5,001
2002–03	26,402	–	–	10,672.00 (100)	–	10,672
2003–04	36,786	–	–	7,139 (100)	–	7,139

(*Continued*)

TABLE 4.1 *(Continued)*

Year	Gross Issues (Rs. in Crore)	Amount Subscribed by the RBI		Amount Outstanding		Total
		(Rs. in Crore)	Per Cent of Gross Amount Raised	Outside the RBI	With the RBI	Amount Outstanding
2004–05	1,00,592	–	–	27,792	–	27,792
2005–06	1,03,424	–	–	16,318	–	16,318
2006–07	1,31,577	–	–	45,229	–	45,229
2007–08	2,10,365	–	–	39,957	–	39,957
2008–09	2,65,555	–	–	75,549	–	75,549
2009–10	2,96,500	–	–	71,503	–	71,503

Note: Figures in parentheses indicate per cent to total.
Source: RBI, *Annual Report,* various issues.

in the money and credit markets. The decline in this amount in the year 2000–01 reflects higher market absorption owing to spells of easy liquidity.

The average net holdings of the Reserve Bank of around 85 per cent in 1992–93 were almost nil in 2000–01. This reflects a high market interest in these short-term bills and successful conduct of open market operations. Since 2001–02, the Reserve Bank has not subscribed to issues of 91-day T-Bills (refer Table 4.1).

There was a substantial decline in the amount outstanding from 1997–98 to 1999–2000 as the notified amount of each auction was reduced to Rs. 100 crore from Rs. 500 crore. However, the amount outstanding has increased substantially since 2001–02. This reflects a high level of liquidity in the system.

Table 4.2 reveals that state governments and banks were major holders of auctioned 91-day T-bills.

TABLE 4.2 Volume, Ownership, and Composition of 91-Day T-Bills Government of India 91-Day T-Bills (Outstanding at Face Value)

March 31	RBI			Banks		State Government		Others		Foreign
	Tap Redis-counted	Ad hocs	Auction	Tap	Auction	Tap	Auction	Tap	Auction	Central Bank Auction
1993	1,287	15,430	1,147	306	155	2,083	–	160	22	–
1994	2,108	21,730	605	72	3,428	2,296	–	541	935	–
1995	1,687	23,480	68	–	38	5,969	618	394	77	–
1996	2,355	29,445	3,211	–	408	5,026	2,285	465	595	–
1997	9,544	34,130	1,468	–	2,365	6,539	1,262	605	605	–
1998	–	–	627	–	29	–	530	–	95	319
1999	–	–	224	–	827	–	–	–	249	200
2000	–	–	288	–	557	–	–	–	455	220
2001	–	–	67	–	868	–	–	–	153	630
2002	–	–	154	–	2,292	–	450	–	360	1,301
2003	–	–	–	–	6,427	–	800	–	780	700
2004	–	–	–	–	3,948	–	600	–	1,452	39
2005	–	–	–	–	21,176	–	1,755	–	4,829	32
2006	–	–	–	–	5,943	–	9,762	–	576	37
2007	–	–	–	–	12,684	–	24,250	–	6,743	5
2008	–	–	–	–	6,057	–	23,825	–	10,075	–
2009	–	–	–	–	49,914	–	544	–	25,092	–
2010	–	–	–	–	30,875	–	–	–	40,628	–

Source: *RBI Bulletin,* May 2010.

The shares of the state governments and commercial banks in sales and outstanding amount of the 91-day T-bills have fluctuated widely over the years. These shares seem to be inversely related—whenever the share of the state governments have increased, that of the banks has declined and vice versa.

Competitive Bids and Non-competitive Bids

The competitive bid amount received to notified amount ratio was higher during 2001–02 than in 2000–01. This ratio was the highest in 2006–07. Also, the proportion of competitive bid amount received to notified amount was higher in the year 2007–08. This indicates a favourable market response to the auctions of the 91-day T-bills (Table 4.3).

Since August 1994, state governments, state-run pension funds, and eligible provident funds have been permitted to participate in the auction on a non-competitive basis. In a non-competitive bid, the participants are not allowed to bid. They have to put in their applications and are allotted bills at the weighted average price determined in competitive bidding. They are not allowed any rediscounting facility from the Reserve Bank.

In the year 1995–96, non-competitive bidders were allotted around 74 per cent of the gross total issues. In the subsequent years, the non-competitive bidders were allotted an average 33 per cent of gross issues except in the year 1997–98. In the year 2000–01, the per cent of non-competitive bids accepted to gross issues was 28 per cent, which was quite low and which further reduced to 7.6 per cent in 2003–04. The proportionate share of non-competitive bids to gross issues increased substantially in 2006–07 and 2007–08. There is a need to attract retail investors through non-competitive bids for the growth of the treasury bills market.

364-Day T-Bills

In April 1992, the 364-day T-bills were introduced to replace the 182-day T-bills.

In case of the 364-day T-bills, a multiple/discriminatory price auction is conducted where successful bidders have to pay prices (yield) they have actually bid.

Initially, the auction of the 364-day T-bills was conducted on a fortnightly basis. These auctions evoked a good response from investors such as financial institutions and banks. These bills are not rediscountable with the Reserve Bank. Since 1998–99, the periodicity of the auctions has been changed to monthly as against fortnightly.

The features of the 364-day T-bills are similar to those of the 182-day T-bills. The investors' response to these bills depends, among other things on the uncertainties in the government securities market, variations in the SLR, and yield. The notified amount of these T-bills was raised from Rs. 500 crore to Rs. 750 crore effective December 13, 2000, and to Rs. 1,000 crore from April 2002. This was further increased to Rs. 2,000 crore from April 2004 on account of the introduction of the market stabilisation scheme (MSS).

Size of the 364-Day T-Bills Market

Both the gross issues and the outstanding amount almost doubled from 1992–93 to 1997–98 and 2001–02 to 2004–05 (refer Table 4.4). These issues contributed towards the government's resource mobilisation efforts. Since 1998–99, the Reserve Bank accepted devolvement on itself. This was around 17 per cent of the gross issues. This devolvement was accepted to contain the volatility in cut-off yields. However, there was no devolvement on the Reserve Bank and Primary Dealers since 2001–02.

182-Day T-Bills

The 182-day T-bills were introduced in November 1986 to provide short-term investment opportunities to financial institutions and others. These bills were periodically offered for sale on an auction basis by the Reserve Bank. Prior to July 1988, the auctions were held every month. Since then, however, fortnightly auctions were held, synchronising with the reporting Fridays of scheduled commercial banks. These bills could not be rediscounted with the Reserve Bank.

These bills were introduced with an objective to develop the short-term money market. It turned out to be a handy instrument for entities like banks, financial institutions and corporates, to invest their

TABLE 4.3 Auctions of 91-Day T-Bills—Competitive Bids and Non-Competitive Bids

Particulars	*1992–93*	*1993–94*	*1994–95*	*1995–96*	*1996–97*	*1997–98*	*1998–99*	*1999–2000*	*2000–01*	*2002–03*	*2003–04*	*2004–05*	*2005–06*	*2006–07*	*2007–08*	*2008–09*
Total Notified Amount (Gross Issues)	1,350.00	15,750.00	12,450.00	24,050.00	25,200.00	13,200.00	16,697.00	8,155.00	7,255.00	26,402.00	36,786.00	1,00,592	1,03,424	1,31,577	2,10,365	2,65,555
Total Bids Received	494.10	41,609.40	19,876.73	26,441.41	51,876.10	19,557.41	18,706.50	11,769.50	12,430.00	566,630.41	92,691.56	2,77,657	2,19,156	2,25,998	4,02,928	5,85,860
—Competitive	–	–	17,866.73	8,291.02	37,091.70	10,067.59	13,109.75	8,734.50	10,025.00	50,418.29	89,906.00	2,70,895	1,89,913	1,68,643	3,01,904	5,19,301
—Non-competitive	–	–	2,010.00	18,150.39	14,784.40	9,489.82	5,597.00	3,035.00	2,405.00	6,212.12	2,785.56	6,762	29,243	57,355	1,01,024	66,559
Bid Amount Accepted	203.10	15,511.50	10,045.45	16,260.29	21,308.85	11,241.65	12,523.00	6,605.50	6,470.00	26,097.12	36,785.56	1,00,597	1,03,424	1,31,577	2,10,365	2,65,558
—Competitive	–	–	8,623.70	4,255.56	14,758.82	4,235.47	6,926.00	3,650.50	4,415.00	20,035.00	34,000.00	93,830	74,181	74,222	1,09,342	1,99,000
—Non-competitive	–	–	1,421.75	12,005.13	6,550.65	7,006.18	5,597.00	2,955.00	2,055.00	6,062.12	2,785.56	6,762	29,243	57,355	1,01,023	66,558
Per Cent of Bid Amount Accepted to Bids Received	41.11	37.3	50.50	61.50	41.10	57.50	66.90	56.10	52.10	46.08	40.00	36	54	58	52	45
Per Cent of Non-competitive Bids Accepted to Total Gross Issues	–	–	14.15	73.83	30.74	53.07	33.52	36.20	28.00	23.00	7.60	6.7	28	44	48	25

Source: RBI, *Annual Report,* various issues.

TABLE 4.4 Auctions of 364-Day T-Bills

(Rs. in Crore)

Year	Gross Issues (Bids Accepted)	Bids Received	Per Cent of Bids Accepted to Bids Received	Devolvement on RBI and PDs	Outstanding
1992–93	8,796.47	14,709.09	60	–	8,796.47
1993–94	21,019.76	46,927.36	45	–	8,385.97
1994–95	16,857.00	30,727.22	55	–	8,163.12
1995–96	1,874.70	3,370.94	55	–	1,874.70
1996–97	8,240.60	15,244.90	54	–	8,240.60
1997–98	16,246.60	25,246.63	64	–	16,246.00
1998–99	10,200.00	18,845.87	43	2,186.30	10,200.00
1999–2000	13,000.00	24,039.84	45	2,266.91	13,000.00
2000–01	15,000.00	32,506.88	41	1,827.00	15,000.00
2001–02	19,588.00	50,772.11	39	–	19,588.00
2002–03	26,126.00	68,237.70	38	–	26,126.00
2003–04	26,136.00	59,717.84	44	–	26,136.00
2004–05	47,132.00	1,10,575.00	43	–	47,132.00
2005–06	45,018.00	81,943.00	55	–	45,018.00
2006–07	53,813,00	1,43,307.4	38	–	53,813.00
2007–08	57,205.00	1,73,704.6	33	–	57,205.00
2008–09	54,550.00	1,66,371	33	–	54,550.00
2009–10	41,497.14	1,41,458.94	29	–	41,997.14

Source: RBI, *Annual Report,* various issues.

short-term liquid funds. The bills were issued at a discount to face value for a minimum of Rs. 1 lakh and its multiples thereof. The amount raised in each auction depended upon the funds available with the market participants. These bills were eligible securities for SLR purposes and for borrowing under the 'stand by refinance facility' of the Reserve Bank. They were not purchased by state governments, provident funds, and the Reserve Bank.

The yield on the 182-day T-bills was freely determined by market forces. Also, they had an active secondary market. The notified amount was kept at Rs. 100 crore on each of the auctions.

The Reserve Bank phased out the auctions of this bill from April 28, 1992 to May 25, 1999. In May 1999, it was reintroduced. It was discontinued from May 2001 to March 2005. In April 2005, it was reintroduced.

Table 4.5 exhibits the interest of the market participants in this bill as both the gross issues and outstanding amount show an increasing trend from 1987–88 to 1991–92. Moreover, the high average cut-off yield of 9.89 per cent and a yield which tended to rise each year, had made this bill popular with investors.

After its reintroduction in May1999, the government raised Rs. 5,500 crore through these bills. Non competitive bids aggregating to Rs. 600 crore were accepted in 1999–2000 while there were no non-competitive bids in 2000–01. The devolvement on the Reserve Bank was Rs. 645 crore during 1999–2000 and Rs. 250 crore during 2000–01.

The bill was discontinued once again in May 2001. It was reintroduced in April 2005 with a notified amount of Rs. 500 crore.

14-Day T-Bills

With the 91-day tap T-bills being discontinued, a scheme for the sale of 14-day intermediate T-bills was introduced effective from April 1, 1997 and 14-day auction T-bills was introduced effective from May 20, 1997 to facilitate the cash management requirements of various segments of the economy and emergence of a more comprehensive yield curve.

TABLE 4.5 Size of 182-Day T-Bills Market

Year	Bids Tendered (Received) (Rs. in Crore)	Bids Accepted (Gross Issues) (Rs. in Crore)	Per Cent of Bids Accepted to Bids Tendered	Cut-off Yield (At the End of the Year) (In Per Cent)	Outstanding at the End of the Year (Rs. in Crore)
1987–88	630.06	329.66	52.3	9.27	132.80
1988–89	2,141.11	1,371.60	64.1	9.42	566.50
1989–90	2,364.20	1,740.15	73.6	9.95	774.30
1990–91	4,336.43	3,425.93	79.0	10.08	1,077.59
1991–92	13,694.32	7,317.72	53.4	9.27	3,985.52
11.4.92	538.00	245.00	45.5	8.77	3,935.57
1999–2000	3,038.50	2,900.00	95	9.68	1,300.00
2000–01	5,676.00	2,600.00	46	9.43	1,300.00
2001–02	731.50	300.00	41	8.44	–
2005–06	45,870	26,828	58	6.6083	9,771
2006–07	74,431.82	36,912.25	49.6	8.204	17,206
2007–08	1,22,852.91	46,926.44	38.2	7.36	16,785
2008–09	1,13,508.93	44,303	39	5.10	20,175
2009–10	1,42,839.55	42,875	30.0	4.6162	21,500

Source: RBI, *Bulletin and Annual Report.*
RBI Bulletin, various issues.

TABLE 4.6 14-Day T-Bills: Total Bills Outstanding and Share of State Governments in Total Outstanding

Year	Outstanding Amount (Rs. in Crore)	Share of State Governments in Total Outstanding (Per Cent)
1997–98	7,759	94.8
1998–99	7,749	95.0
1999–2000	2,383	96.18

Source: RBI, *Annual Report*, various issues.

The intermediate T-bills were introduced to help invest the surplus funds of state governments, foreign central banks, and other specified bodies with whom the Reserve Bank has special arrangements. The salient features of this bill were as follows.

- It was an alternate arrangement in place of the 91-day tap bills.
- It was sold on a non-transferable basis for a minimum amount of Rs. 1,00,000 or in multiples thereof and was issued only in book form.
- It was repaid/renewed at par 14 days from its issue.
- The discount rate was at quarterly intervals such that the effective yield of this instrument was equivalent to the interest on the Ways and Means Advances to the central government.
- The bill was rediscounted at 50 basis points higher than the discount rate. On discounting, the bills were extinguished.

Size of the 14-Day T-Bills Market

The outstanding amount, which was consistent in the first two years, came down to Rs. 2,383 crore from Rs. 7,759 crore. The share of the state governments in the total outstanding remained consistent at an average of 95 per cent in the three years.

The 14-day auction T-bills were introduced to facilitate the cash management requirements of various segments of the economy and the emergence of a more comprehensive yield curve. These bills did not devolve on the Reserve Bank unlike the 91-day T-bills. Non-competitive bids were kept outside the notified amount so that the cut-off yield would reflect liquidity conditions better. Initially, the notified amount varied within the range of Rs. 100 crore and Rs. 500 crore depending on market interest. During 2000–01, the notified amount was Rs. 100 crore per auction.

TABLE 4.7 Auctions of 14-Day T-Bills

(Rs. in Crore)

	1997–98	1998–99	1999–2000	2000–01	2001–02
Gross Issues	69,237	18,150	1,645.3	10,480	1100
Net Issues	240	–40	125	–25	–300
Outstanding	240	200	325	300	–
Per Cent of Non-competitive Bids to Total Issues	47	57	68	50	27

Source: RBI, *Annual Report,* various issues.

The 14-day auction T-bills received a favourable response from market participants in the first year of their introduction. Thereafter, a declining trend was witnessed. The bills were discontinued from May 2001, owing to a lack of market response.

Implicit Yield at Cut-off Prices

Treasury bills are sold at a discount. The difference between the sale price and the redemption value is the return on the treasury bills or the treasury bill rate. This rate was increased to 4.60 per cent in 1974 from 2.25 per cent in 1955–56. The rate was not only administered but it was the lowest rate of interest prevalent till 1993. Since 1993, the treasury bill rate is market-determined and has been much higher than 4.6 per cent per annum, leading to a higher yield to investors.

The yield is the rate of return on a particular instrument. Implicit yield is the yield on an instrument if it is held till its maturity. This yield is calculated as follows.

If a T-bill with a face value of Rs. 100 is issued at Rs. 98, then the implicit yield is

$$= \left[\left(\frac{100}{98} \times 100\right) - 100\right] \times 4$$
$$= 8.164 \text{ per cent}$$

TABLE 4.8 Implicit Cut-off Yield (In Per Cent)

Year	91-Day T-Bills				364-Day T-Bills			
	Minimum	Maximum	Average	End of Period	Minimum	Maximum	Average	End of Period
1992–93	8.99	10.97	10.03	10.97	10.96	11.42	11.23	11.09
1993–94	7.08	11.09	8.68	7.46	9.97	11.36	11.01	9.97
1994–95	7.21	11.99	9.16	11.99	9.41	11.94	10.15	11.94
1995–96	11.40	12.97	12.67	12.97	12.08	13.16	12.87	13.12
1996–97	6.92	12.97	9.67	7.96	10.10	13.12	11.16	10.10
1997–98	5.72	7.33	6.83	7.33	7.98	9.42	8.46	7.98
1998–99	7.17	10.05	8.57	8.75	7.97	10.72	9.51	10.07
1999–2000	8.25	9.46	9.03	9.17	9.31	10.33	10.09	9.93
2000–01	7.91	10.41	8.98	8.75	8.66	10.91	9.76	8.96
2001–02	6.05	8.50	6.88	6.1326	6.16	8.85	7.30	6.1571
2002–03	5.10	7.00	5.73	5.8853	5.35	6.99	5.93	5.89
2003–04	4.16	5.47	4.59	4.3672	4.31	5.50	4.67	4.31
2004–05	4.37	5.61	4.89	5.3241	4.43	5.77	5.15	5.61
2005–06	5.12	6.69	5.51	6.1081	5.58	6.81	5.87	6.4232
2006–07	5.41	8.10	6.80	7.9770	5.90	7.98	7.07	7.9782
2007–08	4.46	7.94	7.11	7.2274	6.58	7.80	7.50	7.3508
2008–09	4.58	9.36	7.10	4.9538	4.51	9.56	7.15	5.5003
2009–10	3.11	4.50	3.57	4.3792	3.50	5.50	4.37	5.1445

Source: RBI Bulletin, various issues.

The Reserve Bank publishes implicit yields in its weekly bulletins.

Table 4.8 presents and compares the implicit cut-off yield in case of 91-day auction T-bills and 364-day T-bills for the period 1992–93 to 2007–08.

In case of both 91-day and 364-day T-bills, the implicit yield rose in the years 1994–95 and 1995–96. The implicit yield at cut-off prices reached its peak in the year 1995–96 due to a spell of tight money market conditions. The yield declined in the next two years as liquidity conditions eased and the Reserve Bank contained the interest rate through its policy. However, in the year 1998–99, to contain the pressure in the forex market, there was a sharp 3 per cent rise in the repo rate, which led to an increase in implicit yields. With easing in liquidity conditions and gradual cuts in CRR, implicit yields declined in 2000–01.

Table 4.8 brings out a noteworthy trend. The long-term yields (364-days T-bill yields) were attractive and higher than the short-term yields (91-day T-bill yields). As seen in Figure 4.1, the spread between the two yields have narrowed and are almost convergent since 2001–02. The average cut-off yield of all the T-bills increased during 2005–06 and 2007–08 indicating tight liquidity conditions. Yields on T-bills hardened in 2007–08 on account of high inflation and inflation expectations, and hikes in the cash reserve ratio (CRR).

A drawback of implicit yields is that they may not be exactly market-determined. Primary dealers are required to bid for a minimum amount of treasury bills in auctions; this may influence yields. Moreover, the Reserve Bank takes devolvement in order to maintain yields and give signals on interest rates to the market. Hence, as treasury bills yields are dependent on and influenced by the level of liquidity in the money market, they are not preferred as benchmark rates. Moreover, a continuous rise and decline in implicit yields has hampered the growth of a smooth yield curve.

Conclusion

The size of the treasury bills market in terms of both volume of sales and outstanding has increased. The Reserve Bank has made substantial efforts to develop the treasury bills market. The bank has discontinued on-tap and ad hoc treasury bills and introduced auctioned treasury bills which have not only helped in developing the treasury bills market but have also gone a long way in enhancing the popularity of this instrument by making the yield market-determined. The primary dealer and satellite dealer systems were set up to activate the treasury bills market. This market has the potential to develop further if the market is broadened even more by increasing the number of players and instruments. Moreover, this market can be made more liquid and attractive if treasury bills futures are introduced.

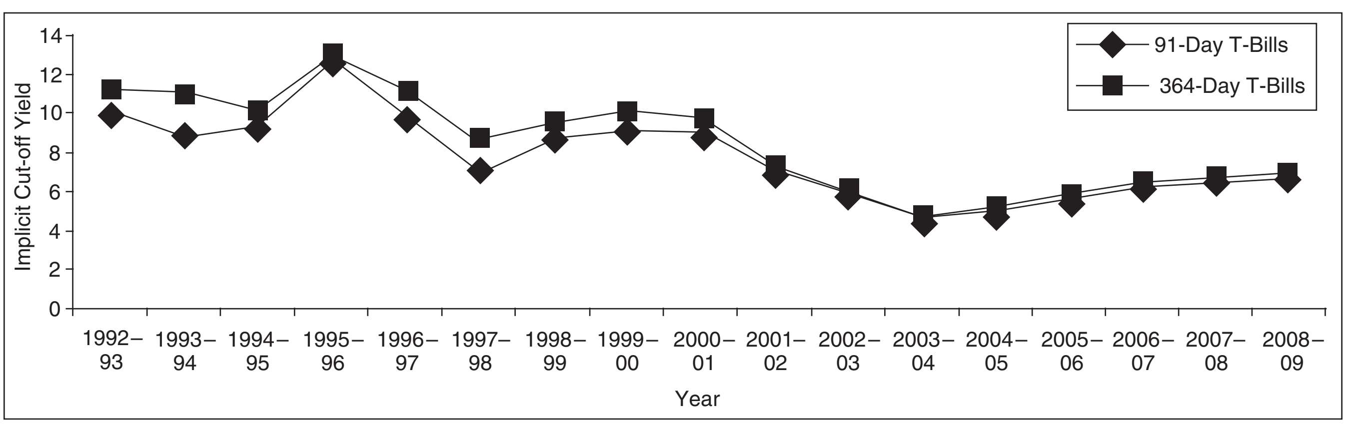

Figure 4.1 Implicit Cut-off Yield (Average) in Per Cent

- A commercial paper is an unsecured short-term promissory note issued at a discount by creditworthy corporates, primary dealers and all-India financial institutions

COMMERCIAL PAPER

The Working Group on Money Market in 1987 suggested the introduction of the commercial paper (CP) in India. The Reserve Bank introduced commercial papers in January 1990. Commercial papers have been in vogue in the United States since the nineteenth century and have become popular in money markets all over the world since the 1980s.

A commercial paper is an unsecured short-term promissory note, negotiable and transferable by endorsement and delivery with a fixed maturity period. It is generally issued at a discount by the leading creditworthy and highly rated corporates to meet their working capital requirements. Depending upon the issuing company, a commercial paper is also known as a finance paper, industrial paper, or corporate paper.

Initially only leading highly rated corporates could issue a commercial paper. The issuer base has now been widened to broad-base the market. Commercial papers can now be issued by primary dealers and all-India financial institutions, apart from corporates, to access short-term funds. Effective September 6, 1996 and June 17, 1998, primary dealers and satellite dealers were also permitted to issue commercial papers to access greater volume of funds to help increase their activities in the secondary market.

Investors in CP

- Individuals
- Banks
- Corporates
- Unincorporated bodies
- NRIs
- FIIs

A commercial paper can be issued to individuals, banks, companies, and other registered Indian corporate bodies and unincorporated bodies. Non-resident Indians can be issued a commercial paper only on a non-transferable and non-repatriable basis. Banks are not allowed to underwrite or co-accept the issue of a commercial paper. Foreign institutional investors (FIIs) are eligible to invest in commercial papers but within the limits set for their investments by the SEBI.

A commercial paper is usually privately placed with investors, either through merchant bankers or banks. A specified credit rating of P2 of CRISIL or its equivalent is to be obtained from credit rating agencies.

A commercial paper is issued as an unsecured promissory note or in a dematerialised form at a discount. The discount is freely determined by market forces. The paper is usually priced between the lending rate of scheduled commercial banks and a representative money market rate.

Corporates are allowed to issue CPs upto 100 per cent of their fund-based working capital limits. The paper attracts stamp duty. No prior approval of the Reserve Bank is needed to issue a CP and underwriting the issue is not mandatory.

Most CPs were issued by manufacturing companies for a maturity period of approximately three months or less. During 2001–02, manufacturing and related companies issued 67.4 per cent of total CPs, whereas 21.5 per cent of the total was issued by leasing and finance companies and the balance of 11.1 per cent by financial institutions. However, the share of manufacturing companies in the aggregate amount of CPs outstanding declined to an average of 56 per cent during 2002–03 and further to 28.9 per cent during 2008–09 and the share of leasing and finance companies markedly increased from 13 per cent in 2001–02 to 76.5 per cent in March 2008 but declined to 61.5 per cent during 2008–09. The share of manufacturing companies has gone down substantially due to enhanced efficiency in their operations, longer internal accruals, and better cash management.

There was a sharp increase in the share of FIs also. Their share increased from a meagre 1 per cent in 2001–02 to a high of 18 per cent in 2003–04 and 20 per cent in March 2005. Their share substantially reduced to 10.5 per cent in March 2006 but again increased to 16 per cent in June 2009.

The CP market is dominated by corporates having tangible net-worth of Rs. 50 crore and above. The recent RBI guidelines on investment in non-SLR securities for banks exempted CPs from the purview of such guidelines. This enabled financial institutions to raise a higher amount through CPs in 2004 and thereafter.

The Process for Issuing a CP

A resolution has to be passed by the Board of Directors approving the CP issue and authorising the executive(s) to execute the relevant documents as per the Reserve Bank's norms. The CP issue then has to be rated by a credit rating agency. The rating is usually completed within two to three weeks of receipt of necessary information. The company has to select an Issuing and Paying Agent (IPA), which has to be a scheduled bank. The IPA verifies all the documents submitted by the issuer viz., copy of board resolution, signatures of authorised executant and then issues a certificate that documents are in order. It also ensures that the issuer has the minimum credit rating as stipulated by the Reserve Bank and amount mobilised through issuance of the CP within the guarantee indicated by the credit rating agency for the specified ratings. It has also to certify that it has a valid agreement with the issuer. All the certified copies of original documents verified by it are held in its custody.

The company then has to arrange for dealers such as merchant banks, brokers, and banks for placement of the CPs which has to be completed within two weeks of opening. Every CP issue has to be reported to the Reserve Bank through the IPA.

Scheduled commercial banks are the major investors in commercial papers and their investment is determined by bank liquidity conditions. Banks prefer a commercial paper as an investment avenue rather than sanctioning bank loans. These loans involve high transaction costs and money is locked for a long time period whereas in a commercial paper which is an attractive short-term instrument, allows banks to park funds during times of high liquidity. Some banks fund commercial papers by borrowing from the call money market. Usually, the call money market rates are lower than the commercial paper rates. Hence, banks book profits through arbitrage between the two money markets. Moreover, the issuance of commercial papers has been generally observed to be inversely related to the money market rates.

Guidelines Relating to CPs

With experience, refinements were made to this instrument by the Reserve Bank by measures such as removing/easing a number of restrictions on maturity, size of the commercial paper, requirement of minimum current ratio, and restoration of working capital finance.

The maturity period has been brought down from 91 days-6 months to 15 days-1 year. The maturity period was further brought down to 7 days in April 2004. The minimum size of the paper has been reduced from Rs. 1 crore to Rs. 5 lakh.

Until October 1994, a commercial paper was an important corporate instrument for financing working capital requirements. Corporates could have access to funds at rates lower than the PLRs through a CP. This low interest rate advantage was due to the stand-by facility wherein banks were required to restore the cash credit limit on the maturity of the paper, guaranteeing the issuer funds at the time of redemption. This stand-by facility was withdrawn in October 1994. The corporates were asked to access funds through a commercial paper on their own repayment strength. This withdrawal also imparted independence to the commercial paper as a money market instrument and its credit rating reflected the intrinsic strength of the issuer. The withdrawal of this stand-by facility led to a crash in the primary market for commercial papers in 1994–95.

Later, the CP was carved out of the Cash-Credit (CC) limits of the maximum permissible bank finance (MPBF) that the corporates had with banks. Hence, if a corporate issued a CP, the cash credit that it had with its bank was reduced by the same amount, thereby lowering the attractiveness of this instrument for the corporates. This issuance limit was delinked from the cash-credit limit in October 1996. Corporates now have the freedom to utilise their entire banking limits for issuing commercial papers.

New guidelines were released in October 2000 for providing flexibility, depth, and vibrancy to the commercial paper market. The Reserve Bank converted the paper into a stand-alone product to enable companies in the services sector to meet their short-term working capital needs more easily. Banks and financial institutions now have the flexibility to fix working capital limits after taking into account the resource pattern of a company's financing including CPs. An important feature of the revised guideline was the flexibility given to banks and financial institutions to provide stand-by assistance/credit, back-stop facility to issuers. This stand-by facility was provided to aid the long-term growth of the CP market. In addition, this facility assists banks to increase their fee-based income. The Ahmedabad Electricity Company was the first company to issue CPs worth Rs. 40 crore with a stand-by facility provided by the bank. Both the issuer and the bank provided unconditional stand-by facility to the extent of Rs. 40 crore for the entire period during which the paper remained outstanding. This issue was assigned a P1 rating by CRISIL.

Banks, financial institutions, primary dealers, and satellite dealers have been permitted to make fresh investments and hold a CP only in dematerialised form, effective from June 30, 2001. In order to provide flexibility to both issuers and investors in the CP market, the Reserve Bank allowed non-bank entities including corporates to provide an unconditional and irrevocable guarantee for credit enhancement for CP issue. The guarantor has to get a credit rating atleast one notch higher than that of the issuer from an approved credit rating agency. The offer document for the CP has to disclose the net-worth of the guarantor names of the companies to which the guarantor has issued similar guarantees, the extent of the guarantees offered and the conditions under which the guarantee will be invoked. Banks were allowed to invest in CP guaranteed by non-bank entities provided their exposure remained within the regulatory ceiling for unsecured exposures.

Summary of Guidelines for Issuance of a CP

With a view to providing flexibility to participants and adding depth and vibrancy to the CP market, the Reserve Bank issued new guidelines for the issuance of the CP in October 2000.

Eligibility Corporates, primary dealers, and all-India financial institutions are eligible to issue a CP. For a corporate to be eligible, it should have tangible net worth of Rs. 4 crore and a sanctioned working capital limit from a bank or a financial institution and the borrowal account is a standard asset.

Rating Requirement The minimum credit rating shall be P2 of CRISIL or such equivalent rating by other approved agencies.

Maturity Initially, corporates were permitted to issue a CP with a maturity between a minimum of three months and a maximum upto six months. At present, the maturity period has been brought down to a minimum of 7 days and a maximum of upto one year from the date of issue.

Denomination Minimum of Rs. 5 lakh and multiples thereof. Amount invested by a single investor should not be less than Rs. 5 lakh (face value).

Limits and Amount A CP can be issued as a 'stand-alone' product. Banks and financial institutions will have the flexibility to fix working capital limits duly taking into account the resource pattern of companies financing including CPs.

Issuing and Paying Agent (IPA) Only a scheduled commercial bank can act as an IPA. It verifies all original certificates viz., credit rating certificates, letter of offer, and the board resolution authorising issue of the CP. It holds custody of original of credit support document if it is in the form of stand-by assistance/back stop facility with relevant declaration and confirms that the documents are in order. After authentication of the entire CP document, IPA issues an 'IPA certificate' to all subscribers of the CP in the primary market and then reports the issue to the RBI.

Investment in a CP A CP may be held by individuals, banks, corporates, unincorporated bodies, NRIs, and FIIs. Investment by FIIs would be within the limits set for their investments by the SEBI.

Mode of Issuance A CP can be issued as a promissory note or in a dematerialised form. Underwriting is not permitted. CP will be issued at a discount to face value as may be determined by the issuer. The total amount of CP proposed to be issued should be raised within a period of 2 weeks from the date on which the issuer opens the issue for subscription. Every issue of CP, including renewal, should be treated as a fresh issue.

Preference for Demat Issuers and subscribers are encouraged to prefer exclusive reliance on demat form. Banks, financial institutions and primary dealers are advised to invest only in demat form.

Stand-by Facility It is not obligatory for banks or financial institutions to provide stand-by facility. They can provide credit enhancement facility within the prudential norms.

The Reserve Bank publishes, on a monthly as well as a weekly basis, effective interest rates on CPs issued during a fortnight. At present, issuers decide on the discount rates of their CPs taking into account the Reuters/Tele rate CP reference rate as well as supply/demand forces prevailing in the market.

In order to improve transparency and strengthen efficiency reporting of all CP deals on the Negotiated Dealing System (NDS) has been made compulsory. It is proposed to rationalise and standardise various aspects of processing, settlement and documentation of CP issuance with a view to achieving the settlement atleast on T+1 basis.

Stamp Duty on CP

The stamp duty on issuance of a CP is governed by the Indian Stamp Act and is under the purview of the central government. The level of stamp duty was scaled down substantially across various maturities on March 1, 2004.

The stamp duty rate applicable to non-bank entities are five times higher than those applicable to banks. Moreover, a CP issuance attracts a stamp duty for 90 days irrespective of the tenor. Hence, stamp duty levy makes shorter tenor issuance expensive.

Size of the CP Market

The size of the CP market is reflected in the total outstanding amount of commercial papers issued by companies. The outstanding amount of commercial papers increased considerably in the initial years. The amount of commercial papers issued by corporates increased significantly from Rs. 577 crore in March 1993 to a peak of Rs. 3,264 crore in March 1994 accompanied by a decline in the average discount rate from 15.5 per cent to 11 per cent during 1993–94. But in 1994–95 and 1995–96, however, the outstanding amount of CPs declined sharply. This decline was attributed to the withdrawal of the stand-by facility of the paper in October 1994, coupled with rising interest rates and a shrinking of short-term surplus funds with banks.

Since 1996–97, the commercial paper market has picked up as it can be accessed at rates lower than the short-term PLRs of commercial banks; CPs have become an attractive source of working capital funds as their rates are less than the sub-prime lending rates. Hence, commercial papers prove to be cheaper for corporates. The CP market has also become an attractive avenue for banks to park their credit funds. This market has been growing at a rate of 12–14 per cent, since 2000–01.

The CP rates are dependent on ratings, a company's standing, and the demand–supply position of the market.

Corporates with the highest rating (P1+, PR1+, A1+) who regularly access the CP market are BPCL, HPCL, IPCL, IOC, ACC, Telco, L&T, Tata Coffee, Dabur, 1L&FS, M&M Finance, GE Caps, EID Parry, Electrosteel Castings, and Ashok Leyland Ltd.

TABLE 4.9 Chronology of Development of CP in India

As on	Tangible Net Worth	Working Capital	Agg. Amt. of CP Issue	Maturity	Denomination	Minimum CP Issued per Investors	Mode of Issuance
January 1990	Rs. 10 Crore	Rs. 25 Crore	20 Per Cent of Working Capital (Fund-based Limit)	3 to 6 Months	Multiples of Rs. 25 Lakh	Rs. 1 Crore	Physical
April 24, 1990	Rs. 5 Crore	Rs. 15 Crore	20 Per Cent of Working Capital (Fund-based Limit)	3 to 6 Months	Multiples of Rs. 10 Lakh	Rs. 50 Lakh	Physical
May 30, 1991	Rs. 5 Crore	Rs. 10 Crore	30 Per Cent of Working Capital (Fund-based Limit)	3 to 6 Months	Multiples of Rs. 5 Lakh	Rs. 25 Lakh	Physical
May 13, 1992	Rs. 5 Crore	Rs. 5 Crore	75 Per Cent (Fund-based Limit)	3 to 6 Months	Multiples of Rs. 5 Lakh	Rs. 25 Lakh	Physical
October 18, 1993	Rs. 4 Crore	Rs. 4 Crore	75 Per Cent (Fund-based Limit)	3 Months to Less than One Year	Multiples of Rs. 5 Lakh	Rs. 25 Lakh	Physical
November 4, 1996	Rs. 4 Crore	–	As Sanctioned by Bank	3 Months to Less than One Year	Multiples of Rs. 5 Lakh	Rs. 25 Lakh	Physical
April 15, 1997	Rs. 4 Crore	–	As Sanctioned by Bank	1 Month to Less than One Year	Multiples of Rs. 5 Lakh	Rs. 25 Lakh	Physical
May 25, 1998	Rs. 4 Crore	–	As Sanctioned by Bank	15 Days to 365 Days	Multiples of Rs. 5 Lakh	Rs. 25 Lakh	Physical
October 10, 2000	Rs. 4 Crore	–	CP can be Issued as "Stand Alone" Product	15 Days to 365 Days	Multiples of Rs. 5 Lakh	Rs. 25 Lakh	–
April 30, 2001	Rs. 4 Crore	–	CP can be Issued as "Stand Alone" Product	15 Days to 365 Days	Multiples of Rs. 5 Lakh	–	Demat form (January 2001)
November 4, 2006	Rs. 4 Crore	–	As Sanctioned by Banks	7 Days to 365 Days	Multiples of Rs. 5 Lakh	–	Demat form

Source: www.rbi.org.in

TABLE 4.10 Structure of Stamp Duty (Effective from March 1, 2004)

(In Per Cent)

Period	Banks		Non-banks	
	Past	Present	Past	Present
1. Up to 3 Months	0.05	0.012	0.125	0.06
2. Above 3 Months Up to 6 Months	0.10	0.024	0.250	0.12
3. Above 9 Months Up to 12 Months	0.20	0.05	0.500	0.25
4. Above 12 Months	0.40	0.10	1.00	0.5

Source: RBI, *Annual Report,* various issues.

Nationalised banks invest in CPs as a primary market instrument. They prefer to invest in CPs only during low credit off-take period.

Leasing and finance companies were the predominant issuers of CPs partly reflecting the Reserve Bank's policy of phasing out the access of these companies to public deposits.

Mutual funds have emerged as big investors as the SEBI regulations impose a ceiling of 10 per cent in investment in unlisted paper but CP investments are excluded. Hence, a large amount of money from mutual funds is flowing to CPs. As a result, interest rates dipped to a low of 6.33 per cent in February 2005. The corporates get a direct and quick access to the institutional investors through issuance of CPs. It is a cheaper option as compared to the customary bank credit route. Moreover, the decline in stamp duty has made CPs attractive.

TABLE 4.11 Outstanding Amount of CPs Issued by Corporates

Year (End-March)	*Outstanding Amount (Rs. in Crore)*	*Interest Rate (Discount Rate, in Per Cent)*
1990–91	65.00	–
1991–92	332.00	–
1992–93	577.00	15.8–16
1993–94	3,264.00	11–12
1994–95	604.00	14–15
1995–96	76.00	20–20.2
1996–97	646.00	11.3–12.3
1997–98	1,500.00	14.2–15.5
1998–99	4,770.00	9.1–13.3
1999–2000	5,663.00	10–12
2000–01	5,847.00	8.75–13.50
2002–03	5,749.30	6.00–7.75
2003–04	9,706.5	4.70–6.5
2004–05	13,418.90	5.2–7.25
2005–06	12,767.35	6.64–9.25
2006–07	21,336	8.08
2007–08	32,591	9.20
2008–09	44,171	10.54
2009–10	75,506	6.41

Source: RBI, *Report on Currency and Finance*, various issues.
RBI, *Annual Report,* various issues.

Secondary Market in CPs

There was very little activity in the secondary market of CPs due to the investor's preference to hold the instrument till maturity. The market is developing with the entry of foreign and private sector banks who are becoming the major players. Mutual funds also prefer the secondary market route as the stamp duty for issuing CPs is higher at 0.5 per cent for mutual funds than for banks, which stands at 0.2 per cent. Mutual funds are active players in the CP secondary market. Mutual funds buy the paper in the secondary market through banks who pay a lower stamp duty in the primary market.

The secondary market activity will gather momentum with the launch of CPs in demat form.

Factors Inhibiting the Growth of the CP Market

Commercial paper is a good instrument to raise short-term finances but this instrument is still in an under-developed state in India. The reasons are as follows.

1. Even though the minimum size of investment is Rs. 5 lakh, retail investors see little scope in investing their money.
2. CP issues involve administrative difficulties and complex procedural formalities which inhibit the growth of this market.
3. The non-bank institutional investors such as LIC, UTI, and GIC are not big buyers in this market because of a Reserve Bank directive limiting their short-term investments in the money market to treasury bills and as majority of their investment is either in equities or other long-term investments.
4. There is no active secondary market for CPs even though efforts have been made by the DFHI in this direction.
5. The CP market has witnessed ups and downs. Corporates too find it hard to enter as there is neither an underwriting facility nor a roll-over facility in case of CPs.
6. Stamp duty levy make CPs less attractive than short-term credit for corporates.

Commercial Paper: A Comparative Position

Countries	*USA*	*United Kingdom*	*France*	*India*
Legal Basis	Securities Act	English Common Law	1. French Financial and Monetary Code 2. Decree and CRBF Regulation	1. Non-Banking (Acceptance of Deposit through CP) Direction, 1989. 2. Section 45K of RBI Act, 1934.
Maturity Period	No Minimum and Maximum Period But in Effect Ranges from 1 Day to 270 Days	Less than 365 Days	Between One Day and Up to One Year	7 Days and Up to 1 Year
Denomination	No Required Minimum Denomination But Market Practice of $ 1,00,000	EUR 40,000	A Unit Value Equivalent at Least EUR 1,50,000	Denominations of Rs. 5 Lakh or Multiples thereof. Amount Invested by a Single Investor Should not be Less than Rs. 5 Lakh (Face Value)
Issuers	Both Financial and Non-financial Corporation	No Restriction	Investment Firms, Companies Making Public Offer, EIG, Public Companies, Community Institutions, and International Organisation of which France is Member.	Corporates, Primary Dealers (PDs) and FIs.

Source: www.rbi.org.in

7. Stamp duty has been reduced substantially by the central government but still disparity exists between stamp duty payable by banks and non-bank entities. Banks as investors pay only one-fifth of what non-bank entities pay for subscribing to a CP. This distortion in the stamp duty rates has forced non-bank entities to buy the paper in the secondary market through banks to save on stamp duty. The stamp duty applicable to non-bank entities should be on par with banks. Moreover, the stamp duty structure inhibits a reduction in the minimum maturity period of CP.
8. The minimum maturity period of 7 days inhibits the growth of the CP market. In developed countries such as USA and France, CPs are issued with an overnight maturity. This is possible because there is no stamp duty on CP and settlement of CP takes place on the same day (i.e., at T+0 basis). In India, the minimum maturity period can be reduced only when stamp duty is abolished and a full-fledged real time gross settlement (RTGS) system is in place.
9. The big corporates in the last two years could borrow money at sub-PLR rates from banks which were cost-effective as compared to commercial paper rates. Moreover, corporates also generated a substantial amount of internal funds to meet their credit demand which reduced the need to issue CPs.

COMMERCIAL BILLS

- Commercial bills are negotiable instruments drawn by the seller on the buyer which are, in turn, accepted and discounted by commercial banks

The working capital requirement of business firms is provided by banks through cash-credits/overdraft and purchase/discounting of commercial bills.

A commercial bill is a short-term, negotiable, and self-liquidating instrument with low risk. It enhances the liability to make payment on a fixed date when goods are bought on credit. According to the Indian Negotiable Instruments Act, 1881, a bill of exchange is a written instrument containing an unconditional order, signed by the maker, directing to pay a certain amount of money only to a particular person, or to the bearer of the instrument. Bills of exchange are negotiable instruments drawn by the seller (drawer) on the buyer (drawee) for the value of the goods delivered to him. Such bills are called trade bills. When trade bills are accepted by commercial banks, they are called commercial bills. The bank discounts this bill by keeping a certain margin and credits the proceeds. Banks, when in need of money, can also get such bills rediscounted by financial institutions such as LIC, UTI, GIC, ICICI, and IRBI. The maturity period of the bills varies from 30 days, 60 days, or 90 days, depending on the credit extended in the industry.

Commercial bills were introduced in the money market in 1970. The RBI rediscounted genuine trade bills at the bank rate or at a rate specified by it. The development of the bills market enabled banks and financial institutions to invest their short-term surplus funds in bills of varying maturities.

Types of Commercial Bills

Commercial bill is an important tool to finance credit sales. It maybe a demand bill or a usance bill. A demand bill is payable on demand, i.e., immediately at sight or on presentation to the drawee. A usance bill is payable after a specified time. If the seller wishes to give some time for payment, the bill would be payable at a future date. These bills can either be clean bills or documentary bills. In a clean bill, documents are enclosed and delivered against acceptance by the drawee, after which it becomes clear. In the case of a documentary bill, documents are delivered against payment accepted by the drawee and documents of the file are held by bankers till the bill is paid.

Types of Commercial Bills

- Demand Bill
- Usance Bill
- Clean Bill
- Documentary Bill
- Inland Bill
- Foreign Bill
- Hundi
- Derivative Usance Promissory Note

Commercial bills can be inland bills or foreign bills. Inland bills must (a) be drawn or made in India and must be payable in India; or (b) drawn upon any person resident in India. Foreign bills, on the other hand, are (a) drawn outside India and may be payable in and by a party outside India, or may be payable in India or drawn on a party in India; or (b) it may be drawn in India and made payable outside India. A related classification of bills is export bills and import bills. While export bills are drawn by exporters in any country outside India, import bills are drawn on importers in India by exporters abroad.

The indigenous variety of bill of exchange for financing the movement of agricultural produce, called a 'hundi,' has a long tradition of use in India. It is in vogue among indigenous bankers for raising money or remitting funds or to finance inland trade. A hundi is an important instrument in India; so indigenous bankers dominate the bill market. However, with reforms in the financial system and lack of availability of funds from private sources, the role of indigenous bankers is declining.

With a view to eliminating movement of papers and facilitating multiple rediscounting, the RBI introduced an innovative instrument known as 'Derivative Usance Promissory Notes,' backed by such eligible commercial bills for required amounts and usance period (up to 90 days). The government has exempted stamp duty on derivative usance promissory notes. This has simplified and streamlined bill rediscounting by institutions and made the commercial bill an active instrument in the secondary money market. This instrument, being a negotiable instrument issued by banks, is a sound investment for rediscounting institutions. Moreover, rediscounting institutions can further discount the bills anytime prior to the date of maturity. Since some banks were using the facility of rediscounting commercial bills and derivative usance promissory notes for as short a period as one day, the Reserve Bank restricted such rediscounting to a minimum period of 15 days. The eligibility criteria prescribed by the Reserve Bank for rediscounting commercial bills are that the bill should arise out of a genuine commercial transaction showing evidence sale of goods and the maturity date of the bill should not exceed 90 days from the date of rediscounting.

Features of Commercial Bills

Commercial bills can be traded by offering the bills for rediscounting. Banks provide credit to their customers by discounting commercial bills. This credit is repayable on maturity of the bill. In case of need for funds, banks can rediscount the bills in the money market and get ready money. Commercial bills ensure improved quality of lending, liquidity, and efficiency in money management. It is fully secured for investment since it is transferable by endorsement and delivery and it has high degree of liquidity.

The bills market is highly developed in industrial countries but it is very limited in India. Commercial bills rediscounted by commercial banks with financial institutions amount to less than Rs. 1,000 crore. In India, the bill market did not develop due to (i) the cash-credit system of credit delivery where the onus of cash management rests with banks and (ii) an absence of an active secondary market.

Measures to Develop the Bills Market

One of the objectives of the Reserve Bank in setting up the Discount and Finance House of India (DFHI) was to develop the commercial bills market. The bank sanctioned a refinance limit for the DFHI against a collateral of treasury bills and against the holdings of eligible commercial bills.

With a view to developing the bills market, the interest rate ceiling of 12.5 per cent on the rediscounting of commercial bills was withdrawn from May 1, 1989.

To develop the bills market, the Securities and Exchange Board of India (SEBI) allowed, in 1995–96, 14 mutual funds to participate as lenders in the bills rediscounting market. During 1996–97, seven more mutual funds were permitted to participate in this market as lenders while another four primary dealers were allowed to participate as both lenders and borrowers.

In order to encourage the 'bills' culture, the Reserve Bank advised banks in October 1997 to ensure that at least 25 per cent of inland credit purchases of borrowers be through bills.

Size of the Commercial Bills Market

The size of the commercial bills market is reflected in the outstanding amount of commercial bills discounted by banks with various financial institutions.

As seen from Table 4.12, the activity in the bills rediscounting market remained subdued and came down from Rs. 4,612 crore in 1991–92 to Rs. 906 crore at the end of March 2002. This depicts the small size and volume of the bills rediscounting market. Even though the number of participants has been increased by the Reserve Bank, the volume of activity is quite low.

The total monthly average amount of bills rediscounted by commercial banks with non-bank financial institutions worked out to Rs. 1,131 crore during 2001–02, with the Small Industries Development Bank of India (SIDBI) accounting for the major share of 63.7 per cent.

There was a substantial decline in the market for bills rediscounting in the year 2002–03. The SIDBI is a major participant in this market as it accounts for 75 per cent of the total transactions in this market. A rise in the rediscounting activity of the SIDBI led to an increase in the volumes of this market in 2003–04.

Columns 2, 3, 5, and 6 in Table 4.13 show that banks prefer discounting inland bills and purchasing foreign bills. The share of bill finance in the total bank credit increased from 1993–94 to 1995–96 but declined subsequently. This reflects the underdeveloped state of the bills market. The reasons for the underdevelopment are as follows.

- The Reserve Bank made an attempt to promote the development of the bill market by rediscounting facilities with itself till 1974. Then, in the beginning of the 1980s, the availability of funds from the Reserve Bank under the bill rediscounting scheme was put on a discretionary basis. It was altogether stopped in 1981. The popularity of the bill of exchange as a credit instrument depends upon the availability of acceptance sources of the central bank as it is the ultimate source of cash in times of a shortage of funds. However, it is not so in India. The Reserve Bank set up the DFHI to deal in this instrument and extends refinance facility to it. Even then, the business in commercial bills has declined drastically as the DFHI concentrates more on other money market instruments such as call money and treasury bills.

TABLE 4.12 Outstanding Amount of Commercial Bills Rediscounted by Scheduled Commercial Banks with Various Financial Institutions and Commercial Bills Rediscounted by Commercial Banks

(Rs. in Crore)

Year	*Outstanding Amount of Scheduled Banks*	*Commercial Bills Rediscounted by Commercial Banks*				
		Month	*2002–03*	*2003–04*	*2004–05*	*2005–06*
1991–92	4,612	April	371	164	330	785
1992–93	779	May	463	334	370	755
1993–94	617	June	701	393	85	N.A.
1994–95	1,048	July	400	364	100	N.A.
1995–96	374	August	341	693	195	N.A.
1996–97	1,029	September	572	644	375	N.A.
1997–98	286	October	502	354	320	N.A.
1998–99	473	November	332	429	1,099	N.A.
1999–2000	735	December	462	469	288	N.A.
2000–01	1,013	January	455	791	316	N.A.
2001–02	906	February	295	1,234	375	N.A.
2002–03	417	March	105	305	401	N.A.
2003–04	515					N.A.
2004–05	355					N.A.

Source: RBI, *Annual Report,* various issues.

TABLE 4.13 Commercial Bills Financing in India

Year	Inland Bills Purchased	Inland Bills Discounted	Total	Foreign Bills Purchased	Foreign Bills Discounted	Total	Grand Total	Total Bank Credit	Per Cent (8/9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1990–91	3,532	2,409	5,941	2,788	1,865	4,652	10,593	1,25,575	8.44
1991–92	3,280	3,021	6,301	2,995	1,947	4,942	11,243	1,25,592	8.95
1992–93	3,804	3,682	7,486	4,392	2,668	7,060	14,546	1,37,436	10.58
1993–94	4,049	4,288	8,337	5,443	4,038	9,481	17,818	1,64,418	10.84
1994–95	5,207	6,007	11,214	8,179	5,227	13,406	24,620	2,11,560	11.64
1995–96	4,305	9,416	13,721	9,164	6,460	15,624	29,345	2,54,015	11.55
1996–97	4,382	8,824	13,206	7,710	6,485	14,195	27,401	3,00,354	9.12
1997–98	4,955	9,967	14,922	8,030	7,204	15,234	30,156	3,49,216	8.63
1998–99	5,198	11,020	16,218	8,289	7,704	15,993	32,211	3,99,417	8.06
1999–2000	4,788	12,758	17,546	8,886	8,619	17,505	35,051	4,35,958	8.04
2000–01	4,908	18,574	23,482	9,351	9,089	18,440	41,922	5,11,434	8.20
2001–02	5,031	18,283	23,314	8,386	9,714	18,100	41,414	5,89,723	7.02
2002–03	6,077	20,713	26,790	9,783	11,911	21,694	48,484	7,29,215	6.65
2003–04	8,131	22,379	30,510	9,954	12,828	22,782	53,292	8,40,785	6.34
2004–05	7,878	25,736	33,614	10,857	16,934	27,791	61,405	11,59,204	5.30
2005–06	13,242	31,362	44,604	13,108	20,353	33,461	78,065	15,72,781	4.96
2006–07	16,414	31,948	48,632	16,174	24,567	40,741	89,373	20,08,608	4.45
2007–08	12,988	41,400	54,388	16,535	31,253	47,788	1,02,176	24,47,646	4.17
2008–09	12,470	43,987	56,457	18,651	26,868	45,519	1,01,976	28,59,554	3.6
2009–10	12,464	63,141	75,605	16,151	32,833	48,984	1,24,589	33,32,159	3.74

Source: RBI Bulletin, various issues.

- It is mostly foreign trade that is financed through the bills market. The size of this market is small because the share of foreign trade in national income is small. Moreover, export and import bills are still drawn in foreign currency which has restricted their scope of negotiation.
- A large part of the bills discounted by banks are not genuine. They are bills created by converting the cash-credit/overdraft accounts of their customers.
- The system of cash-credit and overdraft from banks is cheaper and more convenient than bill financing as the procedures for discounting and rediscounting are complex and time consuming.
- This market was highly misused in the early 1990s by banks and finance companies which refinanced it at times when it could not be refinanced. This led to channelising of money into undesirable uses.

The Reserve Bank issued new guidelines to banks on January 24, 2003 regarding purchasing/discounting/negotiating/rediscounting of genuine commercial/trade bills. The important features of the revised guidelines are as follows.

- Banks are presently required to open letters of credit (LCs) and purchase/discount/negotiate bills under LCs only in respect of genuine commercial and trade transactions of their borrower constituents who have been sanctioned regular credit facilities by them. Accommodation bills should not be purchased/discounted/negotiated by banks.
- The practice of drawing bills of exchange claused 'without recourse' and issuing letters of credit bearing the legend without recourse should be discouraged because such notations deprive the negotiating bank of the right of recourse it has against the drawer under the Negotiable Instruments Act.
- Bills rediscounting should be restricted to usance bills held by other banks. Banks should not rediscount bills earlier discounted by non-banking financial companies (NBFCs) except in respect of bills arising from sale of light commercial vehicles and two/three wheelers.

- While discounting bills of the services sector, banks should ensure that actual services are rendered and accommodation bills are not discounted. Service sector bills should not be eligible for rediscounting.
- Banks should not enter into repo transactions using bills discounted/rediscounted as collateral.

CERTIFICATES OF DEPOSIT

- Certificates of deposit are short-term tradable time-deposits issued by commercial banks and financial institutions

Certificates of deposit (CDs) are unsecured, negotiable, short-term instruments in bearer form, issued by commercial banks and development financial institutions.

Certificates of deposit were introduced in June 1989. Only scheduled commercial banks excluding Regional Rural Banks and Local Area Banks were allowed to issue them initially. Financial institutions were permitted to issue certificates of deposit within the umbrella limit fixed by the Reserve Bank in 1992.

Certificates of deposit are time deposits of specific maturity similar to fixed deposits (FDs). The biggest difference between the two is that CDs, being in bearer form, are transferable and tradable while FDs are not. Like other time deposits, CDs are subject to SLR and CRR requirements. There is no ceiling on the amount to be raised by banks. The deposits attract stamp duty as applicable to negotiable instruments. They can be issued to individuals, corporations, companies, trusts, funds, associates, and others.

NRIs can subscribe to the Deposits on a Non-repatriable Basis.

CDs are issued by banks during periods of tight liquidity, at relatively high interest rates. They represent a high cost liability. Banks resort to this source when the deposit growth is sluggish but credit demand is high. Compared to other retail deposits, the transaction costs of CDs is lower. A large amount of money is mobilised through these deposits for short periods, reducing the interest burden when the demand for credit is slack.

CDs are issued at a discount to face value. Banks and FIs can issue CDs on floating rate basis provided the methodology of computing the floating rate is objective, transparent and market-based.

Measures to Develop the CD Market

In 1989–90, the maximum amount that could be raised through CDs was limited to 1 per cent of the fortnightly average outstanding aggregate deposits. Since these deposits were subject to reserve requirements, a bank-wise limit on their issue of CDs was prescribed. With time, the bank-wise limits were raised. From October 16, 1993, these limits were abolished. In April 1993, scheduled commercial banks were permitted to raise CDs without any ceiling on the interest rate. This not only enabled banks to raise resources at competitive rates of interest but also enabled CDs to emerge as a market-determined instrument. The deposits serve as relationship instruments, issued by banks on a discretionary basis to high net worth clients.

In 1992, six financial institutions—IDBI, IFCI, ICICI, SIDBI, IRBI, and EXIM Bank—were permitted to issue CDs. These institutions could issue CDs with a maturity of more than one year and upto three years for an aggregate amount of Rs. 2,500 crore.

Effective from May 3, 1997, an umbrella limit for the mobilisation of resources by way of term money borrowings, CDs, term deposits, and inter-corporate deposits was prescribed for three financial institutions—IDBI, ICICI, and IFCI—supplanting the instrument-wise limits stipulated earlier. The overall ceiling for the umbrella limit was set equal to the net owned funds of the financial institutions. A similar umbrella limit was also prescribed for EXIM Bank and SIDBI in June and August 1997, respectively.

CDs are issued by commercial banks on a discount to face value basis; the CDs of development financial institutions can be coupon bearing. The discount rate of a CD is market-determined. Coupon rates on the deposits issued by banks and financial institutions are published by the Reserve Bank on a fortnightly as well as monthly basis.

In 2000–01, the minimum maturity of a CD was reduced to 15 days to bring them at par with other short-term instruments like commercial papers and term deposits.

With a view to broadening the CD market, the minimum size of an issue was gradually scaled down from Rs. 5 lakh to Rs. 1 lakh in June 2002. From June 30, 2002, banks and financial institutions were required to issue CDs only in the dematerialised form.

Banks/FIs are also allowed to issue CDs on a floating rate provided the methodology of compiling the floating rate is objective, transparent and market-based. The issuing bank/FI is free to determine the discount/corporate. The interest rate on floating rate CDs is reset periodically in accordance with a pre-determined formula that indicates the spread over a transparent benchmark.

Banks/FIs cannot issue loans against CDs. Further, they can not buy-back their own CDs before maturity.

Guidelines for Issue of Certificates of Deposit (CDs)

Certificates of Deposit (CDs) are negotiable money market instruments and are issued in dematerialised form or as a usance promissory note, for funds deposited at a bank or other eligible financial institution for a specified time period. Guidelines for issue of CDs are presently governed by various directives issued by the Reserve Bank of India, as amended from time to time.

Eligibility CDs can be issued by (i) scheduled commercial banks excluding Regional Rural Banks (RRBs) and Local Area Banks (LABs); and (ii) select all-India Financial Institutions that have been permitted by the RBI to raise short-term resources within the umbrella limit fixed by the RBI.

Aggregate Amount Banks have the freedom to issue CDs depending on their requirements. An FI may issue CDs within the overall umbrella limit fixed by RBI, i.e., issue of CD together with other instruments viz., term money, term deposits, commercial papers, and intercorporate deposits should not exceed 100 per cent of its net owned funds, as per the latest audited balance sheet.

Minimum Size of Issue and Denominations Minimum amount of a CD should be Rs. 1 lakh, i.e., the minimum deposit that could be accepted from a single subscriber should not be less than Rs. 1 lakh and in the multiples of Rs. 1 lakh thereafter.

Who can Subscribe CDs can be issued to entities like individuals, corporations, companies, trusts, funds, and associations. Non-resident Indians (NRIs) may also subscribe to CDs, but only on a non-repatriable basis which should be clearly stated on the certificate. Such CDs cannot be endorsed to another NRI in the secondary market.

Maturity The maturity period of CDs issued by banks should be not less than 7 days and not more than 1 year. FIs can issue CDs for a period not less than 1 year and not exceeding 3 years from the date of issue.

Discount/Coupon Rate CDs may be issued at a discount on face value. Banks/FIs are also allowed to issue CDs on a floating rate basis provided the methodology of compiling the floating rate is objective, transparent and market based. The issuing bank/FI is free to determine the discount/coupon rate. The interest rate on floating rate CDs would have to be reset periodically in accordance with a pre-determined formula that indicates the spread over a transparent benchmark.

Reserve Requirements Banks have to maintain the appropriate reserve requirements, i.e., cash reserve ratio (CRR) and statutory liquidity ratio (SLR), on the issue price of the CDs.

Transferability Physical CDs are freely transferable by endorsement and delivery. Dematted CDs can be transferred as per the procedure applicable to other demat securities. There is no lock-in period for the CDs.

Loans/Buy-backs Banks/FIs cannot grant loans against CDs. Furthermore, they cannot buy-back their own CDs before maturity.

Format of CDs Banks/FIs should issue CDs only in the dematerialised form. However, according to the Depositories Act, 1996, investors have the option to seek a certificate in physical form. Accordingly, if an investor insists on a physical certificate, the bank/FI may inform the Monetary Policy Department, Reserve Bank of India, Central Office, Fort, Mumbai – 400 001 regarding such instances separately. Further, issuance of the CD will attract stamp duty. There will be no grace period for repayment of CDs. If the maturity date happens to be a holiday, the issuing bank should make the payment on the immediate preceding working day. Banks/FIs may, therefore, fix the period of deposit so that the maturity date does not coincide with a holiday to avoid loss of discount/interest rate.

Security Aspect Since physical CDs are freely transferable by endorsement and delivery, it will be necessary for banks to see that the certificates are printed on good quality security paper and necessary precautions are taken to guard against tempering with the document. They should be signed by two or more authorised signatories.

Payment of Certificate Since CDs are transferable, the physical certificate may be presented for payment by the last holder. The question of liability on account of any defect in the chain of endorsements may arise. It is, therefore, desirable that banks take necessary precautions and make payment only by a crossed cheque. Those who deal in these CDs may also be suitably cautioned.

The holders of dematted CDs will approach their respective depository participants (DPs) and have to give transfer/delivery instructions to transfer the demat security represented by the specific ISIN to the 'CD Redemption Account' maintained by the issuer. The holder should also communicate to the issuer by a letter/fax enclosing the copy of the delivery instruction it had given to its DP and intimate the place at which the payment is requested to facilitate prompt payment. Upon receipt of the Demat credit of CDs in the 'CD Redemption Account,' the issuer, on maturity date, would arrange to repay to holder/transferor by means such as Banker's cheque/high value cheque.

Issue of Duplicate Certificates In case of the loss of physical CD certificates, duplicate certificates can be issued after compliance of the following.

- A notice is required to be given in at least one local newspaper.
- Lapse of a reasonable period (say 15 days) from the date of the notice in the newspaper.
- Execution of an indemnity bond by the investor to the satisfaction of the issuer of the CD.

Secondary Market for CDs

Being negotiable instruments, CDs are traded in the secondary money market. However, the secondary market for these deposits has remained dormant as investors find it profitable to hold the high-interest yielding deposits till maturity. In order to provide flexibility and depth to the secondary market, the time restriction on transferability of CDs issued by both banks and financial institutions was withdrawn effective from October 10, 2000. Two-way quotations on the deposits are offered by DFHI, but very little trade actually takes place in the secondary market. CDs are also traded on the NSE–WDM segment but its proportion in the total trading volume is insignificant.

Size of the CD Market

The size of the CD market is reflected in the total outstanding amount of CDs issued by commercial banks and financial institutions.

The amount of money mobilised by banks till 1997–98 through certificates of deposit increased indicating that the primary market for the issuance of the deposits grew rapidly. Stringent conditions in the money market and firm call money rates rekindled the interest of banks in CDs in 1994–95 to 1997–98.

Since 1998–99, the banks' reliance on the relatively high-cost CDs declined due to downward trend in the rates of other money market instruments and strong growth in bank deposits coupled with a deceleration in non-food bank credit. Moreover, interest rate deregulation in term deposits and reduction in the maturity period to 15 days facilitated better management of liabilities by banks and reduced their need to issue CDs.

However, there was a surge in CD issues in 2003–04 on account of reduction in the stamp duty on CDs, withdrawal of the facility of premature closure of deposits in respect of CDs and exemption of investments in CDs by banks from the instructions on non-SLR investments below one year. These developments led to greater demand for investment in CDs by mutual funds.

Since 2004–05, the demand for investment in CDs was further pushed by private sector banks as they are cost attractive vis-a-vis fixed deposits. Moreover, as compared to fixed deposits, CDs do not carry prepayment or premature closure and tax deducted at source (TDS). Also, the reduction in the minimum maturity period from 15 days to 7 days made CDs an attractive investment avenue for both private sector banks and mutual funds. The outstanding CDs constituted 4.8 per cent of the aggregate deposits of issuing banks as at end-March 2008. The weighted average discount rate of CDs was 8.94 per cent at the end-March 2008 and 9.31 per cent at the end-March 2009 (Table 4.14).

Table 4.15 reveals an increasing trend in the outstanding amount issued by financial institutions. This trend depicts a preference for CDs as an instrument for raising finance. However, since 1999, their reliance on CDs has decreased as they prefer inter-corporate deposits (ICDs) and term deposits.

TABLE 4.14 Certificates of Deposits Issued by Scheduled Commercial Banks

Year	*Total Outstanding (Rs. in Crore)*	*Interest Rate (In Per Cent)*
July 1991	4,846	9–17
1991–92	5,682	15–16
1992–93	9,803	12.5–16.5
1993–94	5,571	7–12.2
1994–95	8,017	10–15
1995–96	16,316	12–22.3
1996–97	12,134	7–14.3
1997–98	14,296	7.2–26
1998–99	3,717	8–12.5
1999–2000	1,227	7.5–12
2000–01	771	6.5–12
2001–02	1,576	5.0–11
2002–03	908	5–1.10
2003–04	4,764	3.87–5.16
2004–05	12,078	4.21–6.34
2005–06	43,568	6.50–8.94
2006–07	64,821	8.24
2007–08	1,47,792	8.94
2008–09	1,92,867	9.31
2009–10	3,39,279	6.21

Source: RBI, *Annual Report,* various issues.

TABLE 4.15 Certificates of Deposits Issued by Financial Institutions

Fortnight Ended	*Outstanding (Rs. in Crore)*	*Interest Rate (In Per Cent)*
June 1992	539	15–16.5
March 1993	1,044	15–16.5
March 1994	2,120	11–12
March 1995	2,964	12.5–14.75
March 1996	4,411	16.5–19
March 1997	4,299	13–18
March 1998	4,885	11.5–15.25
March 1999	1,863	12.10–13
March 2000	1,689	9.5– 9.65
March 2003	460	NA
March 2004	467	NA
March 2006	26.66	NA

NA = Not Available.
Source: RBI, *Annual Report,* various issues.

Factors Inhibiting the Growth of CDs

CDs of commercial banks form only 2 per cent of their (financial institutions) aggregate deposits. Hence, there is a large scope for the development of this instrument. The following factors, however, limit the growth of CDs.

- Transactions in the secondary market have not developed because the number of participants are limited, interest rates are quite high, and CDs are not listed.

- The secondary market for certificates of deposit has been slow to develop. With banks offering higher interest rates on these deposits, investors find it profitable to hold them till maturity.
- The reliance of financial institutions on CDs has decreased. It can be increased if the tenor of the CDs of the financial institutions is rationalised.
- There is no facility of loans against the deposits by banks nor can banks buy them back prematurely.
- The market is limited to few investors as the minimum level of investment is still high.
- The stamp duty on the CDs has also affected their growth.
- CDs carry a fixed rate of discount. To enlarge the market of these deposits, it is necessary to introduce floating rate CDs.

Comparison of Certificates of Deposit and Commercial Papers

Commercial banks are the major investors in commercial papers and it is through certificates of deposit they raise funds to tide over their short-term requirements. The interest rate on both these instruments reflect the liquidity conditions of banks.

Comparing the outstanding amount in case of both CDs and CPs, Table 4.16 reveals an inverse relationship between the two. When the outstanding amount of CDs increased, the outstanding amount of CPs decreased. In the year 1995–96, when liquidity conditions tightened and there was an increased demand for bank credit, the outstanding amount of CDs scaled to a peak of Rs. 16,316 crore while CP issues were merely Rs. 76 crore. The outstanding amount of CDs declined from 1999 due to a slackening of credit demand and easing of liquidity conditions. With the easing of liquidity conditions and enlargement of limits, the outstanding amount of CPs has picked up since 1997.

- There has been an inverse relationship between CD and CP issues

The minimum rates on CDs were lower than those of CPs. The size of the CD market also was larger than that of CPs till 1998. From 1999, the size of the CP market has grown with the easing of interest rates and low credit off-take. The size of the CD market trebled in 2005 and 2006 due to high credit off-take and tight liquidity conditions Table (4.16).

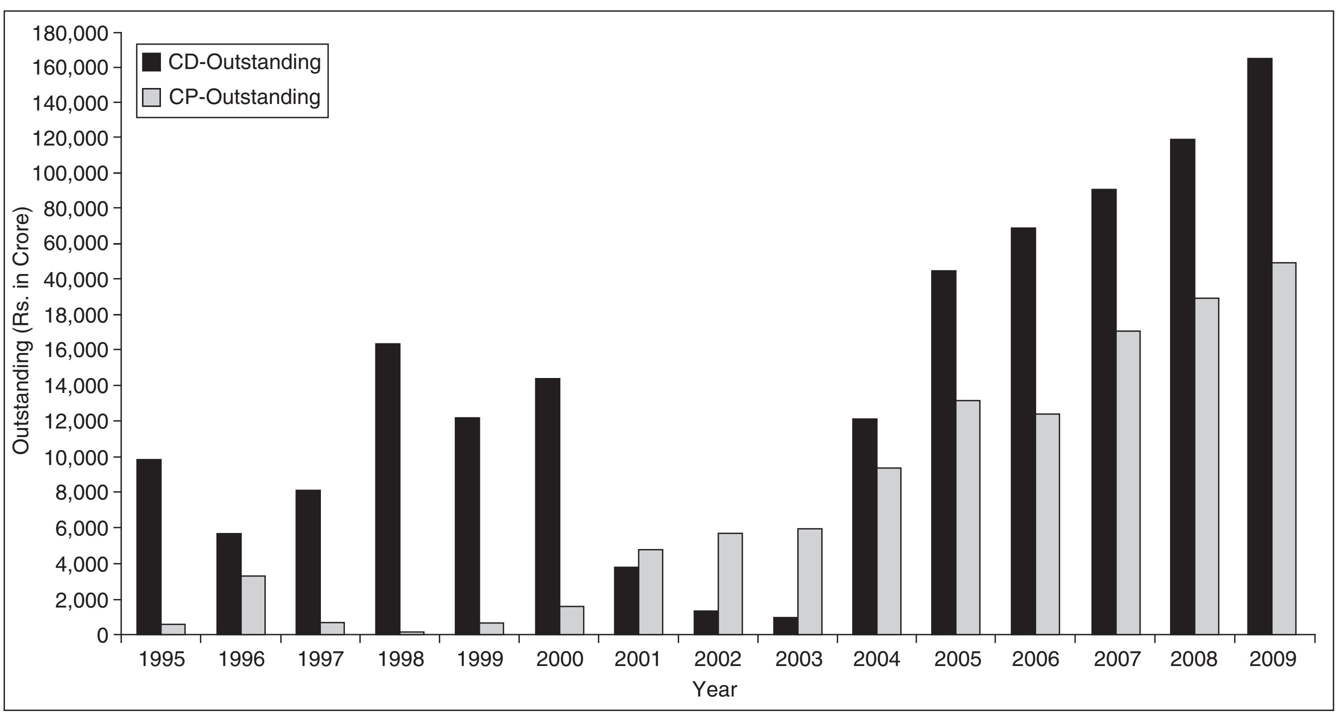

Figure 4.2 Comparison of Certificates of Deposit and Commercial Papers—Outstanding

TABLE 4.16 Certificate of Deposit and Commercial Paper: A Comparison

	CD		CP	
Year (End March)	*Interest Rate (Per Cent)*	*Outstanding (Rs. in Crore)*	*Interest Rate (Rs. in Crore)*	*Outstanding (Rs. in Crore)*
1993	12.5–16.5	9,803	15.8–16	577
1994	7–12.2	5,571	11–12	3,264
1995	10–15	8,017	14–15	604
1996	12–22.3	16,316	20.2	76
1997	7–14.3	12,134	11.3–12.3	646
1998	7.2–26	14,296	14.2–15.5	1,500
1999	8–12.5	3,717	9.1–13.3	4,770
2000	7.5–12	1,227	10–12	5,663
2001	6.5–12	771	8.75–12	5,847
2002	5.0–10.03	1,576	7.10–10.00	7,224
2003	5.0–7.1	908	6.00–7.75	5749
2004	4.21–6.34	4,764	4.70–6.5	9,706.5
2005	6.50–8.94	12,078	5.2–7.25	13,418.9
2006	4.60–8.50	43,568	6.95–925	12,767.35
2007	4.60–10.75	64,821	6.40–13.0	21,336
2008	5.50–10.75	1,47,792	6.70–14.25	32,591
2009	5.4–12.35	1,92,867	6.4–12.5	44,171
2010	3.09–11.5	3,39,279	2.83–12.5	75,506

Source: RBI, *Annual Report,* various issues.

CALL/NOTICE MONEY MARKET

Introduction

It is by far the most visible market as the day-to-day surplus funds, mostly of banks, are traded there. The call money market accounts for a major part of the total turnover of the money market. It is a key segment of the Indian money market. Since its inception in 1955–56, the call money market has registered a tremendous growth in volume of activity.

The call money market is a market for very short-term funds repayable on demand and with a maturity period varying between one day to a fortnight. When money is borrowed or lent for a day, it is known as call (overnight) money. Intervening holidays and/or Sundays are excluded for this purpose. When money is borrowed or lent for more than a day and upto 14 days, it is known as notice money. No collateral security is required to cover these transactions. The call money market is a highly liquid market, with the liquidity being exceeded only by cash. It is highly risky as well as extremely volatile.

- Under call money market, funds are transacted on overnight basis and under notice money market, funds are borrowed/lent for a period between 2–14 days

Why Call Money

Call money is required mostly by banks. Commercial banks borrow money without collateral from other banks to maintain a minimum cash balance known as the cash reserve requirement (CRR). This inter-bank borrowing has led to the development of the call money market.

CRR is an important requirement to be met by all commercial banks. The Reserve Bank stipulates this requirement from time to time. CRR is a technique for monetary control effected by the Reserve Bank for achieving specific macro-economic objective/s such as maintaining desired levels of inflation, growth, and exchange rates. CRR refers to the cash that banks have to maintain with the Reserve Bank as a certain percentage of their total demand and time liabilities (DTL). CRR, a primary instrument of monetary policy, has been brought down from 15 per cent in March 1991 to 5 per cent in January 2009.

- Fortnight shall be on a reporting Friday basis and mean the period from Saturday to the second following Friday, both days inclusive

Prior to May 2000, banks were required to maintain 85 per cent of their fortnightly reserve requirement on a daily basis. The networking among various branches of banks was not developed enough for the branches to report their respective net demand and time liabilities (NDTL) positions to the main branch on the first day of the fortnight itself. The NDTL of a bank is the sum of its liabilities to the banking system and its liabilities to the public.

- Eligible participants are free to decide on interest rates but calculation of interest payable would be based on FIMMDA's (Fixed Income Market and Derivatives Association of India) Hand book of market practices

With a view to providing further flexibility to banks and enabling them to choose an optimum strategy of holding reserves depending upon their intra-period cash flows, several measures were undertaken recently. In November 1999, a lagged reserve maintenance system was introduced under which banks were allowed to maintain reserve requirements on the basis of the last Friday of the second (instead of the first) preceding fortnight. From May 6, 2000, the requirement of minimum 85 per cent of the CRR balance on the first 13 days to be maintained on a daily basis was reduced to 65 per cent. With effect from August 11, 2000, this was reduced to 50 per cent for the first seven days of the reporting fortnight while maintaining the minimum 65 per cent for the remaining seven days including the reporting Friday. The daily minimum CRR was reduced to enable the smooth adjustment of liquidity between surplus and deficit segments and better cash management to avoid sudden increase in overnight call rates.

Hence, once every fortnight on a reporting Friday, banks have to satisfy reserve requirements which often entails borrowing in the call/notice money market. It is a market in which banks trade positions to maintain cash reserves. It is basically an over-the-counter (OTC) market without the intermediation of brokers. Inter-bank trading accounts for more than 80 per cent of the total transactions.

Participants in the Call Money Market

The call money market was predominantly an inter-bank market till 1971 when the erstwhile UTI and LIC were allowed to operate as lenders. Until March 1978, brokers were also allowed to participate in the call money market and they would effect transactions between lenders and borrowers for a brokerage. In the 1990s, the participation was gradually widened to include DFHI, STCI, GIC, NABARD, IDB1, money market mutual funds, corporates, and private sector mutual funds as lenders in this market.

The participants in the call money market who took on roles as both lenders and borrowers were: scheduled and non-scheduled commercial banks, foreign banks, state, district and urban cooperative banks, and DFHI. Other borrowing participants were the brokers and dealers in the securities/bullion/bills market, and sometimes individuals of high financial status.

In 1996–97, the Reserve Bank permitted primary dealers to participate in this market as both borrowers and lenders. Those entities that could provide evidence of surplus funds were permitted to route their lending through primary dealers. The minimum size of operations for routing transactions has been reduced from Rs. 20 crore to Rs. 3 crore, with effect from May 9, 1998. The call money market is now a pure inter-bank money market with effect from August 6, 2005. At present, the eligible participants are banks and primary dealers.

Reporting of Call/Notice Money Transactions

- It is mandatory for all NDS members to report their call/notice money market deals within 15 minutes on NDS. All dealings on NDS-CALL do not require seperate reporting

In order to improve transparency in the call/notice money market, reporting of call/notice money market transactions on the NDS was made mandatory with effect from the fortnight beginning May 3, 2003. Any transaction irrespective of whether executed on the NDS or outside and whether the counter-party is a member of the NDS or not is to be reported on the NDS. A screen-based negotiated quote-driven system for all dealings in the call/notice and term money market (NDS-CALL) was launched on September 18, 2006. NDS-CALL accounts for more than 75 per cent of total call-notice transactions.

Role of the Reserve Bank in the Call Money Market

The Reserve Bank intervenes in the call money market indirectly by conducting repo auctions.

Additional funding is provided through repo auctions which increase liquidity in the market and bring down call money rates. The Reserve Bank's reverse repo auctions absorb excess liquidity in the economy and push up depressed call rates

The Reserve Bank's intervention is necessary as there is a close linkage between the call money market and other segments of the money market and the foreign exchange market.

Link Between the Call Money Market and Other Financial Markets

There is an inverse relationship between call rates and short-term money market instruments such as certificates of deposit and commercial papers. When call rates peak to a high level, banks raise more funds through certificates of deposit. When call money rates are lower, many banks fund commercial papers by borrowing from the call money market and earn profits through arbitrage between money market segments.

A large issue of government securities also affects call money rates. When banks subscribe to large issues of government securities, liquidity is sucked out from the banking system. This increases the demand for funds in the call money market which pushes up call money rates. Similarly, a rise in the CRR or in the repo rate absorbs excess liquidity and call rates move up.

The call money market and the foreign exchange market are also closely linked as there exist arbitrage opportunities between the two markets. When call rates rise, banks borrow dollars from their overseas branches, swap them for rupees, and lend them in the call money market. At the same time, they buy dollars forward in anticipation of their repayment liability. This pushes forward the premia on the rupee–dollar exchange rate. It happens many a times that banks fund foreign currency positions by withdrawing from the call money market. This hikes the call money rates.

Call Rate

The interest rate paid on call loans is known as the 'call rate.' It is a highly volatile rate. It varies from day-to-day, hour-to-hour, and sometimes even minute-to-minute. It is very sensitive to changes in the demand for and supply of call loans. Within one fortnight, rates are known to have moved from 1–2 per cent to over 140 per cent per annum.

Till 1973, the call rate was determined by market forces, i.e., by the forces of demand and supply. In December 1973, the call rate touched a high of 30 per cent due to tight credit policy wherein the bank rate was raised and refinance and rediscount facilities were discontinued. As a result, many banks defaulted and the Indian Bank Association (IBA) started regulating the call rate by fixing a ceiling from time to time in an informal manner.

With effect from May 1, 1989, call rates were freed from an administrative ceiling. Now the rate is freely determined by the demand and supply forces in the call money market.

A reference rate in the overall call money market has emerged recently through NSE and Reuters.

MIBOR

The National Stock Exchange (NSE) developed and launched the NSE Mumbai Inter-bank Bid Rate (MIBID) and the NSE Mumbai Inter-bank Offer Rate (MIBOR) for overnight money markets on June 15, 1998. NSE MIBID/MIBOR are based on rates pooled by the NSE from a representative panel of 31 banks/institutions/ primary dealers. Currently, quotes are pooled and processed daily by the exchange at 9:40 (1ST), for the overnight rate and at 11.30 (IST) for the 14 day, 1 month, and 24 month rates. The rates pooled are then processed using the boost trap method to arrive at an efficient estimate of the reference rates. This rate is used as a benchmark rate for majority of the deals struck for floating rate debentures and term deposits. The benchmark is the rate at which money is raised in the financial markets. These rates are used in hedging strategies and as reference points in forwards and swaps.

Reuters MIBOR (Mumbai Inter-bank Overnight Average) is arrived at by obtaining a weighted average of call money transactions of 22 banks and other players.

MIBOR is an official benchmark rate for interest rate swaps (IRS) and forward rate agreements (FRAs). MIBOR is transparent, market-determined, and mutually acceptable to counter-parties as reference.

Call Rates Volatility

In India, money and credit situation is subject to seasonal fluctuation every year. The volume of call money transactions and the amount as well as call rate levels characterise seasonal fluctuation/volatility. A decrease in the call/notice money requirement is greater in the slack season (mid-April to mid-October) than in the buy season (mid-October to mid-April).

Factors Influencing Call Money Market Rate

Liquidity Conditions Liquidity conditions are governed by factors on both the demand and supply side of money. Liquidity conditions are governed by deposit mobilisation, capital flows and reserve requirements on the supply side, and tax outflows, government borrowings programme, non-food credit off-take, and seasonal fluctuations on the demand side. When easy liquidity conditions prevail, call rates move around the Reserve Bank's repo rate. During times of tight liquidity, call rates tend to move up towards the bank rate.

Reserve Requirement Prescriptions and Stipulations Regarding Average Reserve Maintenance A cut in the CRR reduces call rates while an increase in the CRR increases call rates. Moreover, banks do not plan the demand for funds to meet their reserve requirements which increases call rate volatility. Till April 1997, inter-bank transactions were included in the reserve calculation. This led to a halt in the money market activity every second Friday (reserve calculation day) when banks tried to reduce their reserve requirement by eliminating inter-bank borrowing. Due to this, the overnight call rates fell to zero per cent every second Friday. This inhibited the development of liquid money market yield curve beyond 13 days.

Structural Factors Structural factors refer to issues like government legislation, conditions of the stock markets which affect the volatility of the call money rate.

Liquidity Changes and Gaps in the Foreign Exchange Market Call rates increase during volatile forex market conditions. This increase is a result of monetary measures for tightening liquidity conditions and short position taken by market agents in domestic currency against long positions in US dollars in anticipation of higher profits through depreciation of the rupee. Banks fund foreign currency positions by withdrawing from the inter-bank call money market which leads to a hike in the call money rates.

Measures for Curbing High Volatility

The Reserve Bank has tried to curb or prevent the call rate volatility through various measures.

Through Repos The Reserve Bank is a major player and it moderates liquidity and volatility in the market through repos and refinance operations and changes in the procedures for maintenance of the CRR. The Reserve Bank resumed repo auctions in November 1996 to provide a reasonable floor to call money rates as also a short-term avenue for banks to park their surplus funds. Reverse repos are also employed to inject liquidity in the call market. The liquidity adjustment facility (LAF) was introduced from June 5, 2000 onwards to modulate short-term liquidity under varied financial market conditions and to impart stability to market conditions.

Freeing of Inter-bank Liabilities from Reserve Requirements Inter-bank liabilities were freed from reserve requirements in April 1997. This was expected to help generate a smooth yield curve and reduce volatility in the call rates which, till then, depicted a cyclical pattern with troughs on the reporting Fridays.

Call money rates have been volatile in the last 10 years and they rose sharply in 1995 and 1996 due to tight money market conditions. The major factors behind the overall tight conditions of call/notice money market were as follows.

- The mismatch between assets and liabilities of commercial banks arising out of massive demand for non-food bank credit as against sluggish growth of bank deposits.
- The Reserve Bank's intervention in the forex market to prevent the usual depreciation of rupee.
- The temporary withdrawal of the money market support to stabilise the forex market first.

The call money market remained orderly in the late-1990s with bouts of volatility. The call money rate moved within a limited range as the Reserve Bank conducted a series of reverse repo auctions under the LAF and brought about a monetary easing in the form of bank rate and CRR cuts. In general, the movement was confined to repo reverse repo corridor. The repo rate effectively sets the floor for call market movements.

Size of the Call Money Market The annual and average daily call money turnover indicate the size of the call money market. The annual turnover in the call money increased substantially. The average daily turnover in the call/notice money market rose sharply to Rs. 47,543 crore during April 2002 from Rs. 39,808 crore during March 2002. However, the average daily turnover declined to Rs. 22,852 crore during January 2005. Primary dealers (PDs), whose demand is related to the volume of the government's market borrowing programme, emerged as the largest class of borrowers in the call/notice money market in 2003–04.

There was an upward trend in the call money market turnover as seen in Tables 4.17 and 4.18 due to the following factors.

- Increase in the breadth and depth of the market leading to an increase in the number of players, owing to institutional reform measures taken during the 1990s.

TABLE 4.17 Annual Average Call Money Rates of Major Commercial Banks, Mumbai

Year	High	Low	Average
1990–91	21.28	11.26	15.85
1991–92	40.28	8.57	19.57
1992–93	54.40	9.07	14.42
1993–94	23.64	2.96	6.99
1994–95	26.51	2.93	9.40
1995–96	41.62	7.64	16.64
1996–97	14.56	1.05	7.84
1997–98	52.19	0.24	8.69
1998–99	20.19	3.61	7.83
1999–2000	35.00	0.10	8.87
2000–01	35.00	0.20	9.15
2001–02	22.00	3.61	7.17
2002–03	20.00	0.50	5.89
2003–04	12.00	1.00	4.62
2004–05	10.95	0.60	4.65
2005–06	8.25	0.60	5.60
2006–07	80.0	1.90	7.22
2007–08	55.0	0.01	6.07
2008–09	23.0	1.00	7.06
2009–10	9.0	1.00	3.24

NA = Not Available.
Source: RBI Bulletin, various issues.

TABLE 4.18 Average Daily Turnover in the Money Market

Year	Average Daily Volumes in (Rs. in Crore)			
	CBLO	Market Repo	Call Money Market	Term Money Market
1997–98	–	–	22,709	–
1998–99	–	–	26,500	–
1999–2000	–	6,895	23,161	–
2000–01	–	10,500	32,157	–
2001–02	–	30,161	35,144	–
2002–03	30	46,960	29,421	195
2003–04	515	10,435	17,191	341
2004–05	6,697	17,135	14,170	526
2005–06	20,040	21,183	17,979	834
2006–07	32,390	33,676	21,725	1,012
2007–08	55,626	54,736	21,393	704
2008–09	61,552	57,320	22,436	794
2009–10	1,09,125	42,706	15,924	NA

Source: RBI, *Annual Report*, various issues.

- Growth in the activity of primary dealers supported by refinance facility from the Reserve Bank and its active operations in the market through repos which provided a floor for call rates and enhanced liquidity.

The call rates remained stable in 2003–04 and were below the reverse repo rate (earlier the repo rate). However, the call rates increased during October and November 2004 on account of higher non-food credit off-take. Increase in reserve requirement and seasonal festival cash demand which above the banks

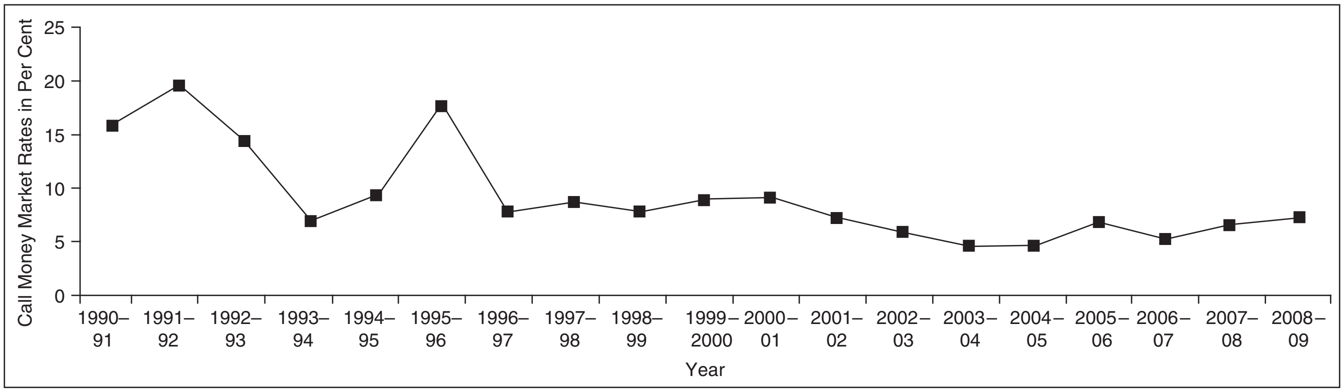

Figure 4.3 Average Call Money Market Rates

towards higher borrowings in the call money market. The call money rate was later stabilised by the Reserve Bank by switching to the LAF repo operations to inject liquidity in the system. Call rates edged up during the year 2005–06 with the increase in the fixed reverse repo rate and liquidity pressure. Again, call rates edged up during 2008–09 due to tight liquidity conditions. (Table 4.17 and Figure 4.3).

The average daily turnover in the call money market increased from Rs. 14,170 crore during 2004–05 to Rs. 17,979 crore in 2005–06 but subsequently declined to 21,394 crore in 2007–08 and to Rs. 13,824 crore during December 2009 (Table 4.18). The call money market is no more the predominant segment in the money market. More than 70 per cent of the activity has shifted to Collateralised Borrowing and Lending Obligation (CBLO) segment as the CBLO rakes are lower than call money rates and non-bank entities have been phased out of this market with effect from August 6, 2005. The share of the call money market in the total overnight market transactions declined from 51 per cent in April 2005 to 20 per cent in March 2009.

Steps to Convert the Call Money Market into a Pure Inter-bank Market

Institutions Permitted to Particpate in the Call/Notice Money Market Both as Lenders and Borrowers

- All scheduled Commercial Banks (excluding RRBs)
- All cooperative banks other than Land Development Banks
- All Primary Dealers (PDs)

The behaviour among banks in call money market was not uniform. Only some foreign and private sector banks were borrowers and some public sector banks were lenders. Moreover, with the entry of non-bank entities, the banking system had to bear the brunt of volatility in the flow of funds, i.e., a shortage or excess liquidity and artificial scarcity leading to a distortion of the interest rate structure. Hence, the Reserve Bank planned to convert the call money market into a pure inter-bank market. The measure is to move to a pure inter-bank overnight rate, in line with global trends.

A four-phased exit of non-bank institutions from the call money market commenced from May 5, 2001.

As part of Stage I, non-bank institutions such as financial institutions, mutual funds, and insurance companies, were permitted to lend, on an average, upto 85 per cent of their average daily call money lending during 2000–01; corporates were allowed to route call transactions through primary dealers upto June 30, 2001.

Stage II of the transition became effective from the fortnight beginning June 14, 2003 wherein the limit of non-bank lending in the call/notice money market was scaled down to 75 per cent of average daily call lending during 2000–01. In Stage III, access of non-banks to the call/notice money market was lowered to 60 per cent of the average daily call lending during 2000–01 with effect from December 27, 2003 and to 45 per cent with effect from June 26, 2004. The Reserve Bank revised the non-bank call-lending limit to 30 per cent from 45 per cent of the 2000–01 daily average from January 8, 2005. Subsequently, such limits were reduced to 10 per cent in Stage IV, before effecting a complete withdrawal of non-bank participants from the call money market. The operationalisation of NDS and CCIL smoothened and shortened the process of conversion of the call money market into a pure inter-bank market.

Moreover, access to other short-term instruments for non-bank institutions were made attractive. In 2000–01, the minimum maturity of CPs was reduced to 15 days and the restriction on the transferability period issued by banks and financial institutions on them was withdrawn.

Prudential limits on exposure to call/notice money lending of primary dealers have been issued by the RBI. With effect from October 5, 2002, primary dealers were permitted to lend in call/notice money market upto 25 per cent of their net owned funds (NOFs). Access of primary dealers to borrow in call/notice money market was gradually reduced in two stages. In Stage I, primary dealers were allowed to borrow upto 200 per cent of their net owned funds as at end-March of the preceding financial year with effect

Box 4.1 Phasing Out of Non-banks from the Call/Notice Money Market

Stage I : Effective May 5, 2001, non-bank institutions (i.e., financial institutions, mutual funds, and insurance companies) were allowed to lend upto 85 per cent of the average, daily call lending during 2000–01; corporates were allowed to route call transactions through primary dealers upto June 30, 2001.

Stage II : Effective June 14, 2003, the limit of non-bank lending in the call/notice money market was scaled down to 75 per cent of average daily call lending during 2000–01.

Stage III : Access of non-banks to the call/notice money market was lowered to 60 per cent of the average daily call lending during 2000–01 effective December 27, 2003 and to 45 per cent with effect from June 26, 2004.

Stage IV : Effective August 6, 2005, non-bank participants, (except primary dealers) were phased out from the call money market completely.

Source: RBI, *Annual Report*, 2005–06.

from February 7, 2004. In Stage II, primary dealers are now allowed to borrow upto 100 per cent of their net owned funds. The limits under both the stages would not be applicable for days on which government dated securities are issued in the market.

The RBI has issued prudential norms to reduce the chronic reliance of banks on the call money market. With effect from the fortnight beginning December 14, 2002, lending of scheduled commercial banks, on a fortnightly average basis, should not exceed 25 per cent of their owned funds (paid-up capital and reserves); however, banks are allowed to lead a maximum of 50 per cent on any day during a fortnight. Similarly, borrowings by scheduled commercial banks should not exceed 100 per cent of their owned funds or 2 per cent of aggregate deposits, whichever is higher, however, banks are allowed to borrow a maximum of 125 per cent of their owned funds on any day during a fortnight. Borrowings outstanding by State Cooperative Banks/District Central Cooperative Banks/Urban Cooperative Banks on a daily basis should not exceed 2 per cent of their aggregate deposits as at end March of the previous year. PDs are allowed to borrow and lend on average in a reporting Friday upto 200 per cent and 25 per cent of their net owned funds respectively as at end March of the previous financial year.

In order to reduce market participants' reliance on the call/notice money market, collateralised borrowing and lending obligation (CBLO) has been operationalised as a money market instrument through the Clearing Corporation of India (CCIL) on January 20, 2003.

With effect from the fortnight beginning April 30, 2005, the benchmark for fixing prudential limits on exposures to call/notice money market in the case of scheduled commercial banks is linked to their capital funds (sum of Tier I and Tier II capital).

With effect from August 6, 2005, non-bank participants, except PDs, were completely phased out from the call/notice money market. Now the call money market is a pure inter-bank market with banks and primary dealers as eligible participants.

Term Money Market

Beyond the call/notice money market is the term money market. This money market is one beyond the overnight tenor, with a maturity ranging between three months to one year. In other words, a term money market is one where funds are traded upto a period of three to six months. The term money market in India is still not developed. The turnover in this market remained mostly below Rs. 200 crore in 2001–02. The average daily turnover in the term money market rose by 52 per cent to Rs. 526 crore in 2004–05 from Rs. 341 crore in 2003–04. The volumes are quite small in this segment as there is little participation from large players and a term money yield curve is yet to develop (Table 4.18). Banks do not want to take a view on term money rates as they feel comfortable with dealing only in the overnight money market. Foreign and private sector banks are in deficit in respect of short-term resources; hence they depend heavily on the call/notice money market. The public sector banks are generally in surplus and they exhaust their exposure limit to them thereby constraining the growth of the term money market. Corporates prefer 'cash credit' rather than 'loan credit,' which forces banks to deploy a large amount of resources in the call/notice money market rather than in the term money market to meet their demands.

The Reserve Bank has permitted select financial institutions such as IDBI, ICICI, IFCI, IIBI, SIDBI, EXIM Bank, NABARD, IDFC, and NHB to borrow from the term money market for three- to six-months maturity. In April 1997, banks were exempted from the maintenance of the CRR and SLR on inter-bank liabilities to facilitate the development of the term money market. However, market participants are reluctant to increase their exposure in the term money market as the market is too shallow.

As stated earlier, the Reserve Bank has converted the call/notice money market into a pure inter-bank market. Hence, many non-bank entities who have been phased out of the call money market have shifted their focus to the term money market. Moreover, banks have been forced to reduce their exposure to the overnight call money market. These surplus funds of banks may shift to the term money market. Increased participation and sufficient liquidity could lead to the development of the term money market.

From April 30, 2005, all NDS members are required to report their term money deals on the NDS platform.

COLLATERALISED BORROWING AND LENDING OBLIGATION (CBLO)

The Clearing Corporation of India Limited (CCIL) launched a new product–Collateralised Borrowing and Lending Obligation (CBLO)—on January 20, 2003 to provide liquidity to non-bank entities hit by restrictions on access to the call money market. CBLO is a discounted instrument available in electronic book entry form for the maturity period ranging from 1 day to 19 days. The maturity period can range up to one year as per the RBI guidelines. The CBLO is an obligation by the borrower to return the borrowed money, at a specified future date, and an authority to the lender to receive money lent, at a specified future date with an option/privilege to transfer the authority to another person for value received. The eligible securities are central government securities including treasury bills with a residual maturity period of more than six months. There are no restrictions on the minimum denimination as well as lock-in period for its secondary market transactions.

Banks, Cooperative Banks, Financial institutions, Insurance Companies, Mutual Funds, and Primary Dealers who are members of negotiated dealing system (NDS) are allowed to participate in CBLO transactions. Non-members like corporates, NBFCs, pension/provident funds, and trusts are allowed to participate by obtaining associate membership to CBLO segment. Associate members are entities not eligible to maintain current account and SGL account with the Reserve Bank. Members can access CBLO Dealing System through INFINET connectivity whereas associate members can access CBLO Dealing System through internet. CBLO Dealing System is an automated order driven, online anonymous matching system provided by Clear Corp Dealing System (CCDS) to enable members to borrow and lend funds against CBLO. It also disseminates online information regarding deals concluded, volumes, rates, etc., and such other notifications as relevant to CBLO market. Associate members are required to open a current account with a settlement bank designated by CCIL for settlement of funds.

There are two types of markets available for trading in CBLO: the normal market and the auction market. The normal market is a continuous market where members can borrow and lend on an ongoing basis. The buy and sell orders in this market get executed online in accordance with order matching principles of time and yield priority. Under normal market, there are two settlement cycles available to members, viz, T+0 and T+1. Normal market is available for all members including associate members. The normal market can be accessed for borrowing funds to the extent of their available borrowing limit. Members can also sell CBLOs held by them to meet their funds requirement instead of holding till maturity. Members intending to sell CBLOs (borrow funds) place their offers directly through order entry form on the CBLO system indicating the amount and rate for a specific CBLO. Likewise, members willing to buy CBLOs (lend funds) place their bids through order entry form specifying the amount and rate for a particular CBLO. The matching of bids and offers takes place on Best Yield—Time Priority basis. Under the auction market, members based on the borrowing limits fixed by CCIL, enter borrow requests to CCDS through CBLO system indicating clearly the amount, maturity, and the cap rate before commencement of the auction session, i.e. from 10:30 a.m. to 11:00 a.m. These borrow requests are then bid for during the auction session. These 'bids'-order for lending funds and 'offers' order for borrowing funds are through an auction screen which remains open for a limited time on working days. Associate members are not allowed to borrow and lend funds in auction market. Auction market is available only to NDS members for overnight borrowing and settlement on T+0 basis. Currently the minimum order lot for auction market is fixed at Rs. 50 lakh and in multiples of Rs. 5 lakh thereof. The minimum order lot for normal market is fixed at Rs. 5 lakh and in multiples of Rs. 5 lakh thereof. Order lot refers to the minimum amount that is required to constitute a successful trade in the auction and normal market.

As the repayment of borrowing under CBLO segment is guaranteed by CCIL, all CBLO members have to maintain collateral or cash margin with the CCIL as cover. CCIL sets up borrowing limits for the members against their deposits of government securities as collaterals. Collateral means the physical security which is given as a guarantee from an acceptable bank and delivered to the CCIL for a value to the extent prescribed by CCIL for participating in the transactions. These collaterals are subject to hair-cuts and revalued on a daily basis. Hair-cut is stipulated by CCIL to protect itself from potential losses arising on account of decline in market value of security held as collateral. Any shortfall in the value of collateral (to cover outstanding borrowings) is collected through the end of the day margin call.

- Liabilities of scheduled commercial banks arising out of transaction in CBLO are subject to maintenance of CRR

The interest rates on the CBLOs mirror call money rates. The borrowing costs in the CBLOs are low as compared to the call market.

Mutual funds and insurance companies have emerged as the largest supplier of funds as they are flush with liquidity. The cooperative banks, public and private sector banks, and primary dealers are large borrowers in this market on account of favourable borrowing cost in the CBLO segment vis-à-vis the call market.

The average daily turnover in the CBLO market has gone up on account of fall in the CBLO rates. Rates on CBLOs fall when there is a fall in overnight call money rates. When CBLO rates fall, forex dealers borrow rupees from the CBLO market to buy dollars and simultaneously agree to sell it a day later. The money is then invested in overnight dollar deposits with banks abroad which give a higher return.

The daily average turnover in the CBLO segment increased from Rs. 2,506 crore in March 2004 to a peak of Rs. 57,320 crore in March 2009 (Table 4.18). Volumes in CBLOs have increased tremendously due to the Reserve Bank's move to bar non-bank entities from the call money market. From August 6, 2005, non-banks (except PDs) were completely phased out from the call money market.

The CBLO market emerged as the preferred overnight market in 2005–06 since it offers anonymity to market participants and provides funds at a lower cost. The interest rates averaged 5.20 per cent in the CBLO segment during 2007–08 as compared with 6.07 per cent in the call money market and 5.5 per cent in market repos (outside the LAF). It is now the predominant segment of the money market and acccounted for nearly 80 per cent of the total volume during 2007–08. Enchanced transparency and real time basis of deals have attracted a large number of market participants to this segment.

In order to increase the depth and liquidity in the CBLO market, CCIL is planning to introduce an internet-based trading platform for its CBLO product which would provide access to corporates and other non-banking entities to the institutional lending and borrowing segment of money markets.

LINK BETWEEN THE MONEY MARKET AND THE MONETARY POLICY IN INDIA

The monetary policy represents policies, objectives, and instruments directed towards regulating money supply and the cost and availability of credit in the economy. In the monetary policy framework, broad objectives are prescribed and an operating framework of policy instruments to achieve them is prepared. The monetary policy in India is an adjunct of the economic policy. The objectives of the monetary policy are not different from those of the economic policy. The three major objectives of economic policy in India have been growth, price stability, and social justice. The emphasis between the first two objectives has changed from year to year, depending upon the conditions prevailing in that year and the previous year. The objectives of the monetary policy are also price stability and growth. The government of India tries to manipulate its monetary policy through the Reserve Bank, the monetary authority in India. The objectives of the monetary policy are pursued by ensuring credit availability with stability in the external value of the rupee as well as an overall financial stability. Monetary policy actions are transmitted to the rest of the economy through changes in financial prices (e.g., interest rates, exchange rates, yields, asset prices, equity prices) and financial quantities (money supply, credit aggregates, supply of government bonds, foreign denominated bonds). Worldwide, the interest rate channel is the key channel of transmission. There is an intrinsic link between monetary policy and money market. It is through the money market that monetary policy affects the real economy.

Direct Instruments

- Reserve requirements
- Limits on refinance
- Administered interest rates
- Qualitative and quantitative restrictions on credit

The Reserve Bank seeks to influence monetary conditions through management of liquidity by operating in varied instruments. These instruments can be categorised as direct and indirect market-based instruments.

Indirect Instruments

- Open market operations
- Repos

In an administered or controlled regime of money and financial markets, the Reserve Bank directly influences the cost, availability, and direction of funds through direct instruments. The management of liquidity is essentially through direct instruments such as varying cash reserve requirements, limits on refinance, administered interest rates, and qualitative and quantitative restrictions on credit.

Since 1991, the market environment has been deregulated and liberalised wherein the interest rates are largely determined by market forces. In such an environment, the Reserve Bank influences monetary conditions through market-based, indirect instruments such as open market operations and refinance (standing facilities) / discount (market-based discount windows)/repo windows. For example, if the Reserve bank desires to inject liquidity for a short period, it could resort to repos–providing funds to the banks in exchange of securities at a predetermined interest rate and reversing the transactions at a predetermined time. Similarly, if the Reserve Bank wants to influence liquidity on an enduring basis, it could resort to open market operations, involving outright purchase (or sale) of securities. The other indirect instruments such as standing facilities and market-based discount window are used (operated) by the Reserve Bank at the discretion of market participants generally banks. Standing facilities provide limited liquidity to eligible market participants and market-based discount window makes available reserves either through direct lending or through rediscounting or purchase of financial assets held by banks.

The success of market-based indirect instruments depends upon the existence of a vibrant, liquid, and efficient money market that is well integrated with the other segments of financial markets such as government securities market and foreign exchange market. The effectiveness of the monetary policy depends on the market and institutional framework available for transmitting monetary policy impulses.

The financial sector in India is still in a state of transition because of ongoing reforms. However, a growing integration among the different segments of the financial markets has been witnessed. Still, the markets do not have adequate depth and liquidity—a major constraint in the conduct of the monetary policy. The Reserve Bank, therefore, still relies on the cash reserve ratio as an operating instrument. The bank activated the bank rate in 1997 as a reference rate and as a signaling device to reflect the stand point of the monetary policy. The interest rates on different types of accommodation from the Reserve Bank including refinance are linked to the bank rate. The announcement impact of bank rate changes has been manifested in the prime lending rates (PLRs) of commercial banks.

Unencumbered Approved Securities or SLR Securities Include

- T-bills of the GOI
- Dated securities of the GOI issued from time to time under the market borrowing programme and the market stabilisation scheme (MSS)
- State Development Loans of the State Governments
- Any other instrument as may be notified by the RBI

The Reserve Bank also set up a framework of the interim liquidity adjustment facility (ILAF) which helped in injecting liquidity through the collateralised lending facility (CLF) to banks, export credit refinance to banks, and liquidity support to primary dealers. All these facilities were formula-based and depended on the bank rate. The ILAF was gradually converted into a full-fledged LAF. The liquidity adjustment facility (LAF) has evolved as an effective mechanism for absorbing and/or injecting liquidity on a day-to-day basis in a more flexible manner.

With the evolution of a regime of market-determined interest rates in the 1990s, new transmission channels opened up. Indirect monetary control instruments gained importance. Open market operations and repos operations emerged for the first time as instruments of monetary control. These operations have been increasingly used to bring about a contraction of liquidity in the system and neutralise the expansion impact of capital inflows. Repo rates, apart from reflecting liquidity conditions, provide a floor for overnight call money rate. In the event of tight liquidity conditions, the Reserve Bank's liquidity support to primary dealers enables it to directly intervene in the market, thereby moderating pressures on the overall call money rates. LAF has also facilitated bringing down the CRR of banks without endangering liquidity pressure.

Demand Liabilities Include

- Current Deposits
- Demand liabilities portion of savings bank deposits
- Margins held against letters of credit/guarantees
- Balances in overdue fixed deposits
- Cash certificates
- Outstanding telegraphic transfers, mail transfers, demand drafts, unclaimed deposits,
- Credit balances in the Cash Credit Account and deposits held as security for advances which are payable on demand

Fixed rate repos were introduced by the Reserve Bank to absorb liquidity. They were supplemented by open market operations in government dated securities and treasury bills. Both the LAF and the OMO were effectively used by the Reserve Bank to manage liquidity till 2003–04. Owing to large inflow of dollars and high liquidity in the system, the stock of government securities available with the Reserve Bank declined and the burden of sterilisation increasingly fell on the LAF operations. In order to absorb liquidity of enduring nature, the Reserve Bank operated a new scheme Market Stabilisation Scheme (MSS). This scheme has provided further flexibility to the Reserve Bank in its market operations.

Thus, the Reserve Bank uses multiple instruments to ensure that appropriate liquidity is maintained in the system.

TOOLS FOR MANAGING LIQUIDITY IN THE MONEY MARKET

Reserve Requirements

Reserve requirements are of two types: (i) cash reserve requirements (CRR) and (ii) statutory liquidity ratio (SLR). They are techniques of monetary control used by the Reserve Bank to achieve specific macro-economic objectives. CRR refers to the cash that banks have to maintain with the Reserve Bank as a certain percentage of their total demand and time liabilities (DTL) while SLR refers to the mandatory investment that banks have to make in government securities. CRR refers to the level of reserves banks need to hold against their liabilities while SLR refers to liquid assets that banks have to hold.

The statute governing the CRR under section 42(1) of the Reserve Bank of India Act requires every bank in the second schedule to maintain an average daily balance with the Reserve Bank of India, the amount of which shall not be less than 3 per cent of the total demand and time liabilities. CRR is an instrument to influence liquidity in the system as and when required. SLR is the reserve that is set aside by the banks for investment in cash, gold, or unencumbered approved securities. It is mandatory under Section 24(2A) of the Banking Regulation Act, 1949, as amended by the Banking Laws (Amendment) Act, 1983 for banks to maintain this reserve. The reserve is supposed to provide a buffer in case of a run on the bank. The CRR for non-scheduled banks and non-scheduled cooperative banks is governed by provisions of Section 18 and 56, respectively, of the Banking Regulation Act, 1949. These banks have to maintain CRR equivalent to 3 per cent of their NDTL as on the last Friday of the preceding fortnight..

The CRR was brought down from 15 per cent in March 1991 to 4.75 per cent in October 2002 and to 4.5 per cent in April 2003, and subsequently raised to 7.00 per cent in August 2007, while the SLR was brought down from its peak of 38.5 per cent in April 1992 to 25 per cent on October 25, 1997. Thus, till the early 1990s, both the CRR and SLR were preempting around 63.5 per cent of the incremental deposits. Even though the SLR has been brought down to 25 per cent, most banks currently hold a volume of government securities higher than required under the SLR as the interest rate on government securities is increasingly market-determined. Commercial banks' holdings of SLR securities were 27.8 of their net demand and time liabilities (NDTL) at end-March 2008.

The CRR rate was hiked by 3 per cent between April 2007 and August 2008 to contain inflationary expectations and absorb excess liquidity. In order to ease the unprecedented liquidity crunch faced by banks due to the sub-prime mortgage crisis , the RBI cut the CRR by 250 basis points (2.5 per cent) with effect from October 11, 2008. This was the first time since June 2003 that the RBI reduced CRR. The RBI also allowed banks to borrow short-term funds against their SLR bonds holding upto 1 per cent to infuse liquidity, thus bringing the SLR down to 24 per cent. On January 17, 2009, the CRR was brought down to 5 per cent of NDTL and then increased to 6 percent of NDTL on April 24, 2010.

The daily minimum CRR was reduced from 85 per cent to 70 per cent of the average daily required reserves for a reporting fortnight on all days of the fortnight to enable a smooth adjustment of liquidity between the surplus and the deficit segment and better cash management to avoid a sudden increase in the overall call rates. Banks can maintain upto 70 per cent of reserve requirements towards the CRR during the reporting fortnight, provided on the reporting Friday, they are able to square the CRR maintenance to 100 per cent. Banks report their net demand and time liabilities (NDTL) on alternate Fridays. A lag of one fortnight in the maintenance of stipulated CRR by banks has been introduced to enable banks to improve the cash management.

A cut in the CRR increases the liquidity in the economy. It also means lower cost for the banks which translates into lower PLRs. It also sets a broad direction for interest rates in the future. Since October 2001, the interest rate paid on eligible balances under the CRR was linked to the bank rate. From August 11, 2001, the inter-bank term liabilities with an original maturity of 15 days and upto one year were exempted from the prescription of the minimum CRR requirement of 3 per cent.

Section 3 of the Reserve Bank of India Act, 1934 was amended in June 2006 and notified by the Government of India in March 2007. This amendment gives discretion to the Reserve Bank to decide the percentage of scheduled banks' demand and time liabilities as CRR without any ceiling or floor. From April 1, 2007, the floor of 3 per cent and a ceiling of 20 per cent stipulated in case of CRR have been removed. Also, the Reserve Bank is not required to make interest payment on CRR balances. The Banking Regulation Amendment Act, 2007 removed the floor rate of 25 per cent for SLR to be prescribed by the RBI and empowered it to determine the SLR eligible assets.

Time Liabilities Include

- Fixed deposit
- Cash certificates
- Cumulative and recurring deposits
- Time liabilities portion of savings bank deposits
- Staff security deposits
- Gold deposits

- At present, the CRR is 6 per cent and the SLR is 25 per cent of NDTL

Other Demand and Time Liabilities Include

- Interest accrued on deposits
- Bills payable
- Unpaid Dividends
- Net credit balances in branch adjustment account
- Amounts due to the Banking System which are not in the nature of deposits or borrowing
- Margin money on bills purchased/discounted
- Gold borrowed by banks from abroad

> The Reserve Bank has announced that it would like to see the CRR level down to 3 per cent. The key constraint in reducing the CRR is the continuing high level of fiscal deficit which cannot be financed entirely by the market and, therefore, requires substantial support by the Reserve Bank.

CRR is an inflexible instrument of monetary policy as it does not distinguish between banks having surplus cash balances from those that are deficient. However, the CRR will continue to be used in both directions for liquidity management in addition to other instruments.

Interest Rates

Interest rate is one of the distinct monetary transmission channels. An administered interest rate structure was the central feature of the Indian monetary and credit system during the 1980s. The rationale behind the administered rate structure was to enable certain preferred or priority sectors to obtain funds at concessional rates of interest. This brought about an element of cross-subsidisation resulting in higher lending rates for the non-concessional commercial sector. The deposit rates also had to be maintained at a low level. This system became complex with the proliferation of sectors and segments to which concessional credit was to be provided.

Following the recommendations of the Chakravarty Committee, set up in 1985, deposit rates were made attractive to avoid financial repression associated with near zero real deposit rates. However, the interest rate structure remained complicated. There were about 50 lending categories and a large number of stipulated interest rates depending on the loan size, usage, and type of borrowers.

In 1991, the Narasimham Committee recommended that concessional interest rates should not be a vehicle for subvention and there should be real interest rates. In view of this recommendation, interest rate reforms were undertaken in money, credit, and government securities market.

Since the beginning of 1992–93, interest rates in the government securities market were progressively deregulated with the introduction of an auction system. The structure of interest rates for commercial banks was simplified. The bank rate was reactivated in April 1997, linked with deposit rates (up to one year maturity) initially. Since then it has become a signaling rate.

Moreover, with a deregulation of interest rates, borrowings by the government since 1992 have been at market-related yields. Public sector undertakings and financial institutions which were largely dependent on budgetary support for their resources, now resort to the market to raise their resource requirement.

Thus, with deregulation, the interest rate has emerged as a major instrument of resource allocation.

- The PLR is hovering around 11.00–12.00 per cent

Prime Lending Rate The prime lending rate is the minimum lending rate (PLR) charged by the bank from its best corporate customers or prime borrowers. PLRs have been deregulated gradually since April 1992 and the interest rate structure for commercial banks simplified. The six categories of lending rates were reduced to four in April 1992 and to three in April 1993.

The norms relating to the PLR have been progressively liberalised. From October 18, 1994, interest rates on loans above Rs. 2 lakh were freed and banks were permitted to determine their PLRs. From April 1998, banks were given the freedom to determine the interest rates on loans up to Rs. 2 lakh, subject to small borrowers being charged at rates not exceeding the PLR. The Reserve Bank of India advised banks to reduce the maximum spreads over their PLRs and announce it to the public along with the announcement of their PLR. The Reserve Bank also gave banks the freedom to evolve differential PLRs. Differential PLRs are different prime lending rates for different levels of maturities. Only a handful of banks came out with differential PLRs. In order to ease the rigidities in the interest rate structure, banks were given the freedom to offer all loans on fixed or floating rates while complying with the PLR stipulations, from April 2000. In April 2001, banks were allowed to offer loans at sub-PLR rates, thereby removing the practice of treating the PLR as a floor for loans above Rs. 2 lakh. Although the PLR ceased to be a floor for loans over Rs. 2 lakh, it continues to operate as a ceiling for loans up to Rs. 2 lakh taking on the role of a benchmark. At present commercial banks decide the lending rates to different borrowers (with of credit limit of over Rs. 2 lakh) subject to the announcement of the PLR as approved by their boards. Banks' PLR will now be on a 'cost plus' basis, i.e., banks have to take into account their (i) actual cost of funds, (ii) operating expenses, and (iii) a minimum margin to cover regulatory requirement of provisioning/capital charge and profit margin, while arriving at the benchmark PLR. The minimum lending rates have gradually come down to 10 per cent in October 2004 from a peak of 17 per cent in 1992–93.

The Indian Banks' Association (IBA) advised its member banks to announce a benchmark prime lending rate (BPLR) taking into account (i) actual cost of funds, (ii) operating expenses, and (iii) a minimum margin to cover regulatory requirement of provisioning/capital charge and profit margin, with the approval of their boards keeping in view the operational requirements. The banks, however, have the freedom to price their loan products below or above their BPLR based on time-varying term premia and offer floating rate products by using market benchmarks in a transparent manner. Almost all commercial banks have adopted the new system of BPLR from January 2004 and the rates are lower in the range of 25–200 basis points from their earlier PLRs. Housing finance, loans against share certificates, and consumer durable loans have been delinked from the new system.

Generally, PLRs across banks are aligned with those of a few major banks who provide the signals for changes in the PLR. The Reserve Bank publishes monthly PLRs based on the rates offered by five leading public sector banks. The PLR of the banks is based on the bank rate and has a positive correlation with it.

The RBI has directed scheduled commercial banks to switch over to the new system of base rate in place of the existing benchmark prime lending rate system from July 1, 2010. Banks may choose any benchmark to arrive at the base rate for a specific tenor that may be disclosed transparently.

Bank Rate

The rate of discount fixed by the central bank of the country for the rediscounting of eligible paper is called the bank rate. It is also the rate charged by the central bank on advances on specified collateral to banks.

The bank rate is defined in Section 49 of the Reserve Bank of India Act, 1934, as the standard rate at which the bank is prepared to buy or rediscount bills of exchange or other commercial papers eligible for purchase under this act.

The bank rate was revised only three times in the period between 1975–96. It was reactivated in April 1997 with deposit rates (up to one year maturity) linked to it initially. With effect from April 16, 1997, the maximum term deposit rate (up to one year) of scheduled commercial banks was set at 2 per cent below the bank rate and all interest rates on advances from the Reserve Bank were linked to the bank rate. The deposit rates were completely deregulated in October 1997; the other rates continued to be linked to the bank rate. From 1997, the bank rate emerged as a signaling rate to reflect the stance of the monetary policy.

The interest rates on different types of accommodation from the Reserve Bank including refinance are linked to the bank rate. The bank rate is the central bank's key rate signal, which banks use to price their loans. The impact of bank rate announcements have been pronounced in the PLRs of commercial banks.

The bank rate was brought down from a high of 9.00 per cent in May 1998 to 6.5 per cent in October 2001. The Reserve Bank cut the bank rate to 6.25 per cent in October 2002, its lowest level since 1973. The bank rate was further brought down to 6.00 per cent in April 2003.

- Since April 2003 the bank rate is 6 per cent

The interest rate, as an instrument of monetary policy, is evolving. As interest rates in the economy cover credit, money, and securities markets, there should be linkages not only among these markets but among the rates as well. A low interest rate is the objective of the monetary policy. Low interest rates are subject to stable inflationary expectations which, in turn, depend on price stability. There are many constraints which impede the lowering of interest rates, diminishing the effectiveness of this tool. The major constraints are high intermediation costs of the banking system, large non-performing assets (NPAs) of the banks, and the government's massive borrowing programme. Also, the system of administered interest rates on certain government saving instruments, such as small savings and provident funds, leads to segmented market behaviour resulting in low convergence of rates of return on various financial instruments.

Refinance from the Reserve Bank

The Reserve Bank uses this instrument to relieve liquidity shortages in the system, control monetary and credit conditions, and direct credit to selective sectors. The quantum and cost of the refinance facility provided to scheduled commercial banks depends upon the degree of liquidity in the banking system and the need for ensuring credit flow to select sectors. Both the quantum and cost of the refinance facility reflect the stance of the monetary policy in response to market conditions. The Reserve Bank has directed certain sector-specific refinance facilities such as food credit, export credit, government securities, and discretionary standby refinance to scheduled banks.

The Reserve Bank has gradually reduced the access to the refinance facility by raising the cost of such a facility or by adjusting the formula for fixing eligible limits. The refinance rate has now been linked to the bank rate.

The complete transition towards indirect market-based instruments requires doing away with all sector-specific and discretionary refinance facilities and moving towards a general refinance/liquidity adjustment facility.

Currently, there are only two refinance schemes available to banks—export credit refinance and general refinance. The export credit facility is formula-based and is extended to banks against their outstanding export credit eligible for refinance. From April 1, 2002, export credit refinance is being provided to scheduled banks at 15 per cent of their outstanding export credit eligible for refinance as at the end of the preceding fortnight. General refinance is provided to tide over temporary liquidity shortages faced by banks. The general refinance window has now been replaced by a collateralised lending facility within the overall framework of the interim liquidity adjustment facility.

With a view to enabling the banks to meet any unanticipated additional demand for liquidity in the context of the century date change, a 'special liquidity support' (SLS) facility was made available to all scheduled commercial banks (excluding RRBs) for a temporary period from December 1, 1999 to January 31, 2000.

With effect from April 13, 1996, banks are provided export credit refinance against their rupee export credit and post-shipment export credit denominated in US dollars taken together.

At present, banks are eligible for standing liquidity facility/export credit eligible for refinance and PDs are eligible for collateralised liquidity support from the RBI subject to certain limits. These limits are apportioned into normal facility constituting one-third of the total entitlement available at the bank rate and back-stop facility constituting the remaining two-third available at the repo rate.

TABLE 4.19 Movement in Key Policy Rates and Reserve Requirements (In Per Cent)

Effective Since	*Bank Rate*	*Reverse Repo Rate*	*Repo Rate*	*Cash Reserve Ratio*	*Statutory Liquidity Ratio*
1990–91	10.00	–	–	15.00	38.5
1999–2000	8.00	6.00	–	9.0	25.00
2000–2001	7.00	6.00	10.0	8.00	25.0
2001–2002	6.50	6.00	9.0	5.50	25.0
June 2002	6.50	6.00	8.5	5.00	25.0
October 2002	6.25	5.50	7.5	4.75	25.0
April 2003	6.00	5.00	7.0	4.75	25.0
August 2003	6.00	4.50	7.0	4.50	25.00
March 31, 2004	6.00	4.50	6.00	4.50	25
September 18, 2004	6.00	4.50	6.00	4.75	25
October 2, 2004	6.00	4.50	6.00	5.00	25
October 27, 2004	6.00	4.75	6.00	5.00	25
April 29, 2005	6.00	5.00	6.00	5.00	25
October 26, 2005	6.00	5.25	6.25	5.00	25
January 24, 2006	6.00	5.50	6.50	5.00	25
June 9, 2006	6.00	5.75	6.75	5.00	25
July 25, 2006	6.00	6.00	7.00	5.00	25
October 31, 2006	6.00	6.00	7.25	5.00	25
December 23, 2006	6.00	6.00	7.25	5.25	25
January 6, 2007	6.00	6.00	7.25	5.50	25
January 31, 2007	6.00	6.00	7.50	5.50	25
February 17, 2007	6.00	6.00	7.50	5.75	25
March 3, 2007	6.00	6.00	7.50	6.00	25
March 30, 2007	6.00	6.00	7.75	6.00	25
April 14, 2007	6.00	6.00	7.75	6.25	25
April	6.00	6.00	7.25	6.00	25
August 4, 2007	6.00	6.00	7.75	7.00	25
November 10, 2007	6.00	6.00	7.75	7.50	25
April 26, 2008	6.00	6.00	7.75	7.75	25
May 10, 2008	6.00	6.00	7.75	8.00	25
May 24, 2008	6.00	6.00	7.75	8.25	25
June 11, 2008	6.00	6.00	8.00	8.25	25
July 5, 2008	6.00	6.00	8.50	8.50	25
July 19, 2008	6.00	6.00	8.50	8.75	25
July 30, 2008	6.00	6.00	9.00	9.00	25
August 30, 2008	6.00	6.00	9.00	9.00	25
October 11, 2008	6.00	6.00	9.00	6.50	25
March 5, 2009	6.00	3.50	5.00	5.00	24
April 21, 2009	6.00	3.25	4.75	5.00	24
Nov 7, 2009	6.00	3.25	4.75	5.00	25
Feb 13, 2010	6.00	3.25	4.75	5.50	25
March 19, 2010	6.00	3.50	5.00	5.75	25
April 24, 2010	6.00	3.75	5.25	6.00	25
July 2, 2010	6.00	4.00	5.50	6.00	25
July 27, 2010	6.00	4.50	5.75	6.00	25

Source: RBI, *Annual Report.*

In order to rationalise the existing structure, the entire amount of support under the Special Liquidity Facility (SLF) is made available at a single refinance rate. The normal facility and back-stop facility have been merged into a single facility to be made available at a single rate viz., at the repo rate with effect from March 29, 2004. The standing liquidity facilities provided to banks (export credit refinance) and primary dealers (collateralised liquidity support) from the RBI are available at the repo rate, that is, at 9 per cent with effect from July 29, 2008

Liquidity Adjustment Facility The Narasimham Committee on Banking Sector Reforms (Report II, 1998) recommended that the Reserve Bank provide support to the market through an LAF scheme. This facility would help in the development of a short-term money market with adequate liquidity. As per the committee's recommendation, the Reserve Bank decided to introduce the LAF in phases.

The interim LAF, introduced in April 1999, provided a mechanism for liquidity management through a combination of repos, export credit refinance, supported by open market operations at set rates of interest. Banks could avail of a collateralised lending facility of up to 0.25 per cent of the fortnightly average outstanding aggregate deposits available for few weeks at the bank rate. Primary dealers were provided liquidity support against a collateral of government securities. These facilities were available subject to quantitative limits (formula-based) for a specific duration and at the bank rate. Additional limits could be availed by banks under the additional collateralised lending facility (ACLF) and by primary dealers at 2 per cent points above the bank rate.

The interim LAF was gradually converted into a full-fledged LAF scheme. It was implemented in three phases: in the first phase, the general refinance facility was replaced by the ACLF for banks and primary dealers; in the second stage, CLF for banks and primary dealer was replaced by variable reverse repo auctions; and in the final stage, with the operationalisation of the real time gross settlement sysem (RTGS), the LAF is operated at different timings of the same day if necessary.

The LAF was introduced from June 5, 2000 impart greater stability and facilitate the emergence of a short-term rupee yield curve for pricing fixed income securities. The LAF is operated through repos and reverse repos. The LAF is a tool of day-to-day liquidity management through the injection or absorption of liquidity by way of sale or purchase of securities followed by their repurchase or resale under the repo/reverse repo operations. Repo/reverse repo auctions are conducted on a daily basis except on Saturdays. The tenor of repos is one day except on Fridays and days preceding holidays. Interest rates in respect of both repos and reverse repos are decided through cut-off rates emerging from auctions conducted by the Reserve Bank on a multiple price auction basis. The auction format for from the LAF was changed from the uniform price auction method to the multiple price auction method to ensure more responsible bidding. Since February 15, 2002, members of the NDS submit LAF bids in an electronic form instead of a physical form. In August 2000, repo auctions of tenor ranging from three to seven days were introduced. In October 2003, repos for a longer tenure of 28 days were also conducted for five consecutive days. The Reserve Bank also has the option of introducing long-term repos of up to 14 days as and when required and to switch over to fixed rate repos on an overnight basis. The minimum bid size for the LAF was reduced from Rs. 10 crore to Rs. 5 crore to facilitate the participation of small operators. LAF operations are conducted in the forenoon between 9.30 a.m. and 10.30 a.m. Operations under the LAF require the availability of adequate stock of government securities with the Reserve Bank.

The Reserve Bank operationalised the second liquidity adjustment facility (SLAF), in November 28, 2005, to provide market participants a second window to adjust their liquidity requirements. The SLAF was withdrawn with effect from August 6, 2007. It was reintroduced on reporting Fridays with effect from August 1, 2008. The bids for SLAF are received between 4:00 p.m and 4:30 p.m. The salient features of SLAF are the same as those of LAF. However, the settlement of the SLAF and the LAF is conducted separately and on gross basis. As liquidity conditions turned easy, the RBI now conducts only one LAF from May 6, 2009.

LAF helps the RBI to adjust the structure of interest rates (through fixed rate repos) in response to evolving market conditions and moderate sudden liquidity shocks. LAF has facilitated systematic movement of interest rates in the overnight call markets which, in turn, help reduce the volatility in the government securities market making gilt funds more attractive. It helps the market participants to overcome mismatches in supply and demand from time to time. As this facility is available to market participants at different timings, it enables them to undertake their own liquidity management. Banks can also structure their interest rates on a floating rate basis. Further, they are not required to undertake the market risk involved in purchase of securities.

- The LAF has become the principal operating instrument for modulating liquidity conditions on a daily basis

The LAF operations combined with the judicious use of open market operations have emerged as the principal operating instrument of the monetary policy.

Repos

The major function of the money market is to provide liquidity. To achieve this function and to even out liquidity changes, the Reserve Bank uses repos. Repo is a useful money market instrument enabling the smooth adjustment of short-term liquidity among varied market participants such as banks and financial institutions.

- Repo is a transaction in which the borrower gets funds against the collateral of securities placed with the lender. The maturity period of repos range from 1 to 14 days. At the maturity, the securities revert to the borrower, after he repays the dues

Repo refers to a transaction in which a participant acquires immediate funds by selling securities and simultaneously agrees to the repurchase of the same or similar securities after a specified time at a specified price. In other words, it enables collateralised short-term borrowing and lending through sale/purchase operations in debt instruments. It is a temporary sale of debt involving full transfer of ownership of the securities, i.e., the assignment of voting and financial rights. Repo is also referred to as a ready forward transaction as it is a means of funding by selling a security held on a spot basis and repurchasing the same on a forward basis.

Reverse repo is exactly the opposite of repo—a party buys a security from another party with a commitment to sell it back to the latter at a specified time and price. In other words, while for one party the transaction is repo, for another party it is reverse repo. A reverse repo is undertaken to earn additional income on idle cash. In India, repo transactions are basically fund management/SLR management devices used by banks.

The difference between the price at which the securities are bought and sold is the lender's profit or interest earned for lending the money. The transaction combines elements of both a securities purchase/sale operation and also a money market borrowing/lending operation. It signifies lending on a collateral basis. It is also a good hedge tool because the repurchase price is locked in at the time of the sale itself. The terms of contract is in terms of a 'repo rate,' representing the money market borrowing/lending rate. Repo rate is the annual interest rate for the funds transferred by the lender to the borrower. The repo rate is usually lower than that offered on unsecured inter-bank rate as it is fully collateralised. The factors which affect the repo rate are the creditworthiness of the borrower, liquidity of the collateral, and comparable rates of other money market instruments.

Importance of Repos Repos are safer than pure call/notice/term money and inter-corporate deposit markets which are non-collateralised; repos are backed by securities and are fully collateralised. Ownership titles of eligible securities is immediately transferred. Thus, the counter party risks are minimum. Since repos are market-based instruments, they can be utilised by central banks as an indirect instrument of monetary control for absorbing or injecting short-term liquidity. Repos help maintain an equilibrium between demand and supply of short-term funds. The repos market serves as an equilibrium between the money market and securities market and provides liquidity and depth to both the markets. By promoting greater integration between the money market and the government securities market, it helps in developing a short-term yield curve. It is a widely used instrument by central governments to adjust market liquidity. Monetary authorities can transmit policy signals through repos to the money market which has a significant influence on the government securities market and foreign exchange market. Hence, internationally, it is a versatile and the most popular money market instrument. In India too, it was a rapidly developing and thriving market until the scam of 1992–93, where this facility was grossly misused.

Types of Repos Two types of repos are currently in operation—market repos and RBI repos.

1. Market repos: The Reserve Bank itself, allowed banks to resort to repo transactions among themselves and with DFHI, and STCI. All government securities and PSU bonds were eligible for repos till 1988. Between April 1988 and mid-June 1992, only Inter-bank repos were allowed in all government securities. Market repos were popular in 1991–92 as banks did not wish to buy the securities outright because of the risk of depreciation. Moreover, since there were not many money market instruments of different maturities, repos served as a hedge against interest rate fluctuations.

Repos were misused by banks and brokers during the 1992 securities scam. Repo deals were subsequently banned in all securities except treasury bills. In June 1995, the ban was lifted, allowing restricted eligible participants and instruments, i.e., repo deals were initially allowed in treasury bills and five dated securities on the NSE. Banks, along with primary dealers, were permitted to undertake ready forward transactions. These transactions were allowed only in Mumbai provided they were routed through the SGL accounts maintained by the Reserve Bank. These restrictions were liberalised gradually. Now, all central and state government dated securities and treasury bills of all maturities are eligible for repo. The participants are required to actually hold the securities in their portfolio before undertaking repo transactions.

Banks, along with primary dealers, were permitted to undertake ready forward transactions. These transactions were allowed only in Mumbai provided they were routed through the SGL accounts maintained by the Reserve Bank.

***Volume of turnover in market repo*:** Average daily volumes in the market repo (outside the LAF) increased from Rs. 10,500 crore in 2000–01 to Rs. 57,320 crore in 2008–09. This spurt in the volumes was due to phasing out of the non-bank entities from the call money market. In the market repo segment, mutual funds are major provider of funds, while the foreign banks, private sector banks and primary dealers are the major borrowers.

2. RBI repos: It is a mechanism through which the Reserve Bank lends/borrows money to/from banks against government securities. Repo implies injection of liquidity and reverse repo absorption of liquidity. In other words, repo is a mechanism through which the RBI lends money to the banks against government securities (by repurchasing government securities from banks) to inject liquidity in the economy and through reverse repos, it borrows money by selling government securities to absorb excess liquidity in the economy. The Reserve Bank conducts repo auctions to

- Now repo implies injection of liquidity and reverse repo absorption of liquidity

1. provide banks with an outlet for managing short-term liquidity;
2. even out short-term liquidity fluctuations in the money market; and
3. optimise return on short-term surplus liquid funds.

The Reserve Bank provides liquidity support to primary dealers, and 100 per cent gilt mutual funds in the form of repo facility. The Reserve Bank also undertakes repo/reverse repo operations with primary dealers and scheduled commercial banks as part of its open market operations.

- Repo is permitted in dated securities, t-bills and state development loans to persons or entities maintaining either a SGL or CSGL accounts and unlisted companies which have been issued special securities by the GOI and maintain gilt accounts with scheduled commercial banks

The Reserve Bank indirectly interferes in the call money market through LAF repo/reverse repo operations to ease undue pressure on overnight call money rates and moderate liquidity conditions in the call money market. This also enables the repo market to forge close links between the money market and securities market.

The Reserve Bank introduced reverse repo operations (selling government securities to repurchase later) on December 10, 1992 to influence short-term liquidity. It is a mechanism through which the Reserve Bank absorbs excess liquidity from the economy. This is apart from the liquidity support extended by the Reserve Bank to primary dealers through refinance/reverse repo facility at a fixed price.

These reverse repo auctions were introduced in December 1992. They were conducted for a period ranging from 1 day to 14 days between 1992 and 1995. From August 1993, the period of repo stabilised at 14 days consistent with the reserve make up period for banks. In February 1995, auctions were discontinued due to lack of demand on account of tight money market conditions resulting from a decline in capital inflows and sharp expansion in non-food credit. Reverse repo auctions were reintroduced on November 4, 1996, to absorb excess liquidity in the economy. Auctions of a 3 to 4 day cycle were introduced again in early 1997. The Reserve Bank switched over from discriminatory price auction repos to a daily fixed rate repo auction system in November 1997. In discriminatory price auctions, bidders submit multiple price quantity sealed bids. The auction results were announced on the same day; payment by the successful bidders at or below the cut-off repo rate was made the following day. Under the fixed rate repos system, the repo rates are pre-announced and banks/financial institutions are required to submit bids indicating the volume of repos. The results of fixed rate repos are announced on the date of submitting the bids.

Fixed rate repos indicate money market rates, bring down volatility in the foreign exchange market, and impart stability to short-term interest rates by setting a floor and ceiling for call money rates. The fixed rate auction reverse repo system was used to prevent speculative activity during foreign exchange volatility and thereby to ward off the spread of that activity during the south-east Asian crisis. Initially, the reverse repo rate was fixed at 4.5 per cent but was successively raised to reach 7 per cent with effect from December 11, 1997, and further to 9 per cent with effect from January 17, 1998. Subsequently, as the forex market stabilised, the reverse repo rate was brought down in stages to 6 per cent with effect from March 1999 to 5.5 per cent in October 2002 and 4.5 per cent in August 2003 and then hiked to 5 per cent on April 29, 2005 and 6 per cent on July 25, 2006. The reverse repos got integrated with the ILAF introduced in April 1999. The absorption of liquidity was at fixed rate reverse repos and the system of injecting liquidity through various ways, including refinance, was at interest rates linked to the bank rate, which was reactivated in April 1997. With the introduction of the liquidity adjustment facility from June 5, 2000, the Reserve Bank has been injecting liquidity into the system through repos on a daily basis at a fixed rate. During 2008–09, the RBI injected liquidity through repo operations on 158 days, while it absorbed liquidity through reverse repo on 169 days (Table 4.20).

TABLE 4.20 Net Repos(+)/Reverse Repos(−) Outstanding

Year	Liquidity Impact of LAF Repos (Rs. in Crore)	Outstanding (Rs. in Crore)	Number of Days Bids Were Received: Repos	Number of Days Bids Were Received: Reverse Repos	Number of Days of Full Acceptance of Bids: Repos	Number of Days of Full Acceptance of Bids: Reverse Repos
2003–04	–32,230	–34,645	06	243	04	230
2004–05	15,315	–19,330	23	242	23	242
2005–06	12,080	–7,250	78	244	76	244
2006–07	36,435	29,185	64	244	63	234
2007–08	21,165	50,350	86	225	86	165
2008–09	–51,835	–1,485	158	169	158	169
2009–10	–2,175	990	–	–	–	–

Source: RBI, *Annual Report,* 2008–09.

TABLE 4.21 Primary Liquidity Flows

(Rs. in Crore)

Year	Net Repos Under LAF	Average Daily LAF Outstanding	MSS	Average MSS Outstanding	Net OMOs
2004–05	15,315	35,592	–64,211	46,445	–2,897
2005–06	12,080	10,986	35,148	58,792	–3,912
2006–07	36,435	21,973	–33,913	37,698	–5,125
2007–08	21,165	4,677	–1,05,418	1,28,684	5,925
2008–09	–51,835	2,885	80,315	1,48,889	1,04,480
2009–10	–2,175	27,918	85,340	22,178	82,355

Source: RBI, *Annual Report,* various issues.

Types of Repo Rates

- Variable rate repos
- Fixed rate repos
- Repo Rate 5.75 per cent
- Reverse Repo Rate 4.50 per cent

The Reserve Bank scrapped the 7 and 14 day repo in October 2004. At present, repo is only overnight to give banks greater flexibility in liquidity management. In case of tight liquidity conditions, the RBI conducts 2/3/7 day repo/reverse repo auctions under additional LAF. The repo auctions are conducted on all working days except Saturdays and restricted to scheduled commercial banks and primary dealers. A system of announcing the calendar of repo auctions was also introduced in January 1997. All forms of liquidity support except ways and means advances (WMA) are at the repo rate.

The reverse repo rate acts as the floor and the bank rate and repo rates as the cap for the money market. With effect from July 27, 2010, the repo rate is 5.75 per cent and the reverse repo rate is 4.50 per cent. Changes in repo and reverse repo rates effect the movement of market interest rates and asset prices as they convey information about future monetary policy and liquidity. The Repo along with the CRR has emerged as an important tool of liquidity and monetary managament.

Large Capital Flows

- Lead to sharp increase in money supply
- Lead to inflation
- Make monetary management difficult
- Lead to like in interest rates
- Tend to appreciate rupee which makes exports less competitive

Market Stabilisation Scheme To manage the foreign exchange rate, the Reserve Bank intervenes in the forex market by buying dollars flowing into the economy. This leads to a release of large rupee supply in the system which results in a flood of rupee liquidity. In order to dry off a part of this rise supply, the Reserve Bank then sells bonds to banks. In the year 2003–04, there was a sharp fall in the level of the Central Government's market borrowing programme which exhausted the stock of bonds with the Reserve Bank. The Reserve Bank's stock of government securities fell to Rs. 4,626 crore in 2003–04 from Rs. 1,67,308 crore in May 2001. There was a persistent flow of foreign exchange and this was absorbed through the Liquidity Adjustment Facility (LAF) and the open Market Operations (OMOs) conducted by the Reserve Bank. However, a depletion in the stock of securities hampered the LAF and the Open market operations of the Reserve Bank. To make up for this, the Reserve Bank signed in March 2004, a memorandum of understanding (MOU) with the Government of India for issuance of dated government securities of a maturity of less than two years and treasury bills under the MSS. The scheme came into effect from April 1, 2004. The main purpose of introducing the scheme was to absorb surplus liquidity of a more enduring nature, thus reducing the burden of sterilisation on the LAF window. These bonds have a tenor of two years and the proceeds from them remain in a separate account of the Reserve Bank. This account is utilised solely for redeeming the principal amount of market stabilisation bonds. The liability of the government is restricted to interest payments.

The ceiling on the outstanding amount under MSS was fixed initially at Rs. 80,000 crore on October 14, 2004 but is subject to revision through mutual assessment of the liquidity in the system. The ceiling has been since enhanced to Rs. 2,50,000 crores in view of large and continuous capital inflows. The Reserve Bank also issues an indicative schedule for the issuance of securities under the MSS to provide transparency and stability in the financial markets. The MOU on the MSS was amended on February 26, 2009 to permit the transfer of the sequestered liquidity from the MSS cash account to the normal cash account of the government. As on December 10, 2004, the outstanding stock of securities under the MSS was Rs. 51,334 crore, inclusive of Rs. 25,000 crore raised through dated securities with a residual maturity of upto two years. The outstanding stock of securities under the MSS was Rs. 64,211 crore in March 31, 2005, Rs. 31,958 crore on March 31, 2006, Rs. 62,974 crore on March 31, 2007, Rs. 1,68,392 crore on March 31, 2008, and Rs. 88,077 crore on March 31, 2009.

Response to Large Capital Flows

- The RBI buys dollars to prevent rupee appreciation. This leads to a large supply of rupees in the market which can create inflation and cause asset prices to go up
- To prevent a rise in inflation, the RBI issues bonds to mop up the rupee released in the system. This is known as sterilisation process

This scheme has enabled the Reserve Bank to improve liquidity management in the system, maintain stability in the foreign exchange market, and conduct monetary policy in accordance with the stated objectives. Liquidity Adjustment Facility (LAF) coupled with open market operations (OMOs) and Market Stabilisation Scheme (MSS) has helped the transition from direct instruments to indirect instruments, stabilisation of short-term money market rates, enabled to affect demand for funds, and modulate the supply of funds on a daily basis to meet day-to-day liquidity mismatches.

MONEY MARKET DERIVATIVES

A derivative security is a financial contract the value of which is derived from the value of an underlying asset. These assets may be stocks, currencies, interest rates, indexes, or commodities. Derivatives help manage various types of risks through hedging, arbitraging, and acquiring insurance against them. As they increase the capability of the markets to absorb risk, they enhance liquidity and reduce transaction costs in the markets for underlying assets.

The deregulation of interest rates led to an interest rate risk. This risk is the adverse impact of interest rate movements on an institution's net interest income and market value, dependent on the maturity profile of the assets and liabilities of the institutions as well as their repricing terms. This interest rate risk can be managed with the help of derivative instruments. Lack of money market derivative instruments will force banks to physically restructure their balance sheets by purchasing or shedding assets and liabilities, which might ultimately turn out to be inefficient. Derivative instruments are off-balance sheets which help banks to manage their interest rate risks without having to restructure their balance sheet and with more efficient use of capital. Hence, in July 1999, the Reserve Bank laid down guidelines to introduce two money market derivatives: interest rate swaps (IRS) and forward rate agreements (FRA). Both are over the counter derivatives. These contracts are negotiated between counter-parties and tailored to meet the needs of their contract.

IRS and FRAs are new hedging instruments introduced to give more depth to the money market as also to enable market participants to hedge interest rate risk arising on account of lending or borrowings made at fixed/variable interest rates.

Interest Rate Swap

An interest rate swap (IRS) is a financial contract between two parties, exchanging or swapping a stream of interest payments for a notional principal amount during a specified period. Such contract involves exchange or swapping of a 'fixed to floating' or 'floating to fixed' interest rate. If participants feel that rates will fall, they could receive fixed and pay floating rates. The converse is beneficial if interest rates rise.

The first interest rate swap contract was negotiated in 1981 in London. It was introduced in the United States in 1982 when the Student Loan Marketing Association (Sallie Mae) employed a fixed for floating interest rate swap to convert the interest rate character of some of its liabilities. In India, some private sector banks and institutions use interest rate swap to hedge interest rate risk. The Reserve Bank allows the use of only plain vanilla interest rate swaps.

Plain Vanilla Interest Rate Swaps

In an interest rate swap there are two counter-parties. One counter-party, say A, will make fixed, semi-annual interest payments to the other counter-party, say B, who will make semi-annual floating interest payments to A. The swap contract specifies the interest rate applicable to each party, currency in which each cash payment will be made, timetable for payments, number of days in the year, provisions to cover the contingency of a defaulting counter-party, and other issues that affect the relationship between the counter-parties. Payments are usually made in the same currencies. Payments are netted and only the party with the positive difference owed makes a payment equal to the netted amount. The principal is not exchanged. Hence, the term 'notional principal,' is used. On the fixed payment side, a 365-day year is assumed; on the floating payment side, a 360-day year is used. The floating side is quoted on a money market yield basis. In India, the NSE/Reuters MIBOR has been accepted as a reference rate for interest rate swaps.

Example Counter-party A pays a fixed rate of 8.25 per cent per annum on a semi-annual basis and receives from counter-party B Mibor+50 basis points. The current six month MIBOR rate is 7 per cent per annum. The notional principal is Rs. 70 lakh.

Counter-party A	8.25 per cent →	Counter-party B
Pays fixed	NSE/Reuters Mibor +	Receives fixed
Receives floating	← 50 basis points	Pays floating

Counter-party A

$$(\text{National principal}) \quad \left(\frac{\text{Days in period}}{365}\right)\left(\frac{\text{Interest rate}}{100}\right)$$

$$= 70{,}00{,}000 \times \frac{182}{365} \times \frac{8.25}{100} = \text{Rs. } 2{,}87{,}959$$

Counter-party B

$$70{,}00{,}000 \times \frac{180}{365} \times \frac{7.50}{100} = \text{Rs. } 2{,}62{,}500$$

Net payments by counter-party A to counter-party B = Rs. 2,87,959 – Rs. 2,62,500 = Rs. 25,459.

Counter-party A will benefit if the variable interest rates rise as per his expectation and counter-party B benefits if the variable interest rates decline.

The fixed rate is market-determined, i.e., by trading in the inter-bank market while the floating rate is linked to a benchmark.

The floating rate paid in an overnight indexed swap (OIS) is the Mumbai Inter-bank Offer Rate (MIBOR) or call rate, which is fixed everyday.

The IRS market is more liquid and provides better interest rate benchmarks than the government securities market. In a government securities market, participants cannot short sell government securities, i.e., they can not sell a government security unless they actually hold it. The government securities market is a long-only market. So participants can buy government securities when they anticipate a fall in the interest rates but when they expect rates to rise, they can only reduce duration or liquidate their government security portfolio and hold cash. To overcome this limitation, banks hedge their government securities portfolio by paying the fixed rate and receiving the floating rate. When the hedging and speculative activities of banks increase, the fixed rate rises and is higher than the government security yields.

In most of these contracts, the NSE-Mumbai Inter-bank Offered Rate (MIBOR) and Mumbai Inter-bank Forward Offered Rate (MIFOR) are used as the benchmark rates. The MIFOR swaps have grown in popularity The Indian corporates preferred the external commercial borrowings route to finance their projects. External commercial borrowings are long-term foreign currency loans. A Mifor swap enables a borrower to convert a floating rate foreign currency loan into a fixed rate rupee denominated one. The fixed interest rate paid in such a swap is the Mifor. It is the sum of London Inter-Bank Offer Rate (Libor) and the US dollar-Indian rupee annualised forward premium for the same tenor. Libor is the dollar interest rate at which international banks lend to each other and it serves as a benchmark for corporate borrowing. Libor as well as the forward premium reflect the view on currency appreciation/depreciation. MIFOR swaps are used to hedge interest rate risk as well as currency risk by an entity which has exposure to foreign currency borrowing by taking an opposite position in MIFOR swap. MIBOR linked short-term paper up to 365 days, with/without daily call/put options, enables top rated corporates to raise funds from non-bank entities, particularly from mutual funds. Overnight index swap (OIS) are actively traded over-the-counter interest rate derivative. It is an interest rate swap that allows investors to swap floating interest rate in exchange for a fixed rate and swap fixed interest rate in exchange for floating rate. The floating rate (MIBOR) is linked to an overnight inter-bank call money market. Banks use this instrument to manage their liquidity by converting their fixed term deposits into floating rate and for asset liability management. The OIS are more popular in this market.

Applications of Interest Rate Swaps

Borrowers who expect interest rates to fall can swap their fixed rate loan into a floating rate loan. Borrowers who expect interest rates to rise can swap their floating rate loan into a fixed rate loan. Borrowers who have loans benchmarked to one floating rate can swap to another floating rate to reduce their risks or take advantage of the expected movement in one benchmark rate against another.

Money market dealers can pay in fixed IRS for 90 days instead of funding government securities deals through the highly volatile call money market. Dealers can also create synthetic long tenor assets at higher than current fixed yields by swapping upwards Mibor-linked debentures. For example, a one-year AAA rated Mibor-linked debenture issued at Mibor+50 bps can be swapped into a fixed rate for the same period.

Interest rate swap can be regarded as the exchange of a fixed rate bond for a floating rate bond. It can be used to transform a fixed rate loan extending over many years into a floating rate loan and vice versa. Thus, IRSs can be viewed as a series of forward contracts. IRSs help in reducing the cost of financing, managing risks, and creating synthetic instruments (created by combining other instruments) to enter new markets.

Forward Rate Agreements

FRAs are a type of forward contracts, originally introduced by British banks in 1983. FRAs are important hedging instruments in global banking.

A forward rate agreement is a financial contract between two parties where the interest at a predetermined rate for a notional principal amount and for a specified period is exchanged at the market interest rate prevailing at the time of settlement. The market interest rate is an agreed benchmark/reference rate prevailing on the settlement date. In India, the NSE/Reuters Mibor is used as a reference rate.

The cash payment at maturity (settlement) is based on the difference between the predetermined rate and the Mibor rate.

Plain Vanilla Forward Rate Agreements

A party that is seeking protection from a possible increase in interest rates would buy FRAs; hence, he is called a purchaser. A party that wants protection from a possible decline in interest rates would sell FRAs; hence, he is a seller. It is assumed that the forward interest rate is certain to be realised. There is no risk of default on the part of the writer of the FRA. A 360-day year convention is used in computing interest.

The specified period of the contract is the point in time when the deposit is to commence and the point in time when the deposit is to terminate. For example, a 3×9 FRA is read as three months against nine months Mibor which means a six-month Mibor deposit to commence in three months and terminate in nine months.

The actual amount received is calculated as follows:

The difference between the reference rate on the contract's settlement date and the agreed interest rate is multiplied by the notional principal and the term of the deposit. The sum obtained is discounted with the reference rate to arrive at the present value which is the sum paid or received.

Example In three months an Indian bank wants to lend Rs. 75,00,000 to a client for a period of six months. The spot NSE Mibor rate is 9.25 per cent. The bank, in order to commit itself to an interest rate, approaches an FRA dealer who offers a 6-month Mibor deposit, at a rate of 9.32 per cent to commence in three months. The bank enters into the contract as an FRA buyer. The bank then offers its client a rate of 9.82 per cent (cost of funds+50 basis points), a higher rate to allow for profit and risk coverage. If interest rates rise at the time of FRA settlement and the 6-month MIBOR is at 9.95 per cent, then the pay off is calculated as follows.

1. First calculate the lending profit/loss.
   Lending profit/Loss = (Rate received – Rate paid) × principal × term.
   = (9.82% – 9.95%) × 75,00,000 × 182/360 = Rs. (–) 4,929
   This loss on lending is hedged to enable the bank to earn profit.
2. The hedge profit/loss and the amount received or paid is calculated as follows.

$$\frac{(\mathrm{RR} - \mathrm{CR})\,\mathrm{P} \times \mathrm{t}}{[1 + \mathrm{RR} \times \mathrm{t}]}$$

RR = Reference rate, here the NSE Mibor rate
CR = FRA contract rate
P = Notional Principal
t = term, here 182/360 as a six-month deposit

The numerator of the equation gives the hedge profit/loss and the denominator discounts the sum obtained to arrive at its present value.

$$= \frac{\left[(9.95\% - 9.32\%) \times 75,00,000\right] \times \dfrac{182}{360}}{\left(\left\{1 + 9.95\% \times \dfrac{182}{360}\right\}\right)}$$

$$= \frac{23888}{\{1 + 0.05030\}}$$

$$= \text{Rs. } 22,743.5$$

Hence, the net profit to the bank is Rs. 22,743.5 – Rs. 4,929 = Rs. 17,814.5.

Besides being used as a hedging vehicle, FRA can be used by banks to arbitrage against futures or swaps or cash deposits.

The FRA market tends to be limited as parties are exposed to more risk than parties to a future contract. Hence, generally institutions with strong credit undertake FRA contracts.

Participants in the IRS/FRA Market

Scheduled commercial banks (excluding regional rural banks), primary dealers, and all-India financial institutions are free to undertake FRAs/IRS as a product for their own balance sheet management or for market making. Banks/ financial institutions/primary dealers can also offer these products to corporates for hedging their balance sheet exposures. Now mutual funds are permitted to undertake FRAs/IRS. The forward rate hedging facility provides fund managers an opportunity to insulate income schemes from interest rate fluctuation. This, in turn, helps in protecting the returns to investors in a volatile interest rate scenario.

No specific permission from the Reserve Bank is required to undertake FRAs/IRS. However, when undertaking such transactions participants are required to inform the monetary policy department (MPD) and the Reserve Bank.

Guidelines Relating to IRSs/FRAs

Banks/primary dealers/financial institutions can undertake different types of plain vanilla FRAs/IRS. Swaps having explicit/implicit option features such as caps/floors are not permitted.

No benchmark rate, size and tenor have been specified in the guidelines but the Reserve Bank has left market forces to evolve a benchmark and healthy conventions and practices. The Reserve Bank has not imposed any ceiling on the minimum or maximum size of the notional principal of FRAs and IRSs. The tenor of the transactions should not exceed their underlying rupee exposure. Participants are allowed, occasionally, to undertake market making activity without subjecting themselves to underlying exposure. Before undertaking such an activity, they are expected to ensure that the necessary infrastructure and risk management systems are satisfactory.

The CCIL developed a reporting platform for OTC Interest Rate Derivatives, which would capture the transactions in OTC interest rate derivatives [Interest Rate Swaps and Forward Rate Agreement (IRS/FRA)]. The platform was operationalised on August 30, 2007. All banks and PDs have to report all their IRS/FRA trades on the reporting platform within 30 minutes from the deal time.

The participation in the market is restricted mainly to a few foreign and private sector banks, primary dealers and all India financial institutions. Most of the IRS/FRA deals have taken place with overnight rates as benchmarks.

The IRS/FRA market is still nascent in India. The Reserve Bank has introduced some measures to bring about growth in the popularity of these instruments. The measures include allowing market participants to use interest rates implied in the foreign exchange forward market as a benchmark in addition to the existing domestic money and debt market rates.

Inspite of all the measures, however, the market in these derivative instruments has not taken off as anticipated. Factors which inhibit the growth of the money market derivative instruments are as follows.

1. Lack of awareness and perception of derivative instruments as risky keeps away many participants from utilising them for their own benefit.
2. The cost of time and resources associated with the search for a suitable swap candidate and negotiating swap terms is high.
3. Only a few private sector and foreign banks are active in this market. Most banks prefer statutory compliance in asset-liability management rather than being proactive.
4. Lack of development of proper benchmark rates has hindered the growth of this market. Most participants rely on overnight Mibor rates as benchmark rates; this has led to a large number of deals of maturity of less than one year and only a few deals for one or more than one year maturity.
5. A vibrant term money market is a precondition for the success of this market. A developed term money market can give a series of rational benchmarks but it is yet to grow.

To develop a healthy market for derivatives, there should be enough participants to provide depth and sufficient liquidity and effort should be made to develop term benchmark rates. Banks and Foreign Exchange Dealers' Association of India (FEDAI) should organise workshops to increase the awareness of the use of these products. Banks and insurance companies should be encouraged to participate actively in this market.

Introduction of New Derivative Instruments

Exchange-traded interest rate futures were launched on April 28, 2003 by the NSE and the BSE. Interest rate futures (IRF) contracts are tools for managing interest rate risk.

Interest Rate Futures Exchange-traded interest rate futures were introduced in June 2003. Interest rate futures are standardised forward contracts on a benchmark interest rate traded on a stock exchange. It allows players to trade on future rate movements and hedge underlying positions. A market participant which expects the interest rate to fall will go short on future and take a long position if the view is otherwise. The major participants in these transactions are banks, mutual funds, foreign institutional investors and bond brokers. Interest rate futures help banks in hedging their exposures, as they borrow for a short tenor and lend for long-term. Moreover, interest rate futures helps in price discovery and in evolving a better term structure. Trading in interest rate futures helps widen the underlying cash market and increase the maturity profile of government securities.

The NSE introduced futures on a notional 10-year government security 3-month treasury bill and a 10-year government zero coupon in June 2003.

Interest rate futures were discontinued by the NSE as many problems surfaced which led to a lack of interest in this product.

- Banks are allowed to use interest rate futures only for hedging their underlying government securities portfolio.
- The zero coupon yield curve (ZCYC) methodology adopted by the NSE for settlement of contracts is not an appropriate methodology. The ZCYC is a curve that depicts interest rate changes at various points in the term structure. Presently, the ZCYC takes into account the daily traded government securities and not the liquidity aspect. Less than 25 per cent are liquid as only 35–40 bonds are traded every day. And calculating discount factors using the ZCYC which factors in all bonds traded for the day, leads to error in yields as compared to market yields of government securities with similar maturity.
- The short end of the ZCYC has shown severe volatility, which renders any hedge position constituted using exchange traded interest rate futures ineffective.
- Gross market yields are touching new lows everyday making no sense to trade, even for hedgers, it makes more sense to just hold on to the government securities and do nothing.
- The interest rates have bottomed out and when interest rates increase, trading in interest rate futures will increase.

On January 5, 2004, the SEBI permitted trading of interest rate futures (IRFs) contract on an underlying 10-year coupon bearing notional bond which would be priced on the basis of the yield-to-maturity (YTM) of a basket comprising bonds with maturity ranging from 9 to 11 years. The product was launched by NSE but it did not pick up. The IRS/FRA market has remained an over-the-counter market.

AN OVERVIEW OF THE MONEY MARKET

The development of a money market is a prerequisite for improving the operational effectiveness of the monetary policy. The objective of reforms in the money market was to remove structural liquidities and inefficiencies so as to increase participation and strengthen inter-linkages between the money market segments and other financial markets. This called for the introduction of sophisticated financial instruments and innovations in market prices to ensure liquidity in various segments of the money market and for the development of a short-term yield curve.

A review of the money market development and current efforts for further development show that a base has been created with a variety of products introduced in the market. The treasury bills market has expanded in terms of size and volume of growth. The markets for commercial paper, certificates of deposit, and commercial bills are less liquid. The call money market has not only become more active but the call money rate has also become more volatile in recent years. With the deregulation of interest rates, the rates have emerged as an important mechanism for asset allocation. New indirect tools of managing liquidity like repos and liquidity adjustment facility operations have emerged and are increasingly used by the Reserve Bank. Agencies like the NSE and Reuters have taken the initiative in creating overnight Mibor rates as benchmark/refinance rates. New players such as non-bank entities, foreign institutional investors, primary dealers, satellite dealers, and others have been permitted to operate in the money market. New hedging instruments such as interest rate swaps and forward rate agreements have been introduced to hedge the interest rate risk.

In the second phase of reforms, the Reserve Bank's objective has been to develop a short-term rupee yield curve. To this end, a fourfold strategy has been adopted which includes conducting of LAF operations with a view to keeping short-term interest rates within a corridor, development of the call money market as a pure inter-bank market, rationalisation of the traditional, sector-specific refinance support, and developing the repo market so that non-bank participants get an access to this market.

Inspite of an increase in the number of instruments and players and the recent efforts as mentioned above, the money market has not acquired the required depth in terms of volume and liquidity. Partly, it was the Reserve Bank's policy which inhibited the growth of the money market. The Reserve Bank's decisions of banning repos after the securities scam of 1992, resorting to a tight monetary policy during the busy season credit policy of 1995, and defending the rupee in the wake of the South-east Asian crisis took a severe toll on the money markets and the institutions that operate in it.

Besides this, there was delay in the technological upgradation of the money market. Technology is a prerequisite for the development of financial markets. The establishment of the VSAT network and electronic dealing system will go a long way in expanding the market and help in bringing about transparency.

The money market cannot be liquid and deep without the necessary instruments to hedge the risk. The derivative market cannot flourish without a deep and liquid money market. This calls for the following measures.

- Development of a transparent benchmark.
- Development of term money market which will help in the development of benchmark inter-bank term money market rate which is vital for integrating money and foreign exchange markets.
- Development of policies that provide incentives for banks and financial institutions to manage risk and maximise profit.
- Increasing secondary market activity in CPs and CDs: In case of CPs, underwriting should be allowed and revolving underwriting finance facility and floating rate CPs should be introduced. In case of CDs, the tenure of those of the financial institutions CDs should be rationalised. Moreover, floating rate CDs can be introduced.
- Rationalisation of the stamp duty structure. Multiple prescription of stamp duty leads to an increase in the administrative costs and administrative hassles.
- Change in the regulatory mindset of the Reserve Bank by shifting the focus of control from quantity of liquidity to price which can lead to an orderly development of money market.
- Good debt and cash management on the part of the government which will not only be complementary to the monetary policy but give greater freedom to the Reserve Bank in setting its operating procedures.

KEY TERMS

Money market, Treasury Bills, Call/Notice Money Market, Commercial Paper, Certificates of Deposit, Commercial Bills, Auctions, Multiple-price Auction, Uniform-price Auction, Competitive Bids, Non-competitive Bids, Implicit Yield at Cut-Off Prices, Call Rates, Term Money Market, Cash Reserve Ratio, Statutory Liquidity Ratio, Prime Lending Rate, Bank Rate, Liquidity Adjustment Facility, Repos, Reverse Repos, Interest Rate Swaps, Forward Rate Agreements.

SUMMARY

1. The money market is a market for financial assets that are close substitutes for money. It is a market for overnight to short-term funds and instruments having a maturity period of one or less than one year.
2. A money market provides a balancing mechanism to even out the demand for and supply of short-term funds, a focal point for central bank intervention for influencing liquidity and general level of interest rates in the economy, and reasonable access to suppliers and users of short-term funds to fulfill their borrowings and investment requirements at an efficient market clearing price.
3. The instruments traded in the Indian money market are treasury bills (T-bills), call/notice money market—call (overnight) and short notice (up to 14 days), commercial papers (CPs), certificates of deposits (CDs), commercial bills (CBs), and collateralised borrowing and lending obligations (CBLOs).
4. Treasury bills are short-term instruments issued by the Reserve Bank on behalf of the government to tide over short-term liquidity shortfalls. There are three categories of T-bills: on-tap bills, ad hoc bills, and auctioned T-bills. The development of T-bills is at the heart of the growth of the money market. The Reserve Bank of India, banks, mutual funds, financial institutions, primary dealers, provident funds, corporates, foreign banks, and foreign institutional investors are all participants in the T-bills market. The state governments can invest their surplus funds as non-competitive bidders in T-bills of all maturities. The sale of T-bills is conducted through an auction. At present, there are two types of T-bills: 91-day and 364-day. There are two types of auctions: (i) multiple-price auction and (ii) uniform-price auction.
5. A commercial paper is an unsecured short-term promissory note, negotiable and transferable by endorsement and delivery with a fixed maturity period. It is generally issued at a discount by the leading creditworthy and highly rated corporates to meet their working capital requirements.
6. Commercial bill is a short-term, negotiable, and self-liquidating instrument with low risk. It enhances the liability to make payment on a fixed date when goods are bought on credit. In India, the bill market did not develop due to (i) the cash-credit system of credit delivery where the onus of cash management rests with banks and (ii) an absence of an active secondary market.
7. Certificates of deposit are unsecured, negotiable, short-term instruments in bearer form, issued by commercial banks and development financial institutions. CDs are issued by banks during periods of tight liquidity, at relatively high interest rates.
8. Comparing the outstanding amount in case of both CD and CP, there is an inverse relationship between the two. When the outstanding amount of CD increased, the outstanding amount of CP decreased.
9. Call/notice money market is by far the most visible market as the day-to-day surplus funds, mostly of banks, are traded there. The call money market is a market for very short-term funds repayable on demand and with a maturity period varying between one day to a fortnight. Commercial banks borrow money from other banks to maintain a minimum cash balance known as cash reserve requirement (CRR).
10. The interest rate paid on call loans is known as the 'call rate.' It is a highly volatile rate. In India, the money and credit situation is subject to seasonal fluctuation every year. The volume of call money transactions and the amount as well as call rate levels characterise seasonal fluctuation/volatility. A decrease in the call/notice money requirement is greater in the slack season (mid-April to mid-October) than in the buy season (mid-October to mid-April).
11. A four-phased exit of non-bank institutions from the call money market commenced from May 5, 2001. With effect from August 6, 2005, non-bank participants, except PDs, were completely phased out from the call/notice money market.
12. A term money market is one where funds are traded upto a period of three to six months. The term money market in India is still not developed.
13. CBLO operates under a guarantee from the CCIL. CCIL members open constituent SGL (CGSL) account with the CCIL for depositing securities, which are offered as collateral for borrowing purposes. The borrowing limits are fixed on the basis of market value of the securities deposited in the account. Similarly, borrowers can avail of funds to the extent of the marked-to-market value of securities offered as collateral. The usual tenor for trading in the bonds is between overnight to fourteen days, though technically the maturity can extend upto one year.
14. MMMFs bridge the gap between small individual investors and the money market. MMMF mobilises savings from small investors and invests them in short-term debt instruments or money market instruments.
15. The Reserve Bank seeks to influence monetary conditions through management of liquidity by operating in varied instruments. These instruments can be categorised as direct and indirect market-based instruments.
16. The management of liquidity is essentially through direct instruments such as varying cash reserve requirements, limits on refinance, administered interest rates, and qualitative and quantitative restrictions on credit. The Reserve Bank also influences monetary conditions through market-based, indirect instruments such as open market operations and refinance (standing facilities)/discount (market-based discount windows)/repo windows.
17. Reserve requirements are of two types: (i) cash reserve requirements (CRR) and (ii) statutory liquidity ratio (SLR). They are techniques of monetary control used by the Reserve Bank to achieve specific macro-economic objectives. The CRR refers to the cash that banks have to maintain with the Reserve Bank as a certain percentage of their total demand and time liabilities (DTL) while SLR refers to the mandatory investment that banks have to make in government securities.
18. The prime lending rate (PLR) is the minimum lending rate charged by the bank from its best corporate customers or prime borrowers. Prime lending rates have been deregulated gradually since April 1992 and the interest rate structure for commercial banks simplified. The six categories of lending rates were reduced to four in April 1992 and to three in April 1993.
19. The rate of discount fixed by the central bank of the country for the rediscounting of eligible paper is called the bank rate. It is also the rate charged by the central bank on advances on specified collateral to banks.
20. Currently, there are only two refinance schemes available to banks—export credit refinance and general refinance.
21. LAF (Liquid Adjustment Facility) is operated through repos and reverse repos. The LAF is a tool of day-to-day liquidity management through the absorption or injection of liquidity by way of sale or purchase of securities followed by their repurchase or resale under the repo/reverse repo operations. It provides a mechanism for injection and absorption of liquidity available to banks and to overcome mismatches in supply and demand from time to time.
22. Repo is a transaction in which the borrower gets funds against the collateral of securities placed with the lender. The maturity period of repos range from 1 to 14 days. At maturity, the securities revert to the borrower, after he repays the dues. Since repos are market-based instruments, they can be utilised by central banks as an indirect instrument of monetary control for absorbing or injecting short-term liquidity. Repos help maintain an equilibrium between demand and supply of short-term funds. The repos market serves as an equilibrium between the money market and securities market and provides liquidity and depth to both the markets. The repo rate, along with the CRR and bank rate, emerged as important tool of liquidity and monetary management.

23. An interest rate swap (IRS) is a financial contract between two parties, exchanging or swapping a stream of interest payments for a notional principal amount during a specified period. Such a contract involves exchange or swapping of a 'fixed to floating' or 'floating to fixed' interest rate. If participants feel that rates will fall, they could receive fixed and pay floating rates. The converse is beneficial if interest rates rise.
24. A forward rate agreement (FRA) is a financial contract between two parties where the interest at a predetermined rate for a notional principal amount and for a specified period is exchanged at the market interest rate prevailing at the time of settlement. The market interest rate is an agreed benchmark/reference rate prevailing on the settlement date. In India, the NSE/Reuters Mibor is used as a reference rate.
25. The number of contracts and the notional amount in case of both IRSs and FRAs has increased tremendously.

REVIEW QUESTIONS

1. What is a money market? What steps have been taken to develop the Indian money market?
2. 'Treasury bills are an important short term source of finance for the government.' Discuss.
3. Compare certificates of deposit and commercial Papers?
4. Why has the commercial bills market not developed in India?
5. What steps have been taken to curb the call money market volatility?
6. What are repos? State the different types of repos. How does the Reserve Bank use repos as a tool for managing liquidity in the money market?
7. 'The market for interest rate swaps and forward rate agreements have not grown at the anticipated pace.' Discuss.
8. What is Market Stabilisation Scheme? Why was it introduced by RBI?
9. What is Liquidity Adjustment Facility and what are its objectives? State the tools of LAF?
10. What is CRR? What is the implication of a cut in CRR? What is the indication of a hike in CRR?
11. Discuss the link between monetary policy and money market?
12. What is CBLO? How has it emerged as a predominant segment in money market?
13. What are the prudential limits laid down by the RBI for transactions in the call money market by banks?
14. State the link between call money market and other financial markets?
15. Write short notes on
    a. Certificate of Deposit
    b. Commercial paper
    c. Treasury bills
16. Which sectors are relatively immune to interest rate shifts?
17. Which sectors are affected by interest rate changes?

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5

The Capital Market

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Functions of the capital market*
2 *Primary capital market and secondary capital market*
3 *History of the Indian capital market*
4 *Capital market scams*
5 *Reforms in the capital market*

INTRODUCTION

The capital market is an important constituent of the financial system. It is a market for long-term funds—both equity and debt—and funds raised within and outside the country.

The capital market aids economic growth by mobilising the savings of the economic sectors and directing the same towards channels of productive use. This is facilitated through the following measures.

- Issue of 'primary securities' in the 'primary market,' i.e., directing cash flow from the surplus sector to the deficit sectors such as the government and the corporate sector.
- Issue of 'secondary securities' in the primary market, i.e., directing cash flow from the surplus sector to financial intermediaries such as banking and non-banking financial institutions.
- 'Secondary market' transactions in outstanding securities which facilitate liquidity. The liquidity of the stock market is an important factor affecting growth. Many profitable projects require long-term finance and investment which means locking up funds for a long period. Investors do not like to relinquish control over their savings for such a long time. Hence, they are reluctant to invest in long gestation projects. It is the presence of the liquid secondary market that attracts investors because it ensures a quick exit without heavy losses or costs.

Hence, the development of an efficient capital market is necessary for creating a climate conducive to investment and economic growth.

Functions of a Capital Market

The functions of an efficient capital market are as follows.

- Mobilise long-term savings to finance long-term investments.
- Provide risk capital in the form of equity or quasi-equity to entrepreneurs.
- Encourage broader ownership of productive assets.
- Provide liquidity with a mechanism enabling the investor to sell financial assets.
- Lower the costs of transactions and information.
- Improve the efficiency of capital allocation through a competitive pricing mechanism.
- Disseminate information efficiently for enabling participants to develop an informed opinion about investment, disinvestment, reinvestment, or holding a particular financial asset.
- Enable quick valuation of financial instruments—both equity and debt.
- Provide insurance against market risk or price risk through derivative trading and default risk through investment protection fund.
- Enable wider participation by enhancing the width of the market by encouraging participation through networking institutions and associating individuals.
- Provide operational efficiency through
  - simplified transaction procedures;
  - lowering settlement timings; and
  - lowering transaction costs.

- Develop integration among
  - real and financial sectors;
  - equity and debt instruments;
  - long-term and short-term funds;
  - long-term and short-term interest costs;
  - private and government sectors; and
  - domestic and external funds.
- Direct the flow of funds into efficient channels through investment, disinvestment, and reinvestment.

Primary Capital Market and Secondary Capital Market

The capital market comprises the primary capital market and the secondary capital market.

- The primary market is a market for new issues, while the secondary market is a market where outstanding or existing securities are traded

Primary Market This refers to the long-term flow of funds from the surplus sector to the government and corporate sector (through primary issues) and to banks and non-bank financial intermediaries (through secondary issues). Primary issues of the corporate sector lead to capital formation (creation of net fixed assets and incremental change in inventories). The capital formation function enables companies to invest the proceeds of a primary issue in creating productive capacities, increasing efficiency, and creating jobs which, in turn, generate wealth.

The nature of fund-raising is as follows.

Domestic	
Equity issues by	— Corporates (primary issues)
	— Financial intermediaries (secondary issues)
Debt instruments by	— Government (primary issues)
	— Corporates (primary issues)
	— Financial intermediaries (secondary issues)
External	
Equity issues through issue of	— Global Depository Receipts (GDR) and American Depository Receipts (ADR)
Debt instruments through	— External Commercial Borrowings (ECB)
Other External Borrowings	
Foreign Direct Investments (FDI)	— in equity and debt form
Foreign Institutional Investments (FII)	— in the form of portfolio investments
Non-resident Indian Deposits (NRI)	— in the form of short-term and medium-term deposits

The **fund-raising in the primary market** can be classified as follows.

- Public issue by prospectus
- Private placement
- Rights issues
- Preferential issues

Foreign Direct Investment (FDI) and Foreign Institutional Investment (FII)

FDI is an investor which picks up more than 10 per cent stake in a company's equity. India has had a long experience with FDIs, with multinational corporations being significant players in many sectors of the economy−pharmaceuticals, consumer durables, fast moving consumer goods, engineering, and financial services. The sectors which were recently opened up for FDIs are telecom, banking and insurance. These multinational corporations either set up their wholly owned subsidiary in India or enter into a joint venture with Indian entrepreneurs. FDI is a preferred route to bridge the large savings−investment gap owing to its beneficial effects such as access to modern technologies and export markets, and direct and indirect employment reaction. However, FDI crowds out domestic investment opportunities and hence some conditions in the form of minimum level of local content, export commitment, technology transfer, and compulsory listing on the local stock-exchanges are generally imposed on FDIs. FDIs are stable by nature as they usually come into the picture only for long-term projects. They also help generate employment and bring in the latest technological innovations.

The government aims to attract FDI worth $150 billion over the next 10 years, with a thrust on infrastructure, financial services and agriculture. This will be possible only if there is a stability of policies, tax laws and incentives and a minimum of red tape and a corruption-free environment. The government has set up an investment commission to identify the problems of the potential investors and advise the government.

The government has revised FDI caps to 100 per cent in airports, power trading, petroleum marketing, distillation and brewing of potable alcohol, captive mining in coal and lignite, industrial explosives, and hazardous chemicals. Investment in these areas would no longer require the approval of the Foreign Investment Promotion Board.

FIls are in the form of portfolio investments both in the primary and secondary capital markets. They help in bridging the short-to medium-term savings–investment gap. FII flows help capital formation either by subscribing to quality issues in the primary market or by releasing the existing pool of risk capital through the secondary market. FIIs can invest only upto 24 per cent in a company. Further investments would need special approval from the company's board and in any case cannot go beyond the foreign investment cap for the sector set by the government. FIIs usually help in developing capital markets. Entrepreneurs can tap the capital market by wooing FIIs and can thereby setup new projects or use the funds for expansion. However, FII investment may not be stable as there can be sudden outflows, if capital markets perform adversely, or are expected to perform negatively.

Secondary Market

- Facilitates liquidity and marketability of securities
- Provides valuation of securities
- Reduces cost of capital
- Enables price discovery
- Creates a wealth effect

The Secondary Market This is a market for outstanding securities. An equity instrument, being an eternal fund, provides an all-time market while a debt instrument, with a defined maturity period, is traded at the secondary market till maturity. Unlike primary issues in the primary market which result in capital formation, the secondary market facilitates only liquidity and marketability of outstanding debt and equity instruments. The secondary market contributes to economic growth by channelising funds into the most efficient channel through the process of disinvestment to reinvestment. The secondary market also provides instant valuation of securities (equity and debt instruments) made possible by changes in the internal environment, i.e., through companywide and industrywide factors. Such a valuation facilitates the measurement of the cost of capital and rate of return of economic entities at the micro level. Secondary markets reduce the cost of capital by providing liquidity, price discovery and risk transfer capability. Liquidity is the ability to buy or sell an asset readily at a low cost and without a substantial impact on its price. Price discovery is the process whereby market participants attempt to find an equilibrium price which, in turn, is useful in making economic decisions. Both the government and business firms use this information to formulate future strategies. For instance, the derivatives trading reveals expected future prices of different commodities, currencies, precious metals, securities, and interest rates. Based on this information, both the government and business firms determine particulars like pricing commitments, timing of issues and expansion of production facilities.

The secondary market creates a wealth effect. The bull run in the stock markets adds to the market capitalisation which notionally accrues to all investors–government, corporates, promoters, strategic holders of equity on listed companies, mutual funds and individual investors and it makes them feel wealthier. Investors also feel rich when they receive frequent dividend distribution from mutual funds or corporates. This stock market created wealth does influence consumption and growth of the economy. The wealth effect suggests that an addition in financial wealth boosts consumer spending in the long run.

The Indian secondary market can be segregated into two.

1. The secondary market for corporates and financial intermediaries. For trading in issues of corporates and financial intermediaries, there are the following entities.
   a. Recognised stock exchanges
   b. The National Stock Exchange of India Limited (NSE)
   c. The Over the Counter Exchange of India (OTCEI)
   d. The Interconnected Stock Exchange of India (ISE).

   The participants in this market are registered brokers—both individuals and institutions. They operate through a network of sub-brokers and sub-dealers and are connected through an electronic networking system.
2. The secondary market for government securities and public sector undertaking bonds. The trading in government securities is basically divided into the short-term money market instruments such as treasury bills and long-term government bonds ranging in maturity from 5 to 20 years.

   The main participants in the secondary market for government securities are entities like primary dealers, banks, financial institutions, and mutual funds.

The secondary market transactions in government securities have been conducted through the subsidiary general ledger (SGL) since September 1994. Both the government securities and public sector undertaking bonds are now traded in the wholesale debt market (WDM) segment of the NSE, the BSE, and the OTCEI.

HISTORY OF THE INDIAN CAPITAL MARKET

The history of the capital market in India dates back to the eighteenth century when the East India Company securities were traded in the country. Until the end of the nineteenth century, securities trading was unorganised and the main trading centres were Bombay (now Mumbai) and Calcutta (now Kolkata). Of the two, Bombay was the chief trading centre wherein bank shares were the major trading stock. During the American Civil War (1860–61), Bombay was an important source of supply for cotton. Hence, trading activities flourished during the period, resulting in a boom in share prices. This boom, the first in the history of the Indian capital market, lasted for nearly half a decade. The bubble burst on July 1, 1865, when there was a tremendous slump in share prices.

Trading was at that time limited to a dozen brokers; their trading place was under a banyan tree in front of the Town Hall in Bombay. These stock brokers organised an informal association in 1875—the Native Shares and Stock Brokers Association, Bombay. The stock exchanges in Calcutta and Ahmedabad, also industrial and trading centres, materialised later. The Bombay Stock Exchange was recognised in May 1927 under the Bombay Securities Contracts Control Act, 1925.

The capital market was not well-organised and developed during the British rule because the British government was not interested in the economic growth of the country. As a result, many foreign companies depended on the London capital market for funds rather than on the Indian capital market.

In the post-independence era also, the size of the capital market remained small. During the first and second five year plans, the government's emphasis was on the development of the agricultural sector and public sector undertakings. Public sector undertakings were healthier than private undertakings in terms of paid-up capital but their shares were not listed on the stock exchanges. Moreover, the Controller of Capital Issues (CCI) closely supervised and controlled the timing, composition, interest rates, pricing, allotment, and floatation costs of new issues. These strict regulations demotivated many companies from going public for almost four and a half decades.

In the 1950s, Century Textiles, Tata Steel, Bombay Dyeing, National Rayon, and Kohinoor Mills were the favourite scrips of speculators. As speculation became rampant, the stock market came to be known as the *satta bazaar*. Despite speculation, non-payment or defaults were not very frequent. The government enacted the Securities Contracts (Regulation) Act in 1956 to regulate stock markets. The Companies Act, 1956 was also enacted. The decade of the 1950s was also characterised by the establishment of a network for the development of financial institutions and state financial corporations.

The 1960s was characterised by wars and droughts in the country which led to bearish trends. These trends were aggravated by the ban in 1969 on forward trading and *badla,* technically called 'contracts for clearing'. *Badla* provided a mechanism for carrying forward positions as well as for borrowing funds. Financial institutions such as LIC and GIC helped revive the sentiment by emerging as the most important group of investors. The first mutual fund of India, the Unit Trust of India (UTI) came into existence in 1964.

In the 1970s, *badla* trading was resumed under the guise of 'hand-delivery contracts—a group.' This revived the market. However, the capital market received another severe setback on July 6, 1974, when the government promulgated the Dividend Restriction Ordinance, restricting the payment of dividend by companies to 12 per cent of the face value or one-third of the profits of the companies that can be distributed as computed under Section 369 of the Companies Act, whichever was lower. This led to a slump in market capitalisation at the BSE by about 20 per cent overnight and the stock market did not open for nearly a fortnight. Later came a buoyancy in the stock markets when the multinational companies (MNCs) were forced to dilute their majority stocks in their Indian ventures in favour of the Indian public under FERA in 1973. Several MNCs opted out of India. One hundred and twenty-three MNCs offered shares worth Rs. 150 crore, creating 1.8 million shareholders within four years. The offer prices of FERA shares were lower than their intrinsic worth. Hence, for the first time, FERA dilution created an equity cult in India. It was the spate of FERA issues that gave a real fillip to the Indian stock market. For the first time, many investors got an opportunity to invest in the stocks of such MNCs as Colgate, and Hindustan Lever Limited. Then, in 1977, a little-known entrepreneur, Dhirubhai Ambani, tapped the capital market. The scrip, Reliance Textiles, is still a hot favourite and dominates trading at all stock exchanges.

The 1980s witnessed an explosive growth of the securities market in India, with millions of investors suddenly discovering lucrative opportunities. Many investors jumped into the stock markets for the first time. The government's liberalisation process initiated during the mid-1980s, spurred this growth.

Participation by small investors, speculation, defaults, ban on *badla,* and resumption *of badla* continued. Convertible debentures emerged as a popular instrument of resource mobilisation in the primary market. The introduction of public sector bonds and the successful mega issues of Reliance Petrochemicals and Larsen and Toubro gave a new lease of life to the primary market. This, in turn, enlarged volumes in the secondary market. The decade of the 1980s was characterised by an increase in the number of stock exchanges, listed companies, paid-up capital, and market capitalisation.

The 1990s will go down as the most important decade in the history of the capital market of India. Liberalisation and globalisation were the new terms coined and marketed during this decade. The Capital Issues (Control) Act, 1947 was repealed in May 1992. The decade was characterised by a new industrial policy, emergence of the SEBI as a regulator of the capital market, advent of foreign institutional investors, euro-issues, free pricing, new trading practices, new stock exchanges, entry of new players such as private sector mutual funds and private sector banks, and primary market boom and bust.

Major capital market scams took place in the 1990s. These shook the capital market and drove away small investors from the market. The securities scam of March 1992 involving brokers as well as bankers was one of the biggest scams in the history of the capital market. In the subsequent years owing to free pricing, many unscrupulous promoters, who raised money from the capital market, proved to be fly-by-night operators. This led to an erosion in the investors' confidence. The M S Shoes case, one such scam which took place in March 1995, put a break on new issue activity.

The 1991–92 securities scam revealed the inadequacies of and inefficiencies in the financial system. It was the scam which prompted a reform of the equity market. The Indian stock market witnessed a sea change in terms of technology and market prices. Technology brought radical changes in the trading mechanism. The Bombay Stock Exchange was subject to nationwide competition by two new stock exchanges—the National Stock Exchange, set up in 1994, and the Over the Counter Exchange of India, set up in 1992. The National Securities Clearing Corporation (NSCC) and the National Securities Depository Limited (NSDL) were set up in April 1995 and November 1996 respectively for improved clearing and settlement and dematerialised trading. The Securities Contracts (Regulation) Act, 1956 was amended in 1995–96 for introduction of options trading. Moreover, rolling settlement was introduced in January 1998 for the dematerialised segment of all companies. With automation and geographical spread, stock market participation increased.

In the late-1990s, Information Technology (IT) scrips dominated the Indian bourses. These scrips included Infosys, Wipro, and Satyam. They were a part of the favourite scrips of the period, also known as 'new economy' scrips, along with telecommunications and media scrips. The new economy companies were knowledge intensive unlike the old economy companies that were asset intensive.

The Indian capital market entered the twenty-first century with the Ketan Parekh scam. As a result of this scam, *badla* was discontinued from July 2001 and rolling settlement was introduced in all scrips. Trading of futures commenced from June 2000, and Internet trading was permitted in February 2000. On July 2, 2001, the Unit Trust of India announced suspension of the sale and repurchase of its flagship US-64 scheme due to heavy redemption leading to a panic on the bourses. The government's decision to privatise oil PSUs in 2003 fueled stock prices. One big divestment of international telephony major VSNL took place in early February 2002. Foreign institutional investors have emerged as major players on the Indian bourses. NSE has an upper hand over its rival BSE in terms of volumes not only in the equity markets but also in the derivatives market.

It has been a long journey for the Indian capital market. Now the capital market is organised, fairly integrated, mature, more global and modernised. The Indian equity market is one of the best in the world in terms of technology. Advances in computer and communications technology, coming together on Internet are shattering geographic boundaries and enlarging the investor class. Internet trading has become a global phenomenon. Indian stock markets are now getting integrated with global markets.

A Brief History of the Rise of Equity Trading in India

July 9, 1875: Native brokers form the Native Share and Stock Brokers' Association in Bombay. Membership fee is Re. 1. The association has 318 members.

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1899: The Bombay Stock Exchange acquires own premises.

1921: Clearing houses are established for settlement of trades as volumes increase.

1923: K. R. P. Shroff becomes the honorary president of the BSE.

1925: The Bombay Securities Contract Control Act (BSCCA) comes into force.

December 1, 1939:	Stock exchange building is acquired.
1943:	Forward trading banned till 1946. Only ready to deliver and hand delivery contracts permitted.
1956:	The Securities Contract Regulation Act drafted on the lines of the BSCCA comes into force.
1957:	The BSE becomes the first exchange in India to get permanent recognition.
1964:	Unit Trust of India (UTI) is born.
April 1, 1966:	K. R. P. Shroff retires and Phiroze J. Jeejeebhoy becomes new chairman.
June 29, 1969:	Morarji Desai bans forward trading.
1973:	Construction of P J Towers, named after late Phiroze Jamshedji Jeejeebhoy, starts.
January 2, 1986:	The BSE Sensex launched as the first stock market index with 1978–79 as the base year.
November 1987:	SBI Mutual Fund launches Magnum Regular Income Scheme.
April 1988:	The Securities and Exchange Board of India (SEBI) set up.
January 1992:	The SEBI given statutory powers.
May 1992:	Harshad Mehta securities scam breaks.
May 27, 1992:	Reliance is the first Indian company to make a GDR issue.
May 30, 1992:	The Capital Issues Control Act, 1947 is repealed.
September 1992:	Foreign institutional investors (FIIs) are permitted to invest in the Indian securities market.
November 1992:	Finance Minister Manmohan Singh inaugurates the Over the Counter Exchange of India.
October 30, 1993:	The first private sector mutual fund, Kothari Pioneer Mutual Fund, begins operations.
1993:	The SEBI bans *badla* trading on the BSE.
June 1994:	NSE commences operations in wholesale debt market segment.
November 1994:	The capital market segment of the NSE goes on stream. Trading is screen-based for the first time in India.
March 1995:	The BSE on-line trading system (BOLT) replaces the open outcry system.
April 1995:	The National Securities Clearing Corporation Limited, India's first clearing corporation is set up.
October 1995:	The NSE overtakes the BSE as the largest stock exchange in terms of volume of trading.
April 1996:	Nifty is born. The National Securities Clearing Corporation Limited commences operations.
November 1996:	The National Securities Depository Limited is created.
February 1997:	The SEBI releases norms for takeovers and acquisitions.
May 1997:	The BSE introduces screen-based trading.
February 1998:	Launch of automated lending and borrowing mechanism (ALBM) on the NSE.
November 1998:	The SEBI recognises the Interconnected Stock Exchange founded by 15 regional stock exchanges. This exchange starts functioning in February 1999.
March 11, 1999:	Infosys Technologies is the first company to be listed on the NASDAQ through a public offering of American Depository Receipts (ADRs).
March 22, 1999:	Central Depository Services (India) promoted by the BSE commences operations.
September 1999:	ICICI is the first Indian company to be listed on the New York Stock Exchange (NYSE).
October 11, 1999:	For the first time in the BSE's history, the Sensex closes above the 5,000 mark at 5,031.78.
January 2000:	The BSE creates a 'Z' category of scrips in addition to A, B1, and B2 comprising scrips that breached or failed to comply with the listing agreement.
February 2000:	Internet trading commences on the NSE. On February 14, 2000, the BSE Sensex hits an all-time high of 6,150. On February 21, the NSE records peak market capitalisation of Rs. 11,94,282 crore.

April 10, 2000:	The Sensex is revamped to include Dr Reddy's Lab, Reliance Petroleum, Satyam Computers, and Zee Telefilms replacing Indian Hotels, Tata Chemicals, Tata Power, and IDBI.
June 2000:	The BSE and the NSE introduce derivatives trading in the form of index futures.
July 9, 2000:	The BSE turns 125.
October 19, 2000:	Wipro lists on the NYSE.
January 22, 2001:	The Borrowing and Lending Securities Scheme (BLESS) launched on the BSE to promote securities lending and borrowing activities.
March 2001:	Ketan Parekh scam breaks. The SEBI suspends all the broker directors of the BSE in relation to the KP scam.
May 2001:	The BSE advises compulsory demat for B2 scrips.
June 2001:	Index options start trading on the NSE.
July 2001:	A SEBI directive bans carry forward. All major securities are moved to rolling settlement. Options of individual scrips start trading on the NSE.
November 9, 2001:	The BSE and the NSE launch futures in individual stocks.

Source: Business Today, January 20, 2002, pp. 62–63.

CAPITAL MARKET SCAMS

Introduction

The post-economic liberalisation era witnessed scams with cyclical regularity in the Indian capital market. The series of scams in the capital market may lead someone to believe that scams and liberalisation are correlated phenomena.

The most infamous scam, known as the 1992 securities scam, was masterminded by Harshad Mehta and other bull operators, not without the connivance and collusion of banks. The consequences were so serious that the BSE remained closed for a month. This was followed by scams by unscrupulous promoters mostly of finance companies who took advantage of free pricing to raise money by price rigging. Such fly-by-night operators jolted both the stock exchange and investors. Besides price rigging, grey market activities were common where the share prices were quoted at a premium before they were listed on the stock exchanges. For instance, a Morgan Stanley Mutual Fund unit worth Rs. 10 was commanding a premium of Rs. 18, i.e., it was quoted at Rs. 28 during the subscription period. In March 1995, another scam known as the M. S. Shoes scam masterminded by an exporter, Pavan Sachdeva, who rigged up prices of shares, leading eventually to a crash. Once again the market had to be closed for three days. In December 1995, the Reliance shares issue—share switching scam—sprung up in which Fair Growth Financial Services, Reliance Industries, and the stock exchange itself were involved. The Bombay Stock Exchange suspended trading in the famous RIL scrip for three days.

C. R. Bhansali, a chartered accountant, shook the country's financial system in May 1997. He identified weaknesses in the regulatory framework of the country's financial system. By trimming the balance sheets of CRB capital markets, he positioned his company as a unique financial organisation with excellent prospects. This created for him an almost unlimited supply of deposits with high interest rates on the one hand, and provided him leverage to rig prices in the market on the other. The investors were lured to part with their money and risk their future.

Price rigging became a recurring ailment of the Indian capital market. This is clearly evident from the fact that, in 1998, the technique of price rigging was successfully applied in case of the BPL,Videocon, and Sterlite scrips, which created a payment crisis. Brokers, who acted in concert with Harshad Mehta, had taken large positions in these scrips. As a consequence, these scrips had to be debarred from the market for a couple of years. J. C. Parekh, the then president, and other key members on the board of the BSE were sacked by the SEBI for price rigging and insider trading in this case. The history of insider trading was repeated in March 2001 when Anand Rathi, the then president of the BSE, was caught red-handed and thereafter sacked by the SEBI alongwith six other broker directors. Ketan Parekh, the new big bull, once again exploited the loopholes and the Anand Rathi bear cartel hammered the market. The hammering rocked the stock market once again.

All the scamsters employed common ploys like price manipulation, price rigging, insider trading, cartels, collusion, and nexus among the bankers, brokers, politicians, and promoters. These ploys were successfully engineered and implemented particularly around public issues or mergers. The regulators were so ineffective that actions were undertaken only after the investors were looted of their hard-earned money. The ignorance of investors and greed for quick money made the scamsters' job all the more easy. Post-scam inquiries are still being carried on.

In this chapter, the first scam in the post-liberalisation era, the 1991–92 securities scam, also known as the Harshad Mehta scam and the 2001 scam, i.e., the Ketan Parekh scam are discussed in detail.

The 1991–92 Securities Scam (The Harshad Mehta Scam)

In 1991, major changes in the government policy led to the emergence of a market-oriented private enterprise economy through the removal of controls.

The economic liberalisation package compelled banks to improve their profitability. With liberalisation, entered the free interest rate regime, which meant that banks had to face interest rate uncertainty. Coupled with this was strict enforcement of the SLR requirements for banks to keep the money supply under control. Hence, public sector banks were forced to undertake more trading in government securities. The increase in interest rates on government securities with a longer period of maturity meant capital loss (depreciation) on the holding of old securities. To partly offset this loss, banks began trading of a new instrument—repos or ready forward. Repo is a means of funding by selling a security held on spot (ready) basis and repurchasing it on a forward basis.

Several banks, including foreign banks, were unwilling to purchase securities for maintaining the SLR because of the risk of depreciation. They preferred ready forward contracts with other banks, which were surplus in securities. These ready forward contracts were turned around every fortnight depending on the banks' deposit figures. Moreover, many banks had purchased public sector bonds which they could not sell due to the coupon rate hike. Many banks then violated the Reserve Bank advice and entered into ready forward deals in PSU bonds.

Repos are legal and versatile instruments but the inter-bank repos in 1991–92 were based on some inside information obtained illegally. This was confirmed by the interim report of the RBI panel on securities, which stated, 'Towards the end of March 1992, the State Bank of India (SBI) had purchased a large quantity of government securities on a ready forward basis one day prior to the date on which the coupon rate of government securities was raised.'

Besides obtaining information illegally, most of the ready forward deals were dubious and facilities like bank receipts (BRs) and SGL forms were misused. Bank receipts which were working smoothly as a mechanism (acknowledgement) for transfer of government securities amongst banks were highly misused. There were fake bank receipts in circulation and there was double counting of BRs, which led to an accelerated growth in money supply. For example, the Bank of Karad, which had an equity base of less than Rs. 1 crore, issued BRs worth more than Rs. 1,000 crore. Standard Chartered Bank, a foreign bank, accepted BRs worth Rs. 200 crore from this bank. These transactions, which were far out of proportion of the banks' own resources, were handled by a handful of brokers. All this was pointed out in the interim report, together with statistics. Of the 57,980 transactions of over Rs. 9,00,000 crore in securities entered into by banks in 14 months from April 1, 1991, a mere 5.26 per cent was made up of outright purchases. More than two-thirds of these transactions were done by four foreign banks. Over 60 per cent of the transactions were carried out through brokers. Nearly 95 per cent of these transactions—worth Rs. 8,58,511 crore, constituted commitments to repurchase or resell securities. In more than 40 per cent of these transactions, the commitments were not documented, but were a mere matter of understanding.

Most banks, with a view to increasing their profits, employed their clients' funds in stocks through their brokers. This they did by offering higher returns through portfolio management.

The stock market index the BSE Sensex—rose by leaps and bounds. Harshad Mehta, by injecting the banks' money into share trading, pushed up prices of selected scrips. Besides the banks' funds, he tapped another source of money—mutual funds. The government was encouraging the creation of mutual funds. These mutual funds, in order to increase their popularity, assured higher returns which led to sizable flow of money to the stock market. Moreover, certain industrialists engaged themselves in 'insider trading' to raise the prices of their shares to prevent hostile takeovers. Brokers, with so much money in their hands, were successful in raising the Sensex by 1,500 points in 15 days.

The boom, which began in July 1991, peaked in April 1992, before the bubble burst. Prices of many scrips such as Apollo Tyres, ACC, Castrol India, East India Hotels, GE Shipping, GNFC, Deepak Fertilisers, and Tata Chemicals shot up three times their usual value in just a year's time. National Housing Bank, Bank of Karad, Metropolitan Cooperative Bank, Standard Chartered Bank, Citibank, Bank of America, ANZ Grindlays Bank, Canbank Financial Services, and many other institutions were involved in the boom.

Between March 1991 and March 1992, the BSE sensitive index rose by more than three-and-a-half times—from 1,168 to 4,285. At the peak level, the market capitalisation of Rs. 3 lakh crore was about half of the GDP as compared to hardly one-fifth of the GDP in the previous year. The market price–earning (P/E) ratio at 55 was not only higher than what it was in many other developing and developed countries but was far in excess of the fundamentals. The monetary size of the securities fraud was estimated to be Rs. 3,542 crore. The Sensex dropped to 3,000 and the BSE was closed for a month when the scam came to light.

The scam highlighted the loopholes in the financial system, unfair trade practices in various instruments, widespread corruption, and wrong policies. The Reserve Bank banned inter-bank repos after the scam and the pace of reforms in the financial sector also increased.

The 2001 Scam (Ketan Parekh Scam)

All over the world, investment in ICE (Information Technology, Communication and Entertainment) shares was the trend. Ketan Parekh colluded with promoters of the new economy (ICE) shares and changed the complexion of the market by buying stock known as K-10 scrips. He succeeded in lifting scrips such as HFCL, Satyam, and Global to international P/E levels.

Parekh's modus operandi was to route orders through his three broking outfits and 40 satellite brokers. He had contacts with brokers in Kolkata and Ahmedabad, who were rewarded with *badla* payments. His source of funds was non-resident Indians and the new private sector banks who accepted shares as collateral. He would pledge shares with banks as collaterals when the share prices were high. Mutual funds and foreign institutional investors, by investing heavily in technology stocks, helped KP scrips to rise high. He placed shares of Satyam at a premium of Rs. 1,000 with UTI and the shares of HFCL for Rs. 1,400 with mutual funds and foreign institutional investors. Parekh would increase the liquidity of stock when there was a strong demand or buy aggressively if one of the portfolio stocks fell.

The bull run started in May–November 1999 when Parekh started his first major round of trading aggressively in HFCL, Global, Satyam, and Zee scrips. The Sensex rose from 3,378.4 to 4,491 points. The Sensex peaked at 6,100 points before it started falling due to a global meltdown in ICE shares. There was a sharp decline in prices due to factors such as the global economic slowdown, significant market capitalisation erosion at NASDAQ and other leading stock exchanges, and bear hammering on the Indian stock exchanges in sectors such as telecommunication, media, and information technology. The sudden, sharp fall in prices of these scrips resulted in a huge depletion in the margins on shares that were placed as securities with the banks. Consequently, the banks were, on the one hand, obliged to ask Parekh and his associates to either pledge more shares as collateral or return some of the borrowed money, and on the other, they were driven to prop the prices by pumping more money into the capital market. This resulted in a financial crunch for some major bull operators, which led to disputes in the Kolkata Stock Exchange (CSE). The crisis snowballed as the Kolkata brokers took more long positions than Parekh. Trading at Kolkata is 90 per cent unofficial. It is a cash *badla* market where Rs. 1,500–2,000 crore is rolled over every month at 21–30 per cent. As the circumstances developed, *badla* rates shot up to 80 per cent at the Kolkata stock exchange. So, Parekh defaulted on payment to Kolkata brokers which resulted in a payment crisis between March 12–17, 2001.

Seventy CSE brokers defaulted as the exchange plunged into crisis. The bear cartel on the BSE, which was bear hammering the market with inside information, was caught red-handed by the SEBI which suspended all seven broker members from the BSE governing board.

Ketan Parekh desperately borrowed huge sums from the Ahmedabad-based Madhavpura Mercantile Cooperative Bank (MMCB). The bank issued pay orders running into crores of rupees without receiving cash payment or collateral from Parekh. Pay orders are instruments issued between branches of a bank in one place. They are issued after the issuing bank collects the cash or has significant collateral. Hence, the discounting bank is sure of collection. As Parekh colluded with Ramesh Parekh, the chairman of MMCB, the latter issued pay orders without having a sufficient balance in the bank's accounts. The Bank of India (BOI) discounted Rs. 137 crore worth of pay orders which bounced. Ketan Parekh paid only Rs. 7 crore and the BOI went to a criminal court against him. The Reserve Bank specifically prohibits cooperative banks to invest in the stock market or to lend to stockbrokers. However, the latter are free to lend to individuals against a pledge of shares upto Rs. 10 lakh per borrower if the shares are in a physical form and upto Rs. 20 lakh if they are in a dematerialised form. MMCB flouted the norms of the Reserve Bank to earn higher rates of return.

The Crime Branch of India arrested Ketan Parekh on the charge of defrauding the BOI. The BSE Sensex plummeted from a peak of 6,100 points to 3,788.2 on March 30, 2001. The SEBI banned all deferral products, including *badla,* from all stock exchanges.

Comparison of the Harshad Mehta Scam and the Ketan Parekh Scam

The Ketan Parekh scam appears to resemble the Harshad Mehta scam. Both adopted price rigging practices involving banks and mutual funds. Both took advantage of the loopholes and inadequacies in the financial system.

However, both scams are different and the difference lies in the instruments, securities, and the cause. While it was the old economy stocks, bank receipts, and SGL ledger accounts in the Harshad Mehta case, it was new economy stocks and misuse of pay orders in the Ketan Parekh scam. Harshad Mehta exploited public sector banks while Ketan Parekh misused the new private sector and cooperative bank funds. The Harshad Mehta scam indicated that capital market was free from checks and controls while the Ketan Parekh scam indicated that scams could and would occur inspite of checks and controls. The major cause of the crisis in the Ketan Parekh scam was the financial crunch resulting from bear hammering which caused a sharp fall in prices, while in 1992 crisis, the fall was an effect, not the cause of the crisis.

The Harshad Mehta scam was thought to be a bank scam rather than a securities scam as banks and institutions lost several thousand crores of rupees. It was the Harshad Mehta scam that prompted reform of the equity markets whereas the Ketan Parekh scam occurred when equity markets had radically transformed. Repos were banned by the Reserve Bank after the Harshad Mehta scam whereas in case of the Ketan Parekh scam, *badla* transactions were banned along with other deferral products.

Conclusion

This cycle of scams needs to be broken if an orderly development of the capital market for higher economic growth is to take place. It has been observed that regulators, instead of taking corrective measures, precipitate crisis. They have to be proactive instead of reactive. Regulators should develop a market intelligence system, which will give them early warning signals. The real culprits should be given deterrent punishment and there should be strict enforcement of directives and law. The capital market cannot function without the support of the banking system. If both are to survive, remain healthy and vibrant, both should develop an extra measure of self-discipline in the first instance.

REFORMS IN THE CAPITAL MARKET

The 1991–92 securities scam prompted the government to increase the pace of reforms in the capital market. Several reform measures have been undertaken since then in both the primary and secondary segments of the equity market.

The Primary Capital Market

- The Securities and Exchange Board of India (SEBI) was set up in early 1988 as a non-statutory body under an administrative arrangement. It was given statutory powers in January 1992 through the enactment of the SEBI Act, 1992 for regulating the securities market. The two objectives mandated in the SEBI Act are investor protection and orderly development of the capital market.
- The Capital Issues (Control) Act, 1947 was repealed in May 1992, allowing issuers of securities to raise capital from the market without requiring the consent of any authority either for floating an issue or pricing it. Restrictions on right and bonus issues were also removed. The interest rate on debentures was freed. However, the new issue of capital has now been brought under the SEBI's purview and issuers are required to meet the SEBI guidelines for disclosure and investor protection, which are being strengthened from time to time to protect investor interest.
- The infrastructure of the primary capital market has been fairly diversified over the years with the setting up of a large number of merchant bankers, investment and consulting agencies, and registrars to the issue.
- The primary capital market has widened and deepened with public sector banks, financial institutions, and public sector enterprises in the infrastructure and power sectors increasingly raising resources from the market both by way of debt and equity.
- Although the process of institutionalisation of the market on the supply side started in 1987–88 when many mutual funds sponsored by banks and financial institutions were set up, it gained considerable momentum in the early 1990s when many mutual funds were set up in the private sector. There are now 37 mutual funds operating in the country with a total asset base of over Rs. 1 lakh crore.

- The requirement to issue shares at a par value of Rs. 10 and Rs. 100 was withdrawn. This gave companies the freedom to determine a fixed value per share. This facility is available to companies which have dematerialised their shares. Moreover, the shares cannot be issued in the decimal of a rupee. The companies which have already issued shares at Rs. 10 or Rs. 100 per value are also eligible for splitting and consolidating the share values.
- Improved disclosure standards, prudential norms, and simplified issue procedures have been prescribed. Companies are required to disclose all material facts, specific risk factors associated with their projects while launching public issues and give justification for pricing on their prospectus. The offer document is not vetted by the SEBI but a code of advertisement for public issues, for ensuring fair and truthful disclosures has been introduced.
- To reduce the cost of the issue, underwriting by the issuer was made optional, subject to the condition that if an issue was not underwritten and in case it failed to secure 90 per cent of the amount offered to the public, the entire amount so collected would be refunded.
- One of the significant steps towards integrating the Indian capital market with the international capital markets was the permission given to foreign institutional investors such as mutual funds, pension funds, and country funds, to operate in the Indian market. Foreign institutional investors were initially allowed to invest only in equity shares; later, they were allowed to invest in the debt market, including dated government securities and treasury bills. The ceiling for investment by foreign institutional investors was increased from 40 per cent to 49 per cent in 2000–01. This increase can be made with the approval of shareholders through a special resolution in the general body meeting.
- Indian companies have also been allowed to raise capital from the international capital markets through issues of Global Depository Receipts, American Depository Receipts, Foreign Currency Convertible Bonds (FCCBs) and External Commercial Borrowings (ECBs). Companies were permitted to invest all ADR/GDR proceeds abroad. Two-way fungibility was announced for ADRs/GDRs in 2000–01 for persons residing outside India. Converted local shares could be reconverted into ADRs/GDRs while being subject to sectoral caps wherever applicable.
  - Various bottlenecks on the floatation of new capital issues, particularly for infrastructure projects, were removed. Requirements such as making a minimum public offer of 25 per cent of the issue, five shareholders per Rs. 1 lakh of offer, and a minimum subscription of 90 per cent are no longer mandatory for infrastructure companies.
  - With a view to helping infrastructure companies raise funds for their projects, their debt instruments are allowed to be listed on the stock exchanges without prior listing of equity. Corporates with infrastructure projects and municipal corporations are exempted from the requirements of Rule 19(2)(b) of the Securities (Contracts) (Regulation) Act, 1956 to facilitate the public offer and listing of its pure debt instruments as well as debt instruments fully or partly convertible into equity without requirement of prior listing of equity but are subject to conditions such as investment grade rating. The freedom to issue debt security without listing security granted to infrastructure companies and municipal corporations has been extended to all companies. This is subject to certain conditions. Issues below Rs. 100 crore shall carry an investment grade credit rating, issues above Rs. 100 crore shall carry an investment grade credit rating from two credit rating agencies; the issues shall comply with the provisions of Rule 19(2)(b) of the Securities Contracts (Regulation) Act, 1956 regarding the size of the public offer and the promoters shall bring in the equity contribution of 20 per cent and lock in the same for three years.
  - In respect of unlisted companies, the existing requirement of a track record of dividend payment in at least three of the preceding five years for asking an initial public offer (IPO) has been relaxed. Under the new norms, the companies will have to demonstrate an ability to pay dividend instead of showing an actual dividend paying record.
- Merchant bankers are prohibited from carrying on fund-based activities other than those related exclusively to the capital market. Multiple categories of merchant bankers have been abolished and there is only one entity, the merchant banker.
- Besides merchant bankers, various other intermediaries such as mutual funds, portfolio managers, registrars to an issue, share transfer agents, underwriters, debenture trustees, bankers to an issue, custodian of securities, venture capital funds and issues have also been brought under the purview of the SEBI.
- Since 1998–99, banks are permitted within the ceiling of 5 per cent of incremental deposits of the previous year prescribed for banks' investment in shares to (a) sanction bridge loans to companies against expected equity flows/issues for periods not exceeding one year and (b) extend loans to corporates against shares held by them to enable them to meet promoters' contribution to the equity of new companies in anticipation of raising resources. The approval of the bank's board is necessary.

The prescription of the minimum margin of 50 per cent of loans to individuals against preference shares and debentures/bonds of corporate bodies is withdrawn. However, the margin of 50 per cent prescribed in respect of equity shares has been retained. Subsequently, the ceiling amount on advances against shares to individuals was increased from Rs. 10 lakh to Rs. 20 lakh against dematerialised securities while the minimum margin prescription was reduced from 50 per cent to 25 per cent for dematerialised shares.

- A code of conduct on advertisement has been issued for mutual funds, banning them from making any assurance or claims that might mislead the public.
- The entry norms for IPOs have been tightened by modifying the Disclosure and Investor Protection (DIP) guidelines. According to the new guidelines, IPOs five times the size of the pre-issue net worth are allowed only if the company has had a record of profitability and a net worth of Rs. 1 crore in three of the past 15 years. Companies without such a track record or a issue size beyond five times the pre-issue net worth are allowed to make IPOs only through the book-building route, with 60 per cent of the issue to be allotted to qualified institutional borrowers (QIBs). For shares issued on a preferential basis to any person by listing companies, a lock-in period of one year has been stipulated. Infrastructure companies are exempt from the requirement of eligibility norms if the project has been appraised by a public financial institution and not less than 5 per cent of the project cost is being financed by any of the institutions jointly or severally, by way of loans and/or subscription to equity.
- The SEBI DIP (Disclosure and Investor Protection) Guidelines, 2000 have been amended. Permission has been granted to foreign venture capital investors (FVCIs) registered with the SEBI and State Industrial Development Corporations (SIDCs) to participate in public issues through the book-building route as qualified institutional buyers (QIBs). There is no lock-in requirements for the pre-issue capital of an unlisted company held by venture capital funds (VCFs) and FVCIs. Exemption from the public offer requirement in view of a reduction in quantum from 25 per cent to 10 per cent and restriction of a minimum public issue size of Rs. 25 crore in respect of an IPO through the book-building issue have been removed.
- Companies in the IT, telecom, media, and entertainment sectors are allowed to tap the market with a minimum offering of 10 per cent of their equity. All public issues through this route have to satisfy the criterion of a minimum Rs. 100 crore issue size, follow the book-building route with an allocation of 60 per cent to QIBs, and maintain a minimum floating post-listing stock on a continuous basis.
- The issuer can make a public or rights offer of shares in demat form only. Investors have the option of subscribing to securities in either the physical or the dematerialised form.
- Every public-listed company making an IPO of any security for Rs. 10 crore or more is required to make an offer only in a dematerialised form.
- The SEBI prescribed new guidelines for regulating private placement of debt securities issued by the corporates. These guidelines aim to enhance transparency and protect the interest of investors in the debt securities.
- The SEBI introduced the green-shoe option facility in IPOs as a stabilisation tool for the post listing price of newly issued shares.
- The Central Listing Authority was set-up to ensure uniform and standard practices for listing the securities on stock exchanges.
- In 2001, the SEBI guidelines mandated a minimum level of public holding at 25 per cent for companies carrying out with fresh IPOs. Companies in infotech, media, and telecom sector were allowed to go public with a 10 per cent public stake. In order to ensure availability of floating stocks on a continuous basis and maintain uniformity for the purpose of continuous listing, a minimum public share-holding of 25 per cent was prescribed. This minimum 25 per cent public float would not only lead to an increase in the floating stock, but also to a higher public holding or control of shares with investors other than promoters which would make manipulation of stock prices difficult and boost liquidity in the market. According to a capital market study, there are over 136 companies in ‘A’ group alone with less than 25 per cent public float. According to the data provided by the National Stock Exchange, the average public holding in listed companies in India is only 13 per cent. Holding of Indian promoters in contrast is on an average as high as 48 per cent. Companies like Wipro whose public holding is just 6.74 per cent, Bharti Airtel (1.17 per cent), TCS (5.19 per cent), and several state-owned companies such as MMTC (0.02 per cent), ONGC (1.82 per cent), SAIL (2.08 per cent), BHEL (2.23 per cent), and NTPC (2.57 per cent) will be impacted by this move. This fall in public float was on account of a substantial rise in open offers arising from hostile takeover bids and mergers and acquisitions in the last few years; SEBI gave a time frame of two years to

maintain this minimum level. Hence, to increase public stakes, promoters can either offload their existing equity shares in the open market through an offer for sale or issue fresh shares. This move failed to yield results as promoters resisted. In 2008, the government has made it mandatory for all listed firms, which do not have a public shareholding of 25 per cent, to increase their shareholding annually by 3–5 per cent.

- In March 2003, the SEBI introduced sweeping changes in IPO norms to boost investor confidence. It changed the eligibility criteria for IPOs—a track record of distributable profits was replaced by net tangible assets as it felt that profit figures could be fudged. According to the new norms, companies floating IPOs should have net tangible assets of Rs. 3 crore in each of the two preceding two years. Of this, not more than 50 per cent should be held in monetary assets–cash or its equivalent such as securities. It is now mandatory for companies changing their names to ensure that a minimum 50 per cent of the total revenues are derived from the business activity suggested by the new name.
- On March 29, 2005, the SEBI redefined the retail individual investor as one who applies or bids for securities of or for a value not exceeding Rs. 1 lakh. It hiked allocation for retail investors in a book-built issue from 25 per cent to 35 per cent and reduced allocation to high networth individuals (non-institutional) category. The allocation to high net-worth individuals was reduced to 15 per cent from 25 per cent. The market regulator also reduced the bidding period for a book-built issue. The SEBI reduced the bidding period from the current 5–10 days (including holidays) to 3–7 working days. It has given an option to listed issuers to either disclose price band in a red-herring prospectus/ an application form/an abridged prospectus or to disclose the price band/floor price atleast one day before opening of the bid. In order to improve contents and ensure uniformity in data display on the websites of the stock exchanges, the data will be made available for a further period of 3 days after the closure of the bid/issue. The new norms are applicable to all public issues whose offer documents are filed with the SEBI on or after April 4, 2005.
- For issues priced below Rs. 500 per share, the face value of the share should mandatorily be Rs. 10 per share. But if the issue price is Rs. 500 or more, the minimum face value should not go below Re. 1.
- Shares will now be allotted on a proportionate basis within the specified categories, with the predetermined minimum allotment being equal to the minimum application size.
- During 2005–06 SEBI Disclosure and Investor Protection (DIP) Guidelines, 2000 relating to bookbuilding issues were amended to introduce a specific allocation of 5 per cent for mutual funds, proportionate allotment to Qualified Institutional Buyers (QIBs) and margin requirement for QIBs.
- In order to ensure availability of floating stocks on a continuous basis and maintain uniformity for the purpose of continuous listing, a minimum public shareholding of 25 per cent was prescribed by SEBI in case of all listed companies barring a few exceptions.
- To assist the retail investors, SEBI gave in-principle approval for grading of IPOs by the rating agencies at the option of the issuers. SEBI will not certify the assessment made by the rating agencies.
- The disclosure requirements were rationalised during the year. Listed companies which have a satisfactory track record of filing periodic returns with the stock exchanges are exempted from repititive disclosures in case of rights and public issues by them. An issuer company is permitted to make a rights issue by dispatching an abridged letter of offer which shall contain disclosures as required to be given in the case of an abridged prospectus. A listed company can fix and disclose the issue price in case of a rights issue, any time prior to fixing of the record date in consultation with the designated stock exchange and in case of public issue through fixed price rate, at anytime prior to filing of the prospectus with the Registrar of Companies. In order to facilitate additional resource mobilisation, a company is permitted to issue further shares after filing a draft offer document with SEBI, provided full disclosures as regards the total capital to be raised from such further issues are made in the draft offer document.
- The facility of electronic clearing services (ECS) was extended to refunds arising out of public issue so as to ensure faster and hassle free refunds.
- Companies are permitted to take multiple routes to raise capital at the same time, even after a prospectus for an IPO or public offer is filed with the regulator. Companies are now only required to update their prospectus with details about the additional capital being raised through other routes. This new relaxation will help corporates to efficiently plan their capital-raising programmes.
- Venture Capital and private equity forms are barred to sell their stake in a company after its IPO. Now, only those firms that have invested more than a year before the company goes public can sell their shares on listing.
- For public/rights issues of debt instruments, credit rating from one credit rating agency would be sufficient now which had to be done from at least two agencies before. This was done to reduce the cost of issuance of debt instruments.

- Issuance of bonds which are below investment grade will be allowed to the public to suit the risk/return appetite of investors. This was previously required to be of, at least, investment grade.
- In order to enable listed companies to raise equity through rights and follow-on issues in a short span of time, SEBI amended the DIP guidelines. The issues by listed companies are known as fast track issues and there are guidelines for the same which are covered in the next chapter.
- SEBI has allowed companies to give discount of upto 10 per cent to retail investors in public offers. This move would enable companies to obtain a more diversified shareholding and a good response from retail shareholders in a period of dull primary market scenario.
- All investors, including retail investors are allowed to invest in Indian Depository Receipts (IDRs). The minimum investment limit has been reduced from Rs. 2,00,000 to Rs. 20,000.
- SEBI launched an alternate payment system called Applications Supported by Blocked A mount (ASBA) for public and rights issues in August 2008.
- PAN has been mandatory in all public and rights issues irrespective of the application amount. SEBI exempted investors residing in the state of Sikkim from the mandatory requirement of PAN for the purpose of opening/operating Beneficial Owner (BO) accounts with depository participants and trading in cash market, respectively.

Secondary Capital Market

- The open outcry trading system, prevalent till 1995, was replaced by the on-line screen-based electronic trading. In all, 23 stock exchanges have approximately 8,000 trading terminals spread all over the country.
- Three new stock exchanges at the national level were set up in the 1990s. These were: the Over the Counter Exchange of India (1992), the National Stock Exchange of India (1994), and the Interconnected Stock Exchange of India (1999).
- Trading and settlement cycles were uniformly trimmed from 14 days to 7 days in all stock exchanges in August 1996. Rolling settlement (T+5) was introduced in January 1998 for the dematerialised segment of all companies. With effect from December 31, 2001, all scrips have come under rolling settlement. The settlement cycle for all securities was shortened from T+5 to T+3, with effect from April 1, 2002.
- With a view to maintaining integrity and ensuring safety of the market, various risk containment measures have been initiated or strengthened, such as the mark to market margin system, intra-day trading limit, exposure limit, and setting up of trade/settlement guarantee fund. Stock exchanges are allowed, subject to conditions, to use the settlement guarantee funds (SGFs) for meting shortfalls caused by non-fulfillment/partial fulfillment of the obligations by members, before declaring them defaulters. The NSE set up a separate clearing corporation—The National Securities Clearing Corporation—to act as a counter-party to all trades executed in the capital market segment of the exchange.
- To enhance the level of investor protection, the process of dematerialisation of securities through the depository system and their transfer through electronic book entry is pursued vigorously. To enable this, the National Securities Depository Limited was set up in November 1996 and the Central Depository Service Limited in February 1999. All actively traded securities are held, traded, and settled in demat form.
- *Badla*–the carry forward trading mechanism was reinstated in January 1996, with safeguards in line with the recommendations of the Patel Committee (1995) and the Varma Committee (1996). The cash segment was strengthened with measures such as mandatory delivery under negotiated deals, securities lending, and continuous net settlement. All deferral products including *badla* have been discontinued from July 2001 following the scam of March 2001.
- Issuing companies are required to make continuing disclosures under the listing agreement. All listed companies are required to furnish to stock exchanges and also publish unaudited financial results on a quarterly basis. Disclosure of material information, which may have a bearing on the performance/operations of a company, is also required to be made available to the public.
- One of the most significant reforms in the secondary market is the measure to improve corporate governance. Corporate governance is a set of systems and processes designed to protect the interests of stakeholders. It is about commitment to values, ethical business conduct, and a high degree of transparency. It is about creating and enhancing shareholder wealth while protecting the interests of all other stakeholders. The SEBI had appointed a committee under the chairmanship of Kumar Mangalam Birla on corporate governance in India. The committee framed the codes for corporate governance and suggested the implementation of the code through stock exchanges.

- Stock exchanges have also undergone some major structural reforms. The boards of various stock exchanges have been made broad-based so that they represent different interests and not just the interests of their members. Stock exchanges, brokers, and sub-brokers have been brought under the regulatory purview of the SEBI.
- Companies are allowed to buy back their own shares for capital restructuring, subject to the condition that the buy back does not exceed 25 per cent of the paid-up capital and free reserves of the concerned company. This buy back has been allowed to improve liquidity and enhance wealth of the shareholder.
- The insider trading regulations have been formulated prohibiting insider trading and making it a criminal offence, punishable in accordance with the provisions under the SEBI Act, 1992.
- Regulations are also in place for take over and substantial acquisition of shares to make the take over process more transparent and mindful of the interests of small shareholders. In September 2002, the SEBI amended the Takeover Code by accepting the Bhagwati Committee recommendations on takeovers. As per the new code, if an acquirer gains control of over 15 per cent in a company which already owns 15 per cent in another company, the acquirer has to declare open offers for shareholders of both the companies. Also, any change in management control will result in an open offer, even though the equity stake is below 15 per cent. Shareholders can withdraw shares already tendered in an open offer and sell them in the open market or to another acquirer at a higher price. Acquirers now have to disclose their holdings in companies at various levels of acquisitions such as 5 per cent, 10 per cent, and 14 per cent. Once the holding touches the 15 per cent mark, the acquirer then has to make disclosures at every 2 per cent acquisition, thereby ensuring full transparency in acquisition.
- An index-based market wide 'circuit breaker' system has also been introduced to check a sudden rise in security price, in speculation and over-trading. This system becomes active at three stages of the index movements either way, at 10 per cent,15 per cent and 20 per cent. As an additional measure of safety, individual scrips-wise bands of 20 per cent either way can be imposed for all securities except those available for stock options.
- In February 1999, trading terminals were allowed to be set up abroad for facilitating market participation by non-residents. Internet trading was permitted in February 2000.
- For ensuring greater market transparency, SEBI, in 1999, banned negotiated and cross deals (where both the seller and buyer operate through the same broker). Moreover, all private off-market deals in both shares as well as listed corporate debts were banned. So these deals are routed only through trading screens.
- Since June 2000, trading of futures has begun. Both the NSE and the BSE have created proper facilities for derivatives trading, including conducting of regular training programmes for the same. The Securities Contracts (Regulation) Act, 1956 has been amended for introduction of options trading. Trading of index-based and stock-based options started in June and July 2001 respectively while trading of stock-based futures began in November 2001.
- It is mandatory for listed companies to announce quarterly results. This enables investors to keep a close track of the scrips in their portfolios. The declaration of quarterly results is in line with the practice prevailing in the stock markets in developed countries.
- To check price manipulation, mandatory client code and minimum floating stock for continuous listing were stipulated in November 2001.
- The government amended the Securities Contracts (Regulation) Rules, 1957 to standardise listing requirements at stock exchanges.
- A 99 per cent value at risk (VaR) based margin system for all scrips in rolling settlement was introduced from July 2, 2001.
- The central government has notified the establishment of the Investor Education and Protection Fund (IEPF) with effect from October 1, 2001. The IEPF will be utilised for the promotion of awareness amongst investors and protection of their interests.
- The restriction on short sales announced in March 7, 2001, was withdrawn with effect from July 2, 2001, as all deferral products stand banned after that date.
- It is mandatory for all brokers to disclose all details of block deals. Block deals include trading which accounts for more than 0.5 per cent of the equity shares of that listed company.
- With a view to providing greater liquidity in the secondary securities market, the SEBI allowed corporate brokers with a net worth of atleast Rs. 3 crore to extend margin trading facility to their clients in the cash segment of stock exchanges.
- A clearing corporation/clearing house, after registration with the SEBI, under the SEBI scheme for Securities Lending and Borrowing, as an approved intermediary may borrow securities for meeting shortfalls in settlement on behalf of the member.

- The SEBI has made it mandatory for every intermediary, to make an application for allotment of unique identification numbers for itself and for its related persons, under the SEBI (Central Data Base of Market Participants) Regulations, 2003. This move aims to promote up-to-date information about all market participants. This will be made mandatory for investors and companies at a later date.
- Stock exchanges were advised to amend Clause 41 of the Listing Agreement to make it mandatory for listed companies to publish the number of investor complaints received, disposed of, unresolved along with quarterly results.
- Clearing and settlement cycle time was further contracted to T+2 with effect from April 1, 2003.
- With a view to strengthening the position, specifying accountability and protecting the interest of investors, the SEBI defined the roles of the chief executive officer and fund manager of mutual funds. It prescribed a uniform cut-off time for calculating and applying NAVs, both for subscriptions and redemptions. It also prescribed the minimum number of investors in a scheme. Further, it specified that no single investor should hold more than 25 per cent of the corpus of any scheme/plan.
- SEBI allowed mutual funds to invest in derivative securities. They were also permitted to invest upto 10 per cent of the net assets as on January 31 of each year in foreign securities with the limit of minimum US $5 million and maximum of US $50 million.
- Interest rate futures contracts were introduced in June 2003 and futures and options contracts on sectoral indices were introduced in August 2003.
- FIIs and NRIs were permitted to invest in all exchange-traded derivative contracts.
- Stock brokers were allowed to trade in commodity derivatives.
- FIIs were allowed to participate in delisting offers, sponsored ADR/GDR programmes and disinvestment by the government in listed companies.
- In order to facilitate execution of large trades without impacting the market, the stock exchanges were permitted to provide a separate trading window for block deals subject to certain conditions. The BSE and the NSE activated this window with effect from November 14, 2005.
- In order to prevent off-market trades prior to the commencement of trading, the International Securities Identification Numbers (ISINs) of IPOs will be activated by the depositories only on the date of commencement of trading on the stock exchanges.
- The Depositories/DPs cannot levy any charges when a BO transfers all securities lying in his/her account to another branch of the same depository participant (DP) or to another DP of the same depository or another depository, provided the BO accounts at the transferee DP and at transferor DP are one and the same
- In order to protect the interest of minority shareholder, the Securities Contracts (Regulation) Act was amended in 2004 to recognise delisting. The draft delisting rules notified by the department of economic affairs on October 30, 2006 state that stock exchanges will have to compulsorily delist a company if
  - it has suffered losses during the preceding three consecutive years and its net worth has turned negative.
  - trading in its securities has remained suspended for more than six months, or if the securities have been 'infrequently traded' during the preceding three years.
  - it violates SCR Act or Sebi Act or the Depositories Act or rules and regulations thereunder, that warrant a penalty of Rs. 1 crore or less than three years punishment.
  - it vanishes or furnishes false addresses or there is an unauthorised change of registered office.
  - the public shareholding in the company shrinks to below the minimum level prescribed in the listing agreement.

These apart, a company can opt for delisting if it has been listed in a recognised exchange for a minimum period of three years or the delisting has been approved by three-fourth of the shareholders in a general body meeting or the promoters commit to buy the outstanding securities of the minority and non-promoter holders.

SEBI amended the listing agreement in December 2007 to improve the transparency with regard to utilisation of issue proceeds. Any company making a public offer or rights issue of more than Rs. 500 crores has to appoint a monitoring agency to monitor the utilisation of issue proceeds.

From April 21, 2008, all institutional trades in the cash market are margined on a T+1 basis with margin being collected from the custodian upon confirmation of the trade. Subsequently, with effect from June 16, 2008, the collection of margins moved to an upfront basis.

In April 2008, SEBI allowed all classes of investors to short sell subject to a broad framework. SEBI also set up a full-fledged securities lending and borrowing (SLB) scheme for all participants in the market under the overall framework of 'Securities Lending Scheme, 1997'. Naked short selling is not allowed and FIIs are prohibited from day trading.

Comprehensive risk management for the cash market and margining of institutional trades in the cash market have been specified by SEBI. In September 2008, SEBI introduced trading in rights entitlements.

Brokers can offer to their clients an electronic facility known as Direct Market Access Facility (DMA), which enables their clients to place orders directly into an exchange-traded system.

Elements of Market Design in Indian Securities Market, 1992 and 2003

Features 1	*1992* 2	*2003* 3
Regulator	No specific regulator, but central government oversight.	A specialised regulator for securities market (SEBI) vested with powers to protect investors' interest and to develop and regulate securities market. The SROs strengthened.
Intermediaries	Some of the intermediaries (stock brokers, authorised clerks and remisiers) regulated by the SROs.	A variety of specialised intermediaries emerged. They are registered and regulated by the SEBI (Also by the SROs). They as well as their employees are required to follow a code of conduct and are subject to a number of compliances.
Access to Market	Granted by central government.	Eligible issuers access the market after complying with the issue requirements.
Pricing of Securities	Determined by central government.	Determined by market, either by the issuer through fixed price or by the investors through book building.
Access to International Market	No access.	Corporates allowed to issue ADRs/GDRs and raise ECBs. ADRs/ GDRs have two-way fungibility. FIIs allowed to trade in indian market. MFs also allowed to invest overseas.
Corporate Compliance	Very little emphasis.	Emphasis on disclosures, accounting standards and corporate governance.
Mutual Funds	Restricted to public sector.	Open to private sector and emergence of a variety of funds and schemes.
Trading Mechanism	Open outcry, available at the trading rings of the exchanges, opaque, auction/negotiated deals.	Screen-based trading system, orders are matched on price–time priority, transparent, trading platform accessible from all over country.
Aggregation Order Flow	Fragmented market through geographical distance. Order flow unobserved.	Order flow observed. The exchanges have Open Electronic Consolidated Limit Order Book (OECLOB).
Anonymity in Trading	Absent.	Complete.
Settlement System	Bilateral.	Clearing house of the exchange or the clearing corporation is the central counter-party.
Settlement Cycle	14-Day account period settlement, but not adhered to always.	Rolling settlement on a T+2 basis.
Counter-party Risk	Present.	Absent.
Form of Settlement	Physical.	Mostly electronic.
Basis of Settlement	Bilateral netting.	Multilateral netting.
Transfer of Securities	Cumbersome. Transfer by endorsement on security and registration by issuer.	Securities are freely transferable. Transfers are recorded electronically in book entry form by depositories.
Risk Management	No focus on risk management.	Comprehensive risk management system encompassing capital adequacy, limits on exposure and turnover, VaR based margining client-level gross margining, and on-line position monitoring.
Derivatives Trading	Absent.	Exchange-traded futures and options available on two indices and select securities.

Source: Chartered Secretary, April 2004, p. 485.

KEY TERMS

Capital Market, Primary Securities, Primary Market, Secondary Securities, Secondary Market.

SUMMARY

1. The capital market is a market for long-term funds— both equity and debt—and funds raised within and outside the country.
2. The primary market refers to the long-term flow of funds from the surplus sector to the government and corporate sector (through primary issues) and to banks and non-bank financial intermediaries (through secondary issues). Primary issues of the corporate sector lead to capital formation (creation of net fixed assets and incremental change in inventories).
3. The secondary market is a market for outstanding securities. Unlike primary issues in the primary market which result in capital formation, the secondary market facilitates only liquidity and marketability of outstanding debt and equity instruments.
4. The history of the capital market in India dates back to the eighteenth century when East India Company securities were traded in the country. It has been a long journey for the Indian capital market. Now the capital market is organised, fairly integrated, mature, more global and modernised. The Indian equity market is one of the best in the world in terms of technology.

REVIEW QUESTIONS

1. What is a capital market? How does it aid economic growth? What are the functions of the capital market?
2. Compare and contrast the Harshad Mehta and Ketan Parekh scams.
3. List down the major reforms in the primary and secondary capital market.
4. State the differences between FDI and FII?
5. What is primary market? State the nature of fund raising in primary market?
6. How do primary and secondary markets contribute to economic growth?

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6

The Primary Market

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *Fund-raising through prospectus, rights issues, private placement, and preferential issues*
2. *Book building : a new issue mechanism*
3. *Green-Shoe option*
4. *On-line IPOs*
5. *Trends in resources mobilised from the primary market*
6. *Trends in resources mobilised from international capital markets*

INTRODUCTION

The primary market is a market for new issues. It is also called the new issues market. It is a market for fresh capital. Funds are mobilised in the primary market through prospectus, rights issues, and private placement.

Bonus issue is also one of the ways to raise capital but it does not bring in any fresh capital. Some companies distribute profit to existing shareholders by the way of fully paid bonus shares instead of paying them a dividend. Bonus shares are issued in the ratio of the existing shares held. The shareholders do not have to pay for bonus shares but the retained earnings are converted into capital. Thus, bonus shares enable the company to restructure its capital.

Bonus is the capitalisation of free reserves. Higher the free reserves, higher are the chances of a bonus issue forthcoming from a corporate. Bonus issues create excitement in the market as the shareholders do not have to pay for them and in addition, they add to their wealth. A bonus issue results in an increase in the company's equity capital. A 1:1 bonus doubles the company's equity base. A bonus issued by a company indicates management's confidence in strong earnings, growth and maintenance of its present level of dividend rate in the future. Companies issue bonus shares for varied reasons.

- To boost liquidity of their stock: A bonus issue results in expansion of equity base, increasing the number of absolute shares available for trading.
- To bring down the stock price: A high price often acts as a deterrent for a retail investor to buy a stock. The price of a stock falls on becoming ex-bonus because an investor buying shares, ex-bonus is not entitled to bonus shares. For instance, a scrip trading at Rs. 600 cum-bonus with a 1:1 bonus begins trading at around Rs. 300 ex-bonus.
- To restructure their capital, companies with high reserves prefer to issue bonus shares as the issue not only restructures their capital but since they are perceived to be likely candidates for bonus issue by investors, they fulfil the expectation of investors.

In India, new capital issues are floated through prospectus, rights, and private placement by government companies, non-government public limited companies (private sector), public sector undertakings, banks, and financial institutions.

Issues are offered to the public through prospectus and the public subscribes directly. Section 67 of the Companies (Amendment) Act, 2000 provides that where the offer or invitation to subscribe for shares or debentures is made to 50 or more persons, then such an offer or invitation shall be deemed to be a public offering and shall have to comply with all the provisions of the act as well as the SEBI guidelines applicable to such public offerings. Public issues are open to the general public. Wide publicity about the offer is given through the media. In the past, the job of organising public issues was generally entrusted to prominent brokers but that practice has now given way to the appointment of a merchant banker for the purpose.

The direct sale of securities by a company to some select people or to institutional investors is called private placement. No prospectus is issued in private placement. Private placement covers equity shares, preference shares, and debentures. It offers access to capital more quickly than the public issue and is quite inexpensive on account of the absence of various issue related expenses.

There are three categories of participants in the primary market. They are the issuers of securities, investors in securities, and intermediaries. The last named render services to both the issuers and investors to enable the sale and purchase of securities.

Intermediaries to an Issue

There are different intermediaries to an issue such as merchant bankers or book running lead managers (BRLM), syndicate members, registrars to the issue, bankers to the issue, auditors of the company and solicitors. The issuer discloses the addresses, telephone, fax numbers and email addresses of these intermediaries.

- Book Running Lead Manager (BRLM) is a lead merchant banker appointed by the issuer company and whose name is mentioned in the offer document of the company

Merchant Banker A merchant banker should be registered with the SEBI as per the SEBI (Merchant Bankers) Regulations, 1992 to act as a book running lead manager (BRLM) to an issue. The lead merchant banker performs most of the pre-issue and post-issue activities. The pre-issue activities of the lead manager include due diligence of company's operations/management/business plans/legal etc., drafting and designing offer document, finalising the prospectus, drawing up marketing strategies for the issue, and ensuring compliance with stipulated requirements and completion of prescribed formalities with the stock exchanges and the Registrar of Companies (ROC).

The post-issue activities include management of escrow accounts, coordinating, non-institutional allocation, intimation of allocation, coordination with the registrar for dispatching of refunds, demateralising of securities, listing and trading of securities, and coordinating the work of other intermediaries involved in the issue process.

Registrar to the Issue The role of the registrar is to finalise the list of eligible allottees, ensure crediting of shares to the demat accounts of the eligible allottees, and dispatch refund orders.

Bankers to the Issue They are appointed in all the mandatory collection centres, and by the lead merchant banker to carry out activities relating to collection of application amounts, transfer of this amount to escrow accounts, and dispatching refund amounts.

It is now mandatory to issue all new initial public offerings (IPOs) in dematerialised form as they are compulsorily traded in dematerialised form.

FREE PRICING REGIME

Before 1992, the Controller of Capital Issues (CCI) used to regulate the new issues market under the Capital Issues (Control) Act, 1947. Companies had to obtain approval from the CCI for raising funds in the primary market. The timing, quantum, and pricing of the issue were decided by the controller. New companies could issue shares only at par, while the existing companies with substantial reserves could issue shares at a premium. This premium was based on a prescribed formula set by the CCI. The formula was based on balancing the two criteria, viz., the net assets value and price earnings value. The issue price was set far below the market price of the company's share. This fixed price mechanism resulted in underpricing of many issues.

In 1992, the Capital Issues (Control) Act, 1947 was repealed and all controls relating to raising of resources from the market were removed. Hence, now the promoters (issuers of securities) do not require the consent of any authority either for making the issue or for pricing it. The promoter and his merchant banker together decide the price of the issue. Both new and established companies are free to decide the price of their issue.

There emerged under free pricing, an alliance of dishonest promoters and greedy merchant bankers. They brought out issues with rosy but unreal projections and sold shares at very high premiums. These projections never materialised, leading to a crash in prices. Moreover, companies with a negative bottom line came back with repeated rights issues at a premium. Issues of all kinds and premiums unheard of in corporate history were made in the early days of free pricing. These issues killed the primary market. Most of these issues were quoted below their offer price on the day they were listed at the stock exchange. Of the 4,000 issues that hit the market in 1992–96, more than 3,000 quoted below their offer price on the very day they were listed. For example, Saurashtra Cements hit the market in September 1993 at Rs. 250 per share. It stood at Rs. 85 when it was listed on the stock exchange; today it fetches only Rs. 8. The free market became a free falling market in numerous cases.

The regulator brought in strict regulations for merchant bankers, brokers, and others, and laid down guidelines for full disclosures for investors' protection. Unfortunately, this was done only when the small investors had fled the market. Today promoters are required to justify the issue price in the prospectus and make material disclosures about the risk factors in the offer document.

BOOK BUILDING—A NEW ISSUE MECHANISM IN INDIA

The mechanics of determining the offer price during the CCI regime was to offer the share at a fixed price. Here, the firm and the merchant banker decided an offer price without taking into account the investor's feedback. Fixed price offerings were made to uninformed investors. Moreover, there was a long time lag from the date of pricing to the date the issue opened, and to the date trading commenced. This raised the possibility of price fluctuations in the intervening period. Empirical evidence supports the view that fixed price offering results in high cost of capital for firms due to under-pricing of shares for attracting subscription.

Methods for Determining the Offer Price

- Fixed Price
- Book Building

The pricing pattern changed in the free pricing era. This era was characterised by unrealistic and abrupt pricing structure, which stripped the radiance of the capital market. Investors shied away from the market after burning their fingers in those premium issues that are now being quoted not only below their issue price but even below their par value.

Following the inefficient functioning of the capital market system, an alternative method, called the book building method, is slowly becoming popular in India. Book building is a mechanism through which an offer price for IPOs based on the investors' demand is determined. In the fixed price method, the investors' demand is not taken into account; the book building method explicitly uses investors' demand for shares at various prices as an important input to arrive at an offer price.

Globally, book building is a recognised mechanism for capital raising. It was book building which built the US market almost entirely in the 1940s and 1950s.

The SEBI guidelines define book building as a process undertaken by which a demand for the securities proposed to be issued by a corporate body is elicited and built-up and the price for such securities is assessed for the determination of the quantum of such securities to be issued by means of a notice, circular, advertisement, document or information, memoranda or offer document.

The book building is basically an auction of shares. Book building essentially means that the 'book is being built.' During the process on both the NSE and the BSE, investors can watch the book being built–a chart shown indicates the bid price and the number of shares being bid for. This helps the investor to know the market price. It offers investors the opportunity to bid collectively. It then uses the bids to arrive at a consensus price.

The issue of securities through book building prior to August 2009 could be done in either of the following two ways: 75 per cent book building known as partial book building and 100 per cent known as one-stage book building. The SEBI allowed partial book building with only 75 per cent of the total issue allotted for the book built portion; the remaining 25 per cent has to be compulsorily offloaded in the general market at a fixed price discovered during the book building process. The IPOs of Hughes Software and HCL Technologies are examples of partial book building which were successful. A 100 per cent book building issue implies that the entire issue is completed in a single stage, without having to make a mandatory fixed price offering. The option of 100 per cent book building was available only to those issuer companies which are to make an issue of capital of and above Rs. 100 crore. Due to these restrictive guidelines, no issue was floated using this mechanism. These guidelines were modified in 1998–99. The ceiling of issue size for book building was reduced from Rs. 100 crore to Rs. 25 crore. Bharti Televentures

Difference Between Shares Offered Through Book Building and Offer of Shares Through Normal Public Issues

Features	*Fixed Price Process*	*Book Building Process*
Pricing	Price at which the Securities are Offered/Allotted is Known in Advance to the Investor.	Price at which Securities will be Offered/Allotted is Not Known in Advance to the Investor. Only an Indicative Price Range is Known.
Demand	Demand for the Securities Offered is Known Only After the Closure of the Issue.	Demand for the Securities Offered can be Known Everyday as the Book is Built.
Payment	Payment is Made at the Time of Subscription Wherein Refund is Given After Allocation.	Payment Only After Allocation.

Source: BSE.

was the first 100 per cent book building issue. It raised Rs. 834 crore through 100 per cent book building in 2001–02. The 100 per cent book building route speeds up the public offering and allotment processes as they take place entirely through the stock exchange network. The National Stock Exchange (NSE) and the Bombay Stock Exchange(BSE) provide a real time graphic display of price and volumes of applications made towards a book building issue through the stock exchange network. This system aids in better price discovery and transparency as institutional investors have the necessary expertise to analyse the information. The 100 per cent book building route provides the option to defer or scrap the issue if the discovered price is inappropriate. Because most issuers preferred 100 per cent book building, the SEBI withdrew the 75 per cent book building option.

- Book building is a process by which demand for the proposed issue is elicited and built-up and the price at which the securities will be issued is determined on the basis of the bids received

The Book Building Process

- The company (issuer) first of all appoints one or more merchant banker(s) as book runner(s) and their name(s) shall be disclosed in the draft red herring prospectus. The lead merchant banker shall act as the lead book runner and shall be primarily responsible for the book building. There shall be only one lead book runner and if the issuer appoints more than one, they shall either be co-book runners or syndicate members.
- The lead book runner and co-book runners shall compulsorily underwrite the issue and the syndicate members shall sub-underwrite with the lead book runner/co-book runners. A ‘syndicate member’ means an intermediary registered with the SEBI and who is permitted to carry on the activity as an underwriter;

The details of final underwriting arrangement indicating actual numbers of shares underwritten shall be disclosed and printed in the prospectus before it is registered with the Registrar of Companies.

- The issuer shall enter into an agreement with one or more of the stock exchange(s) which have the system of on-line offer of securities. The agreement shall specify inter-alia, the rights, duties, responsibilities, and obligations of the issuer and recognised stock exchange(s) inter se.
- The book runner(s)/syndicate members shall appoint stock brokers who are members of the recognised stock exchange and registered with the SEBI, for the purpose of accepting bids, applications and placing orders with the issuer and ensure that the stock brokers so appointed are financially capable of honouring their commitments arising out of defaults of their clients/investors, if any. In case of Application Supported by Blocked Amount, Self-certified Syndicate Banks shall also accept and upload the details of such applications in electronic bidding system of the stock exchange(s). A ‘Self-certified Syndicate Bank’ means a banker to an issue registered with the SEBI, which offers the facility of Application Supported by Blocked Amount. The stock brokers and Self-certified Syndicate Bank accepting applications and application monies shall be deemed as ‘bidding/collection centres.’

- Book Running Lead Manager (BRLM) is a lead merchant banker appointed by the issuer company and whose name is mentioned in the offer document of the company

The underwriters also collect information from potential buyers and attempts to build interest. Part of the process of collecting this information is a road show, so named because the underwriter goes from city to city making presentations about the company and the offering. The road show is conducted in the form of a press release, a broker–analyst meet and investor meet.

- The lead merchant banker shall file with the SEBI a draft red herring prospectus containing all the disclosures including total issue size, if applicable, except the price and the number of specified securities to be offered.
- Book building was first introduced in 1999 with the concept of a price band. Price band includes the floor price and the cap price. For instance, the PNB issue’s price band was Rs. 350–390. Rs. 350 is the floor price–the minimum bid—and Rs. 390 is the cap price. Investors can bid at any price between Rs. 350 and Rs. 390. However, in April 2000, the SEBI moved to the concept of a fixed floor price, which led to underpricing as maximum bids were received at or just above the floor price. The SEBI reintroduced the moving price band concept in book built IPOs. In a moving price band, the range can be moved, upwards or downwards, depending on the demand and the direction in which the book is being built. The band can be moved by 20 per cent (earlier 50 per cent) either way.
- The issuer may mention the floor price or price band in the red herring prospectus.
    a. If the issuer opts not to make the disclosure of the price band or floor price in the red herring prospectus, the following shall also be disclosed in the red herring prospectus:
        i. a statement that the floor price or price band, as the case may be, shall be disclosed at least two working days (in case of an initial public offer) and at least one working day (in case of a further public offer) before the opening of the bid;

- Red Herring Prospectus is a prospectus which does not have details of either price or number of shares being offered or the amount of issue

ii. a statement that the investors may be guided in the meantime by the secondary market prices (in case of a further public offer); and
iii. the names and editions of the newspapers where the announcement of the floor price or price band would be made; names of websites (with address), journals, or other media in which the said announcement will be made.

b. Where the issuer decides to opts for price band instead of floor price, the issuer shall also ensure compliance with the following conditions:
   i. The spread between the floor and the cap of the price band should not be more than 20 per cent. In other words, the cap should not be more than 120 per cent of the floor price. This price band denotes the range of bidding.
   ii. The price band can be revised during the bidding period in which case the maximum revision on either side shall not exceed 20 per cent, i.e., floor of price band can move up or down to the extent of 20 per cent of floor of the price band disclosed in the red herring prospectus and the cap of the revised price band will be fixed in accordance with clause (i) above.
   iii. Any revision in the price band shall be widely disseminated by informing the stock exchanges, by issuing press release, and also by indicating the change on the relevant website and the terminals of the syndicate members.
   iv. In case the price band is revised, the bidding period shall be extended to a maximum of ten working days.
   v. The manner in which the shortfall, if any, in the project financing, arising on account of lowering of price band to the extent of 20 per cent will be met shall be disclosed in the red herring prospectus. It shall also be disclosed that the allotment shall not be made unless the financing is tied up.

- The basis for issue price, floor price, or price band, as the case may be, shall be disclosed and justified by the issuer in consultation with the lead merchant banker on the basis of the following information, which shall be also disclosed separately:
  a. Earnings per share and diluted earnings per share, pre-issue, for the last three years (as adjusted for changes in capital).
  b. Price earning ratio pre-issue.
  c. Average return on net worth in the last three years.
  d. Minimum return on increased net worth required to maintain pre-issue earnings per share.
  e. Net asset value per share based on last balance sheet.
  f. Net asset value per share after issue and comparison thereof with the issue price.

Comparison of all the accounting ratios of the issuer as mentioned in items (a) to (f) above with the industry average and with the accounting ratios of the peer group (i.e., companies of comparable size in the same industry and the source from which industry average and accounting ratios of the peer group has been taken shall be indicated).

The face value of equity shares and the statement that the issue price, floor price, or price band, as the case may be, is 'X' times of the face value. Subject to the provisions of the Companies Act, 1956, the Act and these regulations, an issuer making an initial public offer may determine the face value of the equity shares in the following manner:

1. If the issue price per equity share is Rs. 500 or more, the issuer shall have the option to determine the face value at less than Rs. 10 per equity share provided that the face value shall not be less than one rupee per equity share.
2. If the issue price per equity share is less than Rs. 500, the face value of the equity shares shall be Rs. 10 equity share.

Provided that nothing contained in this sub-regulation shall apply to initial public offer made by any government company, statutory authority or corporation or any special purpose vehicle set up by any of them, which is engaged in infrastructure sector.

In case the option of differential pricing under Regulation 29 has been availed, justification for the price difference shall be given in the offer document. An issuer may offer specified securities at different prices, subject to the following:

1. Retail individual investors or retail individual shareholders may be offered specified securities at a price lower than the price at which net offer is made to other categories of applicants provided that such difference shall not be more than 10 per cent of the price at which specified securities are offered to other categories of applicants.

2. In case of a book built issue, the price of the specified securities offered to an anchor investor shall not be lower than the price offered to other applicants.
3. In case of a composite issue, the price of the specified securities offered in the public issue may be different from the price offered in rights issue and justification for such price difference shall be given in the offer document.

Whenever fully convertible debt instruments (FCDs) are issued bearing interest at a rate less than the bank rate, the offer document shall contain disclosures about the price that would work out to the investor, taking into account the notional interest loss on the investment from the date of allotment of FCDs to the date(s) of conversions.

- A public issue shall be kept open for at least three working days but not more than ten working days, including the days for which the issue is kept open in case of revision in price band. In case the price band in a public issue made through the book building process is revised, the bidding (issue) period disclosed in the red herring prospectus shall be extended for a minimum period of three working days provided that the total bidding period shall not exceed ten working days. In other words, a bid is usually open for three and not more than seven working days, which may be extended to a maximum of ten working days, in case the price band is revised.
- The issuer shall, after registering the red herring prospectus (in case of a book built issue) or prospectus (in case of fixed price issue) with the Registrar of Companies, make a pre-issue advertisement in one English national daily newspaper with wide circulation, Hindi national daily newspaper with wide circulation, and one regional language newspaper with wide circulation at the place where the registered office of the issuer is situated. The pre-issue advertisement shall include the following details: name and address of the registered office of the issuer and the lead book runner/merchant bankers, and details of the issue such as nature of the specified security, size of the issue, face value of the security, price band, the proportion of shares to be allotted to different categories of investors including anchor investor, proposed listing, disclaimer clause, time period of the opening and closing of the issue, IPO grading, and names of the bankers to the issue. The issue advertisements shall also disclose the financial ratios calculated for both upper and lower end of the price band.

Bidding Process

1. Bidding process shall be only through an electronically linked transparent bidding facility provided by recognised stock exchange(s).
2. The lead book runner shall ensure the availability of adequate infrastructure with syndicate members for data entry of the bids in a timely manner.
3. The syndicate members shall be present at the bidding centres so that at least one electronically linked computer terminal at all the bidding centres is available for the purpose of bidding.
4. During the period the issue is open to the public for bidding, the applicants may approach the stock brokers of the stock exchange/s through which the securities are offered under on-line system or Self Certified Syndicate Banks, as the case may be, to place an order for bidding for the specified securities.
5. Every stock broker shall accept orders from all clients/investors who place orders through him and every Self Certified Syndicate Bank shall accept Applications Supported by Blocked Amount from ASBA investors.
6. Applicants who are qualified institutional buyers shall place their bids only through the stock brokers who shall have the right to vet the bids.
7. The bidding terminals shall contain an on-line graphical display of demand and bid prices updated at periodic intervals, not exceeding 30 minutes.
8. At the end of each day of the bidding period, the demand including allocation made to anchor investors shall be shown graphically on the bidding terminals of syndicate members and websites of recognised stock exchanges offering electronically linked transparent bidding facility, for information of public.
9. The investors (except ASBA investors) may revise their bids.
10. The qualified institutional buyers shall not withdraw their bids after closure of bidding.
11. The identity of qualified institutional buyers making the bidding shall not be made public.
12. The stock exchanges shall continue to display on their website, the data pertaining to book built issues in an uniform format, inter alia giving category-wise details of bids received, for a period of atleast three days after closure of bids.

- The margin collected from categories other than Qualified Institutional Buyers shall be uniform across the book runner(s)/syndicate members /Self-certified Syndicate Banks for each such investor category.

An amount of not less than 10 per cent of the application money in respect of bids placed by qualified institutional buyers and not less than 25 per cent of the application money from the Anchor investors was taken as margin money till April 30, 2010. In order to avoid inflated demand in public issues and provide level playing field to all investors subscribing for securities, all types of investors are required to bring in 100 per cent of the application money as margin money along with the application for securities in public issues.

Determination of Price

1. The issuer shall, in consultation with lead book runner, determine the issue price based on the bids received.
2. On determination of the price, the number of specified securities to be offered shall be determined (i.e., issue size divided by the price to be determined).
3. Once the final price (cut-off price) is determined, all those bidders whose bids have been found to be successful (i.e., at and above the final price or cut-off price) shall be entitled for allotment of specified securities.
4. Retail individual investors may bid at 'cut off' price instead of their writing the specific bid price in the bid forms.
5. The lead book runner may reject a bid placed by a qualified institutional buyer for reasons to be recorded in writing provided that such rejection shall be made at the time of acceptance of the bid and the reasons therefore shall be disclosed to the bidders.

Necessary disclosures in this regard shall also be made in the red herring prospectus.

Registering of Prospectus with Registrar of Companies

The final prospectus containing all disclosures in accordance with the provisions of these regulations including the price and the number of specified securities proposed to be issued shall be registered with the Registrar of Companies.

Applications Supported by Blocked Amount (ASBA) Process

The SEBI launched an alternate payment system for book built public issues in August 2008. The alternate payment system, called additional mode of payment through ASBA, exempts retail investors from making full advance payment and instead let the amount to be retained in bank accounts till the completion of allotment. This system co-exists with the current process, wherein cheque is used as a mode of payment by retail investors. ASBA can be used only for retail investors and on an optional basis.

ASBA is an application for subscribing to an issue, containing an authorisation to block the application money in a bank account. This system does away with the refund process and thereby reduces the time between an issue and its listing. ASBA Process is as follows:

- An ASBA investor shall submit an ASBA physically or electronically through the internet banking facility to the Self-certified Syndicate Bank (SCSB) with whom the bank account to be blocked is maintained. SCSB is a bank which offers the facility of applying through the ASBA process. ASBAs can be accepted only by SCSBs, whose names appear in the list of SCSBs displayed in SEBI's website.
- The SCSB shall then block the application money in the bank account specified in the ASBA, on the basis of an authorisation to this effect given by the account holder in the ASBA. The application money shall remain blocked in the bank account till finalisation of the basis of allotment in the issue or till withdrawal/failure of the issue or till withdrawal/rejection of the application, as the case may be.
- The SCSB shall upload the details in the electronic bidding system of the BSE or NSE.
- Once the basis of allotment is finalised, the Registrar to the Issue shall send an appropriate request to the SCSB for unblocking the relevant bank accounts and for transferring the requisite amount to the issuer's account. In case of withdrawal/failure of the issue, the amount shall be unblocked by the SCSB on receipt of information from the pre-issue merchant bankers.

- ASBA is an application by retail investors for subscribing to an issue, containing an authorisation to block the application money in a bank account.

The public issue of 20 microns was the first IPO to hit the market in September 2008 with ASBA facility for retail investors.

Twenty four SCSBs are providing ASBA services. The SCSBs work as a single window intermediary – they collect applications, block application money in the investors' bank accounts, debit the investors' accounts, and transfer money to the escrow account on allotment of shares. The SCSB also sends aggregate information of total number of applications, shares bid for and amount to the registrar who will then reconcile the data and verify it for correctness with depository's data base. Thus, ASBA has simplified the share application and refund process.

- All investors including retail, high net worth individuals (HNIs), corporate investors, and qualified institutional buyers are eligible to apply through ASBA in public issues

The SEBI extended the ASBA facility to rights issues, The rights issues of TATA Motors and Sadhana Nitro Chem were the first to make use of this facility when the issues opened on September 29, 2008. In case of rights issues, all shareholders would be able to make use of this facility while in book-built public issues, it is the retail shareholders only who can make use of this facility. ASBA process in rights issue will enable a shareholder of the company as on record date to apply through ASBA mode by selecting the option of ASBA in the application form of rights issue to the SCSB with whom the bank account to be blocked is maintained. The rest of the process is similar to that of IPOs.

The SEBI extended this payment mode to all investors in public issues opening on or after May 1, 2010. The SEBI extended ASBA facility to the investors subscribing to new fund offers (NFOs) of mutual fund schemes launched on or offer July 1, 2010.

Allotment/Allocation in Book Built Issue

- Incase of lights issues, all shareholders of the issuer company as on the record date are eligible, provided if he/she/it:
  - (a) is holding shares in dematerialised form and has applied for entitlements
  - (b) is not a renouncee to the issue
  - (c) applies through a bank account maintained with SCSBs

In case an issuer company makes an issue of 100 per cent of the net offer to public through 100 per cent book building process:

1. not less than 35 per cent of the net offer to the public shall be available for allocation to retail individual investors;
2. not less than 15 per cent of the net offer to the public shall be available for allocation to non institutional investors i.e., investors other than retail individual investors and qualified institutional buyers;
3. not more than 50 per cent of the net offer to the public shall be available for allocation to qualified institutional buyers.

Provided that, in respect of issues made under Rule 19(2)(b) of Securities Contract (Regulation) Rules 1957 (issues for less than 25 per cent of the post-issue capital of the company), with 60 per cent mandatory allocation to qualified institutional buyers, the percentage allocation to retail individual investors and non-institutional investors shall be 30 per cent and 10 per cent, respectively.

In an issue made through the book building process, the issuer may allocate upto 30 per cent of the portion available for allocation to qualified institutional buyers to an anchor investor.

Out of the portion available for allocation to qualified institutional buyers, 5 per cent shall be allocated proportionately to mutual funds. Mutual fund applicants shall also be eligible for proportionate allocation under the balance available for Qualified Institutional Buyers.

- QIBs are prohibited to withdraw their bids after the close of the IPO, whereas retail and non-institutional bidders can withdraw till the day of allotment

Let us understand the allotment of shares to QIBs with the help of an illustration. Suppose the issue size is 100 crore shares, then 50 crore shares will be allocated to all QIBs including anchor investors, if any, and mutual funds. Out of 50 crore shares, anchor investors will be allocated 15 crore (30 per cent of 50 crore) shares and the remaining 35 crore shares will be allocated to the rest of the QIBs. Of the 35 crore shares, mutual funds will be allocated 1.75 crore (5 per cent of 35 crore) equity shares and the balance (33.5 equity shares) for all QIBs including mutual funds.

Allotment shall be made not later than 15 days from the closure of the issue failing which, interest at the rate of 15 per cent shall be paid to the investors.

According to Clause 2.1 (zd)of the SEBI (Issue of Capital and Disclosure Requirements) Regulations 2009, a QIB shall mean

- a public financial institution as defined in Section 4A of the Companies Act, 1956;
- scheduled commercial banks;
- mutual funds;
- foreign institutional investors and sub-account (other than a sub-account which, is a foreign corporate or foreign individual), registered with the SEBI;
- multilateral and bilateral development financial institutions;
- venture capital funds registered with the SEBI;
- foreign venture capital investors registered with the SEBI;
- state industrial development corporations;
- insurance companies registered with the Insurance Regulatory and Development Authority (IRDA);

- provident funds with the minimum corpus of Rs. 25 crores; and pension funds with the minimum corpus of Rs. 25 crores;
- National Investment Fund set up by resolution no. F.No.2/3/2005-DD11dated November 23, 2005 of the Government of India.

A retail individual investor is one (i) whose shareholding was of value not exceeding Rs. 1,00,000 as on the day immediately preceding the record date to be determined by the issuer, and (ii) who applies or bids for securities of or for a value of not more than Rs. 1,00,000. He can bid in a book built issue for a value not more than Rs. 1,00,000. If he bids in excess, the bid will be segregated under the high net worth individual (HNI) category or non-institution investor (NII) category.

- A retail investor is one who can bid in a book-built issue or applies for securities for a value of not more than Rs. 1,00,000.

Merchant bankers were earlier allowed some discretion while making allotments to institutional investors. Allocation to qualified institutional buyers was determined by the book running lead manager (BRLM) based on issues like prior commitment, investor quality, price aggression, and earliness of bids. SEBI banned discretionary allotments and introduced proportionate allotments in the QIB portion.

In case of book built issues, the basis of allotment is finalised by the BRLM within two weeks from the date of closure of the issue. The allotment of shares is done on a proportionate basis within the specified categories, rounded off to the nearest integer, with predetermined minimum allotment being equal to the minimum application size. Under the earlier guidelines, if an issue was oversubscribed, applicants were chosen by drawing lots and allotted a minimum of 100 shares per minimum tradeable lot.

The registrar then ensures that the demat credit or refund as applicable is completed within 15 days of the closure of the issue. The listing on the stock exchanges is done within seven days from the finalisation of the issue.

Anchor Investor

The SEBI introduced the concept of anchor investor on June 18, 2009 to enhance issuer's ability to sell the issue, generate more confidence in the minds of retail investors and better price discovery in the issue process. The anchor investor subscribes to the issue prior to its public opening, pay an upfront margin of 25 per cent and follows it up with the remaining 75 per cent within two days of the closure of the public issue, and holds the shares for atleast one month which instills confidence in retail investors and boosts the primary market. The anchor investor would be a qualified institutional buyer (QIB) and an issuer can allot up to 30 per cent of its institutional quota to such investors.The anchor investor/s cannot be related to the promoter or promoter group or the lead managers.

- Anchor investors are qualified institutional buyers that buy a large chunk of shares a day before an IPO opens. They help arriving at an approximate benchmark price for share sales and generate confidence in retail investors

The Adani Power IPO in July 2009 was the first issue in the country to attract investors under the anchor investor scheme. The six anchor investors were T Rowe Price, AIC, Ecofin, TPG (through CLSA), Legg Mason, and Sundaram MF. SKS Micro Finance attracted 36 anchor investor in its IPO issue in August 2010.

The guidelines provide various conditions for bringing in anchor investors in public issues:

1. An anchor investor shall make an application of a value of at least Rs. 10 crore in the public issue.
2. Allocation to anchor investors shall be on a discretionary basis and subject to a minimum number of two such investors for allocation of upto Rs. 250 crore and five such investors for allocation of more than Rs. 250 crore.
3. Upto 30 per cent of the portion available for allocation to qualified institutional buyers shall be available to anchor investor(s) for allocation/allotment (anchor investor portion).
4. One-third of the anchor investor portion shall be reserved for domestic mutual funds.
5. The bidding for anchor investors shall open one day before the issue opening date.
6. Anchor investors shall pay a margin of at least 25 per cent on application with the balance to be paid within two days of the date of closure of the issue.
7. Allocation to anchor investors shall be completed on the day of bidding by anchor investors
8. If the price fixed as a result of book building is higher than the price at which the allocation is made to anchor investor, the anchor investor shall bring in the additional amount. However, if the price fixed as a result of book building is lower than the price at which the allocation is made to anchor investor, the excess amount shall not be refunded to the anchor investor and the anchor investor shall take allotment at the price at which allocation was made to it.
9. The number of shares allocated to anchor investors and the price at which the allocation is made, shall be made available in public domain by the merchant banker before opening of the issue
10. There shall be a lock-in of 30 days on the shares allotted to the anchor investor from the date of allotment in the public issue.

11. Neither the merchant bankers nor any person related to the promoter/promoter group/merchant bankers in the concerned public issue can apply under anchor investor category. The parameters for selection of anchor investor shall be clearly identified by the merchant banker and shall be available as part of records of the merchant banker for inspection by the SEBI.
12. The applications made by qualified institutional buyers under the anchor investor category and under the non-anchor investor category may not be considered as multiple applications.

Benefits of Book Building Method

Book building enables issuers to reap benefits arising from price and demand discovery. The aim of the process is to have the issue pre-sold and preclude chances of under-subscription/devolvement. The cost and time for making public issues is lowered; the procedures are also simplified. The public issue benefits investors as they can trust the price at which the syndicate members have purchased the shares. Due to this, the possibility of price falling below par after listing is remote.

Limitations of the Book Building Method

The book building method is still at a nascent stage and not without limitations.

- The book building process adopted in India is quite different from that of the USA, wherein road shows are held and the issue price is arrived at a few hours before the issue opens. The lead manager makes a market in the paper by offering two-way quotes on the secondary market, till trading picks up. There are no such provisions in the Indian book building process.
- In India, unlike in the developed markets, the book building process is still dependent on good faith. The numbers of investors invited to apply are limited and it is the peer pressure and reputation that ensures that there are no defaults. Book building relies on much interaction among firms, merchant bankers, and investors, which is absent in India.
- There is a lack of transparency at critical steps of the book building process and the absence of strong regulation.
- Since the price fixed for the public portion as well as for the placement portion is the same, issues may not succeed in inviting the desired public response.
- It has not proved to be a good price discovery mechanism. Many issues have been listed below their issue price. The lag time of more than 60 days between issue pricing and listing is the building block to price discovery mechanism (Table 6.1).
- Issuers may have to sell cheap due to the collective bargaining power of institutions.
- High institutionalised holding may affect the stock's liquidity and make it volatile as well in case of bulk offloading.

TABLE 6.1 Book Building Issues: How they Fared on First Day of Trading on the NSE?

S.No.	Company Name	Sector (%)	Date of Listing	Issue Price (Rs.)	Close Price on First Day of Trading (Rs.)	Close Price at End of Jun–08 (Rs.)	Price Appreciation/Depreciation on the First Day of Trading (%)	Price Appreciation/Depreciation at End June 2008 Trading (%)
1	Gammon India Projects Limited	Infrastructure	03-Apr-08	167	158.15	120.1	–5.3	–28.08
2	Sita Shree Food Products Limited	Manufacturing	07-Apr-08	30	43.7	18	45.67	–40
3	Titagarh Wagons Limited	Manufacturing	21-Apr-08	540	706.85	545.75	30.9	1.06
4	Kiri Dyes and Chemicals Limited	Manufacturing	22-Apr-08	150	158.95	148.4	5.97	–1.07
5	Gokul Refoils and Solvent Limited	Manufacturing	04-Jun-08	195	182.05	203.95	–6.64	4.59
6	Reliance Power Limited	Infrastructure	11-Feb-08	450	372.3	318.00	–17.27	–29.33

Source: NSE, *Indian Securities Market, A Review*, 2008–09.

- The role of retail investors in determining the pricing decreases. Moreover, retail investors may not have the information to judge the issue and thus, may not be able to arrive at the correct pricing.
- The limits fixed are fungible and can be altered depending upon market conditions. If there is a low retail demand, more than 75 per cent of the issue size is allocated to institutional investors.
- Most book built IPOs, since 1999, have fared badly on the stock market—18 out of 19 are currently traded below their issue price. Only Balaji Telefilms is traded at a premium. The SEBI needs to re-examine the entire book building process at the operational level and, if need be, modify its guidelines.
- The book building system of ascertaining the cut-off price and the allocation to each applicant discriminate between return and institutional investors. It is heavily loaded against the retail or the high net worth investors to the advantage of qualified institutional buyers (QIBs). Institutional investors can revise their bids, both quantity-wise as well as on the price, and back their bids with margin money up front and not the entire amount. This preferential treatment is not available to retail investors who have to back their bids with funds. Moreover, the merchant bankers to the issue have the discretion to allot to the institutional investors which results in a small proportional allotment to retail investors.
- The share of public offer in total capital has been reduced from 75 per cent to 25 per cent and in some cases, to 10 per cent. Effectively, retail now is allotted only 8.75 per cent (35 per cent of 25 per cent) and 3.5 per cent (35 per cent of 10 per cent) of a company's total capital.
- Book building is thrust upon the retail investors even though they cannot discover price. Institutional investors have the support of information and research that aids in price discovery.
- Many scrips prices rise/fall after listing and this reflects the extent of underpricing/overpricing. Hence, a more effective price discovery is needed to avoid underpricing/overpricing.

Auction-based Book Building

The SEBI announced an additional method of auction-based book building known as pure auction for follow-on public issues in November 2009. In the regular book built issue, investors have to bid within the price band quoted by the merchant banker. This price band may not always represent the fair value. Hence, many issues have quoted at a discount in the post-listing trading sessions. Pure auction makes book building more market oriented and improves the price discovery process by allowing investors, rather than companies, to decide on the pricing of the issue. In pure auction, institutional bidders are free to bid at any price above the floor price mentioned by the company and allotment of shares will be done on a top down basis, starting from the highest bidder. Hence, each institutional investor could have a different allotment price. However, retail individual investors and non-institutional investors in such cases would be allotted shares at the floor price. The SEBI has permitted the issuer to place a cap in terms of the number of shares allotted to a single bidder and percentage to issued capital of the company in order that a single bidder does not garner all shares on offer and there is wider distribution. The biggest advantage of this is that it will bring down the institutional investors' oversubscription, as the institutional investors will bid for the quantity they intend to purchase and at a price which they are willing to purchase which will be above the floor price. They may quote a higher price to get a big block of shares at a single price. SEBI has not made it mandatory for companies coming out with follow-on public issues and it has given a choice to the companies—they can either opt for the book building or go for the pure auction or a combination of both.

- Pure Auction is an additional method of book building in which the bidders would be free to bid at any price above the floor price and allotment would be on price priority basis and at differential prices. This method can be used only for FPOs

Reverse Book Building

Reverse book building is a process wherein the shareholders are asked to bid for the price at which they are willing to offer their shares. It is just similar to reverse auctions. This process helps in discovering the exit price and is used by companies who want to delist their shares or buy-back shares from the shareholders.

The process for reverse book building is as follows.

- Reverse book building is a price-discovery mechanism for companies who want to delist their shares or buy-back shares from the shareholders

- The acquiring company secures board and shareholders approval to delist the shares.
- The acquirer shall appoint a designated BRLM to execute the process.
- The BRLM decides the floor price and the dates for inviting bids from the shareholders. The floor price shall not be less than the following: (a) where the equity shares are frequently traded in all the recognised stock exchanges where they are listed, the average of the weekly high and low of the closing prices of the equity shares of the company during the 26 weeks or 2 weeks preceding the date on which the recognised stock exchanges were notified of the board meeting in which the delisting proposal was considered, whichever is higher, as quoted on the recognised stock exchange where the equity shares of the company are most frequently traded; (b) where the equity shares of the company are infrequently traded in all or some of the recognised stock exchanges, the floor

price shall be determined by the BRLM taking into account the following factors: (i) the highest price paid by the promoter for acquisitions, if any, of equity shares of the class sought to be delisted, including by way of allotment in a public or rights issue or preferential allotment, during the 26 weeks period prior to the date on which the recognised stock exchanges were notified of the board meeting in which the delisting proposal was considered and after that date upto the date of the public announcement; and, (ii) other parameters including return on net worth, book value of the shares of the company, earning per share, price earning multiple vis-à-vis the industry average.

- The acquiring company shall, upon receipt of in principle approval for delisting from the recognised stock exchange, make a public announcement in at least one English national daily with wide circulation, one Hindi national daily with wide circulation, and one regional language newspaper of the region where the concerned recognised stock exchange is located.
- Before making the public announcement, the acquiring company shall open an escrow account and deposit therein the total estimated amount of consideration calculated on the basis of floor price and number of equity shares outstanding with public shareholders. The escrow account shall consist of either cash deposited with a scheduled commercial bank, or a bank guarantee in favour of the merchant banker, or a combination of both.
- The acquiring company shall despatch the letter of offer to the public shareholders of equity shares, not later than 45 working days from the date of the public announcement, so as to reach them at least 5 working days before the opening of the bidding period. The letter of offer shall be sent to all public shareholders holding equity shares of the class sought to be delisted whose names appear on the register of the company or depository as on the date specified in the public announcement.
- The date of opening of the offer shall not be later than 55 working days from the date of the public announcement. The offer shall remain open for a minimum period of three working days and a maximum period of five working days, during which the public shareholders may tender their bids.
- Bidding will be done only in the electronic form and through the stock exchanges trading mechanism.
- The holders of physical equity shares may send their bidding form together with the share certificate and transfer deed to the trading member appointed for the purpose, who shall immediately after entering their bids on the system send them to the company or the share transfer agent for confirming their genuineness. The company or the share transfer agent shall deliver the certificates which are found to be genuine to the merchant banker, who shall not make it over to promoter unless the bids in respect thereof are accepted and payment made. The bids in respect of the certificates which are found to be not genuine shall be deleted from the system.
- The BRLM will give the list of trading members who are eligible to participate in the reverse book building process to the stock exchange.
- Bids will be placed through trading members at the bidding centres, whom the public shareholders may approach for placing bids on the on-line electronic system and will have to be made at or above the floor price.
- There is no cap on the bid price and revision of bids is possible. The shareholders may withdraw or revise their bids upwards not later than one day before the closure of the bidding period. Downward revision of bids is not permitted.
- The acquiring company shall not be bound to accept the equity shares at the offer price determined by the book building process. Where the acquiring company decides not to accept the offer price so determined,
    a. the company shall not acquire any equity shares tendered pursuant to the offer and the equity shares deposited or pledged by a shareholder shall be returned or released to him within ten working days of closure of the bidding period;
    b. the company shall not make the final application to the exchange for delisting of the equity shares;
    c. the promoter may close the escrow account
    d. in a case where the public shareholding at the opening of the bidding period was less than the minimum level of public shareholding required under the listing agreement, the acquiring company shall ensure that the public shareholding shall be brought up to such minimum level within a period of six months from the date of closure of the bidding.
- Within eight working days of closure of the offer, the BRLM shall make a public announcement in the same newspapers in which the public announcement was made regarding:-
    a. the success of the offer alongwith the final price accepted by the acquirer; or
    b. the failure of the offer
    c. rejection of the final price discovered by the promoters.

- Where, pursuant to acceptance of equity shares tendered in terms of these regulations, the equity shares are delisted, any remaining public shareholder holding such equity shares may tender his shares to the promoter upto a period of at least one year from the date of delisting and, in such a case, the promoter shall accept the shares tendered at the same final price at which the earlier acceptance of shares was made. The payment of consideration for shares accepted shall be made out of the balance amount lying in the escrow account.

The reverse book building route is a difficult and costly process. Price discovery is a problem in case of small companies as their shares are thinly traded, making it difficult to delist through the reverse book building route. Unless the shares are delisted, the small companies have to pay all listing charges.

- Delisting of securities means permanent removal of securities of a listed company from a stock exchange

Conclusion

The process, methodology, and structure of book building in India has improved over the last two years. The concept has yet to gain popularity among retail investors in India. This requires some modifications at the operational level. With proper safeguards and checks, this new issue mechanism can help in reviving investor confidence.

The entire IPO process should be speeded up through upgradation of the infrastructure to ensure that funds are not blocked for long.

GREEN-SHOE OPTION

The SEBI permitted the green-shoe option in book building issues when it amended the guidelines in August 2003.

A green-shoe option means an option of allocating shares in excess of the shares included in the public issue and operating a post-listing price stabilising mechanism for a period not exceeding 30 days in accordance with the provisions of Chapter VIIIA of the DIP guidelines. Green-shoe option is an option of over-allotting shares by an issuer to the underwriter in a public offering to provide post-listing price stability to an initial public offering. This option is to the extent of 15 per cent of the issue size. It is also referred to as an over-allotment option. Over allotment is an allotment or allocation of shares in excess of the size of a public issue, made by the SA out of shares borrowed from the promoters or the pre-issue shareholders or both, in pursuance of a green-shoe option exercised by the company in accordance with the provisions of this Chapter VIIIA of the DIP guidelines.

- Green-shoe option (GSO) is also referred to as an over-allotment option. It is a mechanism to provide post-listing price stability to an initial public offering. The Green-shoe company was the first to issue this type of option, hence the name green-shoe option

The guidelines relating to green-shoe option are as follows.

- A company desirous of availing the option should seek authorisation in the general meeting for allotment of the additional shares to the stabilising agent (SA) at the end of the stabilisation period.
- The company should appoint one of the merchant bankers or book runners as the SA who will be responsible for the price stabilisation process, if required. The SA should enter into an agreement with the issuer company, prior to filing the offer document with the SEBI, clearly stating all the terms and conditions relating to this option including fees charged/expenses to be incurred by the SA for this purpose.
- The SA should also enter into an agreement with the promoter(s) who will lend their shares. The agreement should specify the maximum number of shares that may be borrowed from the promoters or the shareholders which should not be in excess of 15 per cent of the total issue size. The details of the agreements shall be disclosed in the draft prospectus, the draft red herring prospectus, the red herring prospectus, and the final prospectus.
- The promoters and pre-issue shareholders, of both unlisted and listed company, holding more than 5 per cent shares should lend the shares for the purpose of green-shoe option.
- The allocation of these shares should be on pro-rata basis to all the applicants. The stabilisation mechanism should be made available for not more than 30 days from the date when trading is permitted on the exchange(s).
- The SA shall open a special account with a bank to be referred to as the GSO Bank account and a special account for securities with a depository participant to be referred to as the GSO Demat Account.
- The money received from the applicants against the over-allotment in the green-shoe option shall be kept in the GSO Bank Account, distinct from the issue account and shall be used for the purpose of buying shares from the market, during the stabilisation period.

- The shares bought from the market by the SA, if any, during the stabilisation period, shall be credited to the GSO Demat Account. The shares bought from the market and lying in the GSO Demat Account shall be returned to the promoters immediately, in any case not later than two working days after the close of the stabilisation period.
- The prime responsibility of the SA shall be to stabilise post-listing price of the shares. To this end, the SA shall determine the timing of buying the shares, the quantity to be bought, the price at which the shares are to be bought, etc.
- On expiry of the stabilisation period, in case the SA does not buy shares to the extent of shares over-allotted by the company from the market, the issuer company shall allot shares to the extent of the shortfall in dematerialised form to the GSO Demat Account, within five ( ) days of the closure of the stabilisation period. These shares shall be returned to the promoters by the SA in lieu of the shares borrowed from them and the GSO Demat Account shall be closed thereafter. The company shall make a final listing application in respect of these shares to all the Exchanges where the shares allotted in the public issue are listed. The provisions of Chapter XIII shall not be applicable to such allotment.
- The shares returned to the promoters shall be subject to the remaining lock-in period.
- The SA shall remit an amount equal to (further shares allotted by the issuer company to the GSO Demat Account) * (issue price) to the issuer company from the GSO Bank Account. The amount left in this account, if any, after this remittance and deduction of expenses incurred by the SA for the stabilisation mechanism, shall be transferred to the investor protection fund(s) of the stock exchange(s) where the shares of issuer company are listed, in equal parts if the shares are listed in more than one exchanges. The GSO Bank Account shall be closed soon thereafter.
- The SA shall submit a report to the stock exchange(s) on a daily basis during the stabilisation period and a final report to SEBI in the format specified in Schedule XXIX. The SA shall maintain a register in respect of each issue having the green-shoe option in which he acts as a SA.

A stabilising agent (SA) steps in and buys the shares from the market when the share price falls below the offer price. He has the discretion to decide the timing, the quantity and the price at which to buy shares for stabilising the post-listing price. To ensure the post-listing price, the SA may either buy the issuer's equity shares from institutional shareholders or purchase them from the market but not in excess of 15 per cent of the issue size. The issuer may set up a separate stabilising fund account to keep the funds as well as the shares for purpose of stabilisation. The stabilising measure serves as a cushion against temporary volatility in stock. The SA is also responsible for meeting the excess demand after the commencement of the trading activity. On expiry of the stabilisation period, in case the SA does not buy shares to the extent of shares over-allotted by the company from the market, the issuer company shall allot shares to the extent of the shortfall in dematerialised form.

The first-ever exercise of a green-shoe option in the course of a public issue was carried out by the ICICI Bank. The Life Insurance Corporation became the first institution to lend shares in the primary market. It provided 16 million shares to the DSP Merill Lynch to ensure the post-listing price.

If the issuer company opts for green-shoe option, the mechanism is as follows.

1. If a company is issuing 1,000 shares, the company will enter into an agreement regarding over-allotment option (lending excess shares) with one of the merchant bankers or book runners or lead managers known as the stabilising agent (SA) to the extent of 150 shares.
2. In pursuance with the agreement, the promoters would lend 150 shares to the SA for a limited period of 30 days from the date of listing.
3. Allotment would be made to the extent of 1,150 shares (1,000 shares issued by the company and 150 borrowed from the promoters).
4. In case, on listing, the market price falls below the issue price, the SA may buy shares from the market to the extent of 150 shares. This may counter the selling pressure and raise the market price. The shares bought by the SA are then returned to the promoters. Thus, only 1,000 shares remain listed on the exchange after 30 days.
5. In case, on listing, the share price rises rapidly, and the SA does not buy the shares from the market, then at the end of the 30 days period (or before) the over-allotment option gets invoked. The company allots 150 more shares which are then returned to the promoters. Thus, 1,150 shares remain listed on the exchange.

The green-shoe option is an investor protection measure–especially for protection of small investors during the post-listing period. This option benefits the underwriters in both bullish and bearish conditions. In a bull market, underwriters will opt for additional allotment of 15 per cent due to the index riding high.

Box 6.1 The Green-Shoe Option

In the case of an initial public offering (IPO) by India's largest technology company—Tata Consultancy Services (TCS)—there was a green-shoe option available to the lead book runner JM Morgan Stanley, its stabilising agent (SA).

It was the volatility on the stock market before its IPO that prompted TCS to set up a stabilising fund to ensure that the market price upon listing did not go below the offer price of Rs. 850 per share. Incidentally, following its listing on August 25, 2004 at Rs. 1,076 per share, the stock price did not go below Rs. 850 during the 30 days after the trading commenced.

However, this kind of an appointment of an SA to support stock prices had earlier met with failure. In April 2004, ICICI Bank, which came out with a public issue of 12.50 crore shares to mop up Rs. 3,500 crore, had appointed DSP Merill Lynch as the stabilising agent as a cushion against temporary volatility in the stock. DSP was supposed to check that the share price never once went below the cut-off price of Rs. 280 per share. However, shareholders got a rude shock when the share price closed at Rs. 265–Rs. 15 lower than the issue price–on May 14, 2004. The stabilisation period was to end on May 22, 2004. No sooner did the stock open at Rs. 284 in morning trades, the sale of 130 crore shares led the price to dive to Rs. 277. On receiving support at this level from DSP, the share price rose to Rs. 280. But, shortly thereafter, with trading volumes reaching Rs. 33 crore on BSE and Rs. 100 crore on NSE, the scrip tanked below the issue price. It was DSP's purchase of 24.79 lakh shares (almost 50 per cent of the traded volume) on a single day that helped the stock to fall only 6.95 per cent, as against the average decline of 15 per cent in other bank stocks on that day.

Source: Capital Market, Sept. 13–26, 2004.

In such a scenario, the post-listing price will be automatically maintained and sometimes even higher than the offer price, enabling underwriters to make larger profits. However, in a bearish market, the underwriting option may not be exercised or the underwriters may buy up to 15 per cent at prices lower than the issue price from the market.

Earlier, the green-shoe option could be exercised only in book built IPOs. Now it can be exercised in all IPOs. This measure is expected to mitigate volatility and enhance investors' confidence.

ON-LINE IPOs

The on-line issue of shares is carried out via the electronic network of the stock exchanges. The guidelines for online issue of shares are incorporated in a new chapter in the SEBI (Disclosure and Investor Protection) Guidelines, 2000. The guidelines clearly state that public issue can be made either through the on-line system or through the existing banking channels. The company proposing to make a public issue through the on-line system of stock exchange has to comply with Sections 55–68A of the Companies Act, 1956 and Disclosure and Investor Protection (DIP) guidelines. The issuer company is required to enter into an agreement with stock exchanges which have the requisite system for an on-line offer and has to appoint brokers and registrars to the issue having electronic connectivity with stock exchanges.

This system reduces the time taken for the issue process and securities get listed within 15 days from the closure of the issue, thereby enabling faster access to funds. The new norms prescribe that the allotment of securities should be made not later than 15 days from the closure of the issue, failing which interest at the rate of 15 per cent should be paid to investors. Corporates, planning an IPO can reduce their stationery, printing, and other expenses. The investor also benefits as the system eliminates refunds except in case of direct application.

The SEBI, in its endeavour to bring the Indian stock market at par with its global counterparts, has issued guidelines for the on-line issue of shares by corporates. The salient features of the guidelines are as follows.

- The company will have to first enter into an agreement with a stock exchange for the on-line offer of securities.
- The company will have to appoint a registrar to the issue having electronic connectivity with the stock exchange.
- The stock exchange, in turn, will appoint the SEBI-registered brokers for accepting applications and placing orders for shares.
- The broker will collect the money from clients. In case the client fails to pay for the shares collected, the broker will have to pay the amount.
- The broker shall accept orders from clients to send the application alones with payment to the registrar to the issuer or place the order to subscribe through a broker under the on-line system.
- In case a client fails to pay the application money, the broker, through whom the client placed the order, will have to bring in the money. If the broker fails to pay, he will be declared a defaulter.

- During the period the issue is given to the public for subscription, applicants may approach brokers of the stock exchange through which the securities are offered under the on-line system to place an order for subscribing to the shares.
- In the case of public issues of Rs. 10 crore or more, the registrar to the issue shall open centres for collection of applications in New Delhi, Chennai, Kolkata, and Mumbai.
- The broker shall open a separate bank account (escrow account) with the clearing house for primary market issues and the amount collected by the broker from his clients as margin money shall be deposited in this account.
- The prospectus should list the names of all the brokers appointed for the issue along with the names of other intermediaries like lead managers and registrars to the issue.
- The company shall have the option of listing its securities on any other exchange(s) other than the exchange through which it offers its securities to the public through the on-line system.

PRIMARY ISSUES

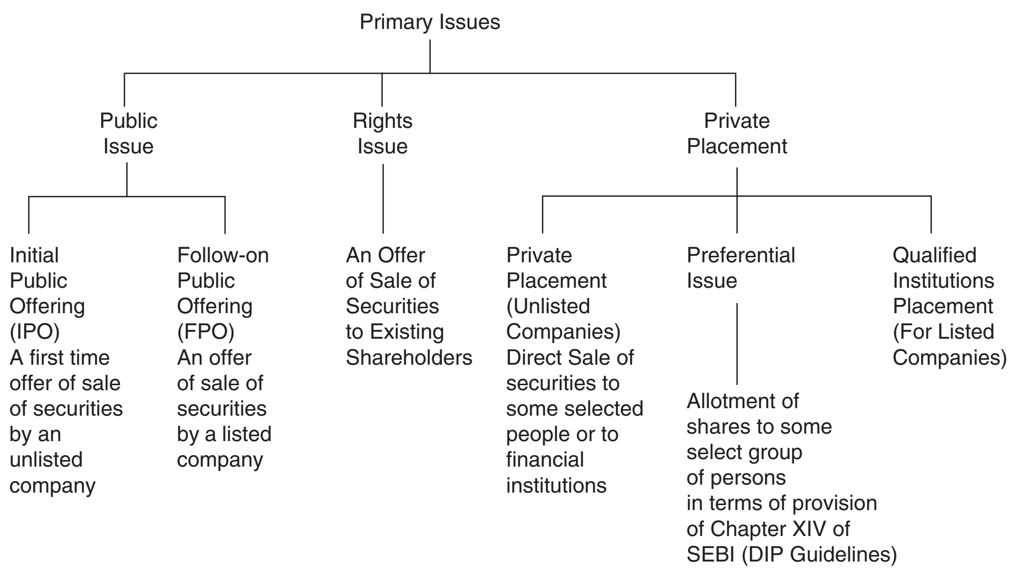

Figure 6.1 Primary Issues

Primary issuances by companies are governed by the SEBI in terms of SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009. They are called as ICDR Regulations. These regulations replace the SEBI (Disclosure and Investor Protection) Guidelines from August 26, 2009.

Primary Issues are classified into Public issue, Rights issue and Private placement (Figure 6.1).

Public Issue

Initial Public Offering (IPO)

- Initial Public Offering is an offering of either a fresh issue of securities or an offer for sale of existing securities, or both by an unlisted company for the first time to the public. IPO enables listing and trading of the issuer's securities

It is an offering of either a fresh issue of securities or an offer for sale of existing securities or both by an unlisted company for the first time to the public.

In the case of an IPO, the availability of information regarding the past performance of the company and its track record is generally inadequate and may lack credibility. This information asymmetry may lead to the problems of moral hazard and adverse selection. To enable investors to take informed decisions and protect their interests, the SEBI has laid down stringent entry norms.

A follow-on public offering (FPO) is an offering of either a fresh issue of securities or an offer for sale to the public by an already listed company through an offer document. Investors participating in these offerings take informed decisions based on its track record and performance.

The SEBI has laid down eligibility norms for entities raising funds through an IPO and an FPO. The entry norms for making an IPO of equity shares or any other security which may be converted into or exchanged with equity shares at a later date are as follows.

Entry Norm I It is commonly known as 'Profitability Route.' The company desiring to tap the primary market shall meet the following requirements.

- Net tangible assets of atleast Rs. 3 crores for three full years, of which not more than 50 per cent is held in monetary assets.
- Distributable profits in atleast three out of the preceding five years.
- Net worth of atleast Rs. 1 crore in three years.
- If there is a change in the company's name, atleast 50 per cent revenue for preceding one year should be earned from the new activity.
- The issue size should not exceed 5 times the pre-issue net worth as per the audited balance sheet of the last financial year.

To provide sufficient flexibility and also to ensure that genuine companies are not deprived, an access to the primary market on account of rigidity of the parameters, the SEBI has provided two other alternative routes to a company not meeting any of the above mentioned requirements. They are as follows.

- Prospectus is an offer document in case of a public issue. It has all relevant details including price and number of shares being offered. It is registered with ROC after the closure of issue in case of a book built issue.

Entry Norm II It is commonly known as 'QIB Route.'

- Issue shall be through a book building route, with atleast 50 per cent of the issue to be mandatorily allotted to the qualified institutional buyers (QIBs), failing which the money shall be refunded.
- The minimum post-issue face value capital shall be Rs. 10 crore or there shall be compulsory market making for atleast 2 years.

OR

Entry Norm III It is commonly known as 'Appraisal Route'.

- The 'project' is appraised and participated to the extent of 15 per cent by FIs/scheduled commercial banks of which atleast 10 per cent comes from the appraiser(s). In addition, atleast 10 per cent of the issue size shall be allotted to QIBs, failing which the full subscription monies shall be refunded.
- The minimum post-issue face value capital shall be Rs. 10 crore or there shall be a compulsory market making for atleast 2 years.

In addition to satisfying the aforesaid eligibility norms, the company shall also satisfy the criteria of having atleast 1,000 prospective allottees in its issue.

The SEBI has exempted the following entities from entry norms.

- Private sector banks.
- Public sector banks.
- An infrastructure company whose project has been appraised by a PFI or IDFC or IL&FS or a bank which was earlier a PFI and not less than 5 per cent of the project cost is financed by any of these institutions.
- Rights issue by a listed company.

A company cannot make a public or rights issue of debt instruments (whether convertible or not), unless it fulfills the following two conditions: credit rating of not less than investment grade is obtained from not less than two SEBI registered credit rating agencies and it should not be in the list of wilful defaulters of the Reserve Bank. Moreover, it should not have defaulted payment of interest or repayment of principal, if any, for a period of more than six months.

An issuer company should not allot non-convertible debt instrument pursuant to a public issue, if the proposed allottees are less than fifty. In such a case, the company shall have to refund the entire subscription amount received; a delay beyond eight days attracts a penal charge of 15 per cent per annum.

An unlisted company shall not make a public issue of equity share or any security convertible at later date into equity share, if there are any outstanding financial instruments or any other right that would entitle the existing promoters or shareholders any option to receive equity share capital after the initial public offering.

A company shall not make a public or rights issue of equity share or any security convertible at later date into equity share, unless all the existing partly paid-up shares have been fully paid or forfeited in a manner specified in the guidelines. A company shall not make a public or rights issue of securities unless firm arrangements of finance through verifiable means towards 75 per cent of the stated means of finance, excluding the amount to be raised through proposed public/rights issue, have been made.

In order to enable investors assess new equity issues offered through an IPO, the issuer has to get IPO grading done by atleast one credit rating agency, before filing the offer documents with SEBI or thereafter. However, the prospectus/Red Herring Prospectus must contain the grade/s given to the IPO by all credit rating agencies.

- 'Offer document' means prospectus in case of a public issue or offer for sale and letter of offer in case of a rights issue
- Listed company means a company which has any of its securities offered through an offer document listed on a recognised stock exchange and also includes public sector undertakings whose securities are listed on a recognised stock exchange
- Offer for sale means offer of securities by existing shareholder(s) of a company to the public for subscription, through an offer document
- Public issue means an invitation by a company to the public to subscribe to the securities offered through a prospectus
- Issuer company means a company which has filed offer documents with the SEBI for making issue of securities

In case of a public issue by an unlisted company, the promoters shall contribute not less than 20 per cent of the post issue capital which should be locked in for a period of three years. The remaining pre-issue capital should also be locked in for a period of one year from the date of listing. Lock-in indicates a freeze on the shares and it is stipulated to ensure that promoters continue to hold some minimum percentage of shares in the company. Promoters' Participation in Excess of the required minimum contribution will be to treated as preferential allotment. Securities which were pledged with banks or financial institutions as collateral security for loans granted by such banks or financial institutions, would not be eligible for computation of minimum promoters' contribution in case of company going for public issue.

Every issuer making an issue of more than Rs. 500 crore is required to appoint a monitoring agency, which needs to file a monitoring report with the issuer company. The issuer company will in turn place the report before its Audit Committee so as to enable the Audit Committee to make appropriate recommendations to the Board of the issuer company. Further, every issuer company is required to inform material deviations in the utilisation of issue proceeds to the stock exchange and to simultaneously make public the material deviations/adverse comments of the Audit Committee/monitoring agency, through an advertisement in newspapers. This provision will not apply to (i) issues by banks and public financial institutions and (ii) offers for sale.

An issuer company has to file draft prospectus with the SEBI through a merchant banker, at least 30 days prior to the filing of the prospectus with the Registrar of Companies (ROC). The SEBI may specify changes, if any, in the draft offer document which shall have to be complied with the issuer or the lead merchant banker before filing the offer document (prospectus) with the ROC/SEs. The draft offer document is available on the SEBI website for public comments for a period of 21 days from the filing of the draft offer. The merchant banker has to ensure that all the requirements of the DIP (disclosure and investor protection) guidelines are complied with while submitting the draft offer document to the SEBI.

Some of the pertinent information that has to be disclosed in the offer document relate to earnings per share (EPS), pre-issue EPS for the last three years, pre-issue price–earnings ratio (P/E), average return on net worth in the last three years, minimum return on increased net worth required to maintain pre-issue EPS, net-asset value (NAV) per share based on last balance sheet, NAV per share after issue and comparison, thereof, with the issue price and comparison of all the accounting ratios of the issuer company. Other information include credit rating, risks in relation to the first issue, risk factors–internal and external, details of underwriting agreements, objects of the offering, funding plan, schedule of implementation, dividend policy, material developments since last balance sheet date and legal and statuary disclosures.

A company has to file a draft offer document with the SEBI atleast 21 days prior to the filing of the offer document with the registrar of companies (ROC) and stock exchanges (SEs). The SEBI may specify changes if any, in the draft offer document which shall have to be complied with the issuer or the lead merchant banker before filing the offer document (prospectus) with the ROC/SEs. The draft offer document is available on the SEBI website for public comments for a period of 21 days from the filing of the draft offer. The SEBI has extended the validity period of IPO's and rights issues to one year from three months. The SEBI issues observations in 21 days and the companies can raise the funds (launch IPO) within one year from the day when these observations were issued. The merchant banker has to ensure that all the requirements of the DIP (disclosure and investor protection) guidelines are complied with while submitting the draft offer document to the SEBI. In order to enable investors assess equity issues offered through an IPO the issuer has to get IPO grading done either before filling the offer documents with SEBI or thereafter. However, the prospectus/red herring prospectus must contain the grade(s) given to the IPO by all credit rating agencies.

The issuer is allowed to freely price the issue. The issuer and the merchant banker have to justify the issue price in the prospectus. There are two methods for determining the issue price–fixed price and the book building route. In the fixed price method, the issuer, in consultation with the merchant banker, decides the price of the issue while in book building, the issuer and the merchant bankers (book running lead manager) stipulate a floor price or a price band but the final price is discovered by market forces. On completion of the bidding process, the cut-off price is arrived at on the lines of 'Dutch' auction and the basis of allotment is finalised. The final price discovered can be any price in the price band or any price above the floor price. Usually it is the price at which the entire issue is exhausted. This issue price is called cut-off price. An issuer can go for differential pricing, i.e., pricing of an issue where one category is offered shares at a price different from the other category. In the DIP guidelines, differential pricing is allowed only if the securities to applicants in the firm allotment category is at a price higher than the price at which the net offer to the public is made. An issuer company can allot the shares to retail individual investors at a discount of maximum 10 per cent to the price at which the shares are offered to other categories of public. The final prospectus with all the details including the final issue price and the issue size is filed with the registrar of companies (ROC).

After the closure of the issue, the bids received are segregated under different categories viz., firm allotment, qualified institutional buyers (QIBs), non-institutional buyers, and retail investors. A firm allotment is the allotment to the investor on firm basis. An issuer making an issue to the public can allot shares on firm basis to Indian and multilateral development financial Institutions, Indian mutual funds, foreign institutional investors including non-resident Indians, permanent/regular employees of the issuer company, and scheduled banks. The ICDR Regulations guidelines provide for maximum percentage of shares which can be reserved on a firm basis. Reservation on a competitive basis can be made in a public issue to the employees of the company, shareholders of the promoting company in case of a new company, and shareholders of the group companies in case of an existing company. Indian mutual funds, foreign institutional investors, Indian and multilateral development institutions and scheduled banks are categorised as qualified institutional buyers. Retail individual investor(RII) means an investor who applies or bids for securities for a value of not more than Rs. 1,00,000. Investors who do not fall within the definition of retail investor and QIB are categorised as 'Non-institutional Investors' (NII). Any investor who wants to invest in an issue should have a PAN which is required to be mentioned in the application form.

Allotment to various investor categories is as follows.

In Case of Book Built Issue

1. In case an issuer company makes an issue of 100 per cent of the net offer to the public through 100 per cent book building process
   a. Not less than 35 per cent of the net offer to the public shall be available for allocation to retail individual investors;
   b. Not less than 15 per cent of the net offer to the public shall be available for allocation to non-institutional investors i.e. investors other than retail individual investors and qualified institutional buyers;
   c. Not more than 50 per cent of the net offer to the public shall be available for allocation to the qualified institutional buyers.
2. In case of compulsory book built issues at least 50 per cent of net offer to the public being allotted to the qualified institutional buyers (QIBs), failing which the full subscription monies shall be refunded.
3. In case the book built issues are made pursuant to the requirement of mandatory allocation of 60 per cent to QIBs in terms of Rule 19(2)(b) of Securities Contract (Regulation) Rules, 1957, the respective figures are 30 per cent for RIIs and 10 per cent for NIIs.

In Case of Fixed Price Issue The proportionate allotment of securities to the different investor categories in an fixed price issue is as follows

1. A minimum 50 per cent of the net offer of securities to the public shall initially be made available for allotment to retail individual investors, as the case may be.
2. The balance net offer of securities to the public shall be made available for allotment to:
   a. Individual applicants other than retail individual investors, and
   b. Other investors including corporate bodies/institutions irrespective of the number of securities applied for.

After the closure of the issue, allotment to each investor is done based on proportionate basis within their respective categories in both book built and fixed price public issue. The oversubscription ratios are calculated for each of the categories as against the shares reserved for each of the categories in the offer document. Within each of these categories, the bids are then segregated into different buckets based on the number of shares applied for. The oversubscription ratio is then applied to the number of shares applied for and the number of shares to be allotted for applicants in each of the buckets is determined. Then, the number of successful allottees is determined. All the public issues of size in excess of Rs.10 crore are to be made compulsorily in dematerialised form.

An investor can get allotment/refund of shares in case of fixed price public issues within 30 days of the closure of the issue and in case of book built public issues within 15 days of the closure of the issue.

- Allotment of shares is done within 15 days after the closure of an IPO. The SEBI reduced the time between public issue closure and listing to 12 days from existing of upto 22 days from May 1, 2010

- The SEBI proposes to shorten the period from closure of a public issue to listing of securities to 7 days from the current 12 days

TABLE 6.2 Primary Issues (IPOs)

Year	*No. of Issues*	*(Rs. in Crore) Issue Amount*
1989–1990	186	2,522
1990–1991	140	1,450
1991–1992	195	1,400
1992–1993	526	5,651
1993–1994	765	10,824
1994–1995	1,343	13,312
1995–1996	1,423	8,882
1996–1997	740	4,671
1997–1998	58	1,132
1998–1999	22	504
1999–2000	51	2,719
2000–2001	114	2,722
2001–2002	7	1,202
2002–2003	6	1,039
2003–2004	21	3,434
2004–2005	23	12,382
2005–2006	79	10,936
2006–2007	77	28,504
2006–2007	77	28,504
2007–2008	85	42,595
2008–2009	21	2,082
2009–2010	39	24,696

Source: SEBI. Bulletin July, 2010.

In case of a listed company, the aggregate issue size of the proposed issue along with all the previous issues made during the financial year should not exceed five times its pre-issue net worth as per the audited balance sheet of the last financial year. If the name of the company has been changed in the last one year, then the revenue accounted for by the activity suggested by the new name should not be less than 50 per cent of its total revenue in the preceding one full-year period.

No company can make a public or rights issue of debt instruments (whether convertible or not), unless it fulfils the following two conditions: credit rating of not less than investment grade is obtained from not less than two SEBI registered credit rating agencies and it should not be in the list of wilful defaulters of the Reserve Bank. Moreover, it should not have defaulted payment of interest or repayment of principal, if any, for a period of more than six months.

An issuer company should not allot non-convertible debt instrument pursuant to a public issue, if the proposed allottees are less than fifty. In such a case, the company shall have to refund the entire subscription amount received, a delay beyond eight days attracts a penal charge of 15 per cent per annum.

Most of the IPOs are quoted at a premium to their offer price on getting listed.

The spurt in the secondary market led to a rise in the number of IPOs in the year 2003–04. The year 2003–04 was a year of IPOs–17,821 crore as raised through 29 public offers. IPCL, CMC, Gail India, ONGC, Dredging Corporation, and IBP collectively raised Rs. 14,322 crore through the sale of government stake (Table 6.3). The enthusiastic retail participation led to an over-subcription of IPOs of large private sector companies such as Biocon, Patni Computers, TV Today, Indian Overseas Bank, and the UCO Bank.

With the new government coming in to power in May 2004, the primary market turned dull. The mega issue of Tata Consultancy Services (TCS) reversed the grim scenario. The IPO from India’s top software services exporting company, Tata Consultancy Services (TCS) received an upbeat response and raised Rs. 4,713.47 crore in July 2004. The listing of TCS was a milestone for the secondary market in the September 2004 quarter. TCS debuted at Rs. 1,076 on the BSE on August 25, 2004, attracting a 26.5 per cent premium to the IPO price of Rs. 850. TCS’s offer of 55.4 million shares was the biggest ever IPO in the Indian history and was oversubscribed 7.7 times and raised Rs. 54,200 crore. The National Thermal Power Corporation (NTPC) IPO, which raised Rs. 5,368.15 crore, was the first disinvestment issue since the Manmohan Singh government assumed office in May 2004.

TABLE 6.3 IPOs from the Central Government in Financial Year 2004

Company Name	Issue Type	Open Date	Close Date	Offer Price (Rs.)	Issue Size (Rs. in Cr.)
IPCL	Book Building	20.02.04	27.02.04	170	1,010.46
IBP	Book Building	23.02.04	01.03.04	620	357.01
CMC	Book Building	23.02.04	28.02.04	475	190.44
Bank of Maharashtra	Fixed Price	25.02.04	04.03.04	23	230.00
Dredging Corporation	Book Building	26.02.04	04.03.04	400	224.00
GAIL (India)	Book Building	27.02.04	05.03.04	195	1,649.02
Power Trading Corporation	Book Building	01.03.04	08.03.04	16	93.6
Petronet LNG	Book Building	01.03.04	09.03.04	15	391.47
Oil and Natural Gas Corp.	Book Building	05.03.04	13.03.04	750	10,694.50

Source: Capital Market.

A staggering amount of Rs. 30,301.96 crore was raised through 30 IPOs between October 2003 and 2004, which was three times the amount raised in the last five years together. In the year 2000–01, 124 IPOs raised Rs. 5,378.38 crore. Six equity IPOs netted only Rs. 1,076 crore in 2001–02. In 2002–03, six IPOs raised an even lower amount of Rs. 1,038.69 crore. The amount collected between October 2003 and October 2004 surpassed the amount of Rs. 30,000 crore raised in 1994–the highest till now.

The amount of Rs. 30,301.96 crore was raised in 2004 through 30 IPOs as against 445 IPOs in the year 1994. Of this, Rs.19,690.18 crore, i.e., 65 per cent, was raised through disinvestment of government stake and the remaining Rs. 10,611.78 crore was raised by companies in the private sector.

Of the 60 issues in the year 2004–05, 23 issues were IPOs, of which 22 were by non-financial companies in the private sector. Public issues by six companies—ICICI Bank Limited, TCS Limited, Sterlite Industries (India) Limited, National Thermal Power Corporation Limited, Jet Airways Limited, and Punjab National Bank—accounted for 72.9 per cent of the total resource mobilisation.

Almost one–half of the amount raised during the year 2005–06 was through the IPOs. All the public issues through IPOs in 2005–06 came from the private sector companies, except one, i.e., Gujarat State Petronet Limited. During the year 2006–07, 77 issues were IPOs, constituting 90 per cent of resource mobilisation while Rs. 42,505 crore was mobilised through 85 IPOs during 2007–08. Funds mobilised through IPOs constituted 48 per cent of the total resources mobilised. However, during the year 2008–09 there were only 47 issues, of which only 21 issues were IPOs. The equity markets came under pressure because of large capital outflows and turmoil in international financial markets. Since June 2009, the primary market has revived and there was a significant increase in IPOs during 2009–10 (Table 6.2).

Follow-on Public Offering (FPO)

It is an offer of sale of securities by a listed company. FPO is also known as subsequent or seasoned public offering. SEBI (DIP) Guidelines define a listed company as a company which has any of its securities offered through an offer document listed on a recognised stock exchange and also includes public sector undertakings whose securities are listed on a recognised stock exchange. Listed companies issue FPOs to finance their growth plans. In case of a listed company, the aggregate issue size of the proposed issue along with all the previous issues made during the same financial year in terms of size (i.e., offer through offer document + firm allotment + promoters' contribution) through the offer document should not exceed five times its pre-issue net worth as per the audited balance sheet of the last financial year. If the name of the company has been changed in the last one year, then the revenue accounted for by the activity suggested by the new name should not be less than 50 per cent of its total revenue in the preceding one full-year period. Any listed company not fulfilling these conditions shall be eligible to make a public issue by complying with QIB route or appraisal route as specified for IPOs. In addition, the promoters shall contribute not less than 20 per cent of the post-issue capital or 20 per cent of the issue size. Moreover, participation by promoters in the proposed public issue in excess of the required minimum percentage shall attract the pricing provisions of guidelines on preferential allotment, if the issue price is lower than the price as determined on the basis of said preferential allotment guidelines.

SEBI has introduced fast track issues (FTI) in order to enable well-established and compliant listed companies satisfying certain specific entry norms/conditions to raise equity through follow-on and rights issues. These norms reduce the process of issue and thereby the time period thus enabling issuers a quick access to primary capital market. Such companies can proceed with follow-on public offers (FPOs)/right issues by filing a copy of Red Herring Prospectus (RHP)/prospectus with the registrar of companies (RoC) or the letter of offer with designated stock exchange (SE), SEBI and stock exchanges. Moreover, such companies are not required to file draft offer document for SEBI comments and to stock exchanges as the relevant information is already in the public domain.

The entry norms for companies seeking to access primary market through FTI's in case aggregate value of securities including premium exceeds Rs. 50 lakhs:

1. The shares of the company have been listed on any stock exchange having nationwide terminals for a period of at least three years immediately preceding the date of filing of offer document with RoC/SE.
2. The 'average market capitalisation of public shareholding' of the company is at least Rs. 5,000 crores for a period of one year up to the end of the quarter preceding the month in which the proposed issue is approved by the board of directors/shareholders of the issuer;
3. The annualised trading turnover of the shares of the company during six calendar months immediately preceding the month of the reference date has been at least 2 per cent of the weighted average number of shares listed during the said six months period;
4. The company has redressed at least 95 per cent of the total shareholder/investor grievances or complaints received till the end of the quarter immediately preceding the month of the date of filing of offer document with RoC/SE.
5. The company has complied with the listing agreement for a period of at least three years immediately preceding the reference date;
6. The impact of auditors' qualifications, if any, on the audited accounts of the company in respect of the financial years for which such accounts are disclosed in the offer document does not exceed 5 per cent of the net profit/loss after tax of the company for the respective years;
7. No prosecution proceedings or show cause notices issued by the Board are pending against the company or its promoters or whole time directors as on the reference date; and
8. The entire shareholding of the promoter group is held in dematerialised form as on the reference date. For the purposes of this clause:
   a. 'Reference date' shall mean:
      i. in case of a public issue of securities by a listed company satisfying all the requirements specified in this clause, the date of filing of Red Herring Prospectus (in case of a book built issue) or prospectus (in case of a fixed price issue) with ROC; and
      ii. in case of a rights issue of securities by a listed company satisfying all the requirements specified in this clause, the date of filing of letter of offer with designated stock exchange.
   b. 'Average market capitalisation of public shareholding' shall mean the sum of daily market capitalisation of 'public shareholding' for a period of one year up to the end of the quarter preceding the month in which the proposed issue was approved by the Board/shareholders, as the case may be, divided by the number of trading days.

Listed companies with a good track record find it easier to raise funds through FPOs. During 2005–06, 24 companies raised Rs. 12,358 crore through FPOs, while during 2006–07 and 2007–08, only eight and seven companies raised Rs. 1,293 crore and Rs.11,916 crore, respectively, through FPOs which was less than 5 per cent of the capital raised from the primary market. Because of cumbersome procedural requirements and high cost and time, the FPOs are no longer an attractive route to raise funds. Listed companies are increasingly preferring the rights issue or Qualified Institutions Placement (QIP) route to raise funds.

Rights Issue

- Rights issue is an offer of new securities by a listed company to its existing shareholders on a pro-rata basis

Rights issue means an issue of capital under Sub-section (1) of Section 81 of the Companies Act,1956, to be offered to the existing shareholders of the company through a letter of offer. The SEBI (ICDR) Regulations define rights issue as an offer of specified securities by a listed issuer to the shareholders of the issuer as on the record date fixed for the said purpose; Section 81(1) of the Companies Act, specifies the mode of making a rights issue. As per Clause (a) of this section, the rights shares 'shall be offered to the persons who, at the date of the offer, are holders of equity shares of the company, in proportion, as nearly as circumstances admit, to the capital paid-up on those shares at that date.' Thus, for deciding the rights entitlement, only the capital paid up on each share is relevant.

Rights issue is the issue of new shares in which existing shareholders are given pre-emptive rights to subscribe to the new issue on a pro-rata basis. The right is given in the form of an offer to existing shareholders to subscribe to a proportionate number of fresh, extra shares at a pre-determined price.

Companies offer shares on a rights basis either to expand, diversify, restructure their balance sheet or raise the promoter stake.

Promoters offer rights issues at attractive price often at a discount to the market price due to a variety of reasons. Firstly, they want to get their issues fully subscribed to. Secondly, to reward their shareholders. Thirdly, it is possible that the market price does not reflect a stock's true worth or that it is overpriced, prompting promoters to keep the offer price low. Fourthly, to hike their stake in their companies, thus, avoiding the preferential allotment route which is subject to lot of restrictions. Moreover, funds can be raised by a company through this route without diluting the stakes of both its existing shareholders and promoters.

Rights Issue is different from public issue:

- In a rights issue, new shares are offered to existing shareholders while in a public issue shares are offered to public at large.
- In case of rights, shareholders can renounce their 'rights entitlement' (REs) while there is no rights entitlement in case of public issue.
- Rights shares are allotted based on shareholding as on record date as against 'proportionate allotment' based on application size in public issues. All details of shareholders on a record date is available with the company, other than those who have purchased RE from the market and become eligible for rights issue subsequently.

According to the SEBI guidelines, no listed issuer company shall make any rights issue of securities, where the aggregate value of such securities, including premium, if any, exceeds Rs. 50 lakh, unless a draft letter of offer has been filed with the SEBI, through a merchant banker, at least 30 days prior to the filing of the letter of offer with the designated stock exchange.

The ICDR regulations put restrictions on the issue of rights shares: (a) No issuer shall make a rights issue of equity shares if it has outstanding fully or partly convertible debt instruments at the time of making rights issue, unless it has made reservation of equity shares of the same class in favour of the holders of such outstanding convertible debt instruments in proportion to the convertible part thereof and (b) the equity shares reserved for the holders of fully or partially convertible debt instruments shall be issued at the time of conversion of such convertible debt instruments on the same terms on which the equity shares offered in the rights issue were issued.

A listed issuer who wants to raise funds through a rights issue shall announce a record date for the purpose of determining the shareholders eligible to apply for specified securities in the proposed rights issue. The issuer shall not withdraw rights issue after announcement of the record date. If the issuer withdraws the rights issue after announcing the record date, it shall not make an application for listing of any of its specified securities on any recognised stock exchange for a period of 12 months from the day on which the record date was announced. The issuer may seek listing of its equity shares allotted pursuant to conversion or exchange of convertible securities issued prior to the announcement of the record date, on the recognised stock exchange where its securities are listed.

Companies issue right shares by sending a letter of offer to the shareholders whose names are recorded in the books on a particular date. A shareholder has four options in case of rights. The first is to exercise his rights, i.e., buy new shares at the offered price, second is to renounce his rights and sell them in the open market, third is to renounce part of his rights and exercise the remainder, and lastly, choose to do nothing. Thus, rights issue application form has three parts. Part A deals with application by the shareholders (including request for additional shares), Part B deals with form of renunciation to be filled in by the shareholders who desire to renounce their RE, and Part C deals with application by renouncee(s). Also, shareholders can request for split application forms wherein they want to renounce only a part of their entitlement and want to apply for the rest of their entitlement or the shareholders want to renounce their entitlement in favour of more than one person.

Rights market has been a favoured capital mobilising route for the corporate sector. However, this market shrunk from Rs. 15,000 crore a year to just about Rs. 1,500 crore. This was due to an absence of a trading platform for the post-issue trading of rights. Rights were traded through brokers by way of an over-the-counter market which does not lead to efficient price discovery. Hence, those shareholders who do not subscribe to their entire entitlement let the unsubscribed rights expire. In addition, the rights issue process was cumbersome wherein the issue has to be kept open for 30 days and the disclosure norms are stringent. In order to activate the rights market and to make the process cheaper and faster, the SEBI eased the disclosure norms relating to the rights issue. For rights issues, the issuer is required to give only the audited accounts of the last financial year and audited or unaudited financials with limited review results for the remaining period instead of five years' restated financials required earlier. Since rights are issued to shareholders who have already been receiving information about the company on a regular basis, the issuer need not give a summary of the industry and its business or information on its past performance or management. Disclosures that have been done away with include summary of the industry and business of the issuer company, promise vs. performance with respect to earlier/previous issues, management discussion, and analysis. The disclosures relating to financial statements, litigations, risk factors, etc. have been simplified.

In order to enable corporates to raise money faster, SEBI reduced the time line for approving a rights issue from 109 to 43 days. The reduction in timeline approved for rights issues include: the number of days for the notice period for a board meeting to be reduced from seven days to two working days; the notice period for record date to be reduced from 15/21/30 days to seven working days for all scrips; issue period to be reduced from minimum 30 days to a minimum of 15 days with a maximum of 30 days; and the time for completion of post-issue activity to be reduced from 42 days to 15 days. This will help the corporates to lower the risk due to an adverse change in market conditions and keep project costs under control.

In September 2008, the SEBI proposed trading in rights entitlements (RE) both electronically and physically through the stock exchange platform. Rights would be given a separate ISIN (code number for the security in a depository system) for it to trade on the exchange.

The proposed trading will work as follow:

(A) Electronic Rights Issue Process

1. The issuer fixes a Record date to identify eligible shareholders. These shareholders would be entitled to subscribe to the proposed rights issue.
2. The issuer dispatches a letter to each shareholder informing that the rights entitlements have been credited into their respective demat accounts and duration of trading in RE and attaching the Letter of Offer and a Blank Application Form (unlike the present form which has shareholders' name and entitlement printed on it) to all the shareholders on the record date.
3. The blank application forms shall also be available with the stock exchanges, merchant bankers, and brokers. Further, soft copy of the same shall be available on the websites of the aforesaid intermediaries.
4. The Registrar, on the instruction of the issuer, shall through credit corporate action, credit the RE in the given ratio into the demat accounts of the eligible shareholders (as on record date).
5. The Rights issue shall thereafter open for (a) subscription and (b) renunciation/trading of RE electronically through the stock exchange platform.
6. Trading will happen in REs on the secondary market platform of the stock exchanges as it happens in case of ordinary shares. To separate the trading of REs from the trading of ordinary shares, a separate ISIN shall be given for the REs.
7. Shareholders, who do not want to exercise their RE, can renounce their RE by selling their REs on the electronic trading platform of stock exchanges.
8. The shareholders who have not renounced their RE and the renouncees who don't want to renounce their RE further shall apply for shares against their RE during the issue period (which includes the trading period of RE) by submitting the application form received with the Letter of Offer/downloaded blank application form or by submitting the required information on a blank paper and submit the requisite payment instrument to Bankers to the issue.
9. Trading of RE may close at least three working days before closure of the rights issue so as to avoid last minute rush in submitting applications and to ensure that beneficial owner of REs have sufficient time to submit an application form. Once trading of REs closes, ISIN assigned to REs shall be suspended.
10. After the closure of trading and settlement of the trades done, the depositories shall make available the list of RE holders on the date the ISIN was suspended and the list of shareholders on the record date to the Registrar with their respective number of REs.
11. Thereafter, the Registrar shall reconcile the application by matching the number of shares applied for with number of RE available in the respective demat accounts based on the aforesaid list.
12. The registrar shall finalise the allotment and thereafter on the instruction of the issuer, credit the rights shares through a credit corporate action, to the respective demat accounts.
13. Thereafter, the Registrar shall through a corporate action debit the REs from the respective demat accounts for (a) shares allotted and (b) lapsed REs.

(B) Physical Rights Issue Process

1. The issuer fixes a Record date to identify eligible shareholders. These shareholders would be entitled to subscribe to the proposed Rights Issue.

2. The issuer dispatches the Letter of Offer and Composite Application Form (CAF) with a pre-printed unique no., name of the shareholder and his/her entitlement, to all the eligible shareholders on the record date.
3. The Rights issue shall thereafter open for (a) subscription and (b) renunciation/trading of RE physically.
4. The shareholders who have not renounced their RE and the renouncees shall apply for shares against their RE during the issue period (which includes the trading period of RE) by submitting the CAF or by submitting the required information on a blank paper and submit the requisite payment instrument to Bankers to the issue.
5. Trading of RE may close at least three working days before closure of the rights issue so as to avoid last minute rush in submitting applications and to ensure that beneficial owner of REs have sufficient time to submit an application form.
6. The Bankers to the Issue shall send the CAF/blank paper application to the Registrar.
7. Thereafter, the Registrar shall reconcile the application form as per the current practice.
8. The Registrar shall finalise the basis of allotment and send the physical share certificates to the shareholders.

The rights issues market made a come back after remaining dormant for over a decade. Companies find it easier to raise funds through rights issues when the primary market is in doldrums. Most of the rights issues were offered at a discount to the ruling market price. Hence, shareholders enthusiastically responded to the rights issues. Fund mobilisation of Rs. 32,518 crore through rights issues in 2007–08 was the highest since 1992–93 (Table 6.4).

Besides the rights issue, several companies prefer private placement route to raise funds.

Indian Depository Receipts (IDRs)

Just as Indian companies tap foreign capital markets to raise funds, similarly, foreign companies can now issue their shares to Indian nationals in India. To enable Indian investors to diversify risk and as a step

TABLE 6.4 Rights and Preferential Equity Issues

Year	Rights Issues		Preferential Equity Issues	
	No.	Amount	Amount	No.
1992–93	488	12,630	NA	NA
1993–94	384	9,306	NA	NA
1994–95	351	6,793	NA	NA
1995–96	291	6,520	NA	NA
1996–97	131	2,724	NA	NA
1997–98	49	1,703	NA	NA
1998–99	26	568	NA	NA
1999–00	28	1,560	NA	NA
2000–01	27	729	12,330	335
2001–02	15	1,041	4,640	243
2002–03	12	431	1,912	313
2003–04	22	1,007	1,745	1,180
2004–05	26	3,616	6,966	4,428
2005–06	36	4,088	14,164	
2006–07	39	3,710	27,082	
2007–08	32	32,518	41,673	
2008–09	25	12,637		
2009–10	29	8,319		

Source: Prime Database.

Indian Depository Receipts

- Enable foreign companies to raise capital in India
- Enable Indian investors to diversify risk
- Enable globalisation of Indian stock exchanges

towards integration of the Indian capital market with the international capital markets, foreign companies are allowed to access the Indian capital market by issuing Indian depository receipts (IDRs).

An IDR is an instrument denominated in Indian rupees in the form of a depository receipt against the underlying equity of issuing company to enable foreign companies to raise funds from the Indian capital market.

The Companies Act was amended in 2002 to permit foreign companies to offer shares in the form of depository receipts in India. However, the Department of Company Affairs (DCA) laid down the guidelines in February 2004. The salient features of the Companies (Issue of Indian Depository Receipts) Rules, 2004 are as follows.

- Only those companies registered overseas and having a pre-issue paid up capital and free reserves of atleast USD 50 million and minimum average market capitalisation of at least USD 100 million during the three financial years preceding the issue would be eligible to tap the Indian capital market.
- The issuing company should have made profits for atleast five years prior to the issue and a dividend record of not less than 10 per cent in those years. Also, the issuing company has to ensure that pre-issue debt equity ratio is not more than 2:1.
- The issuing company should be listed in its home country and not been prohibited to issue securities by any regulatory Body and has a good track record with respect to compliance with securities market regulations.
- Foreigners, resident or employed in India, subsidiaries of global corporations and foreign funds registered in India would also be eligible to invest in IDRs.
- The application would be required to be made atleast 90 days ahead of the opening of the issue in the format laid down along with a refundable fee of USD 10,000. On receiving the approval, an issue fee of 0.5 per cent subject to a minimum of Rs. 10 lakh would have to be paid for issues of upto Rs. 100 crore. Where the issue size exceeds Rs. 100 crore, a fee of 0.25 per cent, would be payable on an amount exceeding Rs. 100 crore.
- The repatriation of proceeds of the issue would be subject to the laws in force relating to export of foreign exchange.
- The IDRs shall not be redeemable into underlying equity shares for a period of one year from the date of issue. IDRs can be converted into the underlying equity shares only after the expiry of one year from the date of the issue of the IDR, subject to the compliance of the related provisions of Foreign Exchange Management Act and Regulations issued there under by the RBI in this regard.
- The IDRs issued in a financial year can not exceed 15 per cent of the issuing company's paid-up capital and free reserves.
- The IDRs will have to be denominated in Indian Rupees and will have to be listed on one or more stock exchanges.
- The issuer shall appoint an overseas custodian bank, with whom the underlying equity shares shall be deposited and a domestic depository which shall be authorised to issue the IDRs. For the issue of IDRs, a merchant banker should also be appointed. Overseas Custodian Bank is a banking company which is established in a country outside India and has a place of business in India and acts as custodian for the equity shares of issuing company against which IDRs are proposed to be issued. Domestic Depository is a custodian of securities registered with the SEBI and authorised by the issuing company to issue Indian Depository Receipts. It is also responsible to distribute dividend or other corporate action on the IDRs to the IDR holders in proportion to their holdings of IDRs. Merchant Banker registered with SEBI is responsible for due diligence and filing the draft prospectus with the SEBI.
- The draft prospectus shall be filed by the issuer with the ROC and the SEBI. Copies of certain documents as specified have to be filed. The SEBI may specify changes to be made in the offer document within a period of 21 days.
- Statement of variation of utilisation of funds from the projected figures and the quarterly audited financial results shall be published in English language newspapers in India.
- On the receipt of dividends or other corporate action, the domestic depository shall distribute them proportionately among the IDR holders.
- IDRs will be listed on one or more recognised stock exchanges having nation-wide trading terminals in India and may be purchased, possessed, and freely transferred by persons resident in India as defined under the Foreign Exchange Management Act, 1999 (FEMA). IDRs can be transferred and redeemed, subject to the provisions of the FEMA.

The guidelines also clearly state that the IDR issuer would have to fulfil the eligibility criteria laid down by the SEBI and that it should obtain prior approval of the SEBI to make any issue.

The SEBI has prescribed its own set of norms which would also have to be adhered to by the IDR issuer.

Eligibility for Issue of IDRs No issuer shall make an issue IDRs unless

1. it fulfills the eligibility criteria as specified in Rule 4 of the IDR Rules;
2. it is listed in its home country;
3. it has not been prohibited to issue securities by any Regulatory Body; and
4. it has good track record with respect to compliance with securities market regulations.

- The first ever issue of IDRs was by Standard Chartered Bank on May 28, 2010. Of 240 million IDRs sold, 36 million IDRs were placed with anchor investors. Each IDR represent one-tenth of Stan Chart's UK listed stock (10IDRs = 1 share)

Investors

1. IDRs can be purchased by any person who is resident in India as defined under FEMA. NRIs and FIIs cannot purchase or possess IDRs unless special permission of the Reserve Bank of India is taken.
2. Investments by Indian Companies in IDRs shall not exceed the investment limits, if any, prescribed for them under applicable laws.
3. Automatic fungibility of IDRs is not permitted.
4. In every issue of IDR:
   a. At least 50 per cent of the IDRs issued shall be subscribed to by QIBs;
   b. The balance 50 per cent shall be available for subscription by non-institutional investors (i.e., investors other than QIBs and retail individual investors) and retail individual investors, including employees. IDRs shall be allocated among non-institutional investors, retail individual investors and employees at the discretion of the issuer. The manner of allocation shall be disclosed in the prospectus for IDRs.
5. The minimum application amount in an IDR issue shall be Rs. 20,000/-
6. Procedure to be followed by each class of applicant for applying shall be mentioned in the prospectus.

Minimum Issue Size The size of an IDR issue shall not be less than Rs. 50 crore.

Minimum Subscription If the company issuing the IDRs does not receive the minimum subscription of 90 per cent of the issued amount on the date of closure of the issue, or if the subscription level falls below 90 per cent after the closure of issue on account of cheques having being returned unpaid or withdrawal of applications, the company shall forthwith refund the entire subscription amount received. If there is a delay beyond eight days after the company becomes liable to pay the amount, the company shall pay interest at the rate of 15 per cent per annum for the period of delay.

The SEBI has extended the facility of anchor investors to issue of IDRs on similar terms as applicable to public issues made by domestic companies. Moreover, at least 30 per cent of issue size of the IDRs shall be reserved for allocation to retail individual investors, who may otherwise be crowded out. IDRs have not taken off so far.

Private Placement Market

In the primary capital market, corporates can raise resources through public issues, rights issues, and private placement. In the case of public issues, securities are allotted to the general public. In the case of rights issues, securities are allotted to the existing shareholders on a pro-rata basis. In contrast, private placement refers to the direct sale of newly issued securities by the issuer to a small number of investors through merchant bankers. These investors are selected clients such as financial institutions, corporates, banks, and high net worth individuals. Company law defines a privately placed issue to be the one seeking subscription from 50 members.

- Private placement refers to the direct sale of newly issued securities by the issuer to a small number of investors through merchant bankers. The number of investors can go only up to 49

The private placement route offers several advantages to the issuer for raising resources. The time taken by, as well as the cost of issue for the private placement route is much less for the issuer as compared to the public and rights issues. Privately placed issues can be tailor-made to suit the requirements of both the issuer and the investor, to give them greater flexibility than public or rights issues. Moreover, private placement does not require detailed compliance of formalities, rating, and disclosure norms as required in public or rights issues. These advantages make the market quite popular in the USA where generally, debt instruments are privately placed.

TABLE 6.5 Resource Mobilisation in the Private Placement Market

(Rs. in Crore)

Year	Private Sector						Public Sector						Grand Total	
	Financial Institutions		Non-financial Institutions		Total		Financial Institutions		Non-financial Institutions		Total			
	No. of Issues	Amt	No. of Issues	Amt	No. of Issues	Amt	No. of Issues	Amt	No. of Issues	Amt	No. of Issues	Amt	No. of Issues	Amount
1995–96	–	2,136.0	–	1,934.0	–	4,070.0	–	4,552.0	–	4,739.0	–	9,291.0	–	13,361.0
1996–97	–	1,847.0	–	646.0	–	2,493.0	–	6,541.0	–	6,032.0	–	12,573.0	–	15,066.0
1997–98	–	4,323.7	–	4,878.5	139	9,202.2	–	9,659.7	–	11,236.7	118	20,896.4	257	30,098.6
1998–99	87	12,174.2	93	4,823.5	180	16,997.7	67	20,382.4	69	12,298.9	136	32,681.3	316	49,679.0
1999–00	176	10,875.2	191	8,528.3	367	19,403.5	119	17,981.3	92	23,874.2	211	41,855.5	578	61,254.0
2000–01	208	13,262.6	171	9,843.0	379	23,105.6	112	26,201.2	96	18,529.6	208	44,730.8	587	67,836.4
2001–02	363	16,019.0	309	12,601.0	672	28,620.0	167	17,358.0	119	18,898.0	286	36,256.0	958	64,876.0
2002–03	327	9,454.0	550	15,623.0	877	25,077.0	157	20,407.0	110	21,464.0	267	41,871.0	1144	66,948.0
2003–04	344	12,250.7	296	6,209.2	640	18,759.9	132	26,461.3	102	18,679.4	234	45,140.7	874	63,900.6
2004–05	255	20,974.2	462	14,820.0	717	35,794.2	124	25,531.2	69	22,080.1	193	47,611.2	910	83,405.4
2005–06	375	26,463.0	571	14,727.0	946	41,190.0	137	39,165.0	32	16,119.0	169	55,284.0	1,115	96,473.0
2006–07	632	48,414.0	892	33,426.0	1,524	81,841.0	127	52,217.0	30	11,908.0	157	64,025.0	1,681	1,45,866.0
2007–08	905	88,291.0	711	41,386.0	1,616	1,29,677.2	132	56,185.5	67	26,862.7	199	83,048.2	1,815	2,12,725.4
2008–09P	683	60,245.9	370	32,789.8	1,053	93,035.7	123	64,608.8	105	45,101.1	228	1,09,709.1	1,281	2,02,744.8

P: Provisional

Source: RBI, *Hand book of Statistics on Indian Economy*, 2006.

Available data indicates that private placement has become the preferred route for raising resources by both private and public sector companies. In India, this route has gained immense importance during the last few years, in view of the prolonged subdued conditions in the new issues market.

Table 6.5 reveals that in the year 1997–98, the amount of resources raised through private placement almost doubled from Rs. 15,066 crore to Rs. 30,098 crore. Again, in the years 1999–2000 and 2000–01, the amount of resources doubled from Rs. 30,098 crore to Rs. 67,837 crore. The share of resources mobilised through private placement in these years accounted for nearly 88 per cent of the total resources mobilised from the primary market. This route was preferred due to dormant conditions prevailing in the capital market.

The public sector garnered huge resources from the private placement market. Its average share during the seven years, from 1995–96 to 2001–02 was 68 per cent in total private placements. The major all-India development financial institutions, the state-level undertakings, and PSUs tapped this market to raise a large amount of funds. The private sector's share in total private placement was on an average 40 per cent in the last fourteen years. (Table 6.6)

Mobilisation of resources through private placement increased by 30.5 per cent in 2004–05 and 15.5 per cent in 2005–06. The public sector companies garnered a large amount of resources through private placement.

In terms of instruments, debt instruments, mainly bonds and debentures of different maturities, were preferred the most. The equity portion was raised in the form of preference shares.

The factors that led to private placement becoming a favoured route for Indian corporates and financial institutions are as follows.

- The prolonged subdued conditions in the primary market since 1995–96.
- Private placements in India were not bound by any regulatory system till September 2003.
- Private placements have no lock-in period except when it is in favour of promoters.
- There is no compliance system for merchant bankers in private placement as in the case of public issues.
- The limit on a bank's investment on debt has been removed which has made this market more buoyant.
- Through private placements, issuing banks can raise their Tier II capital in order to prop up the capital adequacy ratio.

TABLE 6.6 Share of Public Sector and Private Sector in Private Placement Market and Share of Private Placement in Total Resources Mobilised in the Primary Market

Year	*Share of Private Sector (In %) in Private Placement*	*Share of Public Sector (In %) in Private Placement*	*Share of Private Placement in Total Resource Mobilisation (In %)*
1995–96	31	69	39
1996–97	17	83	49
1997–98	31	69	87
1998–99	34	66	84
1999–2000	32	68	89
2000–01	36	64	91
2001–02	44	56	90
2002–03	37	63	94
2003–04	42	58	90
2004–05	42	58	79
2005–06	44	56	72
2006–07	58	42	78
2007–08	57	43	64
2008–09	46	54	93

- Many corporate issuers of debt are defaulters with the subscribing banks and financial institutions. These banks and financial institutions subscribe to a fresh issue and the proceeds from this issue are used to repay the interest and principal of term loans so that the issuing company is not classified as a non-performing asset in the books.
- Benefits of operational flexibility and attractive pricing.
- The private sector taps this market to raise funds for the retirement of old expensive debt or acquisitions.
- Short-term debentures and non-convertible debentures are more popular with issuers and investors in this market.

The major issuers of privately placed securities are financial institutions, banks, and central- and state-level undertakings. The subscribers are banks, provident funds, mutual funds, and high net worth individuals.

In India, privately placed securities are admitted for trading, but are not listed. Banks do not trade these securities and hold them till maturity. Hence, there is no secondary market for such securities. There is not much depth in the market as the number of investors is quite low.

In the US, the private placement market is an important source of long-term funds for corporates. Only qualified institutional buyers (QIBs) are allowed to trade in private debt and this has increased the liquidity of private placements.

Banks and institutions have over Rs. 1,00,000 crore worth of exposure in the private placement market. The Reserve Bank has issued guidelines to banks and financial institutions for investment in such cases. These guidelines are, however, not applicable to privately placed issues with less than 50 members. Issuers avoid these guidelines by tying up with less than 50 members. Hence, the capital market regulator, the SEBI, prescribed stringent disclosure norms on September 30, 2003 for this segment, which had remained almost unregulated until then. On account of this, resource mobilisation from this market declined in 2003–04.

- To go for private placement, the company has to be listed on a stock exchange.

Private placements are now regulated. Companies wanting to list their privately placed bonds have to make disclosures as per the Companies Act and the SEBI guidelines. Further, they will have to comply with the listing agreement of stock exchanges. For privately placed debt in standard denominations of Rs. 10 lakh, such disclosures have to be made through the company and stock exchange websites. Credit rating is compulsory for privately placed debt issues. At least an investment-grade rating is needed for listing. All such issuances must have a debenture redemption trustee and a reserve that may be governed by the SEBI's debenture trust rule. The company shall appoint a SEBI-registered debenture trustee. Securities should be issued and traded in demat form. All trades, with the exception of spot transactions in a listed debt security shall be executed only on the trading platforms of a stock exchange. Secondary market is restricted to qualified institutional buyers (QIBs) and high net worth individuals. If an issuer is unwilling to list the paper, no SEBI-registered merchant banker can be involved in the issue. The Reserve Bank of India also has barred financial institutions (FIs) from investing in unrated papers and papers rated below investment grade. The RBI has placed a 20 per cent ceiling on investment in unlisted securities and securitised paper. Within this 20 per cent limit, it has placed a ceiling of 10 per cent on FI investment in unlisted papers. FIs have to follow the guidelines issued by the SEBI on raising resources through the private placement market. Further, FIs have to disclose the details on the issuer composition of investment made through private placement and non-performing investments in the balance sheet from the fiscal year 2003–04. The RBI norms have also put a cap on banks' investment in unrated debt at 10 per cent of their investments.

Preferential Issue

A public/rights issue is cumbersome and requires compliance with statutory provisions. Hence, many companies opt for preferential allotment of shares for raising funds. Such allotments are made to various strategic groups including promoters, foreign partners, technical collaborators, and private equity funds. Companies need to seek approval from shareholders for preferential allotment of shares. An issuer need not file an offer document in case of preferential allotment.

A preferential issue is an issue of shares or of convertible securities by listed companies to a select group of persons under Section 81 of the Companies Act, 1956. The issuer company has to comply with the Companies Act and the requirements contained in the chapter pertaining to preferential allotment in the SEBI (ICDR) Regulations which inter-alia include pricing and other requirements.

The SEBI (ICDR) Regulations define 'preferential issue' as an issue of specified securities by a listed issuer to any select person or group of persons on a private placement basis and does not include an offer

Box 6.2 Preferential Allotments

The preferential allotment route has been grossly misused by both MNCs and Indian companies. Twenty-nine MNCs had exercised the aforesaid provisions of preferential share in favour of their promoters during 1991–94. Two cases of the lowest throw-away prices at which shares were offered to their promoters were at Rs. 60 and Rs. 110 against the market price of Rs. 700 and Rs. 1,050 respectively. Nine Indian companies similarly allotted preferential shares to their promoters during 1993–94. The lowest price at which one company allotted the share was Rs. 22 against the market price of Rs. 400. Total unlawful gains made by the promoters ran into more than Rs. 2,996.56 crore for MNCs and Rs. 846 crore for Indian companies.

Source: Consumer Education and Research Centre (As reported in *The Economic Times*).

of specified securities made through a public issue, rights issue, bonus issue, employee stock option scheme, employee stock purchase scheme or qualified institutions placement or an issue of sweat equity shares or depository receipts issued in a country outside India or foreign securities;

The promoter has been defined as a person or persons who are in overall control of the company; who are instrumental in the formulation of a plan or programme pursuant to which the securities are offered to the public and those named in the prospectus as promoter(s); Provided that a director or officer of the issuer or a person, if acting as such merely in his professional capacity, shall not be deemed as a promoter. Provided further that a financial institution, scheduled bank, foreign institutional investor, and mutual fund shall not be deemed to be a promoter merely by virtue of the fact that 10 per cent or more of the equity share capital of the issuer is held by such person; Provided further that such financial institution, scheduled bank and foreign institutional investor shall be treated as promoter for the subsidiaries or companies promoted by them or for the mutual fund sponsored by them;

A promoter group includes the promoter, an immediate relative of the promoter (i.e., a spouse of that person, or a parent, brother, sister, or child of the person or of the spouse). In case the promoter is a company, a subsidiary or holding company of that company; any company in which the promoter holds 10 per cent or more of the equity capital of the promoter; any company in which a group of individuals or companies or combinations thereof who holds 20 per cent or more of the equity capital in that company also holds 20 per cent or more of the equity capital of the issuer company. In case, the promoter is an individual, any company in which 10 per cent or more of the share capital is held by the promoter or an immediate relative of the promoter or a firm or HUF in which the 'promoter' or any one or more of his immediate relative is a member; any company in which a company specified above holds 10 per cent or more of the share capital; any HUF or firm in which the aggregate share of the promoter and his immediate relatives is equal to or more than 10 per cent of the total, and all persons whose shareholding is aggregated for the purpose of disclosing in the prospectus shareholding of the promoter group. Provided that a financial institution, scheduled bank, foreign institutional investor, and mutual fund shall not be deemed to be promoter group merely by virtue of the fact that 10 per cent or more of the equity share capital of the issuer is held by such person: Provided further that such financial institution, scheduled bank, and foreign institutional investor shall be treated as promoter group for the subsidiaries or companies promoted by them or for the mutual fund sponsored by them;

- 'Preferential Allotment' includes issue of shares on preferential basis and/or through private placement made by a company in pursuance of a resolution passed under Sub-section (IA) of Section 81 of the Companies Act,1956 and issue of shares to the promoters and their relatives either in public issue or otherwise
- Lock-in indicates a freeze on the shares and it is stipulated to ensure that the promoters continue to hold some minimum percentage of shares in the company

A company can make preferential issue of equity shares, warrants, partly convertible debentures (PCDs), fully convertible debentures (FCDs), or any other financial instruments convertible into or exchanged with equity shares at a later date. A listed company is permitted to make a preferential issue only if its entire shareholding is held in dematerialised form. In case of preferential issues, the entire pre-preferential allotment shareholding should be under lock-in. The lock-in period shall commence from the relevant date upto a period of six months from the date of preferential allotment. The shareholders who have sold their shares during the six months period prior to the relevant period would not be eligible for allotment of shares on a preferential basis.

The SEBI has issued norms for preferential allotment which are as follows:

- The total preferential investments issued to promoters is to be locked in for three years. The lock-in period of shares allotted on conversion of warrants shall start when shares are allotted and not when warrants are allotted.
  - The upfront margin to be paid by allottees of warrants has been raised to 25 per cent from 10 per cent. This is expected to discourage promoters from issuing warrants to themselves at a discount in a bull run and then do not honour their commitments if the stock prices fall.
- The details of the amount utilised out of preferential issue proceeds are to be disclosed under an appropriate head in the balance sheet of the company, indicating the purpose for which such money has been utilised. Even the details of the unutilised money are also to be disclosed in the balance sheet under a separate head indicating the form in which such unutilised money has been invested.

Preference for Preferential Issues

- To enhance holding of promoters
- Can be pledged with banks
- Easier Norms
- Low cost
- Management control to institutional investors

- Preferential allotment should be at a price not less than the higher of the following: The average of the weekly high and low of the closing prices of the scrip quoted on a stock exchange during the six months preceding the date of general meeting or the average of the weekly high and low of the closing prices of the scrip quoted on a stock exchange during the two weeks preceding the date of general meeting. [Clause 13.1.1.1]
- Where the equity shares of a company have been listed on a stock exchange for a period of less than six months as on the relevant date; the issue of shares on preferential basis can be made at a price not less than higher of the following: The price at which shares were issued by the company in its IPO or the average of the weekly high and low of the closing prices of the related shares quoted on the stock exchange during the period shares have been listed preceding the relevant date or during the two weeks preceding the relevant date provided that on completing a period of six months of being listed on a stock exchange, the company shall recompute the price of the share in accordance with the provisions mentioned above and if the price at which shares were allotted on a preferential basis under this clause was lower than the price so computed, the difference shall be paid by the allottees to the company. The preferential allotment guidelines were amended to enable companies with listing history of less than six months also to raise money through preferential allotment, subject to complying with the modified pricing and disclosure norms.

Further, the listed companies intending to make preferential allotment would be required to obtain PAN from each applicant before making the allotment. Debt restructuring framework should commence from the date of allotment and continue for a period of one year. In case of partly paid-up shares, the lock-in period should commence from the date of allotment and continue for a period of one year from the date when shares become fully paid-up.

Preferential allotment is carried out for various reasons: to enhance the promoters' holding by issuing share warrants to themselves; as part of debt restructuring/conversion of loans; for the purpose of strategic investments by institutional/foreign investors; to issue shares by way of Employees Stock Option Plans (ESOPs); for fresh issue to shareholders other than promoters and for take-over of company by management group.

Promoters Pledge their Holdings

- to release their earlier pledged holdings,
- to cash in on the bull run,
- to finance their private transactions, or
- as a collateral for their companies' borrowings

Companies use the preferential allotment route to raise working capital. Besides, the company can choose among the varied types of investors for its preferential issue. Institutional investors like private equity funds prefer preferential issue route as it enables management control in the issuing company and the lock-in period is only one year. One of the reasons why companies prefer to allot preferential shares to their promoters is that they can be pledged with banks either to release their earlier holdings which are not under lock-in or to release fresh funds to cash in on the bull run. The preferential allotment route is preferred in bullish market.

Preferential issues enable quick fund raising at low cost and allow a company to take on board its business partners like technology collaborators, to raise their commitment to the company. Moreover, increase in investments by promoters and institutional investors boosts the confidence of retail investors However, it increases the equity base of a company which leads to a decline in the earnings per share. Since the beneficiaries are promoters or outsiders, the relative holding of existing shareholders declines. Hence, it is an inequitable way of raising funds. In most cases, promoters are allotted additional shares at times when the company may not be in need of funds. This adversely affects the valuation ratios and brings down the stock prices thereby affecting the interests of existing shareholders.

Qualified Institutions Placement (QIP)

It has emerged as a new fund raising investment for listed companies in India. QIP is an issue of equity shares or securities convertible into equity shares by a listed company to qualified institutional buyers only, in terms of provisions of Chapter XIIIA of SEBI(DIP) guidelines. Through a QIP issue, funds can be raised from foreign as well as domestic institutional investors without getting listed on a foreign exchange, which is a lengthy and cumbersome affair. Also, unlike a private placement, there is no lock-in clause. The

Box 6.3 Private Equity (PE)

Private equity investments have increased in India. In 2006, over USD 7 bn were invested by PE firms in India. Private equity is a long-term equity investment by a fund in private and public (listed) firms with successful business models and a potential for a higher growth. Private equity plays an important role in the growth of enterprises. It helps the investee companies in promoting their growth by providing capital knowledge and skills. It also helps in formulating and shaping the corporate strategy of investee firms and improving their corporate governance. Some PE firms such as Warbury Pincus Investments, GW Capital Investment, and GA Partners Investment have invested in highly successful companies like Bharti, Spectramind, ICICI ventures, Biocon, Patni Computers, and many others.

issue process is not only simple but can be completed speedily since the company issues equity shares and does not create a derivative investment as is the case with GDR/ADR. Investors also gain since they invest directly in equity shares and do not have to bear the cost of holding and converting depository receipts. Unlike GDRs, a QIP issue can be offered to a wider set of investors including Indian mutual funds, banks and insurance companies, as well as, foreign institutional investors. As there is no new stock exchange listing, the issue is free from the hassles of continuing disclosures and administrative costs.

SEBI issued guidelines for Qualified Institutions Placement on May 8, 2006. Key features of the same are:

Issuer A company whose equity shares are listed on a stock exchange having nation-wide trading terminals for a period of atleast one year and which is complying with the prescribed requirements of minimum public shareholding of the listing agreements will be eligible to raise funds in domestic market by placing securities with Qualified Institutional Buyers (QIB).

- Qualified Institutions Placement is a private placement of equity shares or convertible securities by a listed company to Qualified Institutions Buyers

Securities Securities which can be issued through QIP are equity shares, or any securities other than warrants, which are convertible into or exchangeable with equity shares. A security, which is convertible or exchanged into equity shares at any time, after allotment of security but not later than sixty months from the date of allotment can be issued. The specified securities shall be made fully paid up at the time of allotment.

Investors/Allottees The specified securities can be issued only to QIBs, as defined under subclause (v) of Clause 2.2.2 B of the SEBI (DIP) Guidelines. Such QIBs shall not be promoters or related to promoters of the issuer, either directly or indirectly. Each placement of the specified securities issued through QIB shall be on private placement basis, in compliance with the requirements of the first provision to clause (a) of Sub-section (3) of Section 67 of the Companies Act, 1956. A minimum of 10 per cent of the securities in each placement shall be allotted to Mutual Funds. For each placement, there shall be atleast two allottees for an issue of size upto Rs. 250 crores and at least five allottees for an issue size in excess of Rs. 250 crore. Further, no single allottee shall be allotted in excess of 50 per cent of the issue size. Investors shall not be allowed to withdraw their bids/applications after closure of the issue.

- The issuing company is required to allot atleast 10 per cent of the total issue to mutual funds.

Issue Size The aggregate funds that can be raised through QIPs in one financial year shall not exceed five times of the networth of the issuer at the end of its previous financial year.

Placement Document Issuer shall prepare a placement document containing all the relevant and material disclosures. There will be no pre-issue filing of the placement document with SEBI. The placement documents will be placed on the websites of the stock exchanges and the issuer.

Pricing The floor price of the specified securities shall be determined on a basis similar to that for GDR/FCCB issues and shall be subject to adjustment in case of corporate actions such as stock splits, rights issues, bonus issue, etc. The floor price for QIPs is based on two weeks average with the relevant date being the day on which the board meets to take the decision to open the QIP.

Other Procedural Requirements The resolution approving QIP, passed under Sub-section (1 A) of Section 81 of the Companies Act, 1956 or any other applicable provision, will remain valid for a period of 12 months from the date of passing of the resolution. There shall be a gap of at least six months between each placement in case of multiple placements of specified securities pursuant to authority of the same shareholders' resolution. Issuer and Merchant Banker shall submit documents/undertakings, if any, specified in this regard in the listing agreement, for the purpose of seeking in-principle approval and final permission from Stock Exchanges for listing of the specified securities.

QIP is an increasingly preferred route to raise funds. During 2007–08, 38 companies raised Rs. 25,525 crore through QIP route. Due to the global financial crisis, only three issuers raised Rs. 264 crore through QIPs during 2008–09. With stabilisation in the global financial markets, there was a sharp rise in the QIP issues. A staggering amount of Rs. 42,729 crore was raised by 62 issuers through QIPs during 2009–10.

RESOURCE MOBILISATION FROM THE PRIMARY MARKET

Both PSUs and private companies tapped the market to finance capital expansion activity and growth plans.

Table 6.7 gives a bird's-eye view of resources mobilised from the primary market through prospectus, rights, and private placement. Table 6.7 reflects three distinct trends in resource mobilisation from the primary market through prospectus and rights issues. It indicates an increasing trend from 1991–92 to 1994–95, a decreasing trend from 1995–96 onwards, with unsustained spells of revival in 1998–99 and

TABLE 6.7 Capital Raised

Year	Total		Category Wise				Issuer-type				Equities				Instrument-wise				(Rs. Crore)	
			Public		Rights		Listed		IPOs		At Par		At Premium		CCPS/FCDs		Bonds/NCDs		Others	
	No.	Amt	No.	Amt	No.	Amt	No.	Amt	No.	Amt	No.	Amt	No.	Amt	No.	Amt	No.	Amt	No.	Amt
1999–00	93	7,817	65	6,257	28	1,560	42	5,098	51	2,719	30	786	52	3,780	0	0	10	3,200	2	51
2000–01	151	6,108	124	5,378	27	729	37	3,385	114	2,722	84	818	54	2,408	2	142	10	2,704	1	36
2001–02	35	7,543	20	6,502	15	1,041	28	6,341	7	1,202	7	151	8	1,121	0	0	16	5,601	4	670
2002–03	26	4,070	14	3,639	12	431	20	3,032	6	1,039	6	143	11	1,314	0	0	8	2,600	2	13
2003–04	57	23,272	35	22,265	22	1,007	36	19,838	21	3,434	14	360	37	18,589	0	0	6	4,324	0	0
2004–05	60	28,256	34	24,640	26	3,616	37	15,874	23	12,382	6	420	49	23,968	0	0	5	3,867	0	0
2005–06	139	27,382	103	23,294	36	4,088	60	16,446	79	10,936	10	372	128	27,000	0	0	0	0	1	10
2006–07	124	33,508	85	29,797	39	3,711	47	5004	77	28,504	2	12	119	32,889	0	0	2	356	1	249
2007–08	124	87,029	92	54,511	32	32,518	39	44,434	85	42,595	7	387	113	79,352	2	5,687	2	1,603	0	0
2008–09	47	16,220	22	3,582	25	12,637	25	12,637	21	2,082	5	96	40	14,176	1	448	1	1,500	0	0
2009–10	76	57,555	47	49,236	29	8,319	34	30,399	39	24,696	1	9	71	54,866	1	180	3	2,500	0	0

Note: FCD: Fully Convertible Debenture; NCD: Non-Convertuble Debenture; CCPS: Cumulative Convertible Preference Share.
Source: SEBI Bulletin.

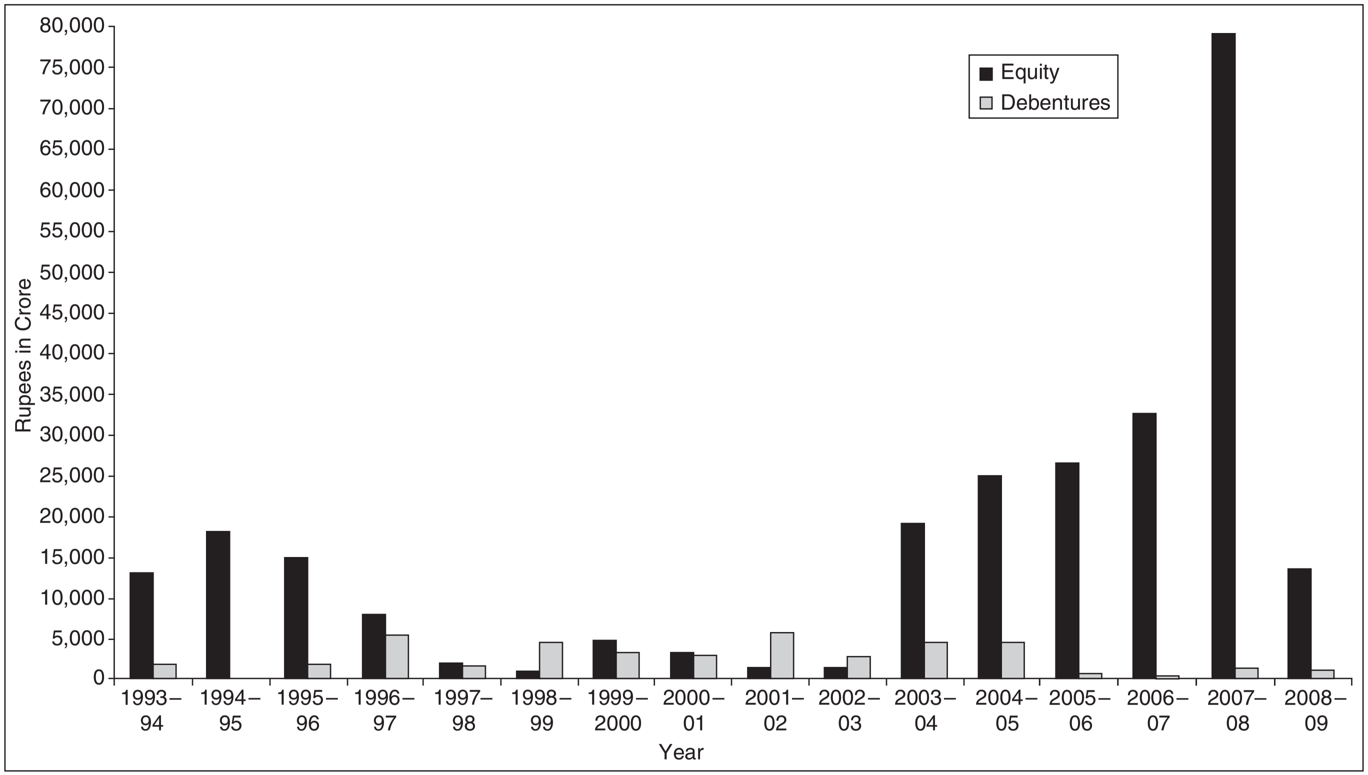

Figure 6.2 Resources Mobilised from the Primary Market—Instrument Wise

an increasing trend since 2003 (Figure 6.2). The growth rate of new capital issues through prospectus and rights was the highest (232 per cent) in 1992–93—a year immediately after the reforms were initiated. This growth was partly a result of the abolition of the Capital Issues (Control) Act with effect from May 1992 and the freeing of the pricing of issues that followed as a consequence. Huge resources were raised also in the following two years. This was due to a spurt in equity issues with premium and a wide variety of innovative/hybrid instruments.

The primary market was quite depressed from 1995–96. This overall decline could be attributed to factors operating on the demand and supply sides. The scams which took place in the secondary market adversely affected the primary market. Many fraudulent promoters cheated investors which led to a loss in investor confidence. Moreover, prices of many issues floated at a high premium declined upon listing. All these factors drove away investors from the primary market. Moreover, strict disclosure standards and entry point norms prescribed by the SEBI and an overall slowdown in the economy and in the industry partly led to deceleration in the primary market.

The decline in resources raised by public sector through prospectus and rights was much sharper as both the government companies and non-financial PSUs did not tap this market for three consecutive years. The public sector preferred the private placement route for raising resources.

The declining trend was again reversed in 2003–04. The phenomenal success of the Maruti IPO, the booming stock markets, low interest rates, and good economic growth forecast led to a revival of the primary market. There was a record increase in capital raised from primary markets during 2007–08 both through public issues and private placement. The global financial crisis took a toll on global financial markets leading to a sharp decline in the number and size of new issues during 2008–09. The private sector tapped the primary market by issuing rights shares while the public sector raised funds only through private placements. With the easing of liquidity pressures in the global financial markets, there was a spurt in primary market activity in the second quarter of 2009–10. There were a large number of primary issuances and private placements by both private and public sector companies.

Non-government Public Limited Companies (Private Sector)

During the CCI regime, most of the companies in the private sector were not motivated to make public issues as the issue price was set below the intrinsic worth of the share. With reforms, many companies came forward with a large number of issues.

Table 6.8 reveals that the average share of the private sector in resources mobilised through prospectus and rights was around 45 per cent in the 1990s. A record growth rate of 220 per cent and a record share of 91 per cent in resources mobilised through prospectus and rights was recorded in 1992–93, a year immediately after the reforms were initiated. It seems that the private sector benefited the most in the era of free pricing.

The share of the private sector has declined sharply after 1994–95 and reached a dismal low of 7 per cent between 1999–2000 to 2001–02 due to loss of investor confidence and bearish conditions in the secondary market. The growth rate in resources mobilised through prospectus and rights issues also turned negative since 1995–96 signaling a bearish scenario in the new issue market.

Resource mobilisation from the private placement market declined during 2003–04 due to stringent disclosure norms prescribed by the SEBI and a spate of public issues from public sector enterprises, banks and financial institutions.

The data in Table 6.10 reflects that equity issues gained popularity after the initiation of reforms. The abolition of the CCI and free pricing has given a tremendous boost to the equity market since 1992–93. The amount of preference share issues in the total issues was negligible. These had virtually gone out of existence in the late 1970s. The re-emergence of preference shares was witnessed in 1994–95 and 1995–96 as a tax benefit was granted under Section 80M of the Income Tax Act. As per this section, if a company subscribed to the preference shares of another company, the former was entitled to tax exemption on the incoming dividends on preference shares if its dividend outgo (on equity shares) exceeded the incoming dividends. With the withdrawal of this benefit, the popularity of preference shares declined.

Debenture issues were prominent till 1990–91. Their prominence declined in the free pricing era wherein the private sector preferred to issue equity shares at a premium. The year 1997–98 was an exception as the debenture issues gained prominence over the equity issues with large companies in the financial sector relying on debt issues.

Rights issues dominated the market till 1992–93, the average proportion being 60 per cent in the total capital issues. This proportion came down steeply in the subsequent years as the prospectus issues

TABLE 6.8 Share of the Private Sector in Resource Mobilisation from the Primary Market

Year	Amount Mobilised Through Prospectus and Rights		Amount Mobilised Through Private Placements	
	(Rs. in Crore)	(Share in Per Cent to Total Resources) (In %)	(Rs. in Crore)	(Share in Per Cent to Total Resources) (In %)
1995–96	16,075	47	4,071	12
1996–97	10,410	34	2,493	8
1997–98	3,138	9	9,202	26
1998–99	5,013	8	16,997	29
1999–2000	5,153	7	19,404	28
2000–01	4,890	77	23,106	34
2001–02	5,692	80	28,620	44
2002–03	1,878	39	25,077	37
2003–04	3,675	47	18,760	29
2004–05	13,482	62	35,794	43
2005–06	21,154	78	41,190	43
2006–07	30,603	95	81,841	56
2007–08	67,311	77	1,29,677	61
2008–09	16,220	100	93,036	46
2009–10	25,153	77	NA	NA

NA = Not Available.
Source: RBI, *Annual Report*, various issues.

TABLE 6.9 Proportion of Prospectus and Rights Issues and of Equity Preference and Debenture Issues in the Total Capital Issues by Non-government Public Limited Companies

(In Per Cent)

	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09
Equity	29.7	48.8	51.7	65.5	74.1	59.3	36.8	51	53.4	53.9	15.1	24.5	61.0	82.3	99.1	97.2	89.3	100
Preference	0.3	0.2	0.3	0.5	0.9	0.7	0.2	1	0	3.0	0	–	–	–	–	–	8.6	–
Debentures	70.0	50.0	48.0	34.0	25.0	40.0	63.0	42	46.6	43.2	84.9	75.5	39.0	17.7	0.9	2.8	2.1	–
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Prospectus	33	35	60	74	64	74	45	52	78	89	87	75	85	87	85	89	75	18
Rights	67	65	40	26	36	26	55	48	22	11	13	25	15	13	15	11	25	82

NA=Not Available.
Source: RBI, *Annual Report*, various issues.

became more popular with private sector companies. The proportion of issues through prospectus was highest in the years 1999–2000 and 2000–01. The companies in the information technology (IT) sector could successfully raise resources through the issue of prospectus.

The year 1992–93 witnessed a spurt not only in total equity issues but also in equity issues with premium. The premium charged as a proportion of the total amount raised had been on an average of 47 per cent from 1992–93 to 1995–96. The premium charged on equities by private corporates as a proportion of total amount of equity issues declined substantially to 23.9 per cent from 40.5 per cent in view of the prolonged bearish conditions on the stock market and reduced preference for equity issues. In the years 1997–98 and 1998–99, an increase in this proportion was witnessed because only reputed and large companies with good track records accessed the new issue market. Moreover, these companies received a sound response in the absence of good issues in the market. The share of the premium in the total amount mobilised by equity issues reached a peak of 78.8 per cent in 1999–2000. This was due to a craze for the

TABLE 6.10 Share of Equity Issues with Premium in the Total Equity Issues of Non-government Public Limited Companies

Year	*Total Equity Issues*		*Equity Issues with Premium*		*Per Cent of Equity Issues with Premium to Total Equity Issues*	
	Number	*Amount (Rs. in Crore)*	*Number*	*Amount (Rs. in Crore)*	*Number (In Per Cent)*	*Amount (In Per Cent)*
1990–91	246	1,285.7	41	128.1	17	10.0
1991–92	367	1,916.2	56	227.5	15.3	13.2
1992–93	868	9,952.6	324	5,184.1	37.3	51.9
1993–94	983	9,959.7	372	4,464.9	37.7	44.2
1994–95	1,548	17,414.4	628	8,420.8	40.6	48.4
1995–96	1,591	11,877.4	461	4,856.4	28.8	40.5
1996–97	801	6,101.4	126	1,462.1	15.6	23.9
1997–98	89	1,162.4	29	653.5	32.5	56.2
1998–99	33	2,562.7	19	1,325.8	57.6	51.7
1999–00	69	2,752.5	48	2,169.3	63	83
2000–01	128	2,607.6	52	1,227.3	39	75
2001–02	6	860.4	3	654.3	53	88
2002–03	5	6.27	5	391.3	65	90
2003–04	35	2470.9	24	1,613	73	98
2004–05	51	11,451.8	46	11,049	89	98
2005–06	128	20,899	118	18,793	93	99
2006–07	114	29,756	109	19,733	95	66
2007–08	120	79,739	113	79,352	94	99
2008–09	45	14,272	40	14,176	89	99
2009–10	72	54,875	71	54,866	99	99

Source: SEBI, Bulletin.

TABLE 6.11 Classification of Equity Issues

(Percentage Share in Total Amount Raised)

Particulars	*2001–02*	*2002–03*	*2003–04*	*2004–05*	*2005–06*	*2006–07*	*2007–08*	*2008–09*
(A) Public Issues, of which	86.00	89.00	96.00	87.20	85.07	88.93	62.64	22
IPOs	16.00	25.00	15.00	43.82	39.94	85.07	48.94	14
FPOs	70.00	64.00	81.00	43.38	45.13	3.86	13.70	8
(B) Rights	14.00	11.00	4.00	12.80	14.93	11.07	37.36	78
Total (A+B)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100

Source: SEBI, *Handbook of Statistics on the Indian Securities Market.*

initial public offerings of companies in the information technology sector. There was a sharp decline in this trend in 2000–01 and 2001–02.

In 2001–02, there were only six equity issues by the private sector. Out of these six issues, three issues were with a premium. However, in the year 2003–04, the number of equity issues with premium increased sharply.

During the years 2004–05 and 2005–06, the number of equity issues with premium increased tremendously. The proportion of equity issues with premium to total number of equity issues was 89 per cent and 93 per cent during these two years. Equity issues constituted 99.1 per cent of the total resource mobilisation through public issues during 2005–06 and were 99.9 per cent during 2006–07. Buoyant stock markets, strong macro economic fundamentals, a higher than expected GDP growth, strong exports growth, good corporate earnings, and higher mergers and acquisitions created favourable sentiments for equity issues. During 2008–09, there were no preference and debenture issues and 82 per cent of the issues floated by the private sector were rights issues (Tables 6.8 and 6.9). Rights issues dominated the market in 2008–09 (Table 6.11).

Mega Issues Floated by Non-government Public Limited Companies

A record number of mega issues were floated after the reforms. An issue of a minimum size of Rs. 100 crore is a mega issue.

Tables 6.12 and 6.13 show that, in the year 1994–95, a record number of 41 mega issues worth Rs. 12,090 crore were issued. Free pricing of equities and buoyant conditions in the secondary market enabled the companies to go for mega issues. However, in the subsequent three years, both the number and the amount of mega issues declined substantially due to prolonged bearish conditions in the primary and secondary market. In 1998–99 and 2001–02, mega issues dominated the new capital issues of the private sector companies. We can infer that only large corporates could have access to or tap the capital market.

Large issues account for more than 90 per cent of the total issues. In 2003–04, large issues accounted for more than 97 per cent of the total issues and equity issues dominated bond issues.

There were 49 mega issues during 2005–06, the highest since 1993–94. The largest FPO issue was that of ICICI Bank (Rs. 5,101 crore) and the largest IPO was issued by Suzlen Energy Ltd. which raised Rs. 1,496 crore. The average size of the issue in 2005–06 was Rs. 197 crore compared to Rs. 471 crore in 2004–05. This indicates that many small and medium enterprises tapped the capital market. The largest private placement issue during the year 2006–07 was that of Reliance Petroleum (Rs. 2,700 crore). The average size of the issues declined during 2008–09 on account of the global economic crisis. However, with an improvement in the global financial scenario, the number of mega issues floated during 2009–10 increased three fold. (Tables 6.12 and 6.13)

Absorption of Private Capital Issues

New capital issues of the private corporate sector are subscribed by promoters, government, financial institutions, insurance companies, mutual funds, public, and others. New capital issues are offered to the public. If the entire portion of the public issue is not subscribed to then underwriters come in and underwrite it as per their underwriting obligations. The underwriting of public issues was compulsory till October 1994. Since then, the SEBI has made underwriting optional.

Table 6.14 shows the pattern of absorption of private capital issues.

TABLE 6.12 Sizewise Distribution of Capital Raised Through Public and Rights Issues

Year	*Total*		*<5 cr.*		*>5 cr.<10 cr.*		*>10 cr.–<50 cr.*		*>50 cr.–<100 cr.*		*>100 cr.*	
	No.	*Amount*	*No.*	*Amount*	*No.*	*Amount*	*No.*	*Amount*	*No.*	*Amount*	*No.*	*Amount*
1993–94	1,143	24,372	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1994–95	1,692	27,633	853	2,569	442	3,033	305	6,356	51	3,584	41	12,090
1995–96	1,725	20,804	1,066	3,183	418	2,833	175	3,344	43	2,934	23	8,511
1996–97	882	14,276	547	1,760	215	1,473	87	1,671	14	908	19	8,465
1997–98	111	4,570	52	122	26	177	15	368	6	420	12	3,484
1998–99	58	5,587	15	35	9	63	14	297	9	581	11	4,611
1999–00	93	7,817	19	53	15	105	26	629	14	997	19	6,034
2000–01	151	6,108	66	186	25	165	34	764	8	507	18	4,486
2001–02	35	7,543	3	7	3	20	8	199	3	177	18	7,140
2002–03	26	4,070	2	6	1	8	10	255	0	0	13	3,801
2003–04	57	23,272	6	16	5	36	16	330	5	351	25	22,539
2004–05	60	28,256	2	2.7	5	43.8	17	461.3	11	723	25	27,025
2005–06	139	27,382	6	20	4	32	47	1,325	33	2,189	49	23,815
2006–07	124	33,508	3	10	6	45	40	1,129	31	2,386	44	29,938
2007–08	124	87,029	4	16	1	6	33	920	25	1,669	61	84,418
2008–09	47	16,220	1	3	1	7	21	509	6	445	18	15,255
2009–10	76	57,555	1	2	3	24	18	596	9	636	45	56,298

NA = Not Available

Source: SEBI, *Handbook of Statistics on the Indian Securities Market.*

TABLE 6.13 Mega Issues Floated by Companies

Year	*Number of Mega Issues*	*Amount (Rs. in Crore)*	*Per Cent of Mega Issues to New Capital Issues*
1991–92	9	1,985	34.5
1992–93	34	8,972	45.2
1993–94	29	7,387	37.8
1994–95	41	12,090	43.8
1995–96	23	8,511	40.9
1996–97	19	8,465	59.3
1997–98	12	3,484	76.0
1998–99	11	4,611	82.5
1999–00	19	6,034	77.1
2000–01	18	4,486	73.4
2001–02	18	7,140	94.7
2002–03	13	3,801	93.4
2003–04	25	22,539	96.9
2004–05	25	27,025	95.6
2005–06	49	23,815	87.0
2006–07	44	29,938	94.5
2007–08	61	84,418	97.0
2008–09	18	15,255	94.0
2009–10	45	56,298	97.8

Source: RBI, *Annual Report*, Various issues and SEBI, Bulletin

With underwriting compulsory till 1994, the percentage of amount underwritten to total amount offered to public was more than 97 per cent for the period 1991–92 to 1994–95. The underwriting business was also quite lucrative till 1993–94 due to good public response. Later, as the SEBI made underwriting optional, the extent of underwriting fell sharply. Moreover, owing to scams, the public response to issues was poor, leading to huge obligations on underwriters. Many underwriters backed out of their commitments.

Around 50 per cent of the total private capital issue was subscribed by government, financial institutions, insurance companies, mutual funds, and the like for three years from 1994–95 to 1996–97 as the public response was quite low in these years.

BANKS AND FINANCIAL INSTITUTIONS IN THE PUBLIC SECTOR

An important policy measure undertaken, after the reforms were initiated, was to allow banks and financial institutions in the public sector to have access to the capital market. Banks and financial institutions raised large amount of resources from the primary capital market.

Table 6.15 gives a detailed view of not only the amount of resources raised by banks and financial institutions but also their share in the total resources raised through prospectus and rights and the total resource mobilisation from the primary capital market.

Table 6.15 reveals that banks and financial institutions garnered around Rs. 19,996 crore during the period 1992–93 to 2000–2001. There was an increasing trend from 1995–96 to 1998–99 in the per cent share of banks and financial institutions in the amount raised through prospectus and rights. This trend was noteworthy in the sluggish primary capital market conditions. It shows investors' confidence in public sector banks and financial institutions.

The disinvestment of public sector banks took place at a time when the markets were low. The State Bank of India entered the market at a low price, which soon rose. Today, it is one of the most traded stocks. Since the State Bank's entry in 1993, other PSU banks like the Bank of Baroda and the Corporation Bank entered the market to find their offerings over-subscribed. Most of them came in at the time when the Sensex was low. Their success could be attributed to the following reasons.

TABLE 6.14 Absorption of Private Capital Issues

Year	No. of Companies	Amount Underwritten	By Promoters, Collaborators, Employers, etc	Subscribed by Govt. Financial Institutions & Insurance Companies	Total (4+5)	Subscribed by Public Other than Underwriters	As Investors	Offered to Public Subscribed by Underwriters		Total (7+10)	Total (6+11)
								As Underwriting Obligators	Unsubscribed		
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
1990–91	130	772	826	184	1,010	793	1	33	0	827	1,837
1991–92	159	837	749	191	940	846	2	0	0	848	1,788
1992–93	426	3,786	754	46	800	2,846	169	387	13	3,415	4,215
1993–94	525	4,880	2,976	666	3,642	4,059	20	218	13	4,310	7,952
1994–95	800	5,417	6,387	816	7,203	5,502	35	15	8	5,560	12,763
1995–96	581	1,361	1,996	326	2,322	2,280	0	0	0	2,280	4,602
1996–97	269	172	547	229	776	774	0	0	0	774	1,550
1997–98	13	26	29	6	35	44	0	0	0	44	79
1998–99	5	31	6	4	10	34	0	0	0	34	44
1999–00	53	1,601	115	262	377	1,562	0	0	0	1,562	1,939
2000–01	91	1,419	246	30	276	1,752	0	0	0	1,752	2,028
2001–02	4	879	107	12	119	1,032	0	0	0	1,032	1,151
2002–03	3	255	0	0	0	207	0	0	0	207	207
2003–04	13	1,885	41	0	41	2,279	0	0	0	2,279	2,320

Source: RBI, *Handbook of Statistics on Indian Economy*, 2006.

TABLE 6.15 Resources Raised by Banks and Financial Institutions in the Public Sector from the Primary Market and Their Share in Amount Raised Through Prospectus and Rights and Total Resources Mobilisation

Year	*Amount Mobilised by Banks and Financial Institutions (Rs. in Crore)*	*Total Amount Mobilised Through Prospectus and Rights (Rs. in Crore)*	*Total Resource Mobilisation from Primary Market (Rs. in Crore)*	*Per Cent Share of Banks and Financial Institutions in (3)*	*Percentage of Banks and Financial Institutions in (4)*
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
1992–93	356	20,589	23,286	1.7	1.5
1993–94	3,843	23,992	37,044	16.0	10.4
1994–95	425	27,730	41,974	1.0	1.0
1995–96	3,465	20,540	36,193	16.9	9.8
1996–97	4,352	15,412	33,872	28.2	12.8
1997–98	1,476	4,657	37,737	31.7	3.9
1998–99	4,352	9,365	59,044	46.5	7.4
1999–2000	255	7,704	68,963	3.3	0.4
2000–01	1,472	6,362	74,199	23	2.0
2001–02	1,070	7,112	71,988	15	1.5
2002–03	2,989	4,867	71,815	61	4.2
2003–04	4,076	7,851	71,091	52	5.7
2004–05	5,726	21,892	1,05,297	26	5.4
2005–06	5,413	26,940	1,23,305	20	4.4
2006–07	997	31,600	1,42,567	3.2	0.7
2007–08	17,553	83,707	2,33,358	21.0	7.5
2008–09	–	14,671	2,17,416	–	–

Source: RBI, *Annual Report,* various issues.

- Investors lapped up the PSU bank shares because of their confidence in the basic worth of the stock.
- Investors perceived that the banks entering the market had cleaned up their acts. A series of reforms, the most important being the adherence to provisioning norms and a healthy bottom line—even if it was achieved with the help of government largesse—had convinced the investor of the attractive possibilities of capital appreciation.
- Investors perceived that with the divestment of government stake, banks had achieved a greater degree of autonomy from government control.

However, resource mobilisation by banks and financial institutions registered a substantial decline in the years 1999–2000 and 2001–02. But, they emerged as the biggest class of issuers in the years 2002–03 and 2003–04.

Banks and Financial institutions dominated the primary market till 2005–06 (Table 6.16). Banks mobilised Rs. 30,151 crore through private placements to meet their capital adequacy requirements.

Banks and financial institutions did not tap the public issues market during 2008-09. They used the private placement route to raise funds. (Table 6.15 and 6.16)

MUTUAL FUNDS

Mutual funds are seen as institutions for providing small investors with avenues of investment in the capital market. Most of the investors do not have the resources, knowledge, skill, experience, and time for directly accessing the capital market. Mutual fund is an investment intermediary which mobilises the savings of the small investor, invests these savings with expertise in a well-balanced and well-diversified portfolio of stocks, thereby, reducing risk and earning a higher rate of return on investment.

Mutual funds are not new in India. The Unit Trust of India (UTI), set up in 1964 under an act of parliament, was the first mutual fund in India. In 1987, with the expansion of the capital market, the government felt the need to allow public sector banks and financial institutions to float mutual funds. During 1987–92, seven new mutual funds were established in the public sector. A change in the government policy in 1993

TABLE 6.16 Resource Mobilisation by Top Eight Industries

Rs. in Crore

	2002–03		2003–04		2004–05		2005–06		2006–07		2007–08		2008–09	
	No.	*Amount*	*No.*	*Amount*	*No.*	*Amount*	*No.*	*Amount*	*No.*	*Amount*	*No.*	*Amount*	*No.*	*Amount*
Banking/FIs	13	3,443	11	5,428	12	11,311	12	12,439	5	2,190	6	30,951	0	0
Infotech	3	227	9	804	5	5,095	15	902	12	2,077	10	691	1	42
Paper and Pulp	1	217	0	0	1	60	4	182	1	15	1	35	0	0
Health Care	2	73	1	14	2	109	10	651	2	208	3	542	3	144
Cement and Construction	1	30	0	0	2	169	11	1,020	13	2,747	27	18,905	3	80
Chemical	–	–	8	2,085	4	128	2	128	5	147	8	661	4	218
Electronics	–	–	5	341	2	61	2	54	9	480	4	684	0	0
Power					2	5,854	2	2,164	1	30	4	13,709	2	958
Finance									9	2,765	7	1,773	3	1,996

Source: Bulletin, various issues

led to the entry of private corporates and foreign institutional investors into the mutual fund segment, taking the tally of mutual funds to 37 by end-March 2004. The total assets under the management of all the mutual funds (including UTI) as of March 2004 has grown to nearly Rs. 1,50,000 crore from Rs. 25 crore in 1964. This asset base is spread over in more than 300 schemes.

Table 6.17 shows an increasing trend in the total resources mobilised by mutual funds from 1987–88 to 1992–93. The contributory factors were setting up of new banks and financial institution-sponsored mutual funds in the late 1980s, tailor-made schemes introduced by them, and high assured rate of return offered by some mutual funds.

Resource mobilisation declined from 1993–94 and more sharply in 1995–96 and 1996–97. Even though new private sector mutual funds entered the market during this time, there was a decline in resource mobilisation by mutual funds. The subdued stock market conditions coupled with a perceived lack of transparency in the functioning of mutual funds, delayed refunds, poor accountability, and lack of efficient services were the causes of poor performance of many mutual funds resulting in low or even negative returns thereby. This eroded the investors' interest. Consequently, resource mobilisation by mutual funds (other than UTI) was low; in the case of UTI, there were large reverse flows in view of substantial repurchases.

In 1998–99, private sector mutual funds accounted for two-thirds of the total resource mobilisation. In the case of UTI, resource mobilisation was quite low due to the redemption pressure faced by it in respect of the US-64 scheme.

Conditions improved for this industry in the subsequent years as several tax incentives were announced for mutual fund investors in the Union Budget for 1999–2000. The tax concessions were offered in the equity-oriented schemes which, coupled with bullish trends in the secondary market, led to higher collections by mutual funds in the subsequent years. There was a halt in the growth of mobilisation of resources during 2008–09 due to redemption pressure and a steep fall in stock prices because of global financial crisis (Table 6.17). The net resources mobilised by private sector mutual funds and the UTI turned negative. With improvement in market sentiments, the net resources mobilised turned positive during 2009–10.

The Indian capital market is getting institutionalised as investors after burning their fingers by directly investing in the primary market are preferring mutual funds as their investment vehicle.

RESOURCE MOBILISATION FROM INTERNATIONAL MARKETS

As mentioned earlier, funds can be raised in the primary market from the domestic market as well as from international markets. After the reforms were initiated in 1991, one of the major policy changes was allowing Indian companies to raise resources by way of equity issues in the international markets. Earlier, only debt was allowed to be raised from international markets. In the early 1990s, foreign exchange reserves had depleted and the country's rating had been downgraded. This resulted in a foreign exchange crunch and the government was unable to meet the import requirements of Indian companies. Hence, allowing companies to tap the equity and bond market in Europe seemed a more sensible option. This permission encouraged Indian companies to become global.

- GDRs are listed on the European stock exchanges or on the Asian stock exchanges such as the Dubai and Singapore stock exchanges

TABLE 6.17 Trends in Mutual Funds Resource Mobilisation

(Rs. in Crore)

Period	Gross Mobilisation				Redemption				Net in Flow				Assets at the End of Period
	Private Sector	Public Sector	UTI	Total	Private Sector	Public Sector	UTI	Total	Private Sector	Public Sector	UTI	Total	
1999–00	43,726	3,817	13,698	61,241	28,559	4,562	9,150	42,271	15,166	–745	4,548	18,790	1,07,946
2000–01	75,009	5,535	12,413	92,957	65,160	6,580	12,090	83,829	9,850	–1,045	323	9,128	90.587
2001–02	147,798	12,082	4,643	1,64,523	1,34,748	10,673	11,927	1,57,348	13,050	1,409	–7,284	7,175	1,00,594
2002–03	2,84,095	23,515	7,096	3,14,706	2,72,026	21,954	16,530	3,10,510	12,069	1,561	–9,434	4,196	1,09,299
2003–04	5,34,649	31,548	23,992	5,90,190	4,92,105	28,951	22,326	5,43,381	42,545	2,597	1,667	46,808	1,39,616
2004–05	7,36,463	56,589	46,656	8,39,708	7,28,864	59,266	49,378	8,37,508	7,600	–2,677	–2,722	2,200	1,49,600
2005–06	9,14,703	1,10,319	73,127	10,98,149	8,71,727	1,03,940	69,704	10,45,370	42,977	6,379	3,424	52,779	2,31,862
2006–07	15,99,873	1,96,340	1,42,280	19,38,439	15,20,836	1,88,719	1,34,954	18,44,508	79,039	7,621	7,326	93,985	3,26,292
2007–08	37,80,753	3,46,126	3,37,498	44,64,376	36,47,449	3,35,448	3,27,678	43,10,575	1,33,304	10,677	9,820	1,53,802	5,05,152
2008–09	42,92,751	7,10,472	4,23,131	54,26,354	43,26,768	7,01,092	4,26,790	54,54,650	–34,018	9,380	–3,658	–28,296	4,17,300
2009–10	76,98,483	14,38,688	8,81,851	1,06,19,023	76,43,555	14,26,189	8,66,198	99,35,942	54,928	12,499	15,653	83,080	6,13,979

Source: SEBI Bulletin, July, 2010.

Indian companies have raised resources from international capital markets through Global Depository Receipts (GDRs)/American Depository Receipts (ADRs), Foreign Currency Convertible Bonds (FCCBs), and External Commercial Borrowings (ECBs). The last are used as a residual source, after exhausting external equity as a main source of finance for large value projects.

Factors Leading to an Increase in the Popularity of International Markets

Since 1993, many of the firms have chosen to use the offshore primary market instead of the domestic primary market for raising resources. The factors that can be attributed to this behaviour are as follows.

- The time involved in the entire public issue on the offshore primary market is shorter and the issue costs are also low as the book building procedure is adopted.
- Offshore issues allow foreign ownership to cross the ceiling.
- Foreign institutional investors (FIIs) prefer Euro issues as they do not have to register with the SEBI nor do they have to pay any capital gains tax on GDRs traded in the foreign exchanges. Moreover, arbitrage opportunities exist as GDRs are priced at a discount compared with their domestic price.
- Indian companies can collect a larger volume of funds in foreign exchange from international markets than through domestic markets.
- The increasing popularity of Euro bonds market among international borrowers. Euro bonds are underwritten by an international syndicate of banks and placed in countries other than the one in whose currency the bond is denominated. There are no regulatory restrictions as they fall outside the purview of any single country's regulatory framework. Moreover, they are not subject to stringent disclosure norms as compared to dollar denominated bonds in the US.
- The projections of the GDP growth are very strong and consistent which have created a strong appetite for Indian paper in the overseas market.
- An overseas issuance allows the company to get exposure to international investors, thereby, increasing the visibility of Indian companies in the overseas market.

The investors in international markets are hedge funds, long equity funds, and self-managed pension funds.

Indian firms can raise long-term funds from the international markets through equity instruments such as GDRs/ADRs or through FCCBs—a debt instrument convertible into equity on a future date. Long-term loans raised from the international markets are known as External Commercial Borrowings (ECBs).

Global Depository Receipts (GDRs)

GDRs are essentially equity instruments issued abroad by authorised overseas corporate bodies against the shares/bonds of Indian companies held with nominated domestic custodian banks. An Indian company intending to issue GDRs will issue the corresponding number of shares to an overseas depository bank. Thus, the issue of GDR creates equity shares of the issuing company which are kept with a designated bank. GDRs are freely transferable outside India and dividend in respect of the share represented by the GDR is paid in Indian rupees only. They are listed and traded on a foreign stock exchange. Trading takes place between professional market makers on an OTC (over the counter) basis. A GDR may represent one or more shares of the issuing company. The shares correspond to the GDR in a fixed ratio. GDRs are fungible, which means the holder of GDRS can instruct the depository to convert them into underlying shares and sell them in the domestic market. A holder of a GDR can, at any time, convert it into the number of shares that it represents. Till conversion, the GDRs do not carry any voting rights and once conversion takes place, the underlying shares are listed and traded on the domestic exchange. Now the GDR holders can instruct their depository to vote on their behalf.

Most of the Indian companies have their GDR issues listed on the Luxembourg Stock Exchange and the London Stock Exchange. Indian GDRs are primarily sold to institutional investors and the major demand is in the UK, US, Hongkong, Singapore, France, and Switzerland. Rule 144A of the Securities and Exchange Commission (SEC) of the US permits companies from outside the US to offer their GDRs to qualified institutional buyers.

American Depository Receipts (ADRs)

ADRs are negotiable instruments, denominated in dollars, and issued by the US Depository Bank. A non-US company that seeks to list in the US, deposits its shares with a bank and receives a receipt which enables the company to issue American Depository Shares (ADSs). These ADSs serve as stock

Box 6.4 Sponsored ADS Issues

In a sponsored ADS issue, a company's shareholders submit their domestic shares to the company which are then issued to foreign investors in the form of ADSs. The shares submitted for the sponsored ADS issue are extinguished and replaced with ADRs. A sponsored ADS issue is different from the regular ADS issue. When companies issue sponsored ADS, there is no new issue of equity shares. Indian investors, promoters, or FIIs can tender their shares when a company announces an ADR issue and the allotment is done proportionately. Companies which have large amounts of cash and a high percentage of floating stock (shares owned by non-promoters), issue sponsored ADS to increase their visibility in territories where their products are sold.

ICICI Bank converted 38.4 million equity shares (5.2 per cent of its equity) into American Depository Shares (ADSs) at USD 12.11 each at a premium of 18 per cent to the closing domestic price on March 11, 2005. ICICI Bank was the first bank to go in for a sponsored ADS issue.

Infosys Technologies, India's second largest software services firm, offered in May 2005, ADS conversion (conversion of existing shares into US-listed stock) at USD-67 per ADS (American Depository Shares). This sponsored secondary offering consisted of 14 million ADSs representing 14 million equity shares with a green-shoe option of 2 million shares. Infosys offered this conversion to boost the size of US float to about 14 per cent of its capital and also to give domestic investors an opportunity to reap the big premium on the NASDAQ. Of the 16 million shares on offer, 20 per cent (3.2 million) shares were allotted to the Japanese market through a public offer without listing (POWL). This was the first POWL issue by any Indian company. POWL means offering the Infosys stock without an official listing procedure to Japanese institutions and retail investors.

Process for Issuing Sponsored ADR/GDR by an Indian Company

- Board Approval
- Tendering of the shares by the shareholders
- Conversion to ADRs/GDRs
- Sale of ADRs/GDRs to overseas investors
- Repatriation of proceeds to India within one month
- Distribution of proceeds to the shareholders

certificates and are used interchangeably with ADRs which represent ownership of deposited shares. There is no legal or technical difference between an ADR and a GDR. As they are listed on the New York Stock Exchange (NYSE) and the NASDAQ (National Association of Securities Dealers Automated Association), ADR issues offer access to the US institutional and retail markets while GDR issues offer access only to the US institutional market. ADR listing requires comprehensive disclosures and greater transparency as compared to a GDR listing.

GDRs can be converted into ADRs by surrendering the existing GDRs and depositing the underlying equity shares with the ADR depository in exchange for ADRs. The company has to comply with the SEC requirements to materialise this exchange offer process. However, the company does not get any funds by this conversion. The trend is towards the conversion of GDRs into ADRs as ADRs are more liquid and cover a wider market.

ADRs are accessible to only good companies with high transparency and good governance practices which also benefit the local investor; this gets reflected in a higher P/E ratio. Companies are attracted towards raising ADRs as they are free to decide the deployment of funds either in the US or in India. Companies can also make their presence felt in the global arena which would result in increased liquidity of the company's stock. This would also further broaden the mergers and amalgamations financing capabilities of the company. Moreover, an ADR issue creates a currency for issue of dollar-denominated stock option to employees, thereby enabling the company to hire and retain the best human resources. A considerable amount of resources has been raised from the international capital market through GDRs/ADRs.

Good companies through good corporate practices and governance have been successful in getting themselves listed on the LSE, the NASDAQ, and the NYSE. There are 12 Indian companies listed on the New York Stock Exchange (NYSE) and two on NYSE Euronext. The US government has made listing norms more stringent in the wake of a recent spate of accounting scandals. With the introduction of stringent Sarbanes Oxley Act in the US, many Indian companies have found it difficult to raise funds through ADRs. Many small and mid-size Indian companies opted to raise funds at the Alternate Investment Market (AIM) at London. Firms listed at AIM can trade on other global exchanges. Satyam Computers went for a cross-listing in early 2008 by joining NYSE Euronext besides NYSE.

Organising Euro Issues

The Euro issues market comprises GDRs/ADRs and FCCBs. Both FCCBs and FCEBs being debt instruments are covered under ECBs. A company which wants to tap international markets for raising resources has to prepare its accounts for the last three to five years in a revised format according to the generally accepted accounting principles (GAAP) prevalent either in the UK or US for the GDR/ADR issue. The company has to appoint a merchant banker for organising the Euro issue. The merchant banker occupies a pivotal place as he formulates the marketing strategy, designs the issue structure, and arranges syndicate members, underwriters, and a team of intermediaries. After finalising the offer document, he conducts road shows wherein interviews with the fund managers and potential investors are held and there is widespread distribution of pamphlets, brochures, and reports of the issuing company. These road shows help in knowing the investor response to the issue. The issue price is based on this response and the price of the securities on the domestic stock exchange. The issue price is decided a few hours before the opening of the issue. In the initial years, Indian GDRs were priced at a discount over the prevailing domestic price. The phenomenon of pricing at a discount ended in November 1993 when Mahindra and Mahindra (M&M) placed its GDR at par with the domestic price.

Guidelines Relating to International Issues

ADRs/GDRs are considered to be a part of foreign direct investment (FDI). Therefore, such issues would need to conform to the existing FDI policy and only in areas where FDI is permissible. Indian companies raising money from ADRs/GDRs through registered exchanges are now free to access the ADR/GDR markets automatically, without the prior approval of the Ministry of Finance, Department of Economic Affairs. Prior permission from the Government of India is essential for the issue of FCCBs. A company seeking to raise funds abroad through these instruments should have a consistently good track record of at least three years. The foreign equity participation directly or indirectly is restricted to 51 per cent of the issued and subscribed capital of a company.

Banks, financial institutions, and registered non-bank financial institutions were made eligible for Euro issues in June 1996 subject to the condition that the proceeds from such issues would not be invested in stock market and real estate. There is no restriction now on the number of Euro issues floated in a year by a company or a group of companies.

The end use of the GDR proceeds and external commercial borrowings have been prescribed and modified from time to time. As GDRs/ADRs are full risk equity, end-use restrictions on GDR/ADR issue proceeds have been removed. The proceeds so raised have to be kept abroad till actually required in India. Pending repatriation or utilisation of the proceeds, the Indian company can invest the funds in

1. Deposits with or Certificate of Deposit or other instruments offered by banks who have been rated by Standard and Poor, Fitch, IBCA or Moody's, etc. and such rating not being less than the rating stipulated by Reserve Bank from time to time for the purpose (current rating applicable is AA(-) by Standard and Poor/Fitch IBCA or Aa3 by Moody's);
2. Deposits with branch/es of Indian Authorised Dealers (ADs) outside India; and
3. Treasury bills and other monetary instruments with a maturity or unexpired maturity of one year or less.

Indian companies are free to utilise, without any prior approval, 100 per cent of the proceeds for overseas investment.

The ADR/GDR proceeds can be utilised for first stage acquisition of shares in the disinvestment process of Public Sector Undertakings/Enterprises and also in the mandatory second stage offer to the public in view of their strategic importance. Voting rights on shares issued under the scheme shall be as per the provisions of Companies Act, 1956 and in a manner in which restrictions on voting rights imposed on ADR/GDR issues shall be consistent with the Company Law provisions. RBI regulations regarding voting rights in the case of banking companies will be applicable to all shareholders exercising voting rights.

In his budget speech 1998–99, the finance minister announced a special stock option scheme for Indian software companies linked with ADR/GDR offerings to enable them to provide incentive to retain their highly skilled professionals.

In March 2001, the government allowed two-way fungibility for Indian GDRs/ADRs by which converted local shares could be reconverted into GDRs/ADRs subject to sectoral caps. Under this scheme, a stock broker in India, registered with SEBI, can purchase shares of an Indian company from the market for conversion into ADRs/GDRs based on instructions received from overseas investors. Re-issuance of ADRs /GDRs would be permitted to the extent of ADRs/GDRs which have been redeemed into underlying shares and sold in the Indian market.

With this, the reverse fungibility of ADRs and GDRs has gathered momentum. With the reconversions, there was no headroom in case of the ICICI bank's counter in September 2002. Headroom denotes the number of domestic shares which are available for reconversion into ADRs or GDRs.

Funds raised through FCCBs can be used for restructuring of external debt and not more than 25 per cent of the FCCB issue proceeds may be used for general corporate restructuring, including working capital requirements. Unlisted companies are barred from issuing shares or debt overseas through FCCBs, without a prior or simultaneous listing in the domestic stock markets.

Listed companies not eligible to raise funds from the domestic capital markets, including those restrained by the SEBI, will not be eligible to issue FCCBs or GDRs. Similarly, overseas corporate bodies (OCBs), which are debarred from investing through the portfolio route and those entities prohibited from dealing in securities by the SEBI are barred from investing in FCCBs and GDRs. Companies which have already issued GDRs, ADRs, or FCCBs will now have to get themselves listed in the domestic market within three years of issue. These measures were aimed at bringing the ADR/GDR guidelines 'in alignment' with the SEBI's guidelines on domestic capital issues and to put a quality check on the burgeoning number of FCCB issues. Accordingly, GDR and FCCB issues would now have to correspond to share prices of similar companies quoted in the Indian Stock Markets. This would block companies from tapping markets abroad, at discounted prices to the local price level. The pricing of GDR/ADR/FCCB issues which was an average of the weekly high and low of the closing prices of related shares in the markets, during six months, or two weeks preceding the relevant date was revised in December 2005. The norms stipulated that the floor price must be an average of the weekly highs and lows during the 26 weeks ending a month before the 'relevant date' or the average of the daily highs and lows in the last fortnight of these 26 weeks, whichever is higher. The relevant date is the day the company's AGM approves the issue. This norm made it more difficult for companies to raise money from overseas markets, especially in declining markets since the floor price determined by this formula was high. Since prices fell sharply during 2008, the norms were again revised in 2008. As per the revised norms, the companies have to price their issues at the higher of the two months' average price or 15 days average price preceding the decision to issue shares overseas. Moreover, the closing prices upto the date on which the shareholders decide on the issuance could be considered.

The Indian company issuing ADRs/GDRs has to furnish to the RBI, full details of such issue within 30 days from the date of closing of the issue.

Takeover regulations relating to ADRs/GDRs were amended in August 2009. ADRs/GDRs holder with voting rights will have to make an open offer to minority shareholders if the holding touches the 15 per cent limit.

Resources Raised Through Euro Issues

In 1993–94 and 1994–95, a record number of Euro issues were issued. Indian companies raised Rs. 14,500 crore through Euro issues in these two years. India became the only country to have the unusual distinction of the largest number of GDR issues. However, in the subsequent four years, there was a lack of interest in Indian equity overseas. The Indian corporates also postponed their plans of raising funds from abroad due to the South-east Asian crisis and Pokhran blasts.

The year 1999 can be regarded as a watershed year as Indian companies, for the first time, raised equity from the Wall Street. Infosys Technologies was the first company to tap the American market in March 1999, followed by ICICI and Satyam Infoway. Infosys Technologies and Satyam Infoway are listed on the NASDAQ while ICICI is listed on the NYSE. Satyam Infoway was the first Indian company which tapped this overseas market even though it was not listed on any of the Indian stock exchanges.

In 1999–2000, Indian firms raised USD 1 billion and, in 2000–01, around USD 4 billion through ADRs, making them Asia's biggest issuers of ADRs. This capital raised from the overseas market was greater than the total equity mobilisation from the domestic market through public issues. Investors responded favourably to the Indian ADRs due to the high growth potential of Indian knowledge-based firms such as information technology, pharmaceuticals, and biotechnology. Rediff.com had become the first dot com company to list at a near 100 per cent premium on the NASDAQ, bypassing the the BSE. With USD 8.6 million in accumulative losses, it could not meet the SEBI's strict criterion of a three-year profitability track record. Indian companies go in directly for ADRs without a domestic offering because the scrip appreciates more in the US markets as the concept of futuristic stocks is stronger in the US.

The private non-financial companies mobilised Rs. 11,352 crore from the international markets during 2005–06 which was 238.7 per cent higher than the previous year. Out of these, Rs. 9,779 crore were mobilised through GDRs, Rs. 1,573 crore through ADRs and Rs. 6 crore through ECCBs. The Indian companies raised Rs. 26,556 crore during 2007–08 which was a record high. However, there was a sharp decline in resources raised by Indian corporates through Euro issues during 2008–09 on account of liquidity crisis in global financial markets (Table 6.18).

The domestic retail investor is deprived of the stocks of good companies as these companies no longer tap the domestic primary market. The sluggish primary capital market can be revived if these blue chip companies raise a part of their resources from the domestic market.

TABLE 6.18 Number and Quantum of Euro Issues

Year	*Total (Rs. in Crore)*
1992–93	702 (2)
1993–94	7,898 (27)
1994–95	6,743 (31)
1995–96	1,297 (5)
1996–97	5,594 (16)
1997–98	4,009 (7)
1998–99	1,148 (3)
1999–2000	3,487 (6)
2000–01	4,197 (13)
2001–02	2,384 (5)
2002–03	3,426 (11)
2003–04	3,098 (18)
2004–05	3,353 (15)
2005–06	11,352 (48)
2006–07	17,005 (40)
2007–08	26,556 (26)
2008–09	4,788 (13)
2009–10	15,967
Total	1,23,004 (286)

Note: Figures in Parentheses indicate number of issues.
Source: RBI, *Handbook of Statistics on Indian Economy,* 2008–09.

External Commercial Borrowings (ECBs)

External Commercial Borrowings are borrowings raised from the international markets by corporates. These overseas borrowings are governed by an ECB policy which is administered by the finance ministry along with the RBI. Indian companies can access funds on a first-come-first-serve basis within an overall limit set in the ECB guidelines.

External Commercial Borrowings supplement domestically available resources for expansion of existing capacity as well as for fresh investment. Indian companies have preferred this route to raise funds as the cost of borrowing is low in the international markets. ECBs need sound risk management–both interest rate and forex risk. Any default has wider repercussions in terms of increasing the risk premium for the subsequent borrowers from India.

Reliance Petroleum raised USD 125 million in the form of ECBs in August 1996. This issue assumes significance as it was the only company which raised resources from the international market without any guarantee from a bank or a financial institution. The issue carried a very low coupon rate of 7.84 per cent.

In October 1996, the first floating rate ECB issue was introduced by Global Telesystems. The company raised 60 million Swiss francs (around USD 48 million) in the form of fully convertible bonds. The company offered an interest rate of 175 basis points over the LIBOR (London Inter-Bank Offer Rate).

SIDBI raised USD 20 million for 38 years–one of the largest tenored ECBs raised in the country–in 2005. Reliance Petroleum, Adani Power, and Essar Oil each raised USD 500 million during 2007–08.

ECBs are a key component of India's overall external debt which includes, external assistance, buyers' credit, suppliers' credit, NRI deposits, short-term credit, and rupee debt. ECB refer to commercial loans (in the form of bank loans, buyers' credit, suppliers' credit, securitised instruments (such as floating rate notes, and fixed-rate bonds) availed from non-resident lenders with minimum average maturity of three years. It also includes credit from official export credit agencies and commercial borrowings from the private sector window of multilateral financing institutions.

ECBs can be accessed under two routes, the automatic route and the approval route.

Automatic Route ECBs for investment in the real sector–the industrial sector, especially the infrastructure sector in India are under the automatic route, i.e., they do not require RBI/government approval. The maximum amount of ECBs which can be raised by an eligible borrower under the automatic route is USD 500 million or its equivalent during a financial year.

Eligible Borrowers Under the Automatic Route

1. Corporates registered under the Companies Act except financial intermediaries (such as banks, financial institutions, housing finance companies, and NBFCs) are eligible borrowers. Individuals, Trusts and Non-profit making Organisations are not eligible to raise ECB.
2. Non-government Organisations (NGOs) engaged in micro-finance activities are eligible to avail ECB. Such NGO (i) should have a satisfactory borrowing relationship for at least three years with a scheduled commercial bank authorised to deal in foreign exchange and (ii) would require a certificate of due diligence on 'fit and proper' status of the board/committee of management of the borrowing entity from the designated Authorised Dealer (AD).

Borrowers can raise ECBs from internationally recognised sources such as international banks, international capital markets, multilateral financial institutions (such as IFC, ADB, and CDC), export credit agencies; and suppliers of equipment, foreign collaborators, and foreign equity holders.

Amount and Maturity

1. Corporate borrowers may avail ECB up to USD 50 million or equivalent with minimum average maturity of three years.
2. Corporate borrowers may avail ECB above USD 50 million and up to USD 500 million or equivalent with minimum average maturity of five years.
3. The maximum amount of ECB which can be raised by a corporate is USD 500 million during a financial year.
4. NGOs engaged in micro-finance activities can raise ECB up to USD 5 million during a financial year.
5. ECB up to USD 20 million can have call/put option provided the minimum average maturity of three years is complied before exercising call/put option.
6. Borrowers in infrastructure sector may avail ECB up to USD 500 million for Rupee expenditure for permissible end-uses per financial year.

Approval Route ECBs that do not come under the automatic route are now considered by an empowered committee of the Reserve Bank for approval.

Eligible borrowers under the approval route are the following.

1. Financial institutions dealing exclusively with infrastructure or export finance such as IDFC, ILFS, Power Finance Corporation, Power Trading Corporation, IRCON, and EXIM Bank.
2. Banks and financial institutions which had participated in the textile or steel sector restructuring package as approved by the government are now permitted to the extent of their investment in the package and assessment by the RBI based on prudential norms. Any ECB availed for this purpose so far will be deducted from their entitlement. These financial sector players will also not be able to provide either guarantee or letters of credit.
3. Non-banking financial companies (NBFCs) may avail ECB with minimum average maturity of five years from multilateral financial institutions, reputable regional financial institutions, official export credit agencies, and international banks to finance import of infrastructure equipment for leasing to infrastructure projects.
4. Housing finance companies may avail foreign currency convertible Bonds (FCCB) by satisfying the following minimum criteria: (i) the minimum net worth of the financial intermediary during the previous three years shall not be less than Rs. 500 crore, (ii) a listing on the BSE or NSE, (iii) minimum size of FCCB is USD 100 million, (iv) the applicant should submit the purpose/plan of utilisation of funds.
5. Entities in the service sector, viz., hotels, hospitals, and software companies have been permitted to avail ECB.
6. Cases falling outside the purview of the automatic route limits.

End-use

1. ECB can be raised only for investment (such as import of capital goods, new projects, modernisation/expansion of existing production units) in real sector—industrial sector including small and medium enterprises (SME) and infrastructure sector—in India. Infrastructure sector is defined as (i) power; (ii) telecommunication; (iii) railways; (iv) road including bridges; (v) sea port and airport; (vi) industrial parks; (vii) urban infrastructure (water supply, sanitation, and sewage projects); and (viii) mining, exploration, and refining.
2. ECB proceeds can be utilised for overseas direct investment in Joint Ventures (JV)/Wholly Owned Subsidiaries (WOS) subject to the existing guidelines on Indian Direct Investment in JV/WOS abroad.
3. Utilisation of ECB proceeds is permitted in the first stage acquisition of shares in the disinvestment process and also in the mandatory second stage offer to the public under the Government's disinvestment programme of PSU shares.
4. NGOs engaged in micro-finance activities may utilise ECB proceeds for lending to self-help groups or for micro-credit or for bonafide micro-finance activity including capacity building.
5. ECB proceeds can be utilised by the telecom companies for payment for obtaining license/permit for 3G Spectrum.
6. Utilisation of ECB proceeds is not permitted for on-lending or investment in capital market or acquiring a company (or a part thereof) in India by a corporate.
7. Utilisation of ECB proceeds is not permitted in real estate. The term 'real estate' excludes development of integrated township.
8. End-uses of ECB for working capital, general corporate purpose, and repayment of existing Rupee loans are not permitted.

ECB proceeds should be parked overseas until their actual requirement in India. Such proceeds can be invested in the following liquid assets (a) deposits or certificate of deposit offered by banks rated not less than AA (-) by Standard and Poor/Fitch IBCA or Aa3 by Moody's; (b) deposits with overseas branch of an AD bank in India; and (c) Treasury bills and other monetary instruments of one year maturity having minimum rating as indicated above. The borrowers have been extended the flexibility to either keep these funds off-shore as above or keep it with the overseas branches/subsidiaries of Indian banks abroad or to remit these funds to India for credit to their Rupee accounts with AD Category I banks in India, pending utilisation for permissible end-uses Prepayment of ECBs upto USD 200 million is permitted without prior approval of the RBI, subject to compliance with the stipulated minimum average maturity as applicable for the loan.

The all-in-cost (rate of interest and other fees and expenses in foreign currency) ceilings over the six month LIBOR is 300 basis points for ECBs with three years and upto a five-year maturity period and 500 basis points for ECBs with a maturity of more than five years. Thus, if the six-month LIBOR is 3.5 per cent, the total permissible cost will be 8.5 per cent. The enhanced ceilings will enable top-rated companies to roll over their existing debt. Refinancing of an outstanding ECB by raising fresh loans at a lower cost is permitted subject to the condition that the outstanding maturity of the original loan is maintained. The designated AD has the general permission to make remittances of instalments of principal, interest, and other changes in conformity with ECB guidelines issued by the government/the RBI from time to time.

The ECBs were a preferred route to raise borrowed funds by large and mid-sized companies as the rate of interest was in the international markets. During the year 2007–08, Indian companies borrowed around USD 31 billion via ECBs. With rising foreign loan rates and a sharp depreciating rupee, Indian companies will now turn to domestic market for loan.

Foreign Currency Convertible Bonds (FCCBs)

FCCBs are bonds issued by Indian companies and subscribed to by a non-resident in foreign currency. They carry a fixed interest or coupon rate and are convertible into a certain number of ordinary shares at a preferred price. They are convertible into ordinary shares of the issuing company either in whole, or in part, on the basis of any equity-related warrants attached to the debt instruments. These bonds are listed and traded abroad. Till conversion, the company has to pay interest in dollars and if the conversion option is not exercised, the redemption is also made in dollars. Thus, foreign investors prefer convertible bonds whereas Indian companies prefer to issue GDRs. The interest rate is low but the exchange risk is more in FCCBs as interest is payable in foreign currency. Hence, only companies with low debt equity ratios and large forex earnings potential opt for FCCBs.

Foreign Currency Convertible Bonds

- Carry an equity component being a debt instrument.
- Give the investor a choice to convert his bond into fixed number of shares at a predetermined price or to receive a fixed yield to maturity.
- In adverse market conditions, the widening gap between bond price conversion and market price of stocks is a major worry.

Corporates can raise FCCBs at a coupon rate of 1.5 per cent which is lower than the domestic rate. The yield-to-maturity in case of these bonds is around 6–7 per cent and it is to be paid only at the end of the tenure.

The scheme for issue of FCCBs and ordinary shares was notified by the government in 1993 to allow companies easier access to foreign capital markets. Under the scheme, bonds upto USD 50 million are cleared automatically, those up to USD 100 million by the Reserve Bank, and those above that by the finance ministry. The minimum maturity period for FCCBs is five years but there is no restriction on the time period for converting the FCCBs into shares.

The interest rate in FCCBs is much lower than bond issuances or loan syndications. The equity component in a FCCB is an attractive feature for investors. Higher the premium for conversion of equity, higher will be the yield on the FCCB. FCCBs straddle both the worlds of equity and debt. FCCBs are less dilutive than equity and are cheaper than debt. In case of FCCBs, equity dilution is not immediate and happens gradually as the bonds get converted into underlying local shares in a phased manner. Initial outflow on interest payments is extremely low since the coupon rate lies between 0 and 1.5 per cent.

When the stock markets become buoyant, FCCBs are a more preferred route to raise foreign currency funds than pure ECBs. Indian companies have issued around USD 20 billion to 50 billion of FCCBs over the past few years to meet their growth plans.

Foreign Currency Exchangeable Bonds (FCEBs)

Foreign currency exchangeable bond is a bond offered by an issuing company and subscribed to by investors living outside India and exchangeable into equity shares of another company, which is called the offered company, in any manner, either wholly or partly or on the basis of any equity-related warrants attached to debt instruments. For example, Tata Sons, a promoter of all key Tata group companies, issues exchangeable bonds to raise funds for Tata Motors.

The Central Government notified the FCEB scheme for facilitating issue of Foreign Currency Exchangeable Bonds by Indian Companies. This scheme was operationalised with effect from September 23, 2008.

- FCEB is a foreign currency bond issued by an Indian company which is a part of the promoter group of offered company and exchangeable into equity shares of the offered company

Foreign Currency Exchangeable Bond means a bond expressed in foreign currency, the principal, and interest in respect of which is payable in foreign currency, issued by an Issuing Company and subscribed to by a person who is resident outside India, in foreign currency and exchangeable into equity share of another company (offered company), in any manner, either wholly, or partly or on the basis of any equity related warrants attached to debt instruments. The FCEB may be denominated in any freely convertible foreign currency.

Eligible Issuer The Issuing Company shall be part of the promoter group of the Offered Company and shall hold the equity share/s being offered at the time of issuance of FCEB.

Offered Company The Offered Company shall be a listed company, which is engaged in a sector eligible to receive Foreign Direct Investment and eligible to issue or avail of Foreign Currency Convertible Bond (FCCB) or External Commercial Borrowings (ECB).

Entities Not Eligible to Issue FCEB An Indian company, which is not eligible to raise funds from the Indian securities market, including a company which has been restrained from accessing the securities market by the SEBI, shall not be eligible to issue FCEB.

Eligible Subscriber Entities complying with the Foreign Direct Investment policy and adhering to the sectoral caps at the time of issue of FCEB can subscribe to FCEB. Prior approval of Foreign Investment Promotion Board, wherever required under the Foreign Direct Investment policy, should be obtained.

Entities Not Eligible to Subscribe to FCEB Entities prohibited to buy, sell, or deal in securities by the SEBI will not be eligible to subscribe to FCEB.

End-use of FCEB Proceeds

Issuing Company

1. The proceeds of FCEB may be invested by the issuing company overseas by way of direct investment including in Joint Ventures or Wholly Owned Subsidiaries abroad, subject to the existing guidelines on overseas investment in Joint Ventures/Wholly Owned Subsidiaries.
2. The proceeds of FCEB may be invested by the issuing company in the promoter group companies.

Promoter Group Companies

Promoter Group Companies receiving investments out of the FCEB proceeds may utilise the amount in accordance with end-uses prescribed under the ECB policy.

End-uses Not Permitted The promoter group company receiving such investments will not be permitted to utilise the proceeds for investments in the capital market or in real estate in India.

All-in-cost The rate of interest payable on FCEB and the issue expenses incurred in foreign currency shall be within the all-in-cost ceiling as specified by Reserve Bank under the ECB policy.

Pricing of FCEB At the time of issuance of FCEB, the exchange price of the offered listed equity shares shall not be less than the higher of the following two:

1. The average of the weekly high and low of the closing prices of the shares of the offered company quoted on the stock exchange during the six months preceding the relevant date; and
2. The average of the weekly high and low of the closing prices of the shares of the offered company quoted on a stock exchange during the two week preceding the relevant date.

Average Maturity Minimum maturity of FCEB shall be five years. The exchange option can be exercised at any time before redemption. While exercising the exchange option, the holder of the FCEB shall take delivery of the offered shares. Cash (Net) settlement of FCEB shall not be permissible.

Parking of FCEB Proceeds Abroad

The proceeds of FCEB shall be retained and/or deployed overseas by the issuing/promoter group companies in accordance with the policy for the ECB.

It shall be the responsibility of the issuing company to ensure that the proceeds of FCEB are used by the promoter group company only for the permitted end-uses prescribed under the ECB policy. The issuing company should also submit audit trail of the end-use of the proceeds by the issuing company/promoter group companies to the Reserve Bank duly certified by the designated Authorised Dealer bank.

Operational procedure—Issuance of FCEB shall require prior approval of the Reserve Bank under the Approval Route for raising ECB. The reporting arrangement for FCEB shall be as per extant ECB policy.

FCEBs would help the promoter to meet the financing requirements within the group firms especially in cases of acquisitions of foreign firm by a promoter group company. FCEBs have also not taken off so far.

Conclusion

The primary market was in a depressed state for a long time. Some unsustained spells of buoyancy were witnessed in 1994–95 (financial sector IPOs), 1999–2000 (IT boom), and the latest in 2002. During the financial years 1994 and 1995, more than 1,000 IPOs were floated in the Indian primary market. In the year 2001–02, only six equity issues aggregating Rs. 860 crore were floated by the private sector.

The primary market was subdued due to lack of investors' confidence. Many fraudulent promoters took advantage of the free pricing regime and duped investors. The SEBI failed to take timely action against these promoters leading to a lack of confidence among investors. They shied away from the primary market. The level of investors' confidence, in turn, is dependent on the performance of the secondary markets. The secondary markets were also coloured with stories of scams which again eroded investors' confidence. Certain other factors which led to subdued conditions in the primary market were strict disclosure standards and entry point norms, prescribed by the SEBI, which led to a decline in the number of issues by the new companies.

The blue-chip companies tapped the international markets via the GDR/ADR route to raise financial resources. Corporates, financial institutions, and banks preferred the private placement route. The private placement route became more popular than the public issue route. In private placements, it was the debt instruments which gained more popularity as investors preferred safety over higher returns. This led to a rise in the debt–equity ratio of many private sector companies.

The primary market revived during 2004–05 as many good quality scrips from private sector companies were subscribed to, enthusiastically, by the investors. Moreover, the government's disinvestment programme created a favourable climate whereby small investors once again entered the market. In November 2005, along with private provident funds (PFs), superannuation and gratuity funds were also allowed by the finance ministry to invest 5 per cent of their new inflow in stocks The total size of superannuation and gratuity funds is around 10–15 per cent of the Rs. 2,50,000 crore provident fund sector. Since November 2005, a dozen superannuation and gratuity funds have, for the first time, invested in equity markets. Besides purchasing shares in the secondary market, these retirement funds are also investing in IPOs, follow on equity offerings of companies and some of the equity-linked mutual funds. They can directly invest in only those shares where debt instruments floated by the company have an investment grade, from atleast two rating agencies. The government liberalised the guidelines relating to private provident funds in August 2008, to facilitate more retirement savings to flow into the stock market and help evolve the corporate debt market. Private provident funds can now invest upto 15 per cent of the corpus in the stocks and 40 per cent of the funds in private sector debt instruments. These debt instruments will have to be rated investment grade by just one credit rating agency as opposed to the earlier requirement of two. The revised guidelines will be effective from April 1, 2009. The pension sector should also be opened up so that long-term domestic money can enter the primary and secondary market.

The bearish phase in the stock markets has had an impact on companies, going for raising funds, through public issues. Indian companies need to have a relook at their business and growth plans in the context of global fund crisis.

India has a household saving rate of about 35 per cent of the GDP, which approximately amounts to Rs. 6 lakh crore a year. Moreover, the Indian investor is looking for profitable and safe investment avenues. Indian retail investors are usually more interested in buying from the primary market. Small investors are more concerned with gains on the listing date which has converted the primary market into a speculative one. If the merchant bankers appropriately price the issue, this will go a long way in sustaining the revival of the primary market. It is the good faith of the small investors, regulator, and promoter which can help these issues become a success.

KEY TERMS

New Issues Market, Prospectus, Rights Issues, Preferential Allotment, Private Placement, Free-Pricing, Book Building, Green-shoe Option, Global Depository Receipts, American Depository Receipts, Foreign Currency Convertible Bonds, External Commercial Borrowings.

SUMMARY

1. The primary market is a market for new issues. Funds are mobilised in the primary market through (a) prospectus, (b) rights issues, (c) preferential allotment, and (d) private placement.
2. Issues are offered to the public through prospectus and the public subscribes directly.
3. IPO is an offering of either a fresh issue of securities or an offer for sale of existing securities or both by an unlisted company for the first time to the public.
4. A seasoned public offering (SPO) is an offering of either a fresh issue of securities or an offer for sale to the public by an already listed company through an offer document.
5. Rights issue is the issue of new shares in which existing shareholders are given preemptive rights to subscribe to the new issue on a pro-rata basis.
6. A preferential issue is an issue of shares or of convertible securities by listed companies to a select group of persons under Section 81 of the Companies Act, 1956 which is neither a rights issue nor a public issue.
7. The direct sale of securities by a company to some select people or to institutional investors is called private placement. Private placement refers to the direct sale of newly-issued securities by the issuer to a small number of investors through merchant bankers. The public sector garnered huge resources from the private placement market. In terms of instruments, debt instruments, mainly bonds and debentures of different maturities, were preferred the most. Private placements are now regulated. Companies wanting to list their privately placed bonds have to make disclosures as per the Companies Act and the SEBI guidelines.
8. There are three categories of participants in the primary market. They are the issuers of securities, investors in securities, and intermediaries.
9. There are different intermediaries to an issue such as merchant bankers or book running lead managers (BRLMs), syndicate members, registrars to the issue, bankers to the issue, auditors of the company, and solicitors.
10. In 1992, the Capital Issues (Control) Act, 1947 was repealed and all controls relating to raising of resources from the market were removed. Hence, now the promoters (issuers of securities) do not require the consent of any authority either for making the issue or for pricing it.
11. Book building is a recognised mechanism for capital raising. Book building is a mechanism through which an offer price for IPOs based on the investors' demand is determined. The aim of the process is to have the issue presold and preclude chances of under-subscription/devolvement. The cost and time for making public issues is lowered; the procedures are also simplified. The SEBI reintroduced the moving price band concept in the book built IPOs. The price band can be revised and this revision has to be informed to the stock exchanges. The SEBI lowered the mandatory participation of QIBs in the book built IPOs from 60 per cent to 50 per cent.
12. Reverse book building is a process wherein the shareholders are asked to bid for the price at which they are willing to offer their shares. It is just similar to reverse auctions.
13. A green-shoe option means an option of allocating shares in excess of the shares included in the public issue and operating a post-listing price stabilising mechanism for a period, not exceeding 30 days, in accordance with the provisions of Chapter VIIIA of the DIP Guidelines. A stabilising agent (SA) steps in and buys the shares from the market when the share price falls below the offer

price. He has the discretion to decide the timing, the quantity, and the price at which to buy shares for stabilising the post-listing price.
14. The on-line issue of shares is issued via the electronic network of the stock exchanges. The guidelines for online issue of shares are incorporated in a new chapter in the SEBI (Disclosure and Investor Protection) Guidelines, 2000.
15. Three distinct trends in resource mobilisation from the primary market through the prospectus and the rights issues. It indicates an increasing trend from 1991–92 to 1994–95, a decreasing trend from 1995-96 onwards, with unsustained spells of revival in 1998–99 and an increasing trend since 2003–04.
16. The average share of the private sector in resources mobilised through prospectus and rights was around 45 per cent in 1990s.
17. Large issues account for more than 90 per cent of the total issues. In 2003–04, large issues accounted for more than 97 per cent of the total issues and equity issues-dominated bond issues.
18. Banks and financial institutions raised large amount of resources from the primary capital market. They emerged as the biggest class of issuers in the years 2002–03 and 2003–04.
19. The Indian capital market is getting institutionalised as investors, after burning their fingers, by directly investing in the primary market, and preferring mutual funds as their investment vehicle.
20. Indian companies have raised resources from international capital markets through Global Depository Receipts (GDRs), American Depository Receipts (ADRs), Foreign Currency Convertible Bonds (FCCBs), and External Commercial Borrowings (ECBs).
21. GDRs are essentially equity instruments issued abroad by authorised overseas corporate bodies against the shares/bonds of Indian companies held with nominated domestic custodian banks.
22. ADRs are negotiable instruments, denominated in dollars, and issued by the US Depository Bank.
23. FCCBs are bonds issued by Indian companies and subscribed to by a non-resident in foreign currency. They carry a fixed interest or coupon rate and are convertible into a certain number of ordinary shares at a preferred price.
24. ECBs can be accessed under two routes, namely, automatic route and approval route.
25. Resources mobilised by way of Global Depository Receipts (GDRs) registered a sharp increase. Companies are attracted towards raising ADRs as they are free to decide the deployment of funds either in the US or in India.
26. As Indian companies tap foreign capital markets to raise funds, similarly, foreign companies can now issue their shares to Indian nationals in India.

MINI CASE

Ritu is a first year MBA student who is always missing her Garam Masala Chai and Samosas made by Sevakram's Mobile Restaurant in her hometown of Bhopal. She approaches Sevakram with a business partnership proposal to open a similar mobile restaurant in Amdavad near her college. Sevakram is horrified. He is not willing to invest in a city that is unfamiliar to him and is more than a thousand kilometers away. However, he has known Ritu for many years as she had patronised his restaurant for years and had never asked for payment credit and had always paid cash. Thus, he offers her his secret formulas in return for 5 per cent of gross revenues that she can make creating products using his formulas. Ritu gladly accepts the deal.

She creates samples of Chai, samosas, cold sandwiches, and idlis using Sevakram's secret formulas and serves them to her classmates. Her classmates love the Chai and eatables. She tells them that she plans to drop out of the MBA course and start a business selling Chai and these eatables across the whole country. She convinces ten of her classmates to contribute Rs. 1,000.00 each at 10 per cent simple annual interest with the principal due after two years and one free Chai and eatables every week till she pays back the loan.

With the seed money that she has now she rents a ultra small mobile kiosk and names it Ritu's Tea House and hires a couple of friends to sell these eatables from her kiosk. Meanwhile, she focuses on creating these products and streamlining the production process at her apartment. She delivers these products thrice a day to her kiosk. Ritu's Tea House even though a small kiosk is a big success in her university campus. Three months later, her 10 friends contribute an additional Rs. 50,000.00 to start another kiosk and a commercial kitchen where she can create these eatables. She hires production staff and logistics staff and six months later, she has paid off all her loans and has two very successful kiosks, a commercial kitchen with trained staff and a small logistics department who delivers on bicycles, and a very happy Sevakram with his 5 per cent royalties and a happy set of friends who have had a return of 10 per cent in nine months and 40 sets of free eatables.

QUESTIONS FOR DISCUSSION

1. Ritu has approached you, a financial consultant, to help her out with additional finances. She wants to open 18 more kiosks in the campus since the campus has many colleges and hostels and 20 kiosks will comfortably survive without cannibalising each others' sales. What will be your recommendation?
2. Fifteen months later Ritu approaches you again for help, with additional funding. All her 20 kiosks are a runaway success and her commercial kitchen is running at full capacity. She has a small managerial team of three people who are now managing the kitchen and the logistics. In a range of 5 km outside the campus, there are enough commercial businesses to support at least 100 kiosks. Ritu wants to hire a real-estate manager to negotiate kiosk areas in the commercial and retail buildings, she wants to buy two delivery trucks for her logistics department, and she needs funding to create and run the additional 100 kiosks. What will be your recommendation?
3. Two years later Ritu has again approached you for your help. Ritu's Tea Houses' revenues this year will exceed Rs. 3 crore Ritu, now an MBA dropout, is very satisfied with her success but she has not achieved her vision of having Ritu's Tea House in every city, town, and village of the country. She wants to know if she should now become like a Sevakram and franchise her business model to other franchisees or should she keep growing the way she has grown in the past four years? Discuss the funding needs and intermediaries that will be involved in both the approaches.

REVIEW QUESTIONS

1. How are funds mobilised in the primary market?
2. What are the reasons for growth of the private placement market in India?
3. Why do blue-chip companies opt to raise funds through GDRs/ADRs?
4. Describe the primary market scenario in India.
5. What is a green-shoe option? What are the advantages and disadvantages of exercising this option?
6. What is an IPO? State the entry norms laid by the SEBI for making an IPO. What are the requirements that need to be fulfilled by an unlisted company wishing to go public?
7. What are the requirements to be fulfilled by an issuer making a follow-on public offer?
8. Which companies are eligible for raising funds through fast-track route?
9. Describe the process of trading of rights entitlement.
10. What is a preferential issue? State the norms issued by SEBI for preferential allotment. Why do companies prefer to allot preferential shares?
11. State the guidelines relating to Qualified Institutions Placement.
12. State the guidelines relating to External Commercial Borrowings.

13. What are the salient features of the Indian Depository Receipts (IDR) rules? Also mention the SEBI norms to be adhered by the IDR issuer.
14. What is book building? Describe the book building process. List the benefits and limitations of book-building.
15. What is ASBA? Explain the ASBA process.
16. What is the role of the Anchor investor in the Indian primary market.

Answer in Brief

1. Distinguish between:
   a. IPO and FPO
   b. Public issues and Right issues
   c. Public issues and Private Placement
   d. Rights issue and Preferential issue
   e. Qualified Institutions Placement and Private Placement
   f. Qualified Institutions Placement and GDR
   g. GDRs and ADRs
   h. Fixed pricing and book building process.
2. What are the different intermediaries to an issue?
3. State the pre-issue and post-issue activities of a merchant banker.
4. What do you understand by the moving price band concept?
5. Define
   a. Retail Individual Investor
   b. Qualified Institutional Buyers (QIBs)
   c. Non-Institutional Investor (NII)
   d. Promoter and Promoter Group
6. What is a Sponsored ADS issue? When do companies issue Sponsored ADS?
7. State the routes under which ECBs can be accessed?
8. What is reverse book building? Describe the process for reverse book building.
9. Which entities are exempted from entry norms laid down by the SEBI for raising funds through an IPO?
10. Why do promoters offer rights issue?
11. How is the pure auction method of book building different from the regular book building?
12. How are FCEBs different from FCCBs?

Choose the Right Answer

1. ________________ issue does not bring in any fresh capital.
   (a) Equity (c) Debenture
   (b) Preference (d) Bonus
2. Where the offer or invitation to subscribe for shares or debentures is made to 50 or more persons, then such an offer or invitation is known as ________________ offering.
   (a) public (c) preferential
   (b) private (d) rights
3. Prospectus is not issued in ____________.
   (a) public issue (c) rights issue
   (b) private placement
4. An issuer need not file an offer document in case of __________.
   (a) public issue (c) rights issue
   (b) preferential allotment
5. A _________ issue is an issue of securities by listed companies to a select group of persons under Section 81 of the Companies Act, 1956.
   (a) rights (c) public
   (b) preferential
6. In book building, the spread between the floor and the cap of the price band should not be more than _____ per cent.
   (a) 10 (c) 30
   (b) 20 (d) 50
7. In book building, a bid is usually open for a minimum of ______ working days and not more than ______working days.
   (a) five, seven (c) seven, ten
   (b) three, seven (d) three, five
8. Allocation to retail investors high networth individuals (non-institutional investors) and qualified institutional buyers (QIBs) is in the ratio of _______ respectively.
   (a) 25:50:25 (c) 35:15:50
   (b) 50:25:25 (d) 50:15:35
9. An issuer can launch an IPO within________.
   (a) three months (c) nine months
   (b) six months (d) one year
10. Rights issue shall be kept open for atleast______ days and not more than _____ days.
    (a) 15, 30 (c) 20, 40
    (b) 30, 60 (d) 10, 20
11. An issue of a minimum size of Rs._____________crore is a mega issue.
    (a) 50 (c) 150
    (b) 100 (d) 300
12. The maximum amount of ECBs which can be raised by an eligible borrower under the automatic route is USD_______million.
    (a) 100 (c) 500
    (b) 300 (d) 1000

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7

Disinvestment of Public Sector Undertakings

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *What is disinvestment*
2. *Why disinvestment of PSUs in India*
3. *The PSU sell-off methods*
4. *Proceeds realised from disinvestment*
5. *Evaluating the disinvestment programme*
6. *Disinvestment of PSUs in different countries*

INTRODUCTION

Central public sector undertakings (PSUs) are organisations established by the government of India as government companies under the Companies Act or as statutory corporations under specific statutes of parliament.

After independence, the government realised that the process of industrialisation needed enormous amount of capital which was beyond the financial capability of the private sector. PSUs were set up in the early 1950s to ensure a rapid economic and industrial growth, create the necessary infrastructure for economic development, create employment opportunities, promote balanced regional development, and assist the development of small-scale and ancillary industries. The central government's direct involvement and involvement through holding companies was to the extent of 95 per cent of the total share capital of all the central public sector undertakings. Fifty-eight industries were reserved exclusively for the public sector in the 1950s. In 1991, the number of industries reserved was brought down to 18 and now it is 4.

PSUs do not have an autonomy as most of their decisions relating to capital expenditure, acquisitions and investments have to be approved by the Public Investment Board (PIB), Cabinet Committee on Economic Affairs (CCEA) and the central government. The control on PSUs is also exercised through the Comptroller and Auditor General (CAG), Central Vigilance Commission (CVC), and the CBI. These controls exist because PSUs are ultimately responsible to parliament.

There are 35 PSUs in the BSE-200 index accounting for almost two-fifths of the market capitalisation, with an aggregate market capitalisation of Rs. 3,84,600 crore. Further, a third of India's mega companies (market capitalisation of USD 5 billion) are PSUs. And, many of them are not only market leaders in their areas of operation but figure in the global fortune 1000 list as well.

PSUs have supported the creation of a pool of managerial and technical talent and a large middle-class population. They have also fulfilled their social obligations to the community at large by providing education, medical, recreational and vocational facilities to the people in the vicinity of their township.

Most of the PSUs are subsidied by the central government and hold monopoly positions in the Indian market. Public sector undertakings of India are a heterogenous mix of infrastructure companies, manufacturing companies and companies engaged in trade and services.

According to the ET–CMIE PSU survey, there are about 380 central public sector units, both listed as well as unlisted at the stock exchanges. They include 31 banks, 17 hire purchase firms, 10 coal and lignite companies, 17 investment services firms, 27 units engaged in trading, and 13 business consultancy firms such as the India Trade Promotion Organisation, Central Mine Planning and Design Institute, and Water and Power Consultancy Services. They had a combined net worth of Rs. 3,45,790 crore, a combined income of Rs. 6,28,600 crore and a dividend payment of more than Rs. 10,000 crore for the year 2000–01. The Oil and Natural Gas Corporation (ONGC) had the largest net worth of more than Rs. 30,000 crore, highest profits of Rs. 5,229 crore, and the highest dividend payment, Rs. 1,729 crore for the year 2000–01. Among the smallest central PSUs are Borrea Coal, Richardson Cruddas, Nagaland Pulp and Paper, Brushware, and Katras Jherriah Coal with revenues under Rs. 10 lakh. The PSU with highest borrowing (excluding banks and financial institutions) was the Food Corporation of India with borrowings of Rs. 22,240 crore and revenues of around Rs. 28,000 crore for the year 2000–01.

In addition to the above, there are 210 state PSUs, about half of them being loss-making units. State PSUs are small in comparison with central PSUs. Tamil Nadu has the highest number of PSUs—55, followed by Kerala with 28 units and Gujarat with 24. The combined net worth of the 210 state PSUs was around Rs. 23,280 crore, combined revenues of Rs. 33,000 crore and net loss of Rs. 286 crore as of 2000–01. Together, the state PSUs declared a dividend of around Rs. 100 crore to their state governments in 2000–01. Gujarat's Sardar Sarovar Nigam has a net worth of Rs. 8,041 crore, followed by Karnataka's Krishna Bhagya Jala Nigam worth Rs. 2,207 crore. The largest state-run unit in terms of revenue was Karnataka Power Transmission with a revenue of Rs. 5,565 crore in 2000–01. In terms of profit, the Gujarat State Electricity Corporation topped the list with a net profit of Rs. 91 crore on a revenue of just Rs. 350 crore and in terms of loss, the Dakshin Haryana Bijli Vitran Nigam had an accumulated loss of Rs. 264.3 crore. State-run PSUs, with accumulated losses of Rs. 4,600 crore, are a big drain on the respective governments.

Disinvestment

- Privatisation implies a change in ownership and management while disinvestment may or may not lead to a change of management

The disinvestment of public sector undertakings means the sale of public sector equity leading to a dilution of the government's stake. In India, the term 'disinvestment' is used rather than 'privatisation.' Privatisation implies a change in ownership resulting in a change of management while disinvestment may or may not lead to a change of management. A well-designed disinvestment programme helps in the long-term growth process through increased foreign investment, technology transfer and the subsequent enhancements in productivity. The process of disinvestment was initiated by the government of India during 1991–92 as part of a package of PSU reform. The disinvestment of government stake from PSUs follows from the Industrial Policy Statement of 1991–92. Around Rs. 2,00,000 crore are locked in PSUs.

Almost half of the PSUs in the country are loss-making enterprises and a big drain on the national exchequer. The public sector was consuming far too much capital and current revenues and the government itself was facing a resource crunch owing to mounting fiscal deficit. The then finance minister, Manmohan Singh, realised that competition would intensify due to reforms and the cash-starved PSUs would be badly affected. So the idea of equity sale privatisation was first mooted in 1991 by him as a means of raising resources and improving the performance of PSUs. Moreover, the process of liberalisation began in the 1990s. The private sectors had enough resources to get into the sectors dominated by PSUs. The government also identified certain sectors such as hotel and food which could be best left to the private sector.

Objectives of Disinvestment

- Broad-base equity
- Put national resources and assets to optimal use
- Enhance the productivity of PSUs

Objectives The privatisation programme was flagged off in October 1991 without clear-cut objectives. The stated objective was to raise resources to finance fiscal deficit. It was proclaimed that the step meant widespread holding which again meant increased efficiency. Moreover, there was no well-defined strategy laid down to achieve these unclear objectives. This was evident by the way the government offloaded, in the very first year, small lots of 2 per cent and 3 per cent of a company's equity capital which left major control still in the government's hands. This revealed the unstated objective of the government which was to retain control over the management. The government later on stated that the objectives of disinvestment were to broad base equity, improve management, enhance availability of resources for these public sector enterprises and finance fiscal deficit. In the Disinvestment Policy 2000–01, the government, for the first time, seemed prepared to reduce its stake in the non-strategic PSUs even below 26 per cent if necessary.

In 2001, the government introduced a special provision for setting aside a quota of shares for small investors and workers. The government set out the following policies in respect of PSUs: Bring down government equity in all non-strategic PSUs to 26 per cent or lower if necessary; restructure and revive potentially viable PSUs; close down PSUs which cannot be revived; and fully protect the interest of workers.

The government has stressed that the proceeds from disinvestment would be used for meeting expenditure in the social and infrastructure sectors, restructuring of PSUs, and restructuring public debt.

To maximise returns to the government, the approach has been shifted from the disinvestment of small lots of shares to strategic sale of blocks of shares to strategic investors.

The disinvestment minister reviewed the disinvestment policy on December 9, 2002 and stated the objective of disinvestment as to put national resources and assets to optimal use and in particular to unleash the productive potential inherent in our public sector enterprises. The disinvestment policy aimed at modernisation and upgradation of public sector enterprises, creation of new assets, generation of employment, and retiring of public debt.

From April 2009, disinvestment of central public sector enterprises (CPSEs) will be considered on a case-by-case basis for approval by the government as CPSEs differ in terms of capital structure, financial strength and status in compliance with mandatory listing requirements.

The Government, on November 5, 2009, approved the following action plan for disinvesting government equity in profit-making CPSEs:

1. Already listed profitable CPSEs not meeting the mandatory public shareholding of 10 per cent, are to be made compliant.
2. All CPSEs having positive net worth, no accumulated losses and have reported net profits for the three preceding consecutive years are to be listed through public offerings out of government shareholding or issue of fresh equity by the company or a combination of both.
3. The proceeds from disinvestment would be channelised into National Investment Fund (NIF) and would be available in full during April 2009 to March 2012 for meeting the capital expenditure requirements of selected social sector programmes decided by the Planning Commission/Department of Expenditure.

The proceeds from the disinvestment in Power Grid Corporation (PGC) and Rural Electrification Corporation (REC) were channelised to NIF. The NIF corpus of Rs. 1814.45 crore is managed by UTI Assets Management Company Ltd, SBI Funds Management Company (Pvt) Ltd, and Jeevan Bima Satyog Asset Management Company Ltd under the 'discretionary mode' of the Portfolio Management Scheme (PMS) governed by SEBI guidelines.

DISINVESTMENT MACHINERY

Initially, in 1991–92, the government resorted to bundling options wherein shares were offered only in bundles of 'very good,' 'good,' and 'average' companies. This resulted in disinvestment at very low prices. The government then realised that framing proper strategies for disinvestment was essential.

The Government of India appointed a committee under the chairmanship of the former RBI Governor, C. Rangarajan, in 1993. It recommended that a disinvestment committee be established on a statutory basis in view of the multiple ministries involved, its impact on economic reform, and the need to monitor use of the proceeds of such disinvestment. In 1996 when the Congress was voted out of power, the United Front government set up a disinvestment commission. It was constituted under the chairmanship of G. V. Ramakrishna. It was set up for advising the government on disinvestment in general and for drawing up a long-term disinvestment programme for the PSUs referred to the commission. The commission identified four objectives as part of its long-term strategy: to strengthen PSUs, where appropriate, in order to facilitate disinvestment; to protect employees' interest; to broad base ownership; and to augment receipts for the government.

The Disinvestment Commission broadly classified the PSUs into two categories for disinvestment—the core group and the non-core group. Those in the core group were defined as having considerable market presence and hence PSU disinvestment would be limited to a maximum of 49 per cent. The non-core group industries were defined as units where private sector players have already made huge investments with the aim of enhancing the intrinsic value of PSU shares. The commission recommended that the core and non-core PSUs should be restructured prior to disinvestment. It identified about 100 PSUs and classified them as *navratnas* and *mini-ratnas*. Nine well-performing PSUs under the core category were identified by the government for granting autonomy, which meant giving them freedom to incur capital expenditure, raise resources, and enter technology contracts. These PSUs, popularly known as '*navratnas*', are BHEL, BPCL, HPCL, IPCL, IOC, NTPC, ONGC, SAIL, and VSNL.

The Disinvestment Commission advocated 'strategic sales' of particular PSUs or sale of equity blocks to a single buyer accompanied by transfer of management to the private investor. The government showed its willingness to hand over control through strategic sales to any private party acquiring 25 per cent in the company. The commission has the mandate to offload upto 74 per cent government equity in the non-core and non-strategic areas. There is no change in the government's present shareholding in strategic areas. The government has identified arms, ammunition, and the allied items of defence, equipment, defence aircraft and warships, atomic energy, and railway transport as strategic areas.

The Disinvestment Commission submitted 12 reports recommending disinvestment of 58 PSUs out of the 71 referred to it. These reports contained specific recommendations including disinvestment through strategic sale in 29 PSUs, trade sale in 8 PSUs, offer of share through GDR and domestic route for 5 PSUs, no disinvestment for 1 PSU, disinvestment deferred in 11 PSUs, and closure of 4. The government decided to disinvest in 45 PSUs out of the recommended 58. The tenure of the Disinvestment Commission ended on November 30, 1999.

The Disinvestment Commission was reconstituted in July 2001 with R. H. Patil as chairman. The task of this Disinvestment Commission is to advise the government on non-strategic PSUs and their subsidiaries excluding IOC, ONGC, and GAIL. The Disinvestment Commission submitted its thirteenth report in January 2002 and made recommendations in respect of the following four PSUs: Neyveli Lignite Corporation Limited (NLC); Manganese Ore (India) Limited (MOIL); Real India Technical and Economic Services Limited (RITES); and Projects and Equipment Corporation Limited (PEC).

The recommendations are being examined by the government.

The government constituted the Department of Disinvestment (DOD) on December 10, 1999. It is a nodal body set up to streamline and speed up disinvestment and establish a systemic policy approach to it. It has been made responsible for all matters relating to the disinvestment of central government equity from central PSUs. The Ministry of Disinvestment is to take decisions on its recommendations on the modalities of disinvestment including restructuring.

PSU Self-off Methods

- Bidding
- Sale of shares in the market
- GDR route
- Crossholdings
- Strategic sale

THE PSU SELL-OFF METHODS

The government has adopted various methods to sell off shares in PSUs.

- *Bidding:* In 1991–92, the bidding method was adopted. When the government invites bids for a portion of its stake in a public sector undertaking, it is essentially conducting an auction. The Department of Public Enterprises (DPE) invites closed bids from government financial institutions and mutual funds. The tendering process is driven by a reserve price based on valuation models such as net asset value, earnings potential, and previous realisations if available. These were determined after consultations with merchant bankers such as IDBI and SBI Caps. The government sets a price below which it is unwilling to sell its stake. This price is referred to as the reserve price. In 1991–92, the government resorted to bundling option wherein shares were offered only in bundles of 'very good,' 'good,' and 'average'. The realised amount exceeded the targeted amount in the very first year of the disinvestment programme due to acceptance of low bids for share bundles. However, this strategy instead of helping the government to divest shares in loss-making enterprises at reasonable prices, resulted in disinvestment at very low prices. The share bundles included certain PSU shares such as MTNL, ITI, VSNL, CMC, and Cochin Refineries which would have otherwise commanded a high premium if sold individually. The practice of bundling shares was abandoned thereafter. The government, in subsequent years, sold shares for each company separately. The emphasis of the government in the initial years was on disinvestment of equity, retaining the controlling block.
- *Sale of Shares in the Market:* During 1991–99, shares of companies like IOC, BPCL, HPCL, GAIL, and VSNL were sold in the market. The shares of these blue chip companies were sold at price–earnings ratios of ranging between 4.5 and 6.0. The sale of shares through public issue not only brings down the government's equity holding in the company but there is also the advantage that the money so realised can be used for expansions. The offer of sale of shares in the primary market increases public ownership in these PSUs through retail participation resulting in better price discovery, increasing the floating stock of the company and deepening the capital market. The IPO route is suitable during strong secondary market conditions. Moreover, retail investors get an opportunity to subscribe to the offer and help develop capital markets. The wealth created by PSUs through public resources can be shared equitably with the public at large. However, a public issue does not result in a change in management style and functioning of the companies. The control of the companies continues to be vested with the government resulting in a lower P/E ratio.
- *Global Depository Receipts (GDR) Route:* The government decided to tap the overseas market for disinvestment due to sluggish capital market conditions. In March 1997, the VSNL disinvestment took place through the GDR issue which was priced at USD 13.93 and was over-subscribed 10 times. The second GDR issue of VSNL in February 1999 was priced at a lower price of USD 9.25. MTNL and GAIL were the other GDR issues. The government sold 18 per cent equity in GAIL in 1999–2000 and raised Rs. 1,095 crore through the disinvestment of 155 million shares represented by 22.5 million GDRs. The disinvestment through offloading of minority shares through domestic, ADR, or GDR markets was not productive.
- *Cross-holdings:* After widely missing the targets on the PSU disinvestment front, the government adopted an innovative route to meet the disinvestment target in 1998–99. Cash-rich oil companies were asked to subscribe to each other's shares. This swapping of shares within oil sector PSUs took place just before the close of 1998–99. This cross-holding of Indian Oil Corporation (IOC) buying 10 per cent government stake in ONGC and 5 per cent stake in GAIL, ONGC buying 10 per cent in IOC and 5 per cent in GAIL, and GAIL buying 2.5 per cent stake in ONGC helped the government gather Rs. 4,867 crore at the end of the year. The lock-in period of these shares came to an end in September 2004.

- Strategic sale is sale of equity blocks of a PSU to a single buyer (private investor) resulting in change of ownership and management

- *Strategic Sale:* The Disinvestment Commission in 1996 advocated 'strategic sales' of particular PSUs or sales of equity blocks to a single buyer accompanied by the transfer of management to the private investor. The government also felt the need for privatisation as opposed to just disinvestment. It preferred to privatise the PSUs through the strategic sale route. A strategic sale is indicative of

TABLE 7.1 Price–Earnings Ratio

Sale of Shares 1991–99		*Strategic Disinvestment 2000–02*	
Company	*P/E Ratio*	*Company*	*P/E Ratio*
IOC	4.9	Balco	19
BPCL	5.7	CMC	12
HPCL	5.9	HTL	37
GAIL	4.4	MFIL	Very High as EPS was Negative
VSNL	6.0 (In Monopoly Days)	LJMC	Same as Above
		PPL	Same as Above
		JESSOP	Same as Above
		IBP	63
		VSNL	11 [Inclusive of Income from Dividend and so on After the End of Monopoly]
		HZL	26
		Maruti	89
		IPCL	58

Source: Business World, June 24, 2002, p. 26.

the government's sincerity about disinvestment. It also enables a higher valuation since it takes into account intrinsic valuation, not just the prevailing market price. Moreover, private investors introduce new technologies, induct fresh investments, and improve efficiency. Under strategic sale, the government transfers part of its holding to a strategic partner who would control the operation and financial policy of the enterprise. The strategic partner is chosen through an elaborate bidding process. The transfer of ownership is subject to certain restrictions imposed through covenants. However, strategic sale may inhibit competition and limit the ability of the government to realise the full value of the assets. The first strategic sale was of Modern Food where the government offloaded 74 per cent of its equity to Hindustan Lever for Rs. 105.45 Crore. The strategic sale of Balco, CMC, HTL, MFIL, PPL, JESSOP, IBP, LJMC, VSNL, HZL, Maruti, and lPCL was done at a higher price–earnings ratio ranging between 11 and 89. VSNL's price–earnings ratio of around 11 was higher by around 6 than in case of public issue. In strategic sale, the money goes to the government exchequer instead of the company. The government has adopted the competitive bidding route to ensure the success of the disinvestment programme. The group or the corporate securing the bid then has to make an open offer for acquiring shares from the public at six months' average price as per SEBI's takeover code. The recourse to strategic sale has made the process of disinvestment more beneficial from the revenue point of view. Between 1991 and 1997, the sale of minority shares in blue chip PSUs such as ONGC, IOC, GAIL, and VSNL fetched a price–earnings ratio of 4.4 to 6. With strategic sales, the price–earnings ratio spurted to between 11 and 89. The amount so realised was Rs. 11,335 crore, from the disinvestment of a mere 1.02 per cent of the government equity of Rs. 885 crore.

Methods Used to Arrive at the Reserve Price of a PSU

- Discounted cash flow
- Balance sheet
- Market multiple
- Asset valuation

The Ministry of Disinvestment has set certain guidelines for evaluating PSUs. It has suggested four methods to arrive at the reserve price of a PSU. These are: the discounted cash flow (DCF) method, the balance sheet method, the market multiple method, and the asset valuation method.

The DCF method discounts the expected future cash flows of the PSU to arrive at its present value. The balance sheet method values a company on the basis of the value of its underlying assets. This method does not project the future cash flow. The market multiple method uses information on how the market is evaluating comparable firms. The asset valuation method estimates the cost of replacing the tangible assets of the business and the costs so arrived at as the value of the firm. The asset valuation method overlooks the value of intangibles such as goodwill, brands, distribution network, and customer relationships which are important to determine the intrinsic value of the enterprise. The asset valuation method is more suitable in case of liquidation than in the case of companies sold as running concerns. The DCF method is superior to the other three as it projects future cash flows and the earning potential of the firm, takes into account intangibles such as brand equity, marketing and distribution networks, the level of competition likely to be faced in the future, risk factors to which the enterprise is exposed as well as the value of its core assets. Sometimes, it is better to use a combination of methods in case of PSUs having sizeable tangible assets such as surplus land, which are unrelated to its core business.

Strategic Sales Techniques

In the years 2000–01 and 2001–02, 14 PSUs were disinvested (Refer Annexure 7.1). The disinvestment ministry had evolved innovative methods to make them attractive for sale. In case of Balco and VSNL, the government retained cash and the real estate of the company and sold the remaining assets while in the case of India Tourism Development Corporation (ITDC) and the Shipping Corporation of India (SCI), it spun off various assets as separate and individual entities. The government financially restructured the ailing Paradeep Phosphates before the sale, to make it more attractive to prospective buyers.

Two sell-offs in 2002, that of Maruti Udyog Limited (MUL) and Indian Petrochemical Corporation Limited (IPCL), were unique in the 11-year history of disinvestment. In the case of Maruti, the government decided to sell 50 per cent holding in three phases. The first phase entailed Rs. 400 crore rights issue in which the government would renounce its entitlement in favour of its equal foreign partner, Suzuki Motor Corporation, for a consideration of Rs. 1,000 crore. Suzuki's stake was to go upto 54.5 per cent after the issue and the Rs. 400 crore were to flow into the company's coffers. Suzuki also paid Rs. 1000 crore as control premium. In the second phase, the Government of India would sell 36 lakh shares in an initial public offer (IPO) and earn a minimum of Rs. 828 crore as Suzuki had underwritten these shares at a price of Rs. 2,300 (face value Rs. 100). The government's remaining stake was to be sold in the last phase. Suzuki was only picking up 4.5 per cent additional stake under the rights issue to become a majority owner and it would be obliged to buy the remaining stake only if the government was unable to get a predetermined minimum price for its share in the two subsequent public issues. In 2003, the government divested 27.5 per cent by way of initial public offering (IPO) which was a huge success. The issue was oversubscribed ten times and opened with a premium of 25.2 per cent.

In the IPCL case, the government of India sold off one of its units prior to the sale to prevent the creation of a monopoly in the petrochemical sector. The sale of one unit (the Baroda unit to IOC) prior to disinvestment made IPCL more attractive for the buyer—Reliance—as the unit was the oldest and the least profitable. The government held a 59.95 per cent stake in the petrochemicals giant and to dilute its holdings it decided to sell its 51 per cent holding in two phases. In the first phase, the government invited financial bids in April 2002 from prospective bidders—Reliance Industries, IOC—the Chatterjee Group Combine and Nirma for a 26 per cent stake in the oil giant. On May 18, 2002, Reliance Industries Limited (RIL) became the strategic buyer as it had submitted the highest bid of Rs. 231 per share for a total consideration of Rs. 1491 crore. RIL further bought 20 per cent from the market to take its holding to 46 per cent. The second phase involved selling 25 per cent of its stake in tranches of 10 per cent or less every year, either in the market or to a strategic buyer.

PROCEEDS REALISED FROM DISINVESTMENT

The government has collected disinvestment proceeds of around Rs. 49,214 crore from the sale of 50 PSUs in the last 15 years. There have been only four years (1991–92, 1994–95, 1998–99, and 2003–04) during which the actual receipts have exceeded the targeted receipts. The success has been due to acceptance of extremely low bids in 1991–92 for share bundles which included premium shares offloading in 1994–95 of a large chunk of shares in attractive PSU giants such as BHEL, GAIL, and Bharat Petroleum and through cross-holdings wherein cash-rich PSUs were forced to buy back equity of other PSUs.

During 1993–94, disinvestment was held in March 1994 and the bids were opened in April 1994. Thus, the proceeds so realised were accounted as capital receipts of 1994–95. The actual mobilisation under the disinvestment programme fell short of the targeted amount in the budget for three successive years—from 1995–96 to 1997–98—due to sluggish capital market conditions. Hence, the government adopted the GDR route to mobilise resources under this programme.

The Supreme Court judgement in December 2001 validating the previous fiscal's (FY 2001) sale of aluminium major Balco to Sterlite Industries, gave impetus to the limping disinvestment process. Moreover, the disinvestment ministry headed by Arun Shourie was able to sell off PSUs at a hefty premium by adopting the competitive bidding route. The successful bidders were supposed to make an open offer to investors other than the government. These helped in creating a bullish environment in the PSU segment. The PSU stocks which were trading at a discount started trading at price–earnings multiples comparable to private sector blue chips. The BSE PSU index rose 531.27 points or 57.44 per cent between December 31, 2001 and March 31, 2002. The BSE Sensex was up only by 207.02 points or 6.34 per cent in the same period.

Buoyed by this spurt in market prices of PSU shares, the Department of Disinvestment mooted a proposal on July 8, 2002, for mopping up Rs. 25,000 crore by making public offers in five major PSUs. These include BSNL, IOC, GAIL, NTPC, and ONGC. The government owns 100 per cent stake in BSNL and NTPC, 82 per cent in IOC and ONGC, and 67 per cent in GAIL.

PSU Disinvestment: Summary of Receipts from Disinvestment: 1991–92 to 30–9–2009

TABLE 7.2 Actual Disinvestment From April 1991 Onwards and Methodologies Adopted

Year	No. of cos in which Equity Sold	Target Receipt for the Year (Rs. in Crore)	Actual Receipts (Rs. in Crore)	Methodology
1991–92	47[@]	2,500	3,038	Minority Shares Sold by Auction Method in Bundles of 'Very Good,' 'Good,' and 'Average' Companies.
1992–93	35[$]	2,500	1,913	Bundling of Shares Abandoned. Shares Sold Separately for Each Company by Auction Method.
1993–94	–	3,500	0	Equity of 7 Companies Sold by Open Auction But Proceeds Received In 1994–95.
1994–95	13	4,000	4,843	Sale Through Auction Method, in which NRIs, and Other Persons Legally Permitted to Buy, Hold, or Sell Equity, Allowed to Participate.
1995–96	5	7,000	361	Equities of Four Companies Auctioned and Government Piggy Backed in the IDBI Fixed Price Offering for the Fifth.
1996–97	1	5,000	380	GDR (VSNL) in International Market.
1997–98	1	4,800	902	GDR (MTNL) in International Market.
1998–99	5	5,000	5,371	GDR (VSNL)/Domestic Offerings with the Participation of FIIs (Concor, Gail). Cross-purchase by 3 Oil Sector Companies, i.e., GAIL, ONGC, and Indian Oil Corporation.
1999–2000[#]	4	10,000	1,860	GDR: GAIL, VSNL: Domestic Issue, Balco: Restructuring MFIL: Strategic Sale, and Others.
2000–01	4	10,000	1,871	Strategic Sale of Balco, LJMC; Takeover: KRL (CRL), CPCL (MRL), BRPL.
2001–02[$#]	9	12,000	5,632	Strategic Sale of CMC–51%, HTL–74%, VSNL–25%, IBP–33.58%, PPL–74%, and Sale by Other Modes: ITDC & HCLI; Surplus Reserves: STC and MMTC.
2002–03	6	12,000	3,348	Strategic Sale: HZL–26%, MFIL–26%, IPCL–25%, HCL, ITDC, Maruti: Control Premium from Renunciation of Rights Issue, ESOP:HZL, CMC.
2003–04	9	14,500	15,547	Maruti-IPO (27.5%) Jessop and Co. (Strategic Sale–72%), HZL (Call Option of SP 18.92%), Public Offers—IPCL (28.95%), CMC (26%), IBP (26%), DRDG (20%), GAIL (10%), ONGC (10%), ICI (9.2%).
2004–05	3	4,000	2,764.87	NTPC (IPO). NTPC (5.25% Offer for Sale), IPCL (5% to Employees and ONGC (0.01%).
2005–06	1	–	1569.68	By Sale of MUL Shares to Public Sector.
2007–08	3	–	4,181.39	Sale of Rs. 2,366.94 Crore MUL Shares to Public Financial Institutions and Sale of Power Grid Corporation (PGC)—Rs. 994.82 Crore and Rural Electrification Corporation (REC)—Rs. 819.63 Crore.
2008–09	–	–	–	–
2009–10	2	–	4,259.80	Sale of Rs. 2012.85 Crore of NHPC Limited and Rs. 2,247.05 Crore Shares of OIL India Limited.
Total #	56	96,800	57,682.93	

* Total number of companies in which disinvestment has taken place so far.

@ 31 in one tranche and 16 in other. $ in 3 tranches

\# Figures (inclusive of amount expected to be realised, control premium, dividend/dividend tax and transfer of surplus cash reserves prior to disinvestment etc.)(Rs. 31 crore taxes from Balco).

Source: Department of Disinvestment.

TABLE 7.3 Disinvestment of Public Sector Undertakings and Ratio of Disinvestment Proceeds to Gross Fiscal Deficit

Year	Target (Rs. in Crore)	Actual (Rs. in Crore)	Per Cent of Actual to Target	Per Cent of Disinvestment Proceeds to GFD
1991–92	2,500	3,038	121.5	8.0
1992–93	2,500	1,913	76.5	4.7
1993–94	3,500	–	–	–
1994–95	4,000	4,843	121.1	8.4
1995–96	7,000	362	5.2	0.6
1996–97	5,000	380	7.6	0.6
1997–98	4,800	902	18.8	1.0
1998–99	5,000	5,371	107.4	4.7
1999–2000	10,000	1,820	18.2	1.7
2000–01	10,000	1,869	18.7	1.7
2001–02	12,000	5,632	46.9	4.3
2002–03	12,000	3,348	27.9	–
2003–04	13,200	15,547	118	18.12
2004–05	4,000	2,684	67.1	4.32

Source: Public Enterprise Survey.

In the last four years, i.e., from 1999–2000 to 2002–03, the government failed to meet its disinvestment targets. The NDA government set a target of Rs. 13,200 crore in 2003–04.

The disinvestment was set-off with the initial public offering (IPO) from India's largest car maker Maruti Udyog Limited (MUL) which hit the primary market on June 12, 2003. The government divested 25 per cent of its 45.8 per cent stake in MUL by selling 7.22 crore shares of the face value of Rs. 5 per share at a floor price of Rs. 115 per share through the book-building route. The total size of the issue was Rs. 830 crore with a green-shoe option to sell another 72 lakh shares. The issue was offered in 75 cities and 150 centres through 100 per cent book building process wherein 60 per cent of the issue was allocated to qualified institutional buyers (QIBs), 15 per cent to non-institutional investors, and 25 per cent to retail investors to subscribe upto 1,000 shares. The issue was over-subscribed almost 10 times and the cut-off price was fixed at Rs.125 per share. The MUL IPO created a history of sorts by listing at Rs. 157, a 26 per cent premium to its issue price of Rs. 125 per share. After touching an intra-day high of Rs. 170.3, the scrip ended at Rs. 164 at over 31 per cent premium to the offer price. This spectacular success of the MUL IPO demonstrated the merits of a disinvestment strategy where the strategic sale of a government company is then followed by selling residual shares to the public. The government garnered Rs. 993.35 crore through this sale. Post-offer, the government's stake came down to 18.3 per cent from 45.8 per cent.

On March 27, 2002, the government had offloaded its 26 per cent equity in Hindustan Zinc to Sterlite Industries for Rs. 445 crore. In November 2003, Sterlite Industries acquired the government's residual stake of 18.92 per cent for Rs. 323.88 crore.

The disinvestment programme of the government received a set-back with the Supreme Court ruling on September 16, 2003 that disinvestment in HPCL and BPCL required parliamentary sanction as these former MNCs were nationalised through an act of parliament. The planned disinvestment of Nalco, HPCL, and BPCL were deferred. The growing Indian economy, good corporate results and a slow down in the US market attracted the foreign institutional investors towards Indian Stock Markets which led to a rally in the stock market. Moreover, the IPOs of UCO Bank and Vijaya Bank got good response from the market which motivated the government to offload its stakes by selling shares to the public. The government decided to divest its holdings in six PSUs namely IPCL, CMC, IBP, Dredging Corporation of India Limited (DCIL), ONGC, and GAIL, in March 2004. In IPCL, CMC and IBP, the government completely divested its holdings, while in others it sold only a part. The government reserved 25 per cent of all the offerings for retail investors and offered them shares at a 5 per cent discount to the cut-off price. The process of disinvestment in these six PSUs began by February end and was completed by mid-March, 2004.

The IPCL issue opened on February 20, 2004 at a floor price of Rs. 170 per share which was also the cut-off price. The government offloaded 29 per cent stake by offering 5.94 crore shares. The IPCL issue was over-subscribed 4.9 times with over two lakh applications. The government raised Rs. 1,219.24 crore through the IPCL issue.

IBP and CMC issues opened on February 23, 2004. In IBP, IOC had brought majority stake of 53.58 per cent at Rs. 1400 per share in 2001. The government offloaded 57.58 lakhs IBP shares of Rs. 10 each at a floor price of Rs. 620. Initially, the IBP offer received a lukewarm response due to the sustained offloading of stock but with the disinvestment minister Arun Shourie announcing a probe, IBP got over-subscribed by 2.80 times, receiving around 85,000 applications. The government raised Rs. 352.53 crore by divesting its 26 per cent stake at a cut-off price of Rs. 620.

In CMC, the government had sold 51 per cent of the paid-up capital to Tata Sons for Rs. 152 crore, i.e., at Rs. 197 per share in October 2001. This price was higher than the reserve price of Rs. 108.8 crore. The government decided to offload the remaining 26 per cent stake in CMC at a floor price of Rs. 475 per share. The issue was over-subscribed 11 times with the retail portion being over-subscribed six times. The government collected Rs. 188.69 crore through its offer of 39.76 lakh shares at a cut-off price of Rs. 485 per share.

The government's offer for sale of 56 lakh shares of Dredging Corporation of India (DCI) hit the market on February 26, 2004. The government offloaded 20 per cent of its stake in the company at a cut-off price of Rs. 400. The floor price was in the range of Rs. 385 to Rs. 400 and the offer was over-subscribed by more than nine times. Maximum bidding was seen at the ceiling of the price band set by the government and hence the cut-off price was set at Rs. 400. The DCI IPO received bids for 86.62 lakh shares as against the offer size of 56 lakh shares. The government raised Rs. 223.44 crore through this sale and post offer its stake came down to 78.6 per cent.

The IPO of GAIL India issue opened on February 27, 2004. The government offered 8.45 crore shares at a floor price of Rs. 185 by disinvesting 10 per cent of its ownership to the public. In less than two days, the IPO of Gail India got over-subscribed 2.41 times. The government raised Rs. 1643.63 crore through this issue at a cut-off price of Rs. 195.

The government's offer for sale of 10 per cent of its stake in Oil and Natural Gas Corporation (ONGC) opened on March 5, 2004. This was the largest IPO in the history of the Indian primary market. Moreover, it was the biggest success among the six PSU IPOs. One of the factors attributing to its success was the issue price which was fixed in a range of Rs. 680 to Rs. 750. The price–earning multiple worked out to around 9.7 which was quite low when compared to its global peers and this attracted retail investors. Moreover, the SEBI allowed merchant bankers and lead managers to issue participatory notes to large investors domiciled overseas for ONGC shares which led to a high demand for the scrip. The offer for sale of 14.26 crore shares was over-subscribed 5.9 times attracting bids worth over Rs. 60,000 crore. ONGC made history by mopping up the targeted Rs. 10,000 crore in less than 20 minutes of its opening.

The government met its target of disinvestment after a gap of four years. These six offers for sale helped the government to surpass the disinvestment target of Rs. 13,200 crore by Rs. 2,347 crore. Through these six offers, the government was successful in broadening the retail investor base. The strong response to ONGC issue demonstrates that the Indian stock markets can successfully execute global size offerings and Indian investors do respond enthusiastically to good paper.

The Manmohan Singh government (UPA) after assuming power came up with an offer for sale of 5.25 per cent stake in state power producer, National Thermal Power Corporation which were sold in 2004–05 (Table 7.2).

The government sold 8 per cent of MUL's shares in early 2006 at Rs. 678.40 per share for Rs. 1567.60 crore to eight public sector banks and financial institutions. The sale fetched a price higher than the prevailing market price due to the French auction model—bidders pay the price that they bid. The government sold-off its remaining stake of 10.27 per cent stake in MUL to banks, financial institutions and private mutual funds through the differential pricing method during 2008–09.

The cabinet committee on Economic Affairs approved on April 9, 2010, the government's proposal to disinvest a portion of government of India's shareholding in Steel Authority of India Ltd (SAIL) and Engineers India Limited (EIL) to the extent of 10 per cent each through offer for sale.

EVALUATING THE DISINVESTMENT PROGRAMME

The Disinvestment Programme

- A tool to finance fiscal deficit
- Some of the best performing units sold at low prices
- PSUs not structured nor marketed properly before sale
- Absence of political consensus for disinvestment

The government had no clear-cut objectives set for the disinvestment programme. In the initial years of implementation, the government talked of disinvestment without losing control and when the programme flopped, it talked more in terms of privatisation than disinvestment.

The disinvestment programme was used as a tool to finance fiscal deficit. It was more a tool for raising resources to finance revenue expenditure than one to redefine the role of the government in the economy. The government did not have a proper privatisation policy. The government was never clear about what business it meant to remain in and from where it needed to move out. There was a lack of political will and a sense of urgency, which led to sales being repeatedly stopped and restarted. Every sale undertaken by the government was a subject of controversy. There were differences of opinion on the methods or pricing

Fiscal Deficit

- The gap between the government's total spending and the sum of its revenue receipts and non-debt capital receipts
- This gap is bridged through additional borrowing from the RBI, issuing government securities, etc
- A high fiscal deficit contributes to inflation

which slowed down the pace of disinvestment. Moreover, the lack of a politically acceptable agenda hampered the progress of the disinvestment programme.

Improvement in efficiency should be the primary objective of privatisation. This objective can be achieved when inefficient public sector units are privatised. Instead, in the last decade, some of the best performing units have been sold off. Most of the blue chip companies were sold at very low prices. The distress sale was a result of an inappropriate pricing strategy and delays in pricing. The delay in pricing the VSNL issue resulted in a massive loss to the nation. The same mistake was committed when the shares of GAIL were sold at half the proposed price. To make disinvestment a success, the government should come to terms with the fact that it is the market that determines the price of a PSU stock.

The Unit Trust of India was one of the financial institutions which had picked up a sizeable number of shares in the disinvestment programme of the early 1900s. The market price of these shares fell so sharply that UTI lost Rs. 5,056 crore over an investment of Rs. 6,403 crore. The government had to bailout UTI with tax payers' money and at a great cost to investors.

In the case of strategic sale of a unit, the government did not put in substantial efforts to restructure or market the PSUs. Hence, most of the time it ended up selling a company cheap. For instance, the restructuring of Paradeep Phosphates was incomplete and it was sold off at a low price to Zuari Macro Phosphate. The restructuring of a unit should be of both financial and operational nature. For instance, writing off loans and interest for a certain period and deciding specific and achievable operational objectives for each stage. Thus, the restructuring exercise requires long-term planning and a step-by-step approach for successful implementation and timely completion. For instance, SAIL's restructuring is expected to be completed by 2005 but it is stuck at various levels due to conflicts either with the state governments where the units are located or due to old issues not being sorted out at the initial stage. The entire restructuring exercise reflects a half-hearted approach of the government and if restructuring is not completed as soon as it should be, the sale might not fetch the government a high price.

Disinvestment was not a privatisation programme in the real sense; it was one which led to transfer of money from one public undertaking pocket to another to bridge immediate resource gaps. Cash-rich oil corporations were forced by the government to cross-hold shares in other oil PSUs. The surplus resources of cash-rich oil corporations could instead have been used for their restructuring to face a competitive environment. Moreover, there has been no real change in the ownership and quality of management. Most of the companies have had a disinvestment of less than 10 per cent of government holding.

The proceeds realised from the sale of assets should be deployed in a productive manner such as liquidation of debts or the creation of sound infrastructure. In its budgets, the government earmarked the amount expected to be realised from disinvestment for use in social and infrastructure sectors, restructuring of PSUs and so on. However, the target amount could not be realised and whatever was realised, became a part of revenue receipts.

In 2000–01, it seemed that the disinvestment minister had managed to evolve a consistent and fairly sophisticated approach to disinvestment. He insisted on a proper implementation of the programme and believed in transparency. Privatisation gathered momentum with 14 PSUs divested in the last 24 months. Most of the PSUs were sold off during this time at a hefty premium.

Since 2001, the government's emphasis was on strategic sale as it thinks that it boosts share price of the concerned PSU. This, in turn, increases the value of the government's residual equity. To boost the disinvestment process, the finance ministry decided on June 30, 2002, to permit companies to raise ADRs/GDRs/ECB to fund disinvestment buyouts. Thus, bidders have access to an additional source of funds and this route can bring foreign funds to the disinvestment process. The disinvestment programme is once again under a political cloud. The strategic sale technique has been highly criticised by some political parties. Political consensus is required for effective implementation of the disinvestment programme.

The UPA government has proposed setting up of a Board for Reconstruction of Public Sector Enterprises which will replace the Disinvestment Commission. The function of this proposed board will be to strengthen PSUs and make them more autonomous and professional.

The public sector still has a role to play—especially in the strategic areas. The PSUs in the defence and aerospace sectors are top performers and have succeeded in building global brands. There are certain areas such as broadcasting, law and order, and regulatory bodies where PSUs are still needed. The proposed board has to make efforts to see that these PSUs are strengthened and not divested.

DISINVESTMENT OF PSUs IN DIFFERENT COUNTRIES

Chile and the UK are cited as the pioneers of privatisation. The disinvestment process began in the 1970s. Most developed countries such as the UK, France, Australia, and New Zealand wanted to disinvest to reduce the state's role in the economy and improve the utilisation of resources. Underdeveloped countries such as Chile, Thailand, Malaysia, Indonesia, Mexico, Argentina, and the Philippines wanted disinvestment to accelerate growth, improve efficiency, and raise resources for further capital formation. These countries had laid down clear-cut objectives and strategies (methodology) for disinvestment. Most of them were successful in attaining their objectives which included decrease in government control in the country's economy.

The UK's disinvestment programme is cited as one of the most successful of all. It began in the late 1970s and was carried out under the leadership of the then Prime Minister Mrs Margaret Thatcher. The stated objective was to reduce the role of the government in the economy and apply the resources thus freed to better governance. In the UK, privatisation was encouraged through the multiple methods of direct sale, management buyouts, and floatation of public issues. Large corporations such as British Telecom (BT) and British Airways were restructured by installing good management with full autonomy before they were offered to the public. These entities were aggressively marketed and their shares were underpriced which led to an over-subscription of 35 to 45 times. In most of the large companies, the government sold a 100 per cent stake through public issues. The impact of privatisation was that most of the companies including British Airways and Enterprise Oil could improve their performance and profitability. In fact, privatisation led to an improvement in service standards and consumers were paying less and getting more.

Disinvestment of Public Sector Undertakings in Different Countries

Country Developed	*Objective*	*Methodology*
The UK (Commenced Privatisation in the Late 1970s)	Reduced Role of the Government in the Economy, Apply More Resources to Governance	Privatisation encouraged through multiple methods of direct sale, management buyouts, and under-priced floatation. companies were restructured, corporatised, and commercialised. The british parliament had the opportunity of discussing the reform proposals of the government in each sector before they were implemented. Ministries prepared white papers for the consideration of the house of commons. parliament exercised the right of self denial to questions on PSUs.
Australia and New Zealand (in the 1980s) *Developing*	Reduce Excessive State Ownership	Units directly sold to interested parties either as going concerns (if profitable) or broken up (if loss-making).
Chile (Commenced Privatisation in the 1970s)	Improve Efficiency and Reduce Deficits	Every PSU was allowed to pursue the course it found suitable. In the first stage, only 30 per cent of the equity was divested. It was sold-mainly to employees with attractive options. In the next stage, 19 per cent was divested, and the rest of it in the last stage. Large, private institutions it in the last stage. Large, private institutions were allowed to participate only in the last round.
Malaysia (in 1985)	Redefine the Role of Government, Improve Efficiency, Balance Wealth Distribution	Underpricing and mass fixed-price marketing. The native malays were given a special status in being offered preferential allotment and reservations in public offerings. Companies were restructured. Adopted four main modes of privatisation: sale of assets or equity; lease of as sets, build-operate and transfer (BOT) for new infrastructure; and management contracts. Management contracts to private par ties to run (manage) the business.
Thailand	Restrict the Growth of PSUs	Leasing out Idle capacity.
Mexico	Raise Resources to Repay Internal Debt	Sold 600 of its loss-making companies first.
The Philippines	Reduce Corruption and Increase Accountability in the Government Sector	Units were directly sold to interested parties either as going concerns (if profitable) or broken Up (if loss-making) and disposed of.
Brazil	Reduce State Involvement in Commercial Activity and Attract Foreign Capital, Introduce Modern Technology, and Benefit the Local Economy.	Created a national privatisation programme through a legislation. A clear sequencing of the privatisation effort, starting with industrial enterprise and then to infrastructure., The national development bank (BNDES) conducted privatisation on behalf of the federal and state government. No distinction between profitable and unprofitable public enterprises while privatising.

Source: Capital Market, various issues.

Countries such as Japan, France, Italy, and Germany have raised almost USD 285 billion through 120 public offerings. The model of disinvestment through public offers is referred to as 'Share Issue Privatisation (SIP).' SIPs have raised over USD 400 billion for governments in every continent in the past two decades. Moreover, this model has helped develop capital markets and promote an equity culture among domestic investors. The disinvestment proceeds were utilised to trim budget deficits, enhance institutional and structural competence, and to improvise on the social costs emerging as a result of disinvestment.

Conclusion

A similar and sincere restructuring exercise needs to be undertaken for Indian PSUs and a similar public-offer-sale route should be adopted. This can be used as a tool to revive the sluggish primary capital market conditions. In view of mounting fiscal deficits, the disinvestment of PSUs has become inevitable.

There should be a clear-cut methodology laid down for each PSU because a common disinvestment methodology cannot be very effective. For instance, there are some PSUs which are loss-making but are of immense value due to their production capacities and/or distribution network. In such cases, a better price can be obtained from strategic sale rather than sale in open market to retail investors while in some PSUs, retail interest may be necessary to drive the trading volumes. Moreover, offering good PSU stock to the retail segment can improve market sentiments and broad base the shareholding. Finally, the speed of the disinvestment process is a critical variable for its success. The increase in competition and drying up of the resources of the government can weaken even strong PSUs. A delay in disinvestment can not only weaken these PSUs but also reduce the value that can be realised through their sale.

A smooth and successful disinvestment programme of central PSUs can raise the probabilities of successful disinvestment of state PSUs.

KEY TERMS

Disinvestment, Privatisation, Fiscal Deficit, Strategic Sale.

SUMMARY

1. Central public sector undertakings (PSUs) are organisations established by the Government of India as government companies under the Companies Act or as statutory corporations under specific statutes of parliament.
2. The disinvestment of public sector undertakings means the sale of public sector equity leading to a dilution of the government's stake.
3. The objectives of disinvestment are to broad base equity, improve management, enhance availability of resources for these public sector enterprises and finance fiscal deficit.
4. The government has adopted various methods to sell off shares in PSUs: bidding, sale of shares in the market, global depository route, cross-holdings, strategic sale.
5. The Ministry of Disinvestment has suggested four methods to arrive at the reserve price of a PSU. These are: the discounted cash flow method, the balance sheet method, the market multiple method, and the asset valuation method.
6. The government has collected disinvestment proceeds of around Rs. 47,500 crore from the sale of 49 PSUs in the last 14 years.
7. The government's current emphasis is the on sale of equity shares in the market. The government collected Rs. 14,222 crore in the year 2003–04 by selling its equity stake in seven PSUs.
8. Countries such as Japan, France, Italy, and Germany have raised almost USD 285 billion through 120 public offerings. The disinvestment proceeds were utilised to trim budget deficits, enhance institutional and structural competence and to improvise on the social costs emerging as a result of disinvestment.

REVIEW QUESTIONS

1. State the reasons for the government's decision to disinvest its stake in the public sector enterprises.
2. Why is the Indian disinvestment programme surrounded with many controversies?
3. Do you think that the disinvestment programme has achieved its stated objectives? Discuss.
4. Which were the different methods adopted to sell off PSUs? Which method is the most superior? Why?

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ANNEXURE 7.1 PSU Disinvestments: 2000–02

Company	*Stake Sold (%)*	*Total Price (Rs. in Crore)*	*Methodology*
Balco	51	826.50	Strategic Sale to Sterlite Industries After Taking Out Cash Reserves.
Modern Foods	100	149.00	Complete Sale to Hindustan Lever in Two Phases After Minor Restructuring.
CMC	51	152.00	The Tatas Purchased the Company After they Alone were Left in the Fray.
HTL	74	55.00	Simple Sale of a Company that was Not Doing Too Well.
Lagan Jute Machinery	74	2.53	The Loss-making Entity was Sold as an Ongoing Concern.
ITDC	100	179.55	Nine of its Properties were Demerged and Sold as Separate Entities.
Hotel Corporation	100	242.51	Three of its Properties were Demerged and Sold as Separate Entities.
IBP	33.58	1,153.68	The Stake was Purchased by IOC at a Fairly High Premium.
VSNL	25	3,689.00	Simple Sale to the Tatas After Taking Out Cash and Delinking its Real Estate.
Paradeep	74	151.70	An Incomplete Financial Restructuring was Undertaken Before Selling It.
Phosphates Jessop & Co.	72	18.18	Post-restructuring, The Loss-making Entity was Sold as an Ongoing Concern.
Hindustan Zinc	26	445.00	Sterlite Industries Took it Over in a Simple Sale Transaction.
IPCL	26	1,491.00	To Stop Creation of a Monopoly, One of its Units was Sold off Beforehand.
Maruti Udyog	50	2,424.00”	For the First Time, A Part of the Money will Flow Back into the Company.

* Includes cash taken out of the company prior to disinvestment in the form of dividends and dividend tax.
** Minimum expected realisation to the government in a 3-phase disinvestment.
Source: Business World, June 3, 2002, p. 26.

ANNEXURE 7.2 PSU Disinvestments: 2003–04

Name	*Open Date*	*Close Date*	*Floor Price (Rs.)*	*Cut-off Price (In Rs.) General*	*Cut-off Price (In Rs.) Retail*	*Stakes Offered (%)*	*Govern-ment Stake Post Issue (%)*	*Issue Size (Shares in Crores)*	*Amount Raised (Rs. in Crore)*
MUL	June 12, 2003	June 19, 2003	115	125	125	25	20.8	7.22	82.3
IPCL	February 20, 2004	February 27, 2004	170	170	161.5	29	5.0	7.19	1,219.24
IBP	February 23, 2004	March 1, 2004	620	620	589.0	26	Nil	0.57	352.53
CMC	February 23, 2004	February 28, 2004	475	485	460.75	26.25	Nil	0.39	188.69
Dredging Corp.	February 26, 2004	March 4, 2004	385–400	400	380.00	20	78.6	0.56	223.44
Gail	February 27, 2004	March 5, 2004	185	195	185.25	10	57.4	8.45	1,643.63
ONGC	March 5, 2004	March 13, 2004	680–750	750	712.50	10	74.1	14.29	10,512.00
Total									14,221.83

Source: Capital Market.

8

The Secondary Market

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Functions of the secondary market*

2 *Post-reforms stock market scenario*

3 *Organisation structure of stock exchanges*

4 *Listing of securities, trading and settlement arrangements*

5 *Internet trading*

6 *Stock market index*

7 *Stock exchanges such as the Bombay Stock Exchange, the National Stock Exchange, the Over The Counter Exchange of India, the Inter-connected Stock Exchange of India, the Indonext and Regional Stock Exchanges*

8 *Measures to boost liquidity in the secondary market: Investment by FIIs, buy back of shares, market making system, rolling settlement and margin trading*

9 *Impact of reforms and measures on secondary market activities*

INTRODUCTION

The secondary market is a market in which existing securities are resold or traded. This market is also known as the stock market. In India the secondary market consists of recognised stock exchanges operating under rules, by-laws and regulations duly approved by the government. These stock exchanges constitute an organised market where securities issued by the central and state governments, public bodies, and joint-stock companies are traded. A stock exchange is defined under Section 2(3) of the Securities Contracts (Regulation) Act, 1956, 'as any body of individuals whether incorporated or not, constituted for the purpose of assisting, regulating or controlling the business of buying, selling or dealing in securities'.

Functions of the Secondary Market

- To facilitate liquidity and marketability of the outstanding equity and debt instruments.
- To contribute to economic growth through allocation of funds to the most efficient channel through the process of disinvestment to reinvestment.
- To provide instant valuation of securities caused by changes in the internal environment (company-wide and industry-wide factors). Such valuation facilitates the measurement of the cost of capital and the rate of return of the economic entities at the micro level.
- To ensure a measure of safety and fair dealing to protect investors' interests.
- To induce companies to improve performance since the market price at the stock exchanges reflects the performance and this market price is readily available to investors.

Development of the Stock Market in India

The origin of the stock market in India dates back to the end of the eighteenth century when long-term negotiable securities were first issued. The real beginning, however, occurred in the middle of the nineteenth century, after the enactment of the Companies Act in 1850 which introduced the feature of limited liability, and generated investor interest in corporate securities.

The Native Share and Stock Brokers' Association, now known as the Bombay Stock Exchange (BSE) was formed in Bombay (now Mumbai) in 1875. This was followed by the formation of association/exchanges in Ahmedabad in 1894, Calcutta (now Kolkata) in 1908, and Madras (now Chennai) in 1937. In order to promote the orderly development of the stock market, the central government introduced a comprehensive legislation called the Securities Contracts (Regulation) Act, 1956.

The Calcutta Stock Exchange (CSE) was the largest stock exchange in India till the 1960s. In 1961, there were 1,203 listed companies across the various stock exchanges of the country. Of these, 576 were listed on the CSE and 297 on the BSE. However, during the later half of the 1960s, the relative importance of the CSE declined while that of the BSE increased sharply.

Table 8.1 below shows the phenomenal growth in the operations of the stock markets in India till the nineties.

Till the early 1990s, the Indian secondary market comprised regional stock exchanges with the BSE heading the list. The Indian stock market was plagued with many limitations, such as the following.

TABLE 8.1 Pattern of Growth of Stock Exchanges

	1946	*1961*	*1971*	*1975*	*1980*
No. of Stock Exchanges	7	7	8	8	9
No. of Listed Companies	1,125	1,203	1,599	1,852	2,265
Market Capitalisation (Rs. in Crore)	971	1,292	2,675	3,273	6,750

	1990–91	*1999–2000*	*2004–05*	*2007–08*
No. of Stock Exchanges	22	23	23	19
No. of Listed Companies	2,471	5,815	4,731*	4,887
Market Capitalisation* (Rs. in Crore)	90,836	1,12,842	16,98,428	51,38,014
Turnover (Rs. in Crore)	36,011	20,670,310	16,20,498**	51,29,895

Note: * relates to the BSE, ** relates to the BSE and the NSE.
Source: SEBI, Annual Report, various issues.

- Uncertainty of execution prices.
- Uncertain delivery and settlement periods.
- Front running, trading ahead of a client based on knowledge of the client order.
- Lack of transparency.
- High transaction costs.
- Absence of risk management.
- Systemic failure of the entire market and market closures due to scams.
- Club mentality of brokers.
- Kerb trading—private off-market deals.

POST-REFORMS MARKET SCENARIO

After the initiation of reforms in 1991, the Indian secondary market now has a four-tier form as follows:

- Regional stock exchanges
- The National Stock Exchanges (BSE and NSE)
- The Over the Counter Exchange of India (OTCEI)
- The Inter-Connected Stock Exchange of India (ISE)

The NSE was set up in 1994. It was the first modern stock exchange to bring in new technology, new trading practices, new institutions and new products. The OTCEI was set up in 1992 as a stock exchange, providing small- and medium-sized companies the means to generate capital.

In all, there are, at present, 21 stock exchanges in India—15 regional stock exchanges, the BSE, the NSE, the OTCEI and the Interconnected Stock Exchange (ISE) of India. The ISE is a stock exchange of stock exchanges. The 15 regional stock exchanges are located at Ahmedabad, Bangalore, Bhuvaneshwar, Kolkata, Cochin, Coimbatore, Delhi, Guwahati, Indore, Jaipur, Kanpur, Ludhiana, Chennai, Pune and Vadodara. They operate under the rules and by laws and regulations approved by the government and the SEBI.

The MCX Stock Exchange (MCX-SX) was granted recognition on September 16, 2008 by the SEBI. The United Stock Exchange of India Limited (USE) is the latest entrant in the stock markets. It commenced operations in July 2010. It is the fourth currency futures exchange after BSE, NSE and MCX-SX. All 21 Indian public sector banks, leading private sector banks, public sector undertaking and corporates are shareholders of the exchange.

Table 8.2 shows the secondary market structure in India.

Regulation of Stock Exchanges

The stock markets in India are regulated by the central government under the Securities Contracts (Regulation) Act, 1956, which provides for the recognition of stock exchanges, supervision and control of recognised stock exchanges, regulation of contracts in securities, listing of securities, transfer of securities and many other related functions. The Securities and Exchange Board of India Act, 1992, provides for the establishment of the Securities and Exchange Board of India (SEBI) to protect investors' interest in securities and promote and regulate the securities market.

TABLE 8.2 Secondary-market Structure

Secondary Market Structure	*As on March 31, 2001*	*As on March 31, 2005*	*As on March 31, 2006*	*As on March 31, 2008*	*As on March 31, 2009*	*As on March 31, 2010*
Stock Exchanges (Cash Market)	23	22	22	20	20	20
Stock Exchanges (Derivatives Market)	2	2	2	2	2	2
Brokers (Cash Segment)	9,782	9,129	9,335	9,487	9,628	9,772
Corporate Brokers (Cash Segment)	3,808	3,733	3,961	4,190	4,308	4,424
Sub-brokers (Cash Segment)	9,957	13,684	23,479	44,074	60,947	75,577
Brokers (Derivatives)	519	994	1,120	1,442	1,587	1,705
Foreign Institutional Investors	527	685	882	1,319	1,626	1,713
Custodians	14	11	11	15	16	17
Depositories	2	2	2	02	02	02
Depository Participants	335	477	526	654	714	758
Merchant Bankers	233	128	130	155	134	164
Bankers to an Issue	69	59	60	50	51	48
Under Underwriters	57	59	57	35	19	5
Debenture Trustees	37	35	32	28	30	30
Credit Rating Agencies	4	4	4	05	05	–
Venture Capital Funds	35	50	80	106	132	158
Foreign Venture Capital Investors	1	14	39	97	129	143
Registrars to an Issue and Share Transfer Agents	186	83	83	76	71	74
Portfolio Managers	39	84	132	205	232	243
Mutual Funds	39	39	38	40	44	47
Approved Intermediaries (Stock Lending Schemes)	10	3	3	02	02	02
STP (Centralised Hub)	46	–	–	01	01	01
STP (Service Providers)	–	–	–	02	02	02
Regulators (DCA, DEA, RBI and SEBI)	4	4	4	04	04	04

Source: SEBI Bulletin, September 2009.

ORGANISATION, MANAGEMENT AND MEMBERSHIP OF STOCK EXCHANGES

The organisational forms of the various recognised stock exchanges in India were as follows:

(i) Bombay, Ahmedabad and Indore	Voluntary non-profit-making association of persons
(ii) Kolkata, Delhi, Bangalore, Cochin, Kanpur, Guwahati, Ludhiana and Chennai	Public limited company
(iii) Coimbatore and Pune	Company limited by guarantee
(iv) The Over the Counter Exchange of India	A company under Section 25 of the Companies Act, 1956

The regional stock exchanges were managed by a governing body consisting of elected and nominated members. The trading members, who provide broking services, owned, controlled and managed the exchanges. The governing body was vested with wide-ranging powers to elect office-bearers, set up committees, admit and expel members, manage properties and finances of the exchange, resolve disputes and conduct day-to-day affairs of the exchange.

The OTCEI and the NSE are demutualised exchanges wherein the ownership and management of the exchange are separated from the right to trade on exchange. The National Stock Exchange was the only tax-paying company incorporated under the Companies Act and promoted by leading financial institutions and banks.

Brokers are members of the stock exchange. They enter trades either on their own account or on behalf of their clients. They are given a certificate of registration by the SEBI and they have to comply with the prescribed code of conduct. Over a period of time, many brokers with proprietary and partnership firms have converted themselves into corporate entities. Both NSE as well as OTCEI have laid down strict standards for the admission of members, which relate to capital adequacy, track record, education, experience and so on, to ensure quality broking services.

Brokers are important intermediaries in the stock markets as they bring buyers and sellers together, and aid in price discovery. There are three classes of brokers, namely, proprietary, partnership and corporate. In the old exchanges, most of the brokers are proprietary in nature, whereas in the new exchanges, they are corporate members. Several structural changes have taken place in the Indian broking industry over the past few years. Consolidation and reconstructuring have assumed considerable importance in this segment. As on March 31, 2010, there were 9,772 brokers and 4,424 brokers in the cash segment registered with the SEBI. The CSE has the highest number of brokers followed by the NSE, the OTCEI and the BSE.

A stock broker is required to pay an annual registration fee of Rs. 5,000, if his turnover per year does not exceed Rs. 1 crore. If it does, he has to pay Rs. 5,000 plus one-hundredth of 1% of the turnover in excess of Rs. 1 crore. About 5 years from the date of initial registration, he has to pay Rs. 5,000 for a block of 5 financial years. The exchange also levies transaction charges.

The brokerage on transactions varies from broker to broker. The maximum brokerage that can be levied is 2.5% of the contract price, exclusive of statutory levies such as SEBI-turnover fee, service tax and stamp duty. He is also required to pay the exchange, the transaction charges at the rate of 0.0035% (Rs. 3.5 per Rs. 1 lakh) of the turnover. Trading members are also required to pay securities-transaction tax (STT) on all delivery-based transaction, at the rate of 0.125% (payable by both buyer as well as seller), and, in case of non-delivery transactions, at the rate of 0.025%, for equities payable by the seller alone). Stamp duties are also payable by him as per the rates prescribed by the relevant states.

Brokers can now offer direct market-access (DMA) facility to institutional clients that allow clients a direct access to the exchange-trading system, through the broker's infrastructure, without any manual intervention by the broker. This enables brokers to have a direct control of clients over orders, faster execution of client orders, reduced risk of errors associated with manual-order entry, greater transparency, increased liquidity, lower-impact costs for large orders, better audit trails and better use of hedging and arbitrage opportunities through the use of decision-support tools/algorithms for trading.

Consolidation is taking place in the broking industry. Small brokerages are shutting shop as the big broking entities have cornered a big chunk of the broking business.

Demutualisation of Stock Exchanges

All the stock exchanges in India, except the NSE and the OTCEI, were broker-owned and broker-controlled. In other words, it was the brokers who traded, collectively owned and managed these exchanges. The ownership and managerial rights of the brokers often led to a conflict of interests, wherein the interest of brokers was preserved over those of the investors. Instances of price rigging, recurring payment crisis on stock exchanges and misuse of official position by office bearers, have been unearthed in the last few years. As a result, both rolling settlement as well as demutualisation of stock exchanges were announced to preserve their integrity.

Demutualisation

- Separation of ownership rights and trading rights
- Stock exchange is a corporate tax paying entity
- Safeguards the interest of investors
- Brings out greater transparency in the functioning of the stock exchanges

Demutualisation is the process by which any member-owned organisation can become a shareholder-owned company. Such a company could either be listed on a stock exchange or be closely held by its shareholders.

Stock exchanges in India were either Section-25 companies under the Companies Act or an association of persons. Hence, stock exchanges were exempt from all taxes. The NSE, the OTCEI and the ICSE were set up as demutualised stock exchanges. The NSE was set up as a demutualised entity and is owned by financial institutions. Although the ISE was set up as demutualised, it was not a profit-making organisation, which means that even if the profit gets generated, it cannot be distributed among owners, like in the NSE. Like the ISE, the OTCEI has been set up with a not-for-profit motive. It was the first demutualised exchange in the country, set up with a share capital of Rs. 10 crores and promoted by prominent Indian financial institutions. Table 8.3 provides a comparison of the NSE model and international models of demutualised exchanges.

Through demutualisation, a stock exchange becomes a corporate entity, changing from a non-profit-making company to a profit- and tax-paying company. Demutualisation separates the ownership and control of stock exchanges from the trading rights of its members. This reduces the conflict of interest between the exchange and the brokers and the chances of brokers using the stock exchanges for personal gains. With demutualisation, stock exchanges have access to more funds for investment in technology, mergers with and acquisition of other exchanges, and for strategic alliances with other exchanges. Members of the stock exchange also benefit by demutualisation as their assets become liquid and they get a share of the profits made by the exchange through dividends. Demutualisation makes operations of the stock exchange transparent, which facilitates better governance.

Demutualisation process is similar to a company-going public—owners will be given equity shares. The exchange offers equity capital, either through dilution of existing promoters stake or by the fresh issue of capital. The process seeks to give majority control (51%) of the exchange to investors who do not have trading rights. This is to allow a better regulation of the exchange. Once listed as a public company, the exchange will be governed by the corporate-governance codes to ensure transparency.

There has been a global trend towards demutualisation, wherein 17 stock exchanges including NASDAQ, and those of Australia, Singapore, Hong Kong, London and Tokyo have already been demutualised, and another 15 are in the process of demutualisation. The Amsterdam and Australian Stock Exchanges have become publicly listed companies. In Asia, the Singapore Stock Exchange (SGX) and the Singapore Monetary Exchange have merged.

In November 2002, SEBI approved the uniform model of corporatisation and demutualisation of stock exchanges, recommended by the Kania Committee. The committee recommended that stock exchanges in India, which were set up as associations of persons, should be converted into companies, limited by shares. The three stakeholders of the exchange—the shareholders, brokers and the investing public—should equally represent the board. The trading and ownership rights, currently coded in the broker's membership card, should be separated. A broker will get trading rights after paying a certain fee, fixed by the exchange. The ownership right, however, will reside with the shareholders of the corporatised exchange. The shares of an exchange can also be listed on other exchanges.

The Securities Contracts (Regulation) Act was amended on October 12, 2004, through an ordinance, making it compulsory for the exchanges to convert into corporate entities and delink their broker members from the management. The ordinance restricts brokers' representation in the governing-body board of stock exchanges to 25%. It also reduces their shareholding in the exchange to 49% from the existing 100%.

Moreover, 51% of the stake of an exchange should be held by the public, other than shareholders having trading rights. Brokers' trading rights will be distinct from their ownership and management right in all exchanges. The segregation is expected to safeguard the interest of investors and bring about a greater transparency and efficiency of stock exchanges. The ordinance also allows inter-exchange trading among brokers, which would promote a trading platform for small- and mid-cap companies.

With corporatisation, the assets owned by the exchanges become the personal property of the brokers. Brokers demanded a one-time exemption from all taxes, including capital-gain tax in respect of all the property of the exchange. The budget for 2003–04 announced an exemption from the payment of capital-gain tax for exchanges on corporatisation.

In order to speed up the process of demutualisation and corporatisation of stock exchanges, the finance minister in the Finance Budget 2005–06, announced a one-time exemption from the stamp duty that is payable on transfer of assets.

The SEBI made it mandatory for stock exchanges to dilute 51% ownership in favour of public. In India, three stock exchanges—the Bombay Stock Exchange (BSE), the Ahmedabad Stock Exchange

Box 8.1 NASDAQ

The National Association of Securities Dealers (NASD) demutualised the NASDAQ stock exchange in the year 2000 by way of a two-phase private placement of shares to dilute the stake of NASD in Nasdaq to 27 per cent. It raised a total of USD 516 million in the first phase and later raised another USD 240 million by offering convertible debentures in a private offering which could be converted to a 9.8 per cent stake in Nasdaq. Today, the exchange has over 2,900 investors.

Source: Capital market.

TABLE 8.3 Comparison of the NSE Model and International Models of Demutualised Stock Exchanges

Comparators	*International Model*	*NSE Model*
Legal Structure	Company	Company
For Profit/Not-for-profit	For Profit Company	
Ownership Structure	Owned by shareholders which includes brokers	Owned by shareholders which are financial institutions which also have broking firm as subsidiaries
Listing	Several stock exchanges are listed on themselves after initial public offer.	Not a listed company. No Initial public offer made.
Ceilings on Shareholding	Mostly 5% of voting rights for a single shareholder	No ceiling
Segregation of Ownership, Trading Rights and Management	These are segregated. To become a member of the demutualised stock exchange, it is not necessary to own a share in the company. Thus, members may or may not be shareholders and members who own shares may sell off their trading rights and all shareholders are not necessarily members	These are segregated. The trading rights and ownership are segregated. The broking firms are not shareholders
Board Structure	The governing board comprises directors who are elected by shareholders. Some of the directors are brokers but majority do not have a stock-broking background	The board comprises representatives of shareholders, academics, chartered accountants, and legal experts. Of these, three directors are nominated by the SEBI and three directors are public representatives approved by the SEBI
Fiscal Benefits	As mutual entities, stock exchanges enjoyed fiscal benefits prior to demutualisation, but when converted into for-profit companies these are taxed	The NSE was set up as a demutualised for-profit company and is taxed. So the question of fiscal benefit prior to demutualisation does not arise
Transfer of Assets	Assets were transferred from the mutual entity to the for-profit demutualised company and shares were given to the members in lieu of the ownership in the old entity. There was no cash consideration paid. Since an Initial Public Offer (IPO) was also made in many cases, the valuation of the shares were done by the market and no separate valuation exercise was required as for example in the case of the LSE where a bonus issue was made	The question of transfer of assets did not arise because the NSE was set up by the institutions as a demutualised company itself
Enactment of Legislation to Give Effect to Demutualisation	In several countries, a separate legislation was necessary as in the case of Australia, Hong Kong, Toronto and Singapore. In several others, no legislation was necessary as in the case of the UK	Not applicable as the NSE was set up as a demutualised company

Source: Report of the SEBI Group on Corporatisation and Demutualisation of Stock Exchanges.

(ASE) and the Madhya Pradesh Stock Exchange (MPSE), did not have a corporate structure as they functioned as associations of persons. They were first corporatised and then demutualised. The BSE completed the process of demutualisation in June 2007.

All stock exchanges except the Coimbatore Stock Exchange have completed their corporatisation and demutualisation process, and are functioning as for-profit companies, limited by shares, and at least 51% of their equity-share capital is held by public other than shareholders having trading rights therein. Various investors like public-sector banks, public-sector insurance companies, public-sector undertakings (PSUs), industrial-development corporations, corporates and individuals have subscribed to the equity-share capital of the stock exchanges.

In view of the special nature of stock exchanges, the SEBI laid out norms in regard to the shareholding pattern, for recognised stock exchanges in respect of which the scheme for corporatisation or demutualisation has been approved by the Board under Section 4B of the Act.

1. The minimum stake of a single shareholder in a recognised stock exchange, directly or indirectly, cannot exceed 5% of the total equity, and that at least 51% of the total equity in such exchanges should be held by public. The holding limit of a single shareholder was enhanced to 15% in respect of six categories of shareholders, which are public financial institutions, stock exchanges, depositories, clearing corporations, banks and insurance companies.
2. Any shareholder holding more than 1% of the exchange's total equity cannot hike the stake, post-implementation of these norms.
3. No shareholder having trading rights in a recognised stock exchange shall, prior to issuance of the confirmation under Regulation 7, transfer his shares in such recognised stock exchange to any person otherwise than in accordance with Chapter II.
4. The private placement would be in line with the rules in the Companies Act.

These norms prevent any single entity from acquiring a substantial stake and, say, in the functioning of stock exchanges. Also, they enable foreign investors to acquire shares in stock exchanges and encourage competition among exchanges. The government has permitted 49% (26% by FDI and 23% by FII) foreign investment in stock exchanges. Strategic investments in stock exchanges are required for the revival and growth of stock exchanges, so that they can compete globally. SGX and Deutsche Börse AG hold 5% stake each in the BSE. In NSE, entities such as the NYSE Group, Goldman Sachs, General Atlantic and Softbank Asian Infrastructure Fund have a stake of 5% each.

LISTING OF SECURITIES

Listing of Securities

- Permits trading
- Unlocks the value of the company
- Creates wealth effect

A company has to list its securities on the exchange so that they are available for trading. A company can seek listing on more than one stock exchange. Earlier, it was compulsory to list on the regional stock exchange that is nearest to its registered office, but now it is not mandatory. A security listed on one exchange is permitted for trading on the other.

A company seeking listing of its securities on the stock exchange is required to file an application, in the prescribed form, with the Exchange before issue of Prospectus by the company, where the securities are issued by way of a prospectus or before issue of Offer for Sale, where the securities are issued by way of an offer for sale. The prospectus should state the names of the stock exchanges, where the securities are proposed to be listed. It has to enter into a listing agreement with the stock exchange. As per Section 73 of the Companies Act, 1956, a company seeking listing of its securities on a stock exchange is required to submit a letter of application to all the stock exchanges where it proposes to have its securities listed, before filing the prospectus with the registrar of companies. Section 21 of the Securities Contract (Regulation) Act, 1956, deals with the listing of the public companies. Section 19 of the Securities Contract (Regulation) Rules, 1957, deals with the requirements and documents to be submitted with respect to the listing of securities on a recognised stock exchange. The documents that need to be submitted are: Memorandum and articles of association and, in case of a debenture issue, a copy of the trust deed, prospectus or statements in lieu of prospectus, offers for sale and circulars or advertisements offering any securities for subscription or sale during the last 5 years, balance sheets and audited accounts for the last 5 years, or in the case of new companies, for such shorter period for which accounts have been made up; a statement showing dividends and cash bonuses, if any, paid during the last 10 years (or such shorter period as the company has been in existence, whether as a private or public company) and dividends or interest in arrears, if any; certified copies of agreements or other documents relating to arrangements with or between vendors and/or promoters, underwriters and sub-underwriters, and brokers and sub-brokers; a statement containing particulars of the dates of, and parties to all material contracts, agreements (including agreements for technical advice and collaboration), concessions and similar other documents (except those entered into in the ordinary course of business carried on or intended to be carried on by the company), together with a brief description of the terms, subject matter and general nature of the documents; a brief history of the company since its incorporation giving details of its activities including any reorganisation, reconstruction or amalgamation, changes in its capital structure (authorised, issued and subscribed) and debenture borrowings, if any; particulars of shares and debentures issued (i) for consideration other than cash, whether in whole or part, (ii) at a premium or discount or (iii) in pursuance of an option; and a statement containing particulars of any commission, brokerage, discount or other special terms including an option for the issue of any kind of the securities granted to any person. The SEBI issues guidelines/circulars prescribing certain norms to be included in the listing agreement and to be complied by the companies.

In case the exchange does not admit the company's securities for listing, the company cannot proceed with the allotment of shares. However, the company may file an appeal before SEBI under Section 22 of Securities Contract (Regulation) Act, 1956 (SCRA, 1956), and also to the Securities Appellate Tribunal (SAT).

A company delisted by a stock exchange and seeking relisting at the same exchange is required to make a fresh public offer and comply with the extant guidelines of the exchange. Provisions in the listing agreement attempt to ensure liquidity and investor protection in the stock market. There were 5,900 securities listed on exchanges and around 6,94,000 unlisted companies in India at the end of March 2009. Unlisted companies follow provisions under the Companies Act which are less stringent. Because the compliance cost of listing are high, companies do not prefer to get listed on the stock exchanges. The compliance costs for listed companies include expenses for carrying out legal formalities, costs for communicating quarterly and annual financial reports to shareholders, printing and posting costs of reports, listing fee to the exchanges and reporting board decisions to exchanges.

A company can seek listing if at least 10% of the securities, subject to a minimum of 20-lakh securities, have been offered to the public for subscription. In addition, the size of the net offer to the public (i.e., the offer price multiplied by the number of securities offered to the public, excluding reservations, firm allotment and promoters' contribution) is not less than Rs. 100 crores and the issue is made only through book-building method with 60% of the issue size allocated to the qualified institutional buyers (QIBs). Alternatively, a company has to offer at least 25% of the securities to the general public.

A company needs to obtain 'in-principle' approval for listing from the exchanges having nationwide trading terminals where it is listed, before issuing further shares or securities. Where the company is not listed on any exchange having nationwide trading terminals, it needs to obtain such 'in-principle' approval from all the exchanges in which it is listed before issuing further shares or securities. Moreover, the equity-listing agreement has been amended to prohibit listed companies from issuing shares with superior rights as to voting or dividend vis-à-vis the rights on the equity shares that are already listed.

The basic norms for listing of securities are uniform for all exchanges. They are specified in the listing agreement entered into between the company and the concerned exchange and their compliance is monitored by the exchanges. The stock exchanges levy annual listing fees from the listed companies; this constitutes their major source of income.

The following eligibility criteria have been prescribed effective August 1, 2006 for listing of companies on BSE, through Initial Public Offerings (IPOs) and Follow-on Public Offerings (FPOs):

Companies have been classified as large-cap companies and small-cap companies. A large-cap company is a company with a minimum issue size of Rs. 10 crores and market capitalisation of not less than Rs. 25 crores. A small-cap company is a company other than a large-cap company.

1. In respect of Large-Cap Companies: The minimum post-issue paid-up capital of the applicant company shall be Rs. 3 crores; issue size shall be Rs. 10 crores; and the market capitalisation of the company shall be Rs. 25 crores (market capitalisation shall be calculated by multiplying the post-issue paid-up number of equity shares with the issue price).
2. In respect of Small-Cap Companies: The minimum post-issue paid-up capital of the Company shall be Rs. 3 crores; the issue size shall be Rs. 3 crores; the market capitalisation of the Company shall be Rs. 5 crores; the income/turnover of the Company shall be Rs. 3 crores in each of the preceding three 12-month period; and number of public shareholders after the issue shall be 1,000. A due diligence study may be conducted by an independent team of Chartered Accountants or Merchant Bankers appointed by BSE, the cost of which will be borne by the company. The requirement of a due diligence study may be waived if a financial institution or a scheduled commercial bank has appraised the project in the preceding 12 months.

The BSE issued new listing norms in August 2002 for companies listed on other exchanges and seeking listing on the BSE. These companies should have a minimum issued and paid-up equity capital of Rs. 3 crores, minimum net worth of Rs. 20 crores, profit-making track record of 3 years, minimum market cap at two times its paid-up capital, and a dividend track record for three consecutive years with a minimum dividend of at least 10%. Besides, there should be a two-year track record of being listed on a regional exchange. At least 25% of the issued capital should be with a non-promoter and no single shareholder should hold more than 0.5% of the capital.

After a security is issued to the public and listed on a stock exchange, the issuing company has to make continuous disclosures relating to financial results, material information which would have a bearing on the performance of the company, and information in the form of a statement on the actual utilisation of funds and actual profitability as against the projected utilisation of funds and projected profitability, on a quarterly basis to the stock exchanges. To improve transparency, the SEBI made it mandatory for listed companies to provide their half-yearly results and disclose their balance sheets—audited or un-audited—every 6 months to the stock exchanges. Listed companies will also be permitted to submit accounts under the international financial reporting standards (IFRS), which calls for greater disclosures.

The SEBI issued new norms for listing and raising of funds by small and medium enterprises (SMEs) on November 9, 2009. According to the norms, Companies listed on the SME exchanges would be exempted from the eligibility norms applicable for IPOs and FPOs prescribed in the SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009 (ICDR). SEBI has prescribed a minimum IPO application size of Rs. 1 lakh in order to have informed, financially sound and well-researched investors with a certain risk-taking ability. The minimum trading lot under the SME platform would be Rs1 lakh. For listing on the main boards of NSE and BSE, an upper limit of Rs. 25 crores paid-up capital has been prescribed for a company wanting to be listed on the SME platform/exchange and having a minimum paid-up capital of Rs. 10 crores. In other words, Rs. 25 crores would be the maximum capital permissible to be raised under the SME platform. If the paid-up capital is more than Rs. 25 crores, trading will be on the main platform. The entire public offer of small and medium companies will have to be underwritten. The offer document will have to be filed with SEBI and the exchange. No observations would be issued by SEBI on the offer documents filed by the merchant bankers.

An exchange can take some disciplinary actions, including suspension/delisting of securities if a company fails to comply with the requirements. Delisting of securities means removal of securities of a listed company from the stock exchange where it was registered. As a result of this, the company ceases to be traded at that stock exchange. There are two methods for delisting: compulsory and voluntary.

A stock exchange may compulsorily delist the shares of a listed company under certain circumstances such as non-compliance with the listing agreement for a minimum period of 6 months, failure to maintain the minimum trading level of shares on the exchange, insider trading, manipulation of share prices, unfair market practices by promoters/directors, inability to meet current debt obligations or to adequately finance operations due to sickness, or has not paid interest on debentures for the last 2–3 years, or has become defunct, or there are no employees, or liquidator appointed. Under compulsory delisting, the promoter of the company shall be liable to compensate the shareholders of the company by paying them the fair value of the securities held by them and acquiring their securities, subject to their option to remain security holders with the company. In such a case, there is no provision for an exit route for the shareholders except that the stock exchanges would allow trading in the securities under the permitted category for a period of 1 year after delisting.

The SEBI has issued the delisting guidelines for voluntary delisting from any stock exchange other than the regional stock exchange. The companies need to obtain prior approval of the holders of the securities sought to be delisted, by a special resolution at a General Meeting of the company. The shareholders will be provided with an exit opportunity by the promoters or those who are in the control of the management.

Companies can get delisted from all stock exchanges following the substantial acquisition of shares. The regulations state that if the public shareholding goes down to 10% or less of the voting capital of the company, the acquirer making the offer, has the option to buy the outstanding shares from the remaining shareholders at the same offer price. However, under the existing SEBI takeover code, the exit price is based on the average of the preceding 26-week high and low prices.

An exit-price mechanism called ‘reverse book-building method’ is used to arrive at the price at which the shares will be bought from the shareholders. However, an exit opportunity need not be given in cases where securities continue to be listed in a stock exchange having nationwide trading terminals.

Dual Listing of shares of companies is not allowed in India. Dual Listing allows a company to be listed on stock exchanges of two countries. This enables an investor to buy/sell shares in one country and sell/buy them in another country where they are listed. For example, Royal Dutch Shell and Unilever are listed on the stock exchanges of the United Kingdom and the Netherlands, and Rio Tinto Group is listed on the stock exchanges of Australia and the United Kingdom. Dual Listing is required when two companies in two countries enter into an agreement to operate their businesses as if they were a single enterprise (without an outright merger), while retaining their separate legal entity and the existing stock exchange listings. Bharti Airtel and the South Africa-based Telco, MTN sought dual listing of their shares where Bharti shares could be listed on the Johannesburg Stock Exchange and MTN on NSE or BSE. But the Indian government policy does not allow dual listing. There are many issues which need to be resolved to enable dual listing. Domestic trading in shares denominated in foreign currency is not permitted; and to enable this, the Foreign Exchange Management Act and the Companies Act need to be amended. Moreover, the Indian rupee needs to be fully convertible. In addition, the domestic company’s and the foreign company’s composition of Boards should be identical and the stock exchanges of both the countries should have similar rules and regulations.

Central Listing Authority

The listing fees constitutes the major source of income of stock exchanges. The greater the number of companies listed on an exchange, the higher their listing fees. To attract companies to get listed, exchanges are tempted to ease listing standards. Moreover, listing requirements vary from one exchange to another. This results in issuers wasting resources to comply with listing requirements of a number of exchanges simultaneously. Hence, a conflict of interest arises when stock exchanges regulate the companies that contribute to their revenues through listing fees. This conflict may become more serious in the near future as the process of demutualisation of stock exchanges is underway. With demutualisation, the core objective of stock exchanges would be profit maximisation; this would lead to further dilution in listing requirements to maintain or increase listing fees.

To resolve these issues, a central listing authority is needed in the country who would not only frame listing regulations but also take on the task of ensuring compliance of listing requirements. In the UK, the London Stock Exchange (LSE) takes care of trading while a listing authority takes care of the listing activity. The government has proposed the introduction of a Central Listing Authority (CLA). The CLA would regulate prelisting procedures including clearing of prospectus. It would also apply post-listing measures to monitor the purpose for which funds are used. This would prevent diversion of funds for alternate use. In the pre-liberalisation era, the Controller of Capital Issues (CCI) monitored the pricing of issues as well as the end use of funds by companies.

Under the proposed structure, the regional listing of shares will continue and the stock exchange would be responsible for monitoring violations of listing agreement. Merchant bankers would be responsible for disclosures made in the prospectus. The department of company affairs would, as usual, regulate unlisted companies.

To make corporates more accountable for their actions and to prevent any further scandals, the SEBI has set up the CLA for which it has spelled out norms.

The SEBI (Central Listing Authority) Regulations, 2003

These regulations were notified on August 22, 2003 and are stated below:

- Before making an issue of securities, and before making an application to the stock exchange for listing of its securities, the issuer must obtain a letter precedent to listing from the CLA. The applicant shall also specify the exchange or the exchanges where the applicant is desirous of listing its securities.
- The draft offer document will be filed only with the CLA. The SEBI may offer its observations, if any, to the CLA.
- The CLA may call for information from the stock exchanges and the intermediaries in connection with the processing of the applications for letter precedent to listing.
- The CLA may impose conditions while granting the letter precedent to listing and also lay down further conditions subsequent to the grant of the letter. The letter is to be valid for 90 days, by which time the subscription list for public and rights issues should have opened and in the case of other kinds of issues the securities should have been listed on the stock exchanges. Subject to certain conditions, the CLA may, in its discretion, extend the validity period of the letter precedent to listing.
- The CLA may withdraw the letter precedent to listing after giving an opportunity of being heard to the applicant in the following circumstances.
  - Where the applicant changes the terminal conditions of the issue or where any material development has taken place which has a bearing on the issue.
  - Where the applicant has either suppressed material facts or misrepresented the facts in its application to the CLA.
  - Where the applicant has failed to comply with the conditions imposed by the CLA.
  - Where the CLA is of the opinion that withdrawal of the letter precedent to listing is in the larger interests of the investors and the securities markets.
- Against decision of the CLA, an appeal may be filed before the SAT.

The CLA shall be entitled to withdraw the letter precedent to listing if and only if the securities have not been listed and in case they have been listed, then CLA shall inform the SEBI and the stock exchanges for taking such steps as may be deemed fit including delisting of the securities.

Regulation 17 provides that in the extent of non-compliance with any of the CLA regulations or any of the terms of the listing agreement or in the event of any failure on part of the applicant to furnish the required information to the CLA, the same shall be punishable with penalty as specified in Section 15A or Section 15B of the SEBI Act, 1992.

Regulation 2 (1)(h) of the SEBI (CLA) Regulations, 2003 defines a 'letter precedent to listing' to mean a letter issued by the CLA under Regulation 12 permitting the applicant to make a listing application to any exchange including an application for re-listing and listing of an already listed security at an exchange other than the exchange where it is presently listed.

The SEBI provides operational and functional support to the CLA in matters relating to appointment of the CEO and providing infrastructure and manpower to the CLA as and when required.

The CLA is headed by Shri M. N. Venkatachalaiah, former Chief Justice of India. The aim of the CLA is to ensure uniform and standard practices for listing the securities on stock exchanges.

Risk Management to be shifted below Central Listing Authority, and Trading rules and regulations below risk management. Then circuit breakers and then trading arrangements.

RISK MANAGEMENT

The SEBI has laid down risk management policies to mitigate market, operational and systemic risks. Designing effective risk management policies leads to enhancement of investor protection and market development.

On the instructions of the SEBI, the stock exchanges have developed a comprehensive risk management system to promote a safe and efficient market. Stock exchanges have laid down trading rules and regulations for broker-members, set up market surveillance systems to curb excess volatility, created trade/settlement guarantee fund to ensure timely settlements even if a member defaults to deliver securities or pay cash, and set up a clearing corporation to guarantee financial settlement of all trades and thereby reduce credit risk in the settlement system. The Clearing Corporation matches the transactions, reconciles sales and purchases and daily settlements. It is also responsible for the risk management of its members and conducts inspection and surveillance. It also collects margins and capital from members and monitors their net worth requirement. Its major role is to ensure the fulfilment of every contract either by becoming a counter-party itself to every trade or by guaranteeing the performance of all trades. This risk management system was absent in the pre-reforms period and the setting up of the system is one of the landmark achievements of financial market reforms.

Trading Rules and Regulations

Strict rules and regulations have been framed to prevent unfair trading practices and insider trading. The trading rules relate to the margin system, intra-day trading limit and exposure limit. Brokers are levied various types of margins such as daily margins, mark-to-market margins, ad hoc margins and volatility margins to check price volatility.

Stock exchanges impose different types of margins on brokers for individual stocks, depending on the exposures taken by these brokers in these stocks, both on a proprietary basis and on behalf of clients, vis-à-vis the overall market exposure in the scrips. Several of these margins are paid upfront by brokers.

These margins are collected to prevent operators from taking market positions in excess of their buying capacities and are used to settle dues to the exchange/clearing corporation/traders in the event of any fund shortage faced by the broker. The margins vary from operator to operator depending on the size of the positions taken in the market. There is a real-time monitoring of the intra-day trading limits and gross exposure limits by the stock exchanges. There is an automatic deactivation of trading terminals in case of breach of exposure limits. The collection of margins from institutional clients is on T + 1 basis.

As a large section of the market makes margin payments by routing trades through brokers who pay lower margins, the SEBI stipulated that the stock brokers/sub-brokers of one exchange cannot deal with the brokers/sub-brokers of the same exchange either for proprietary trading or for trading on behalf of the clients without prior permission. It has also stipulated that a stock broker/sub-broker of an exchange can deal with only one broker/sub-broker of another exchange for proprietary trading offer, intimating the names of such stock broker/sub-broker to his parent stock exchange.

If the markets become volatile, the exchanges impose different types of margins such as value-at-risk (VaR) to minimise the risk of default by either counter-party. The system of collecting margins is devised in such a manner that higher exposures attract higher margins. Besides the normal margin, scrips with unusually high trading volumes attract special margins or a special ad hoc margin to keep defaults at bay.

The SEBI has shifted the margining system from net basis to gross basis (sale and purchase) with effect from September 3, 2001, and introduced a 99% VaR-based margin for all scrips in the compulsory rolling system with effect from July 2, 2001. VaR measures the worst-expected potential loss from an unlikely adverse event in a normal, everyday market environment. Prior to VaR, trade positions were reported at book value only and no considerations were made for market changes. This margin is kept in a manner that covers price movements for more than 99% of the time. Usually, three sigma (standard deviation) is used for the measurement.

The intra-day trading limits, that is, limit to volume is specified and no broker's trading volume can exceed this limit. If a broker wishes to exceed the limit he has to deposit the additional capital with the exchange. The upper limit for the gross exposure of a broker is fixed at 20 times his capital to ensure market safety. Besides these, there are capital adequacy norms for members, indemnity insurance and online-position monitoring by exchanges.

To ensure fair trading practices, the SEBI has formulated Insider Trading Regulations prohibiting insider trading by making it a criminal offence. To enhance transparency of the takeover process and to protect the interests of the minority shareholders, there are now separate regulations relating to acquisitions and takeovers.

Circuit Breakers

To contain the excessive volatility in prices, the SEBI introduced, in 1995, scripwise daily circuit breakers/ price bands. The circuit breakers bring about a halt/suspension in trading, automatically for a specified period, if the market prices vary unusually on either side, that is, move out of a pre-specified band. Circuit breakers do not halt trading but no order is permitted if it falls out of the specified price range.

Circuit breakers allow participants to gather new information and assess the situation. This helps in controlling the panic. It helps exchange-clearing houses to monitor their members. However, the introduction of circuit breakers precipitates matters during volatile moves and leads to chaos as participants rush to execute their orders before an anticipated trading halt.

In the United States, the system of circuit breakers was introduced in 1987 to halt a sharp fall in share prices. In India, circuit breakers are used to halt both sharply rising as well as declining prices. Price bands, which were originally fixed at 8%, were relaxed in case of 100 scrips in January 2000, when a further variation of 4% in the scrip beyond 8% was allowed after a cooling-off period of 30 minutes. In June 2000, the price

Box 8.2 Index-wide Circuit Breakers

The BSE and the NSE implement the index-based market-wide circuit breaker system on a quarterly basis. The market-wide circuit breakers would be triggered by movement of either the Sensex or the NSE S&P CNX Nifty whichever is breached earlier.

- In case of a 10 per cent movement of either of these indices, there would be a one-hour market halt if the movement takes place before 1 p.m. In case, the movement takes place at or after 1 p.m. but before 2:30 p.m., there will be a trading halt for one-half hour. In case the movement takes place at or after 2.30 p.m., there will be no trading halt at the 10 per cent level and the market will continue trading.
- In case of a 15 per cent movement of either index, there will be a two-hour market halt if the movement takes place before 1 p.m. If the 15 per cent trigger is reached on or after 1 p.m. but before 2 p.m., there will be a one-hour halt. If the 15 per cent trigger is reached on or after 2 p.m. the trading will halt for the remainder of the day.
- In case of a 20 per cent movement of the index, the trading will be halted for the remainder of the day.

The percentages are calculated on the closing index value of the quarter. These percentages are translated into absolute points of index variations (rounded off to the nearest 25 points in case of the Sensex and 10 points in case of the Nifty). At the end of each quarter, these absolute points of index variations are revised and made applicable for the next quarter.

As an additional measure of safety, individual scrip-wise price bands have been fixed by the NSE as below:

- Daily price bands of 2% (either way) on a set of specified securities
- Daily price bands of 5% (either way) on a set of specified securities
- Daily price banks of 10% (either way) on specified securities
- Price bands of 20% (either way) on all remaining securities (including debentures, warrants, preference shares etc. which are traded on CM segment of NSE),
- No price bands are applicable on: scrips on which derivative products are available or scrips included in indices on which derivatives products are available.

Source: NSE, Factbook 2008

band was relaxed by 8% from 4% in case of scrips under rolling settlement. These price bands were removed for all stocks in the rolling mode from July 2, 2001, and for the entire market from January 2, 2002. An index-based, market-wide circuit-breaker system at three stages of the index movement, either way at 10%, 15% and 20% is now applied. To enhance safety, individual scripwise price bands of 20% either way have been prescribed for all securities except those available for trading in the derivatives segment, and new listings.

For the first time since their introduction in July 2001, the Sensex and Nifty attracted the index-wide circuit filters and trading on BSE and NSE was halted two times (for a total of 3 hours) on May 17, 2004. Monday, May 17, witnessed the biggest intra-day fall (842.37 points or 17.59%) and the second-biggest, single-day fall (564.71 points or 11.14%) of the Sensex. The market reacted adversely to the statements of some leaders of the new Congress-led United Progressive Alliance (UPA) government regarding policy matters including disinvestment in the PSUs, liberalisation of foreign-direct investment (FDI) norms and the sale of non-performing assets by banks and financial institutions. On November 26, 2008, markets hit lower circuits on the news of global financial crisis. For the first time on Monday, May 18, 2009, markets hit two upper circuits (first circuit at over 10% and the next at 20%) when a clear mandate for the Congress-led UPA was announced. May 18, 2009 was the reverse of May 17, 2004. Trading was halted within seconds of opening of the markets when the 30-share Sensex surged 14.70% or 1,789.88 points to 13,963.30 and the 50-unit S&P CNX Nifty gained 531.65 points or 14.48% to 4203.30.

TRADING ARRANGEMENTS

Electronic Trading Systems

- Ensures transparency
- Increases information efficiency
- Increases operational efficiency
- Improves depth and liquidity of the market
- Provides a single trading platform

The open outcry system, prevalent a few years ago on regional stock exchanges, has been replaced by an online, screen-based electronic trading system. The NSE and the OTCEI had adopted screen-based trading right from inception. With almost all the exchanges going electronic, trading has shifted from the floor to the brokers' office where trades are executed through a computer terminal. All stock exchanges together have 8,000 terminals spread across the country. In a screen-based trading system, a member can feed into the computer the number of securities and the prices at which he would like to transact and the transaction is executed as soon as it finds a matching order from a counter party. The electronic trading system is superior to the open outcry system of the past. It ensures transparency, as it enables participants to see the full market during real time. It increases information efficiency by allowing a faster incorporation of price-sensitive information into prevailing prices and thereby helps in an efficient price discovery. This also results in the operational efficiency as there is a reduction in time, cost, risk of error, and fraud and elimination of a chain of brokers and jobbers, which result in low transaction costs. This system has enabled a large number of participants, in every part of the country, to trade in full anonymity with one another simultaneously, thereby improving the depth and liquidity of the market. This has led to the integration of different trading centres spread all over the country into a single trading platform.

The SEBI has permitted the setting up of trading terminals abroad as well as Internet trading. Now, investors in any part of the world can route the order through the Internet for trading in Indian scrips. Internet trading is more cost effective than using trading terminals.

There are two types of trading systems—order-driven trading system and quote-driven trading system. In the order-driven system, orders from all over the country are entered into an electronic system and matched directly and continuously without the involvement of a jobber or a market maker. In the quote-driven system, there are market makers who continuously offer two-way quotes—buy-and-sell quotes—and are willing to buy and sell any quantity. The BSE provides both these systems while the NSE provides only the order-driven system.

There are two types of orders: limit orders and market orders. Limit orders are those trades which will be only executed at the price specified by the investor. Usually, retail investors and fund houses place limit orders. Market orders are those trades which are executed at the latest quoted bid or offer price on the trading screen.

There are certain orders (buy or sell) which already exist in the trade book at the time of trade matching which are known as passive orders. While active orders are incoming orders that are matched against the passive orders, stock exchanges charge different transaction fees for both passive and active orders.

The SEBI allowed trading members (Brokers) to offer Direct Market Access (DMA) to institutional clients such as foreign institutional investors (FIIs), mutual funds and insurance companies in April 2008. These institutional clients can directly execute their buy-and-sell orders without any manual intervention by their brokers. The benefits of DMA are:

1. It prevents the practice of front-running by brokers who are trading ahead of the client based on the knowledge of the client order. Brokers profit from the price changes which take place when large institutional orders are placed. With DMA, the secrecy of the orders can be maintained as the orders are routed directly through the computer system.

2. It enables a faster execution of orders with a minimal risk of errors from the manual order entry.
3. It reduces malpractices and price manipulation, enhances transparency and increases liquidity as the orders are visible to the entire market rather than to a particular person/group.
4. It results in lower impact costs for large orders. Moreover, institutional client can break large orders into smaller ones, thereby reducing the bid-ask spread. In addition, it results in saving, in the form of low brokerage charges.
5. It enables **algorithmic trading** wherein the traders instal computers running complex mathematical algorithms and place buy-and-sell orders automatically in the trading system through DMA. Algorithmic trading or program trading is a software program built on certain mathematical models, which enables traders to detect an arbitrage opportunity between the cash and the futures market and place orders on exchanges in real time. It enhances efficiency in trading, reduces transaction costs and prevents information leakage. Foreign broking firms such as Merrill Lynch, Goldman Sachs, JPMorgan, Citigroup and Credit Suisse offer these trading services.

Algorithmic trading is popular in developed countries but it has not taken off in a big way in India because of lack of liquidity beyond the top 15–20 actively traded scrips and both the exchanges' systems not being equipped to handle very heavy orders of trades, when the market is unusually active.

Trading and Settlement

After the reforms, the trading-and-settlement cycle was trimmed from 14 days to 7 days. Later on, securities were traded and settled under a uniform weekly-settlement cycle. In a trading cycle, trades accumulated till the end of a specified period and the positions were settled in the form of payment of cash and delivery of securities. The carry-forward system prevailed for a long period at stock exchanges, as it increased the volume of trading and thereby added to the liquidity of the system. However, it also increased the speculation which, in turn, increased the volatility in prices and defaults by brokers, thereby impeding the price-discovery process. Hence, an alternative system called 'rolling settlement' was introduced in a phased manner.

Under the T+5 basis rolling-settlement system, the trading cycle comprises 1 day and transactions in these securities are settled 5 days after the trade date. The rolling settlement on a T+5 basis was introduced in 10 scrips in January 2000, extended to another 153 scrips in May 2000 and then to 414 securities in July 2001; and thereafter, all scrips were covered under this system. From April 2002, the rolling settlement was on a T+3 basis but since April 2003 it is on a T+2 basis (transactions in securities are settled 2 days after the trade date). Effective implementation and success of the rolling settlement requires electronic fund-transfer facility and dematerialisation.

Dematerialisation of Securities

To eliminate various problems such as theft, fake/forged transfers, transfer delays and the paperwork associated with physical certificates, an electronic book entry form of holding and transferring securities has been introduced. Investors have the option to hold securities in either physical or dematerialised form. In order to expedite the process of dematerialisation, the SEBI has mandated the compulsory settlement of trade in demat form in certain select scrips. Securities issued through an IPO can be settled only in a dematerialised form. Henceforth, all IPOs will be issued in the dematerialised form. Two depositories—the National Securities Depository Limited (NSDL) and the Central Depository Service Limited (CDSL)—offer trading facility in the dematerialised form. The dematerialisation process is almost complete and more than 99% of the turnover settled by delivery is in the dematerialised form.

Steps involved in online trading

1. An investor/trader needs to sign the 'member–client agreement' if dealing directly with a broker or a 'broker–sub-broker–client tripartite agreement' if dealing with a sub-broker in order to execute trades on his behalf from time to time. An investor/trader has also to furnish details such as permanent account number (PAN), which has been made mandatory for all the investors participating in the securities market;,his name, date of birth, photograph, address, educational qualifications, occupation, residential status (Resident Indian/NRI/others); bank and depository account details; and if registered with any other broker, then the name of that broker and the concerned stock exchange and the Client Code Number in the client registration form. All brokers have been mandated to use

the unique client code that is linked to the PAN details of the respective client, which will act as an exclusive identification for the client. The broker opens a trading account in the name of the investor for maintenance of transactions executed, while buying and selling the securities.

2. An investor has to open a Beneficial Owner Account (BO Account)/Demat Account with a depository participant in his name for the purpose of holding and transferring securities. He also has to open a bank account which is used for debiting or crediting money for trading in the securities market.
3. Investor/trader who wants to trade places order with a broker to buy/sell the required quantity of specified securities.
4. The order is matched at the best price based on the price–time priority.
5. The order which is executed electronically is communicated to the broker's terminal.
6. The broker issues the trade confirmation slip to the investor/trader.
7. The broker issues contract note to the investor/trader within 24 hours of trade execution. A contract note is a confirmation of trades done on a particular day on behalf of the client by the broker. It imposes a legally enforceable relationship between the client and the broker with respect to purchase/sale and settlement of trades. It also helps to settle disputes/claims between the investor and the broker.

   The stock exchanges assign a Unique Order Code Number to each transaction, and once the order is executed, this order code number is printed on the contract note. The time when the investor/trader has placed the order and the time of execution of the order have to be mentioned in the contract note.
8. The payment for the shares purchased or delivery of shares in case of sale of shares is required to be done prior to the pay-in date for the relevant settlement.
9. Pay-in of funds and securities take place before T+2 day as the settlement cycle is on T+2 rolling-settlement basis, w.e.f. April 1, 2003. Pay-in day is the day when the broker shall make payment or delivery of securities to the exchange.
10. Pay-out of funds and securities take place on T+2 day. Pay-out day is the day when the exchange makes payment or delivery of securities to the broker. The broker makes payment to the investor/trader within 24 hours of the payout.
11. The investor/trader can get direct delivery of shares in his beneficial owner account. To avail this facility, he has to give details of his beneficial owner account and the DP-ID of his Depository Participant (DP) to his broker along with the standing instructions for 'Delivery-In' to his DP for accepting shares in his beneficial owner account. After the receipt of these instructions, the clearing corporation/clearing house sends pay-out instructions to the depositories and the investor/trader receives pay-out of securities directly into his beneficial owner account.
12. In case of short or bad (non) delivery of funds/securities, an auction of securities on the pay-in day is held to settle the delivery. The Exchange purchases the required quantity in the Auction Market and delivers them to the buying trading member. The shortages are met through auction process and the difference in price indicated in the contrac t note and the price received through auction is paid by the member in the Exchange, which is then liable to be recovered from the client. Auction ensures that the buying trading member receives the securities. The Exchange purchases the requisite quantity in auction market and gives them to the buying trading member. Auction price applicable is previous day's close price.

In case the shares could not be bought in the auction, the transaction is closed out as per SEBI guidelines. The guidelines stipulate that the close-out price will be the highest price recorded in that scrip on the exchange in the settlement in which the concerned contract was entered into and up to the date of auction/close out or 20% above the official closing price on the exchange on the day on which auction offers are called for (and in the event of there being no such closing price on that day, then the previous day's closing price), whichever is higher.

INTERNET TRADING

Internet trading in India made its debut in April 2000. Through this means of trading, investors can buy and sell shares online through the Internet.

To start Internet trading, an investor has to register himself with a broker offering online services. He has to open a bank account as well as a demat account with the broker. The broker is responsible for the risk management of his clients. The orders get logged directly on the trading platforms within

Box 8.3 To Trade Online Using e-broking Facility

- Register yourself with the online trading portals listed on the site.
- You must be a registered iconnect user.
- On placing an order for buy/sell of securities through the listed, online trading portal, click on 'Pay Through'—Bank listed on the
- online portal which will direct you to a login screen of your account.
- Once the details of your Login ID and password are entered, you are required to verify the transaction details and confi rm the
- transaction by entering your transaction ID and password. An email confi rmation will follow regarding the status of your transaction once your order is executed.
- Your account status will be updated on a real time basis.

Source: Business Today, February 13, 2005.

the assigned limits designated by the broker to the clients. Even if the client order exceeds the assigned limits, the order gets re-routed to the broker's server for authorisation or rejection. The broker can change the parameters on-line. His software allows real time market information display, client information display, bank account management, and a transaction history display.

In April 2000, the market was bullish and a large number of players ventured into online (Internet) trading. As many as 79 members took permission for Internet trading. However, after the Ketan Parekh scam, barely 10 members remained online. The market is dominated by *ICICI Direct.com* with a market share of about 50 per cent and *India Bulls.com* with a market share of 26 per cent.

ICICI has emerged as a market leader because it can provide strong connectivity between the trading account, demat account, and bank accounts. Moreover, ICICI's huge off-line presence in various financial services segments and penetration aids in drawing as well as servicing customers. ICICI Direct leads the pack with 1,70,000 trading customers. It executes an average of 1,600 trades a day; this puts it in the same league as the tenth largest online brokerage in the US. *Sharekhan.com* and *5 paise.com* have faded away while *Kotak Street.com* and *HDFC Securities* are hanging on.

Around 44 lakh investors had registered to trade online as on March 31, 2008. There has been a sharp increase in volumes after the rolling settlement was introduced. The online trading volumes rose from Rs. 7,288 crore in 2000–01 on the National Stock Exchange to Rs. 6,68,399 crore in 2007–08. Around 11.68 per cent of the total trading volume was routed and executed through internet during 2007–08.

Online trading has driven down the transaction costs substantially and increased the liquidity options available to an investor to enter or exit from the stock at his own wish. The Internet has provided a wide range of information to the investor which has enabled him to take calculated risks.

The US has the largest number of cyber investors—approximately 15 million. Online trading has grown tremendously in the US where roughly 40 per cent of retail stock brokerage business is conducted through the Internet. Schwab, a US-based company, is the world's largest discount and web brokerage firm with 5.8 million investor accounts holding more than USD 500 billion in assets.

Compare this with Indian online trading statistics. Online trading represents about 18 per cent of the total traded volumes on the NSE and the BSE.

The stumbling blocks for such low online trading volumes are as follows.

- Erratic bandwidth and erratic net connectivity coupled with low personal computer (PC) penetration.
- Low security and inadequate cyber laws.
- Lack of automation in the banking sector especially among public sector banks. Not many banks offer online transaction of money.
- Incremental and ongoing investment in technology and brand building are required. This is owing to lack of funding for Internet-based business.
- Stipulation from the SEBI—Know Your Customer (KYC)—which requires that companies actually meet their customers before allowing them to trade on their site. This requires a large off-line structure which most of the companies do not have.
- A big time lag of 5–10 minutes between the placing of an order and its execution. The high volatility prevailing in the market leads to fluctuations in prices.
- High cost of transactions as online brokers charge brokerage as steep as 0.20–0.25 per cent for non-delivery based transaction and between 0.50–0.75 per cent for delivery based transaction.
- Absence of streaming data on the investor's computer. The broker gets streaming data on his computer while the client does not. Clients get a browser-based web application which works on a request reply model, most suited for document presentation,

- An online investor pays more margin for trading than the off-line investor and his funds are also tied up for more trading days.
- The high development, acquisition, maintenance and service costs. The cost of servicing one internet client may range between Rs. 5,000 to Rs. 8,000 annually.

There is great potential for the growth of Internet trading in India. What is required is a regulatory authority to control this market; availability of high bandwidth, and an online infrastructure. Investor interest in Internet trading has to be sustained and this requires innovations and new products. Broking firms should devise distinct marketing and service strategies.

STOCK MARKET INDEX

Functions of an Index

- To serve as a barometer of the equity market
- To serve as a benchmark for portfolio of stocks
- To serve as underlying for futures and options contracts

The stock market index is the most important indices of all as it measures overall market sentiment through a set of stocks that are representative of the market. The stock market index is a barometer of market behaviour. It reflects market direction and indicates day-to-day fluctuations in stock prices. The market index reflects expectations about the behaviour of the economy as a whole. It is a precursor of economic cycles. The function of a stock index is to provide investors with information regarding the average share price in the market. A well-constructed index captures the overall behaviour of the market and represents the return obtained by a typical portfolio investing in the market. An ideal index must represent changes in the prices of scrips and reflect price movements of typical shares for better market representation. Stock index is a barometer of a nation's economic health as market prices reflect expectations about the economy's performance. Stock markets tend to be buoyant when the economy is expected to do well. The bell wether Sensex, if it touches the psychologically golden 15,000 mark, indicates that the country's fnancial and economic growth is surging ahead.

Stock indices are termed as leading economic indicators as they indicate what is going to happen in the economy in the future. The returns generated in the stock market are based on future expectations. The future streams of expected returns from the companies are discounted to arrive at their present value known as market price.

A good market index incorporates a set of scrips which have high market capitalisation and high liquidity. Market capitalisation is the sum of the market value of all the stocks included in the index. The market value is derived by multiplying the price of the share by the number of equity shares out-standing. Liquidity is reflected in the ability to buy or sell a scrip at a price close to the current market price. In other words, the bid–ask spread is minimum.

The index on a day is calculated as the percentage of the aggregate market value of the set of scrips incorporated in the index on that day to the average market value of the same scrips during the base period. For example, the BSE Sensex is a weighted average of prices of 30 select stocks and S&P CNX Nifty of 50 select stocks.

Categories of Holding Excluded from the Definition of Free-float

- Holdings by founders/directors/acquirers/bodies with controlling interest.
- Government hold-ing as promoter/acquirer
- Holdings through the FDI route
- Strategic stakes by private corporate bodies/individuals
- Crossholdings by associate/group companies
- Equity held by Employee Welfare Trusts
- Locked-in shares

Methodologies for Calculating the Index

Market Capitalisation Weighted

1. **Full market capitalisation method:** In this method, the number of shares outstanding multiplied by the market price of a company's share determines the scrip's weightage in the index. The shares with the highest market capitalisation would have a higher weightage and would be most influential in this type of index. Examples: S&P 500 Index in USA and S&P CNX Nifty in India.
2. **Free-float market capitalisation method:** Free-float is the percentage of shares that are freely available for purchase in the markets. It excludes strategic investments in a company such as the stake held by government, controlling shareholders and their families, the company's management, restricted shares due to IPO regulations, and shares locked under the employee stock ownership plan. In this methodology, the weight of a scrip is based on the free-float market capitalisation. Free-float market capitalisation reflects the investible market capitalisation which may be much less than the total. Closely held companies would have a much lower weightage and companies with high free-float, i.e., higher investible shares, would be rewarded. Companies which provide high shareholder value but have less free-float would be marginalised.

   Free-float market capitalisation method is superior to full market capitalisation method in several ways.

   - Free-float is rational in the sense that it factors in the constituent shares to the extent they are available for trading in the market. For instance, ONGC has a free-float of less than 15 per cent and hence it has a weight of under 5 per cent in the free-float weighted sensex.

- The free-float methodology helps in designing a broad-base index wherein the concentration of top few companies and their influence on index movement is reduced. It avoids the undue inf uence of closely held large capitalisation stocks on the index movement and prices.
- An index-based on free-float methodology, is useful to active fund managers as it enables them to benchmark their fund returns vis-a-vis an investible index.
- It avoids multiple counting of company shares through cross holding.

Passive investing (index investing) in the developed market is around 10 per cent. The free-float index helps fund managers in better tracking and replication as the weight of scrips in the index is based on their float available in the market, which helps them in investing in those scrips. The free-float methodology has become popular the world over. Since June 2001, the entire range of FTSE (Financial Time Stock Exchange) indices are fully free-float adjusted. S&P's indices around the world are free-float. All Dow Jones indices except Dow Jones Industrial Average are free-float adjusted.

The BSE has taken a lead on free-floating the indices. It made a beginning by launching on July 11, 2001, the country's first free-float index, 'BSE-TECK Index,' an index for technology, entertainment, communication, and other knowledge-based sectors. The BSE has introduced this methodology in the case of the BSE sensex since September 1, 2003. Now the BSE sensex is a free-float sensex.

Free-float Factors The BSE has adopted the international practice of assigning a free-float factor to each company. Free-float factors are assigned according to a banding structure consisting of ten bands into which each company falls, based on its percentage of shares in free-float. The banding structure means that the actual free-float of a company is not taken as it is but rounded off to the higher multiple of 5 or 10 depending upon the banding structure adopted. The exact free-float of a company is rounded-off to the higher multiple of 10. For example, if the free-float factor of a company is, say, 16 per cent, a free-float factor of 0.2, i.e., 20 per cent is applied. If the free-float factor changes, adjustment to the index is made only if the new free-float crosses either the lower band or the higher band by 2 percentage points. The free-float factor is then multiplied with the full market capitalisation of the company to arrive at the free-float capitalisation. Based on the percentage of a company's free-float capitalisation to the total free-float capitalisation of the sensex, weights are assigned to each company.

Free-float Index

- Reflects investible market capitalisation
- Avoids influence of few companies on index movement
- Helps active fund managers to bench-mark their returns
- Helps passive fund managers in tracking and replicating

In order to reduce the frequency of index adjustments arising out of a change in free-float of a company, the BSE refined the banding structure and increased the number of bands from 10 to 20. In the 20 band system, a company having a free-float of 60.1 per cent would be assigned a free-float factor of 0.65 and another company having a free-float of 67 per cent would be assigned a free-float factor of 0.7. A Free-float factor of say 0.55 means that only 55 per cent of the market capitalisation of the company will be considered for index calculation.

3. **Modified capitalisation weighted:** This method seeks to limit the influence of the largest stocks in the index which otherwise would dominate the entire index. This method sets a limit on the percentage weight of the largest stock or a group of stocks. The NASDAQ-100 Index is calculated by using this method.

Free-float Bands:

% Free-float	*Free-float Factor*	*% Free-float*	*Free-float Factor*
>0 – 5%	0.05	>50 – 55%	0.55
>5 – 10%	0.10	>55 – 60%	0.60
>10 – 15%	0.15	>60 – 65%	0.65
>15 – 20%	0.20	>65 – 70%	0.70
>20 – 25%	0.25	>70 – 75%	0.75
>25 – 30%	0.30	>75 – 80%	0.80
>30 – 35%	0.35	>80 – 85%	0.85
>35 – 40%	0.40	>85 – 90%	0.90
>40 – 45%	0.45	>90 – 95%	0.95
>45 – 50%	0.50	>95 – 100%	1.00

Source: www.bseindia.com

Price Weighted Index In this method, the price of each stock in the index is summed up which is then equated to an index starting value. An arbitrary date is set as the base and the Laspeyre's Price Index which measures price changes against a fixed base period quantity weight is used. In case of a stock-split, the market price of the stock falls and this results in less weightage in the index. The Dow Jones Industrial Average and Nikkie 225 are price-weighted indices.

Equal Weighting In this method, each stock's percentage weight in the index is equal and hence, all stocks have an equal influence on the index movement. The value line index at Kansas City Board of Trade (KCBT) is an equal weighted index.

Global Stock Market Indices

The Dow Jones Industrial Average It is the most widely watched and quoted index because of its long existence. The Dow has 30 constituents and it follows the methodology of price-based weightage. Changes to stocks included in the Dow are infrequent: three stocks were added/dropped in 1991, four in 1997, and four in 1999. The addition of Microsoft and Intel in 1999 was the first inclusion of Nasdaq market stocks to the Dow 30.

The Nasdaq Composite Index This index is the market capitalisation weightages of prices for all the stocks listed in the Nasdaq stock market. The Nasdaq Composite began on February 8, 1971, with a base of 100.

The Nasdaq 100 Index Nasdaq 100 comprises the largest computer, software and telecom stocks by market capitalisation on the Nasdaq. For a company to be included in the Nasdaq 100, it must have a minimum average trading volume of 1,00,000 shares per day and must have been trading on a major exchange for at least a year or two.

The S&P 500 Index This index comprises 500 biggest publicly traded companies in the US by market capitalisation. Most money managers treat the S&P 500 as a proxy for the US stock market. The S&P 500 tries to cover all major areas of the US economy. To be included, a company must be profitable, the prospective company must not be closely held (at least 50 per cent of its stock should be public) and must have a large trading volume for its shares (not less than a third of its total shares).

The FTSE 100 The FTSE 100 consists of the largest 100 companies by full market value listed on the London Stock Exchange. The FTSE 100 is the benchmark index to indicate the performance of the European market. It is a market-capitalisation-weighted index that also considers the free-float weightages of individual stocks before including them in the index.

The MSCI Indices Include the MSCI EAFE (Europe, Australasia, and Far East), MSCI Europe, MSCI World, MSCI (EMF), and MSCI Pacific Basin Indices.

The MSCI World Index is a free-float adjusted market capitalisation index that is designed to measure global developed market equity performance. As of April 2002, the MSCI World Index consisted of the following 23 developed market country indices: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Singapore, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States.

The MSCI EAFE Index is a free-float market capitalisation index that is designed to measure developed market equity performance. As of April 2002, it consisted of 21 developed market country indices, excluding the US and Canada.

The MSCI EMF (Emerging Markets Free) Index is a free-float adjusted market capitalisation index that is designed to measure equity performance in the global emerging markets. As of April 2002, the MSCI EMF Index consisted of the following 26 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, the Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, the Philippines, Poland, Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela.

Major Indices in India

Major Indices
- Sensex
- S&P CNX Nifty

There are two major indices in India: BSE Sensex and NSE Nifty. The BSE Sensitive Index of equity share prices was launched in 1986. It comprises 30 shares and its base year is 1978–79. The major criterion for selection of a scrip in the Sensex is large market capitalisation. Besides this criterion, other criteria like listed history, track record, industry/sector representation, number of trades, average value of shares traded per day as a percentage of total number of outstanding shares, are considered for inclusion in the Sensex. The scrip selection is also based on a balanced representation of the industry, leadership position in the industry, continuous dividend-paying record, and track record of promoters. Since its beginning in 1986, it was revised for the first time on the 50th *Independence Day*, August 15, 1997, by replacing 15 scrips. During this revamp, the scrips of banks and financial institutions with a weightage of 14.6 per cent were included on the index for the first time. It was revised again in October 1998 to replace some old economy stocks such as Arvind Mills, Great Eastern Shipping, Steel Authority of India, and IPCL with some new economy stocks such as Infosys, NIIT, Castrol, and Novatris. The sensex was revamped again on March 11, 2000, which came into effect on April 10. Certain scrips, such as Indian Hotels, IDBI, Tata Chemicals, and Tata Power were replaced by Satyam Computers, Zee Telefilms, Dr Reddy's Laboratories, and Reliance Petroleum. The new economy stocks now have a 50 per cent weightage in the index. The BSE Sensex was revised again on January 7, 2002, when the motorcycle major Hero Honda Motors displaced Mahindra and Mahindra and HCL Technologies displaced NIIT. The BSE included the MUL scrip in place of L&T Ltd from May 19, 2004. On July 7, 2007, Mahindra and Mahindra displaced Hero Honda Motors. On July 28, 2008, Ambuja Cement Ltd and Cipla Ltd were replaced by Sterlite Industries Ltd and Tata Power Company Ltd. The Sun Pharmaceutical Industries replaced Satyam Computers on January 12, 2009. The recent revamp was on June 29, 2009 when Ranbaxy Laboratories was replaced by Hero Honda Motors. The index constituents were revised by the BSE 20 times between January 1, 1986 and June 30, 2009. Today, only eight of the original club of 30 remain, the others have been supplanted by companies whose scrips are far more indicative of the happenings in the market.

The Reliance Industries Ltd (RIL) has the highest weightage of 13.75% in index market capitalisation, followed by Infosys Technologies Ltd with 9.5%, and ICICI Bank Ltd with 7.58%. The BSE Sensex represents 44% of the BSE market capitalisation and 14 most-important listed and traded sectors. The BSE Sensex scrips, on average, account for 52% of the trading volumes on a daily basis and 35% of total trades executed on the exchange.

Another index which has become very popular in a short span of time is the S&P CNX NIFTY. The NSE began equity trading in November 1994, and its volumes surpassed that of the BSE in a very short span of time. The NSE and CRISIL undertook a joint venture, wherein they jointly promoted India Index Services and Products, a specialised organisation to provide stock index services. This organisation developed scientifically devised indices of stock prices in the NSE in technical partnership with Standard and Poor (S&P). The NSE introduced this index to reflect the market movements more accurately, provide fund managers with a benchmark for measuring portfolio performance and develop a reference rate for introducing index-based derivative products. The S&P CNX Nifty launched on July 8, 1996, comprises 50 scrips which are selected on the basis of low impact cost, high liquidity and market capitalisation. The impact cost is the percentage marking from the (bid+ask)/2 suffered in executing a transaction. The 'Bid' is the buyer's price—the price at which there is a ready buyer for the stock which he intends to sell. The 'Ask' (or offer) is the price at which there is a seller ready to sell his stock and this is the price the buyer needs to know when he is buying a stock.

- Impact cost is the cost of executing a transaction on a stock exchange. It varies with the size of the transaction

Lower the impact cost, higher the liquidity of a stock and vice versa. Suppose a scrip trades at a bid price of Rs. 99 and an asking price of Rs. 101, the ideal price is Rs. 100. If a buy order for 1,000 shares goes through at Rs. 102, then the market impact cost is 2%. If a buy order for 2,000 shares goes through at Rs. 104, then the market impact cost at 2,000 shares is 4%. For a stock to be included in the S&P CNX Nifty, it must trade in the total portfolio of Rs. 2 crores at an impact cost of less than 1.5 per cent on 85% of the trading days. Nifty represents about 44% of the total market capitalisation on the NSE. The S&P CNX Nifty is a widely used indicator. Index funds and index futures and options, launched at the NSE, are based on the S&P CNX Nifty.

Both BSE as well as the NSE use the weighted average method of averaging whereby each stock is given a weight in proportion to its market capitalisation. Suppose an index contains two stocks, A and B. If A has a market capitalisation of Rs. 3,000 crores and B has a market capitalisation of Rs. 1,000 crores, then a 75 % weightage is attached to the movements in A and a 25% weightage to the movements in B.

Besides these two indices, the other popular indices are the Economic Times Ordinary Share Price Index, Financial Express Ordinary Price Index and the RBI Index of Security Prices. These indices comprise 72, 100, and 338 scrips, respectively. The major regional stock exchanges such as Kolkata, Chennai, Delhi and Ahmedabad have their own indices. The other major indices are the OTCEI index, the CMIE (Centre for Monitoring Indian Economy) index, the CRISIL CNX indices (mid-cap 200, PSE index, IT index and MNC index) and the Business Line (all India) Index.

STOCK EXCHANGES

The Bombay Stock Exchange

Trading in securities has been in vogue in India for a little over 200 years. Trading in securities dates back to 1793, most of them being transactions in loan securities of the East India Company. Rampant speculation was a common feature even during those times. The broking community prospered as there was a rise in prices which led to a share mania during 1861–65. This bubble burst in 1865 when the American Civil War ended. The brokers realised that investor confidence in the securities market could be sustained only by organising themselves into a regulated body with defined rules and regulations. This realisation resulted in formation of 'The Native Share and Stock Brokers' Association,' which later came to be known as the Bombay Stock Exchange (BSE). In 1875, these brokers assembled at a place now called Dalal Street. The BSE was set up as a voluntary, non-profit-making association of broker members. It emerged as a premier stock exchange after the 1960s. The increased pace of industrialisation caused by the two world wars, protection to the domestic industry and the government's fiscal policies aided the growth of new issues, which, in turn, helped the BSE to prosper. The BSE dominated the Indian capital market by accounting for more than 60% of the all-India turnover.

Until 1992, the BSE operated like a closed club of select members. With the securities scam outburst in 1992 and the SEBI taking over the reins of the stock market, the BSE had to bring about changes in its operational policies. Until March 1995, the BSE had an open outcry system of trading. However, when faced with a stiff competition from the NSE, the country's first modern, computerised and professionally managed stock exchange set up in 1994, the BSE had to change its system of trading and operations. On March 14, 1995, the BSE turned to electronic trading whereby the brokers trade using computers. This system is known as the BSE On-line Trading System (BOLT). Screen-based trading was initially confined to 818 major scrips. Trading in all the 5,000 scrips of the BSE was transferred to BOLT on July 3, 1995. The introduction of BOLT helped in improving trading volumes, significantly reducing the spread between buy-and-sell orders, better trading in odd-lot shares, fixed-income instruments and dealings in the renunciation of rights shares.

In 1995, BOLT was limited to Mumbai, whereas the NSE was operating at the national level. As a result, the BSE was losing countrywide business. The BSE, therefore, submitted a proposal for allowing the installation of terminals connected to BOLT in centres outside Mumbai. After rejecting the proposal four times, on October 29, 1996, the SEBI finally allowed the BSE to use its BOLT system nationwide.

Today, BOLT is spread over 330 cities with 15,471 TWSs (trader work stations). Later, the BSE set up a central depository system to dematerialise shares and promote demat trading.

BSE Milestones

1840–50	About half-a-dozen brokers converge under a banyan tree near what is now called Horniman Circle.
1860–65	In the prevailing share mania, the number of brokers rises to about 250, but in the aftermath of the price crash they are hard-pressed to find a place for their regular meeting.
1874	The broking community find a place in what is now called Dalal Street to conduct their dealings in securities without hindrance and an informal association of sorts comes into being.
July 9, 1875	The Native Share and Stock Broker Association with the aim of 'protecting the character, status and interests of native share and stock brokers,' with 3,128 members who pay an entrance fee of 1 rupee is set up. The genesis of the present-day BSE is clearly traceable to these humble beginnings. Premises are hired in 1874 so that the indignity of trading in public comes to an end.
1895–1930	The exchange moves into what is now known as the Stock Exchange Old Building in 1895. With more members and more trading spaces, after repeated expansion in 1920, 1928 and 1930, the BSE is vastly different from the one that existed in the last quarter of the 19th century.
1921	The establishment of a clearing house for settlement of transactions.
1923	K. P. Shroff, later to be known as the doyen of the Indian stock market, assumes the post of honorary president of the BSE, a position he retained till 1966. Together with Phiroze Jeejeebhoy, who later succeeded him, Shroff steers the exchange through stormy times and plays a major role in raising the BSE's status.

1957	The government accords a permanent recognition under the Securities Contracts (Regulation) Act.
1973	The construction work for a new multi-storey office to house the BSE commences. It is named after its former president, Phiroze Jeejeebhoy.
1986	On January 2, BSE launches the first stock index with 30 scrips and the base year of 1978–79 with quotations from specified and non-specified group of companies listed on the five major bourses—Bombay, Calcutta, Delhi, Ahmedabad and Madras.
1994	Serial bomb blasts in BSE, but it begins to operate as usual despite damages to the premises.
1995	In March, BSE introduces the modified carry-forward system (the traditional *badla* had been banned since March 1993). In July, all scrips are transferred to BOLT. Now, more than 250 cities/towns are on BOLT trading.
1997	Screen-based trading commences.
1999	In March, Central Depository Services, promoted by the BSE, begins operations.
2000	In June, the BSE becomes the first exchange in the country to introduce trading in derivatives in the form of index futures on the Bell Wether Sensex.
2005	Launched enterprise market for SMEs—INDOnext on January 7, 2005 to provide small and medium enterprises easy and an efficient access to capital markets. INDOnext is a joint initiative of the BSE with 18 regional stock exchanges.
2009	Launch of Currency Derivatives, Interest Rate Futures and Mutual Fund Service System.

Source: www.bseindia.com

Carry Forward Deals, or *Badla*

The carry forward system, or *badla,* was a unique feature of Indian stock exchanges, particularly of the BSE. *Badla* was a unique selling proposition of the BSE. *Badla* provided the facility for carrying forward the transaction from one settlement to another. In simple terms, it was the postponement of the delivery of or payment for the purchase of securities from one settlement period to another. This facility of carry forward provided liquidity and breadth to the market. It was invented in the BSE and other exchanges copied the mechanism as it facilitated share financing, share lending, and carry forward simultaneously. It was a stock lending facility (since shares were needed to postpone a sell position) as well as a money market operation (since finance was needed to postpone a buy decision). By bringing in outside money to fund the carry forward of the long positions, *badla* acted as a bridge between the money market and the stock market. This system also helped in moderating extreme movement of stock prices, as it facilitated short selling in a rising market and long purchases in a declining market. It acted as a risk-hedging instrument wherein an investor could hedge against a likely fall or rise in prices by selling or buying in a carry forward market.

- *Badla* is the postponement of the delivery of or payment for the purchase of securities from one settlement period to another

Badla Mechanism

Badla was allowed in the specified group of shares of the BSE. This specified group was also known as the forward group as one could buy or sell shares in it without physical delivery. The carry forward session (*badla* session) was held on every Saturday at the BSE.

A contract for current settlement could be executed in any of the following three ways.

- Delivery against a sale contract given and delivery against a purchase contract received, and payment received/made at the contract rate.
- Squaring off of transactions wherein a reverse transaction of either buying or selling of shares squared up with the earlier outstanding position and the difference in prices settled.
- A contract in respect of which delivery was given or taken and which was not offset by an opposite transaction during the settlement period, could be carried forward to the next settlement period at the making up price, i.e. the closing quotation on the last trading day and the difference between the contract rate and the making up price settled. This postponement of the delivery of or payment for the purchase of securities from one settlement period to another was referred to as carry forward.

Badla involved four parties: the long buyer—a buy position in a stock without the capacity to take delivery of the same, the short seller—a sell position without having the delivery in hand, the financier and the stock lender.

Types of *Badla* Transactions

Vyaj badla known as *mandi badla*

Teji badla known as *mal badla*

If the quantum of delivery sales exceeded the quantum of delivery purchases, financiers known as *vyaj badlawala* came forward to assist in completing the deal, took delivery in the current settlement, made the delivery in the next settlement to the buyers and, by doing so, helped in carrying forward the transaction. The difference between the current settlement rate and the sale rate for the next settlement which they received was the interest charges known as *seedha badla* and the transaction was known as *vyaj* or *mandi badla*. If the quantum of delivery purchases exceeded the quantum of delivery sales, share financiers known as *teji badlawala* would give delivery in the current settlement to the buyers at the settlement rate and take the delivery back in the next settlement from the seller at lower sale rates. The difference between the two rates earned by them was known as 'backwardation' or *ulta badla* and the transaction was known as *mal badla* or *teji badla*.

Badla charges were market-determined and varied from scrip to scrip and from settlement to settlement. *Badla* rates ranged from 15 per cent to 36 per cent on a yearly basis. The SEBI banned *badla* charges for carry forward sales (short position) if the net carry forward buy (long) positions exceeded short positions. If the market was overbought (net long), there would be more demand for funds and the carry forward rates would be high; the reverse would be true when the market was oversold (net short). An oversold market would result in high demand for securities and the stock lender would get returns.

These transactions were completely hedged and stock exchanges guaranteed settlements and conducted auctions of shares in case of defaults. However, these guarantees were not available in unofficial or parallel *badla* markets which existed in Kolkata and Mumbai. Kolkata had a 90 per cent unofficial *badla* market and as a result, it had to undergo a payment crisis in 2001.

Badla, or the carry forward facility, was quite popular, accounting for nearly 90 per cent of the trade at all stock exchanges.

Advantages

The *badla* system contributed to the increase in the volume of the trading activity at the BSE as it facilitated brokers to carry forward their positions and leverage. Moreover, as *badla* financiers were earning higher returns through this mechanism, they were lending a larger amount of funds, leading to an increase in trading activity. *Badla* along with other factors such as increased network, boom periods, and increased participation by retail investors was instrumental in the increase of volume of trading activity from Rs. 500 crore in 1991–92 to Rs. 9,000 crore in 2000. *Badla* was also a vehicle of speculation.

The 135-year-old *badla* system was banned in 1993 by the SEBI as it led to excessive speculation and increased market risk. It was also uncontrolled and unregulated which enhanced market risk and the prices of scrips could be manipulated under *badla* as brokers could easily corner liquid stocks. Moreover, brokers evaded margins and manipulated *badla* rates. Following the ban, however there was a steep decline in the volumes in the specified group following the ban. Therefore, it was revived and resumed again on the BSE in January 1996 on the recommendations of the G. S. Patel Committee. Later, in March 1997, the SEBI constituted the J. R. Varma Committee to review the revised carry forward system. The committee recommended a modified carry forward system (MCFS) which was accepted by the SEBI.

The MCFS was replaced by another carry forward mechanism—Borrowing and Lending of Securities Scheme (BLESS)—on January 27, 2001. This scheme was similar to Automatic Lending and Borrowing Mechanism (ALBM) of the NSE. The difference between ALBM/BLESS and *badla* was that while under ALBM/ BLESS one could withdraw the securities financed by paying a small margin of 15 per cent to 20 per cent, under *badla,* securities were kept with the clearing house and could not be withdrawn. Due to the facility of withdrawal of securities under BLESS/ALBM, a broker could create an exposure seven to eight times the amount invested in these deferral products.

In March 2001, after the Ketan Parekh scam came to light and the payment crisis in the Kolkata Stock Exchange, the SEBI completely banned *badla* and all deferral products—ALBM and BLESS—from July 2001. With this ban again, the volume of trading on BSE slumped from an average daily turnover of Rs. 5,220 crore in May 2001 to around Rs. 700 crore in July 2001—a decline of more than 70 per cent in a period of two months. This old system has been replaced by a new system—rolling settlement.

Listing Categories

Before *badla* was resumed in 1996, there were only two categories of securities listed on the BSE—the specified group of shares comprising the securities in which carry forward deals were allowed and the cash group shares in which no carry forward deals were permitted. Later, it was observed that the facility of carry forward was not being used in all the 94 scrips in the specified group. Hence, after *badla* was resumed, the size of the specified group was reduced to 32 scrips on April 3, 1996.

The BSE later decided to regroup the existing A and B group shares into three categories.

A Group This group consists of large turnover and high floating stock, with large market capitalisation. In other words, scrips included in this group are blue-chip companies. Carry-forward deals and weekly settlement were allowed in this group. At present, there are 150 scrips in this group.

B1 Group This group includes scrips of quality companies with an equity above Rs. 3 crores, with high growth potential and trading frequency. No carry-forward facility was allowed in this group. As on 12 December 2009, there were 205 scrips in this group.

B2 Group This group of scrips were just like those of B1 but with a fortnightly settlement. However, in September 1996, the BSE introduced a weekly settlement for all scrips listed on the exchange, thus doing away with the distinction between the B1 and B2 groups. This group consists of low trading volume scrips, with an equity below Rs. 3 crores, and surveillance measures initiated against most of them for suspected price manipulations.

Both B1 and B2 groups have been merged into one group known as B Group since April 1, 2008. All companies not included in group 'A', 'S' or 'Z' are clubbed under this category.

Subsequently, a Z group was introduced in 1999 with scrips of companies that do not meet the rules, regulations and stipulations laid down by the exchange. It is a buyer-beware company. There are some 300 scrips in the group. The companies that failed on a frequent basis to disclose quarterly results, to address investor grievances and make an arrangement with depositories to demat shares or even pay the exchange-listing fees are transferred by the exchange to this category. All Z-category stocks result in deliveries. The trading is on a trade-to-trade basis and no squaring up is permitted in intra-day trading as in other groups. The exchange authorities review their performance on a regular basis; and if a company satisfies the requirement, it is reverted back to its original group. As on December 12, 2009, there were 2,376 scrips in this group.

A new F group pertaining to the debt-market segment and G group pertaining to the government-securities market was started with effect from September 9, 1996.

The BSE set up the BSE INDONext market as a separate trading market on January 7, 2005 on its BOLT system as S group. As on December 12, 2009, there were 481 scrips in this group.

The scrips are transferred on a trade-to-trade basis from the regular segment to T group. Settlement of trades is done on the basis of gross obligations for the day. No netting is allowed and every trade is settled separately. As on December 12, 2009, there were 623 scrips in this group.

Scrips in the BSE-Indonext segment S, which are settled on a trade-to-trade basis as a surveillance measure, are transferred to the **TS** group. As on December 12, 2009, there were 52 scrips in this group.

There were 4,955 companies and 7,887 scrips were listed on BSE till November 2009.

BSE Indices

The first index launched by BSE was the BSE Sensitive Index (Sensex) in 1986. Since then, in the last 15 years, it has launche d 13 more indices. The BSE Sensex of equity-share prices was launched with the base year of 1978–79. It comprises 30 scrips. The BSE Sensex was followed by the BSE National in 1989.

This is a broader index comprising 100 scrips. The BSE introduced two new indices during 1993–94—the BSE 200 and the Dollex. The BSE 200 reflects the movements in the shares of 200 selected companies from its specified and non-specified lists. The Dollex is a dollar version of the BSE 200, which has 1989–90 as its base year. The BSE Dollex indices are Dollex 30, 100 and 200. The BSE introduced five sectoral indices from August 1999—the BSE IT Index, the BSE Capital Goods Index, the BSE FMCG Index, the BSE Health Care Index and the BSE Consumer Durables Index. In 2001, the BSE launched the BSE-PSU Index Dollex-30 and the BSE-Tech Index. Market capitalisation of all the indices is a free-float market capitalisation except for BSE-PSU Index. Subsequently, it introduced seven new sectoral indices which include auto, bank, metal, oil and gas, power, realty and tech. The other major indices introduced are small cap, midcap, BSE100, BSE 500 and BSE IPO.

Box 8.4 Scrips Comprising the Sensex and their Free-float Factors

Scrip Code	Company	Beta Values	Weightage (%) in SENSEX as on November 30, 2009	Free-float Adj. Factor as on November 30, 2009
500410	ACC Ltd	0.78	0.65	0.55
500103	Bharat Heavy Electricals Ltd	0.95	3.03	0.35
532454	Bharti Airtel Ltd	0.74	3.14	0.35
532868	DLF Ltd	1.61	1.17	0.25
500300	Grasim Industries Ltd	0.64	1.29	0.75
500180	HDFC Bank Ltd	0.82	5.07	0.85
500182	Hero Honda Motors Ltd	0.47	1.35	0.5
500440	Hindalco Industries Ltd	1.2	1.2	0.65
500696	Hindustan Unilever Ltd	0.33	2.45	0.5
500010	Housing Development Finance Corporation Ltd	1.12	5.58	0.9
532174	ICICI Bank Ltd.	1.54	7.58	1
500209	Infosys Technologies Ltd	0.66	9.15	0.85
500875	ITC Ltd	0.55	5.38	0.7
532532	Jaiprakash Associates Ltd	1.8	1.37	0.55
500510	Larsen & Toubro Ltd	1.22	6.85	0.9
500520	Mahindra & Mahindra Ltd	0.98	1.69	0.75
532500	Maruti Suzuki India Ltd	0.63	1.78	0.5
532555	NTPC Ltd.	0.55	2.04	0.15
500312	ONGC Corporation Ltd	0.79	4.04	0.2
532712	Reliance Communications Ltd.	1.45	0.98	0.35
500325	Reliance Industries Ltd.	1.2	13.75	0.5
500390	Reliance Infrastructure Ltd	1.58	1.21	0.65
500112	State Bank of India	1.14	5.04	0.45
500900	Sterlite Industries	1.33	2.55	0.45
524715	Sun Pharmaceutical Inds Ltd	0.32	0.95	0.4
532540	Tata Consultancy Services Ltd	0.82	3.18	0.3
500570	Tata Motors Ltd	1.18	1.5	0.6
500400	Tata Power Co. Ltd	0.84	1.76	0.7
500470	Tata Steel Ltd	1.42	2.81	0.7
507685	WIPRO Ltd	0.83	1.45	0.2
	SENSEX	**1**		**2.28**

Source: www.bseindia.com

Sensex Moves in the 1990s

Events	*Date*	*BSE Close*
Gulf War begins	January 17, 1991	1017.72
Rupee depreciation from Rs. 21 to Rs. 26	July 3, 1991	1312.87
Manmohan Singh Budget I	July 24, 1991	1485.76
High Index 91	November 19, 1991	1924.15
Low Index 92	January 1, 1992	1957.33
Manmohan Singh Budget II High Index 92	February 29, 1992	3017.68
Harshad Mehta period peak	April 23, 1992	4467.32
Scam exposed	April 26, 1992	3896.90
Babri Masjid demolition	December 10, 1992	2550.22
Manmohan Singh Budget III	February 27, 1993	2652.40
Low Index 93	April 26, 1993	2036.81
SEBI bans *badla*	December 13, 1993	3346.06
High Index 93	December 13, 1993	3454.81

(*Continued*)

Events	*Date*	*BSE Close*
Low Index 94	January 5, 1994	3454.08
Manmohan Singh Budget IV	February 28, 1994	4286.20
First all-time high	September 12, 1994	4630.54
NSE starts operations	November 3, 1994	4269.86
High Index 95	January 2, 1995	3932.09
Manmohan Singh Budget V	March 15, 1995	3487.07
NSE turnover crosses BSE's	November 1, 1995	3488.50
Low Index 95	November 29, 1995	2922.16
Manmohan Singh Budget VI (Interim)	February 28, 1996	3494.09
BJP loses confidence vote	May 27, 1996	3653.10
High Index 96	June 14, 1996	4049.32
P. Chidambaram Budget I	July 22, 1996	3807.60
S&P upgrades outlook to positive	October 1, 1996	3226.80
Low Index 96	December 4, 1996	2745.06
Low Index 97	January 2, 1997	3225.24
P. Chidambaram Dream Budget II	February 28, 1997	3651.91
Fall of the Deve Gowda government	March 31, 1997	3360.89
RIL gives 1:1 bonus	June 26, 1997	4116.56
High Index 97	August 5, 1997	4548.02
Asian crisis	October 28, 1997	3934.33
Moody warns rating downgrade	January 8, 1998	3598.16
Vajpayee sworn in as PM	March 19, 1998	3820.87
High Index 98	April 21, 1998	4280.96
Pokhran nuclear blast	May 11, 1998	4022.20
US imposes sanctions	May 12, 1998	3945.13
Yashwant Sinha's Budget I	June 1, 1998	3642.68
Moody's two notch downgrade	June 19, 1998	3143.10
US 64 scare	October 5, 1998	2878.07
Low Index 98	October 20, 1998	2764.16
S&P lowers rating to BB	October 22, 1998	2764.16
Yashwant Sinha's Budget II	February 27, 1999	3399.63
Fall of the Vajpayee government	April 17, 1999	3326.98
Air attacks on Kargil begin	May 26, 1999	3973.30
US lifts sanctions	June 11, 1999	3969.36
Second all-time high	July 14, 1999	4710.25
Sensex touches 5,000 mark for the first time in technology boom Sensex marked from 4,000 to 5,000 in 106 trading days	October 8, 1999	4981.74
High of 1999	October 14, 1999	5075.34
Sensex touches 6,000 mark	February 11, 2000	5933.56
New all-time high	February 14, 2000	6150.69
Yashwant Sinha Budget III	February 29, 2000	5446.98
Crash in the NASDAQ composite	April 14, 2000	4880.71
Sensex touches its year's low	October 19, 2000	3491.55
UTI suspends the sale and repurchase of its flagship scheme	July 2, 2001	3312.95
US 64 *badla* banned and T+5 rolling settlement introduced	September 21, 2001	2600.12
On September 11, 2001, terrorists attack World Trade Centre in New York, Sensex touches eight-year low	September 21, 2001	2600.12
The government offloads 51 Per Cent stake in CMC and Tata Sons and 74 Per Cent stock in Hindustan Teleprinters to HFCL. Various other disinvestments take place and the PSU stocks raise the Sensex to a new eight-month high	February 13, 2002	3519.87

(*Continued*)

Events	*Date*	*BSE Close*
Sensex blasts past 5,000 for second time in history.	November 3, 2003	5063.63
It was the highest in 43 months since April 13, 2000.		
The feel good belief in a rebounding economy and a powerful performance from four of its biggest stock push up the Sensex by 165 points the largest gain in a day since March 14, 2001. Sensex moves from 4,000 to 5,000 in just 55 trading days Expectations that the BJP-led National Democratic	January 14, 2004/ February 18, 2004	6194.11
Alliance (NDA) government would be re-elected Out polls predict that the NDA would return to power	April 23, 2004	5925.58
Sensex tumbles 230 points on the eve of the	May 11, 2004	5325.90
announcement of the election outcome on May 13, 2004		
The Sensex crashes 894.31 points or 16.5 Per Cent in two trading sessions on the shock defeat of the	May 17, 2004	4505.16
BJP-led NDA government		
Strong quarterly results and huge FII inflow	October 1, 2004	5527.75
The easing oil prices, stable fundamentals of the economy and FII inflow are the driving forces. After a nine-month gap, the Sensex close above the 6000 mark	November 16, 2004	6016.58
Historic high	March 8, 2005	6915.06
The best in 12 months under a new government since 1991–92 – a 31 Per Cent appreciation	May 26, 2005	6462.00
Crossed the five-digit mark	February 6, 2006	10,122
Crossed the 12000 mark	May 11, 2006	12,671
Crash of the Sensex	June 14, 2006	8,929
Crossed the 13000 mark	October 30, 2006	13,024
Crossed the 14000 mark	May 14, 2007	14,026.02
Crossed the 14500 mark	May 23, 2007	14,500.64
Crossed the 16000 mark	September 19, 2007	16335.20
Crossed the 17000 mark	September 27, 2007	17018.56
Crossed the 18000 mark	October 09, 2007	18,327.42
Crossed the 19000 mark	October 15, 2007	19095.75
Crossed the 20000 mark	December 26, 2007	20,018.17
Crossed the 21000 mark	January 08, 2008	21,077.53
Peak of the Sensex	January 10, 2008	21,206.77
Crash of the Sensex	October 27, 2008	7,697.39
On December 2, 2009	December 2, 2009	17,329.68
On July 13, 2010	July 13, 2010	18,106.50

Gigantic Drops of the Sensex in a Day Of the eight major falls of Sensex in a day, three can be attributed to political developments and the rest to scams. Political stability and scams have, to a large extent, influenced the market investor sentiments—domestic and international.

Year	*Fall (Points)*	*Culprits*
April 28, 1992	570	Harshad Mehta Involved in a Scam
May 12, 1992	333	Full Effect of the Scam
May 9, 1992	327	National Housing Bank Involved in a Scam
March 31, 1997	303	Congress Withdraws Support to Deve Gowda's Government
April 17, 1999	246	Vajpayee's Government Falls
April 04, 2000	361	Dotcom Bubble Bursts
May 17, 2004	894.31	Defeat of the BJP-led NDA Government
October 24, 2008	1070	Sub Prime Crisis and Global Meltdown

Bull Rally On October 17, 2003, the BSE Sensex closed at 4,930.53. This was the fastest rally of 2,006 points in the last decade. This 2,006-point rally came in 123 trading days, since April 25, 2003, when the Sensex was 2,924.12 points. However, the fastest rally, outside the current decade, was during the Harshad Mehta Scam when the Sensex gained 2,193 points in 31 trading days between February 7, and April 2, 1992. The biggest bull run was inspired by 'Big Bull' Harshad Mehta and expectations of foreign money coming into the local equity market. The Sensex moved up by 127% from 1,885 to 4,285 levels.

The second 1,150-plus point rally during March–August 2003 in the equity market was the largest half-year rally in more than a decade. The BSE Sensex then registered the biggest post-reform gain—a record rise of 83.37% during the year 2003–04. Unlike some previous rallies, this rally was a broad-based one, not driven by a few scrips of one or two sectors. Investors holding a diversified portfolio recorded an all-round gain. Moreover, there was also a considerable amount of FII interest in the Indian markets.

Between the last week of October 2004 and end-March 2005, a strong rally pushed the BSE Sensex to a historic high of 6,915.06 on March 8, 2005. Strong macroeconomic fundamentals, renewed buying interests by FIIs, an acceleration in the industrial activity, an improved financial performance of Indian companies, a moderation of domestic inflation, an easing of international crude-oil prices, an unprecedented pick-upon in bank credit and policy initiatives relating to the FDI in telecom and construction sections contributed to the upsurge in the Sensex.

The Sensex crossed the 8,000 level—a historic high on September 8, 2005. The Sensex closed on that day at 8,053—a rise of 106 points. The BSE Sensex crossed the 5-digit mark on February 6, 2006 when it touched 10,122. It touched 12,000 on April 20, 2006 and 12,671 on May 11, 2006, but it went into a free fall after May 12, 2006, lost 30% over a month, touched bottom at 8,799 on June 14, 2006 and drove investors into a panic.

The Sensex touched 11,015 on August 8, 2006 and 12,010 on September 15, 2006. It crossed the 13,000 mark on October 30, 2006 when the index rallied 117 points to close at 13,024. Investors' wealth in the 30 Sensex companies, measured in terms of the cumulative market value of these firms, soared to over Rs. 16,50,000 crores, from about Rs. 15,00,000 crores on April 20, 2006. Total investor wealth soared to over 34,00,000 crores on October 30, 2006. Strong economic growth, robust corporate results, a stable rupee, inflation and interest rates, lower crude-oil prices and high FII investment gave a fillip to market sentiments which drove the Sensex to amazing heights.

In 2006, the Sensex joined a select club of global indices such as the Dow Jones Industrial Average, the Nikkei and Hong Kong's Hang Seng which had crossed the 10,000 mark. India became the first BRIC country to join an exclusive club of developed markets whose market capitalisation of companies listed on the stock exchanges exceeds the GDP. A comparison of the market capitalisation with GDP is primarily made to assess the valuation levels of the markets. The total listed market capitalisation touched Rs. 34 lakh crores on October 16, 2006 exceeding the GDP figure of around Rs. 32 lakh crores during the financial year 2006.

The Sensex touched an all-time high of 21,206.77 on January 10, 2008, but then started declining on account of adverse global developments. Since the second quarter of 2009, the Sensex has been rising on account of improvements in the global financial markets scenario.

The BSE Sensex (Average) movements are shown in Figure 8.1.

Trends in Turnover on the BSE

The annual turnover, market capitalisation and the BSE Sensex increased sharply by 99 per cent in 1991–92 (Table 8.4). Share markets were unprecedentedly buoyant due to the liberalisation measures announced by the government to attract investments. Some important proposals announced in the Union Budget of 1992–93, such as the abolition of wealth tax on financial assets, abolition of the office of the CCI, free pricing era, and permission for Indian companies to raise funds abroad triggered volumes on the BSE. Irregularities in the securities transactions of banks and financial institutions also added to the speculative pressure in the stock markets. These irregularities were detected in 1992–93 when the scam broke out which -led to the streamlining of stock market operations by the BSE authorities, sharply reducing the turnover. In 1996–97, the turnover at BSE rose by 148 per cent. *Badla* was revived, which led to a massive rise in the turnover in the specified group of shares. Moreover, the extension of trading terminals outside Mumbai in September 1997 and rapid progress in trading in demat paperless form were some of the reasons for an increase in the turnover witnessed from 1996–97 to 1998–99.

During 1999–2000, the BSE turnover witnessed a sharp increase of 119 per cent. The market was driven by large FII inflows, improved corporate performance, sound macro-economic fundamentals, and upgrading of India's international credit ratings from stable to positive by international credit rating agencies. In 2000–01, the increase in turnover was 46 per cent. This was due to a slowdown in FII inflows, large

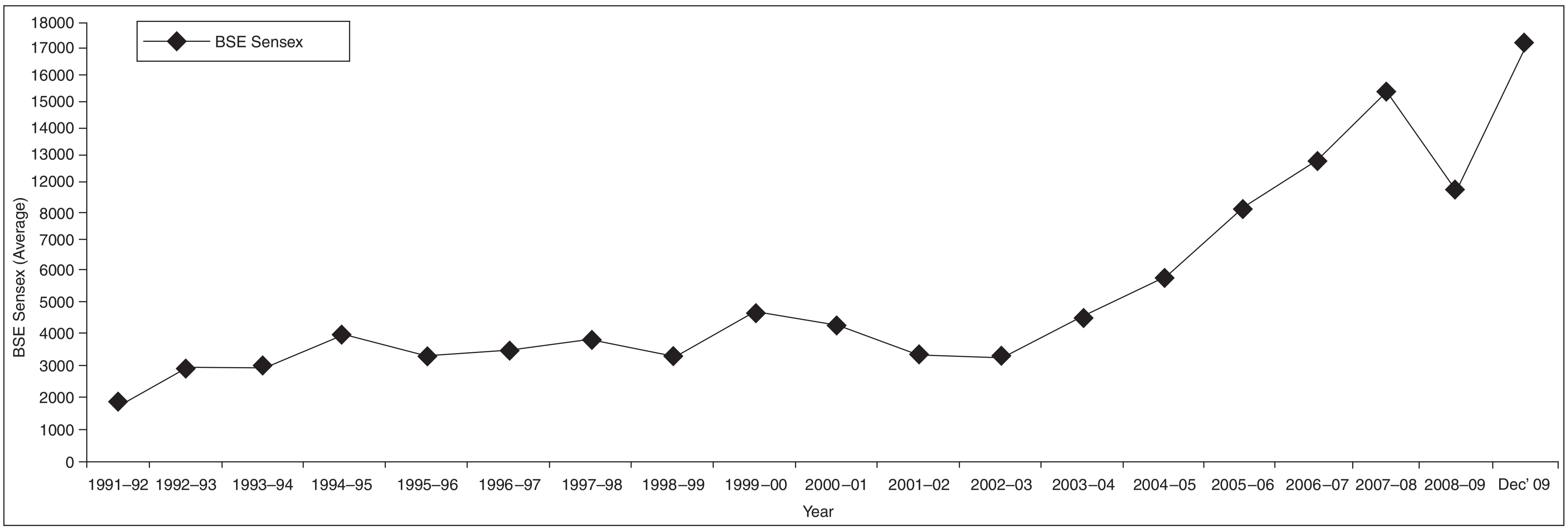


Figure 8.1 BSE Sensex (Average)

sell-offs of new economy stocks on Nasdaq, an increase in international oil prices, payment crises at some stock exchanges, and liquidity problems with some cooperative banks.

The average share of A group in total volumes from 1990–91 to 1993–94 was around 78 per cent. In 1994–95, there was a sharp fall in its percentage as the SEBI banned *badla* in A group shares. Then, with the resumption of *badla* in January 1996, the proportion of A group increased. Moreover, in 1995–96, even though the number of companies in A group was reduced sharply from 94 to 32, the group's share in total volumes increased. This shows a very high concentration of a handful of companies in trading volumes at the exchange.

The number of listed companies rose from 2,471 in 1990–91 to 9,413 in 2002–03. However, the number of listed companies declined to 4,955 till November 2009, on account of delisting of securities. The market capitalisation is an indicator of the addition to the wealth of share owners. Its increase is a function of price change and supply change coming from new issues. In the first year of economic reforms, market capitalisation increased by 256%. This was the result of an increase in share prices due to an announcement of liberalisation measures and the listing of six PSU stocks for the first time on the stock exchange. In the subsequent year, 1992–93, market capitalisation declined due to irregularities in securities transactions. Share prices firmed up again in 1993–94 due to an increased flow of foreign funds, increased investor interest and speculative trading.

The secondary market turned distinctly depressed thereafter, as the BSE Sensex lost as many as 1382.30 points by March 31, 1995. In 1996–97, 1998–99, and 2000–01, even though the turnover increased, the market capitalisation declined. This indicated that the positive impact of wealth on consumption demand was lacking. The decline in market capitalisation was a result of decline in the new economy share prices and large sell-offs in the global market, news about financial status of US-64, payment crises at some stock exchanges and withdrawal of deferral products including *badla.* The secondary market turnover declined sharply both at the BSE and the NSE in 2001–02. Global recessionary conditions, international disturbances, and domestic industrial slowdown accounted for this sharp decline. The BSE Sensex touched the 2,600 mark on September 21, 2001 when terrorists attacked US cities. This 2,600 mark was an all-time, eight-year low, the lowest since September 8, 1993. BSE market capitalisation jumped to Rs. 17.5 lakh crores in March 2004, and India joined the US$400-billion Asian elite club. On October 30, 2006, the Sensex joined a select club of global indices which have crossed the 10,000 mark and continued to trade above that mark. The BSE Sensex touched an all-time high of 21,207 on January 10, 2008, but declined sharply thereafter on account of global financial turmoil. The impact of the sub-prime crisis and the turbulence in the global financial markets were felt on the stock markets in India. The depressed conditions in the domestic and global markets led to a steep fall in the Sensex by 60.9% and it touched a new low of 8,110.10 on March 9, 2009. The volatility of the BSE Sensex increased, the market capitalisation fell and the price–earning (P/E) ratio declined significantly. With improvements in the global liquidity and global financial markets, there has been an upward trend in the Sensex since the second quarter of 2009. The FIIs returned to the Indian markets and large purchases by them raised the BSE Sensex to 17,000 mark in November 2009. Moreover, the unexpected, good, corporate-earning announcements improved the market sentiments and investor confidence (Table 8.4).

TABLE 8.4 Important Indicators of the Stock Exchange, Mumbai

Year	Turnover (Rs. in Crore)	Per Cent Share of A Group in Total Volumes	No. of Listed Companies	Market Capitalisation of Listed Companies (Rs. in Crore)	Trend in Share Price BSE Sensex	Price Earning Ratio	Price Book Value Ratio	Yield Per Cent Per Annum
1990–91	36,012 (22.6)	80.15	2,471	90,836 (39.3)	1,167.97 (49.5)	N.A.	N.A.	N.A.
1991–92	71,777 (99.3)	76.08	2,601	3,23,363 (256.0)	4,285.00 (266.9)	26.0	N.A.	N.A.
1992–93	45,696 (–36.3)	72.67	2,903	1,88, 146 (–41.8)	2,280.52 (–46.8)	35.5	6.18	0.82
1993–94	84,536 (85.0)	73.59	3,585	3,68,071 (95.6)	3,778.99 (65.7)	36.35	5.03	0.91
1994–95	67,749 (–19.9)	22.81	4,802	4,35,481 (18.3)	3,260.96 (–13.7)	41.24	5.64	0.75
1995–96	50,064 (–26.1)	53.63	5,603	5,26,476 (20.9)	3,366.61 (3.2)	19.92	3.46	1.25

(*Continued*)

TABLE 8.4 *(Continued)*

Year	Turnover (Rs. in Crore)	Per Cent Share of A Group in Total Volumes	No. of Listed Companies	Market Capitalisation of Listed Companies (Rs. in Crore)	Trend in Share Price BSE Sensex	Price Earning Ratio	Price Book Value Ratio	Yield Per Cent Per Annum
1996–97	1,24,284 (148.3)	95.56	5,832	4,63,915 (–11.9)	3,360.89 (–0.2)	15.34	2.93	1.54
1997–98	2,07,644 (66.9)	94.88	5,853	5,60,325 (20.8)	3,892.89 (15.8)	14.51	2.73	1.53
1998–99	3,11,999 (50.3)	93.67	5,848	5,42,942 (–3.1)	3,739.96 (–3.9)	12.86	2.26	1.82
1999–2000	6,85,028 (119.6)	N.A.	5,889	9,12,842 (68.1)	5,001.28 (33.7)	19.76	3.4	1.23
2000–01	10,00,032 (46.00)	N.A.	5,955	5,71 ,553 (–37.4)	3,604.38 (–27.9)	23.9	3.6	1.3
2001–02	3,07,292 (–69)	N.A.	5,782	6,12,224 (+7)	3,469 (–3.7)	16.6	2.4	2.0
2002–03	3,14,073	N.A.	5,650	5,72,198	3,049	14.5	0	0
2003–04	5,03,053	N.A.	5,528	12,01,207	5,591	18.57	–	–
2004–05	5,18,715	N.A.	4,731	16,98,429	6,493	15.61	–	–
2005–06	8,16,074	N.A.	4,781	30,22,190	11,280	20.9	–	–
2006–07	9,56,185	N.A.	4,821	35,45,041	13,072	20.3	5.1	1.3
2007–08	15,78,857	N.A.	4,887	51,38,014	15,644	20.11	5.2	1.1
2008–09	11,00,074	N.A.	4,929	30,86,075	9,709	13.7	2.7	1.8
2009–10	13,78,809	N.A.	4,973	61,65,619	17,528	21.3	3.9	1.1

Note: Figures in brackets are percentage variations over the previous year.
N.A.: Not Available.
Source: The Stock Exchange, Mumbai.

The P/E ratio is the market price of a share divided by the earnings per share. It signifies the price being paid by the buyer of equities for each rupee of annual earnings, whether distributed as dividends or retained in the company. A company's P/E ratio is crucial for judging whether the prevailing market price of a share is reasonable. The P/E ratio of the index is the market capitalisation of the 30 companies in the Sensex, divided by their earnings or net profits. A market's P/E ratio is an important indicator of the general state of the share market. Markets decide the P/E ratio based on a company's expected growth in earnings. Hence, when the expectation of growth increases and confidence shoots up, the scrip gains. One of the highest P/E levels was witnessed in April 1992, when the Sensex had a P/E of 56. In November 1994 it was 39, in July 1999 it was 17.51, in June 2000 it was 22.4 and in September 2003 it was 15.55. In November 2004, the stocks of Indian companies were quoted at 13 times their earnings. A declining trend was witnessed in P/E ratios due to lack of free-float, rising fiscal deficit, and a substantial rise in recent years in earnings of corporates. A similar trend was observed in the price–book-value ratio. The annualised yield based on 30 scrips included in the Sensex was the highest at 1.82% in 1998–99 and declined in the subsequent years and again increased to 2.0 in 2001–02. The price–earning ratio of the 30 scrips increased during the years 2005–06, 2006–07 and 2007–08, but declined during 2008–09. A similar trend was noticed in the price–book-value ratio.

Box 8.5 Price-to-book Value Ratio

Price-to-book value (P/BV) is the ratio of market price of a company's share over the book value of its equity, or the net worth. The net worth is the value of company's assets expressed in the balance sheet, i.e., the difference between the book value of assets and book value of its liabilities. The P/BV ratio offers a simple approach to find undervalued stocks. If a stock is trading for less than its book value, or has a P/BV ratio of less than 1, it means the investors perceive the company's assets as overstated or that the company is earning a low return on assets. This ratio may not always be a reliable guide for picking under valued stocks on account of various reasons: book value of an asset may not help when assets are ageing or the earnings power of the assets increase or decrease; book value can be changed by increasing or lowering the cash reserves; and this ratio is of less value to companies in the services sector with few tangible assets.

TABLE 8.5 Top 50 Companies by Market Capitalisation and Turnover at BSE and NSE (Rs. in Crores)

Item	Market Capitalisation (End of Period)				Turnover			
	1991–92 (at BSE)	% to Total	2007–08 (at NSE)	% to Total	1991–92 (at BSE)	% to Total	2007–08 (at NSE)	% to Total
Manufacturing	86,232	58.6	7,11,980	22.51	41,572	83	4,30,484	19.72
Financial services	29,842	20.3	97,743	3.09	576	1.1	2,54,523	11.66
FMCG	26,359	17.9	1,27,532	4.03	3,478	6.9	26,700	1.22
IT	–	–	2,51,388	7.95	436	0.1	1,28,794	5.9
Petrochemicals	–	–	7,25,669	22.94	–	–	3,88,646	17.8
Infrastructure	–	–	5,39,261	17.05	–	–	5,00,458	22.93
Telecommunications	–	–	2,89,080	9.14	–	–	1,82,192	8.35
Banks	–	–	2,83,587	8.96	–	–	2,04,182	9.35

Note: FMCG: Fast moving consumer goods such as food, beverages and personal products.
IT: Information Technology.
Source: BSE, NSE, RBI, Report on Currency and Finance and various issues.

Table 8.5 reflects the significant changes in the relative importance of various companies. Traditionally, manufacturing companies such as cements and steel and the financial-services sector constituted the bulk of market capitalisation and of the turnover at the stock exchanges. However, in recent years, the relative importance of the traditional sectors has declined, while that of information technology (IT), pharmaceuticals and FMCG sectors has increased.

This change was a result of the government policy, which lifted the controls on the private sector and then opened up the economy to foreign companies. Hence, many capital-intensive industries such as steel, fertilisers and chemicals, which worked well in a closed economy, could not withstand the international competition. Moreover, new companies and businesses emerged which offered good returns.

Conclusion

The oldest stock exchange of India faced rough weather when the National Stock Exchange (NSE) was set up in 1994. It was opined that the BSE would not be in a position to face stiff competition from this new and modern stock exchange. However, the BSE revamped its operations quickly, adopted modern technology, and gave tough competition to the NSE. This competition among the exchanges has made the Indian capital market more mature.

The BSE is still in the process of reforming itself. The involvement of BSE brokers and its elected members in a series of scams has affected its image and small and institutional investors have more or less lost faith in it. It completed the process of demutualisation and corporatisation in May 2007. The Singapore stock exchange (SGX) and the Deutsche Borse (DB) are BSE's strategic partners holding 5 per cent stake each in the exchange. They have a combined investment of Rs. 380 crore at Rs. 5200 per share.

The BSE's network outside Mumbai has not expanded significantly. The BSE lacks in liquidity and needs to draw in more players like market makers to create liquidity. The BSE and NSE had commenced derivatives trading in 2000 but NSE dominates the derivatives market. Thus, BSE needs to revamp its strategic plan to compete with NSE.

THE NATIONAL STOCK EXCHANGE OF INDIA

The stock markets witnessed many institutional changes in the 1990s. One of them was the establishment of the NSE, a modern stock exchange which brought with it the best global practices.

The NSE was incorporated in November 1992 with the following objectives.

- To establish a nationwide trading facility for equities, debt instruments, and hybrids.
- To ensure all investors all over the country equal access through an appropriate communication network.
- To provide a fair, efficient, and transparent securities market to investors through an electronic trading system.
- To enable shorter settlement cycles and book-entry settlement system.
- To meet the current international standards of securities markets.

The Pherwani Committee, which mooted the setting up of the NSE, wanted different trading floors linked through a technologically backed, automated network thereby creating an exchange with a national network. However, instead of providing a common platform for all regional stock exchanges, the NSE is competing with the BSE, thus creating a problem of survival for other exchanges.

The NSE, unlike other Indian stock exchanges, is a tax-paying company incorporated under the Companies Act, 1956. It has been promoted by leading financial institutions and banks to provide automated and modern facilities for trading, clearing and settlement of securities in a transparent, fair and open manner and with countrywide access.

The exchange is professionally managed in that the ownership and the management of the NSE are completely separated from the right to trade on the exchange. In order to upgrade the professional standards of the market intermediaries, the exchange lays stress on factors such as capital adequacy, corporate structure, track record and educational experience.

NSE's membership is always on tap and anyone who meets the eligibility criteria such as cash deposits and high net worth can become a member. A member, who wants to quit business, can do so freely and refund deposits after meeting all liabilities. The Exchange had 1,227 members as at end March 2009 and a large majority (88.59%) of them were corporate members, and the remaining, individuals, firms and banks.

NSE members are connected to the Exchange from their work stations to the central computer located at the exchange through a satellite using VSATs (very small aperture terminals). The NSE has installed over 2,648 VSATs in over 201 cities across the country. Members can place orders from their office and extend connectivity to clients through their computer-to-computer-link (CTCL) facility outside their premises. Registered dealers of the members have remote trading terminals at their offices and they trade electronically on the 'NSE–NEAT' trading system through the CTCL server installed at the members' office. Through this facility, members can have a total control over their network and can closely monitor the orders placed by their registered dealers/branches.

The NSE was granted recognition as a stock exchange in April 1993 and it started operations with the wholesale debt market (WDM) segment in June 1994. It started equity trading in November 1994 and, in a short span of 1 year, surpassed the volume at the BSE, the largest stock exchange in the country. The NSE is the only stock exchange in the world to get to the first place in the country in the very first year of its operations.

The NSE offers a trading platform for a wide range of products for multiple markets, including equity shares; warrants; exchange-traded funds (ETF); mutual funds; debt instruments including corporate debt, central and state government securities, treasury bills, commercial paper and certificate of deposits; derivatives like index futures and options, stock futures and options and currency futures. The Exchange provides trading in four different segments, namely, Wholesale Debt Market (WDM) segment, Capital Market (CM) segment, Futures & Options (F&O) segment and the Currency Derivatives (CD) segment. Table 8.6 captures the record number of trades and daily turnover in all the five segments of NSE.

There are more than 1,400 companies listed in the Capital Market and more than 95% of these are actively traded.

The NSE introduced, for the first time in India, fully automated, screen-based trading, eliminating the need for physicaltrading floors. This screen-based trading was the first to go live in the world through satellite communication.

The NSE developed a system of managing the primary issues through screen-based automated trading system.

The NSE offers its nationwide network for conducting online IPOs through the book-building process. It operates a fully automated, screen-based, bidding system called NEAT IPO that enables the trading members to enter bids directly from their offices through a sophisticated telecommunication network.

The NSE developed a new trading application, NOW, or 'NEAT on Web' in May 2008. This platform allows the trading members to connect to the Exchange through the Internet, and has resulted in a significant reduction in both access cost as well as turnaround time for providing access.

The NSE is the first stock exchange to help promote institutional infrastructure of the capital market.

The NSE set up the National Securities Clearing Corporation Limited (NSCCL)—the first clearing corporation in the country, to provide settlement guarantee. To promote dematerialisation of securities, it jointly set up with the erstwhile UTI and the IDBI, the National Securities Depository Limited (NSDL)—the first depository in India.

The NSE set up India Index Services and Products Limited (IISL), a joint venture of CRISIL and NSE, in May 1998, to provide indices and index services. IISL is India's first specialised company focusing upon the index as a core product and maintains over 96 equity indices comprising broad-based, benchmark indices, sectoral indices and customised indices.

The NSE's IT set-up is larger than that of any company in the country. It has a state-of-the-art client-server application. The NSE was the first exchange to grant permission to brokers for Internet trading.

TABLE 8.6 NSE—At a Glance

	CAPITAL MARKET (EQUITIES) SEGMENT		
1	Settlement Guarantee Fund	March 31, 2009	Rs. 4,843.50 Crores
2	Investor Protection Fund	September 30, 2009	Rs. 299.91 Crores
3	Number of Securities Available for Trading	October 31, 2009	1,672
4	Record Number of Trades	May 19, 2009	1,12,60,392
5	Record Daily Turnover (Quantity)	May 19, 2009	19,225.95 Lakhs
6	Record Daily Turnover (Value)	May 19, 2009	Rs. 40,151.91 Crores
7	Record Market Capitalisation	January 07, 2008	Rs. 67,45,724 Crores
8	Record Value of S&P CNX Nifty Index	January 08, 2008	6,357.1
9	Record Value of CNX Nifty Junior Index	January 04, 2008	13,209.35
	CLEARING & SETTLEMENT		
1	**Record Pay-in/Pay-out (Rolling Settlement):**		
	Funds Pay-in/Pay-out (N2007200)	October 23, 2007*	Rs. 4,567.70 Crores
	Securities Pay-in/Pay-out (Value) (N2009088)	May 21, 2009*	Rs. 9,523.33 Crores
	Securities Pay-in/Pay-out (Quantity) (N2009088)	May 21, 2009*	4,385.75 Lakhs
	*Settlement Date		
	DERIVATIVES (F&O) SEGMENT		
1	Settlement Guarantee Fund	March 31, 2009	Rs. 23,655.86 Crores
2	Investor Protection Fund	September 30, 2009	Rs. 52.89 Crores
3	Record Daily Turnover (Value)	July 29, 2009	Rs. 116,508 Crores
4	Record Number of Trades	January 07, 2009	18,74,697
	CURRENCY DERIVATIVES SEGMENT		
1	Record Daily Turnover (Value)	November 27, 2009	Rs. 10,599.48 Crores
2	Record Number of Trades	November 27, 2009	51,656
3	Record Number of Contracts	November 27, 2009	22,60,014
4	Investor Protection Fund	September 30, 2009	Rs. 0.01 Crores
	WHOLESALE DEBT SEGMENT		
1	Number of Securities Available for Trading	October 31, 2009	3,978
2	Record Daily Turnover (Value)	August 25, 2003	Rs. 13,911.57 Crores

Source: www.nseindia.com

The NSE incorporated a separate entity—NSE IT Ltd in October 1999, to service the securities industry in addition to the management of IT requirements of the NSE. It also set up NSE Infotech Services Ltd to focus on IT. It caters to the IT needs of NSE and all its group companies exclusively. The data and info-vending products of the NSE are provided through a separate company DotEx International Ltd, a wholly owned subsidiary of the NSE.

The commodity exchange platform—NCDEX—was jointly set up by the NSE with financial institutions. In order to provide clearing-and-settlement services to NCDEX, it promoted a company—National Commodity Clearing Limited (NCCL) in 2006. In 2008, it set up a national-level electricity exchange—Power Exchange India (PXI) Ltd, again the first of its kind in the country.

The NSE is ranked third in terms of number of equity shares traded and is the eighth largest derivatives exchange in the world.

Membership Pattern on the NSE

The management of the NSE is in the hands of professionals, as distinct from the trading members, to avoid any conflict of interest. If the applicant is an individual/partnership firm/corporate, then the individual/at least two partners of the applicant firm/at least two directors of the applicant corporate must be graduates, possess at least 2-year experience in securities market, not debarred by the SEBI and not engaged in any fund-based activity. A trading member is admitted to any of the following combinations of market segments: (a) wholesale debt market (WDM) segment, (b) capital market (CM) and the futures and options (F&O) segments, (c) CM segment and the WDM segment or (d) all the three segments (refer Table 8.7).

NSE Milestones

Month/Year	*Event*
November 1992	Incorporation.
April 1993	Recognition as a stock exchange.
June 1994	WDM segment goes live.
November 1994	CM segment goes live through VSAT.
March 1995	Establishment of Investor Grievance Cell.
April 1995	Establishment of NSCCL, the first Clearing Corporation.
July 1995	Establishment of Investor Protection Fund.
October 1995	Became the largest stock exchange in the country.
April 1996	Commencement of clearing and settlement by NSCCL.
April 1996	Launch of S&P CNX Nifty.
June 1996	Establishment of Settlement Guarantee Fund.
November 1996	Setting up of National Securities Depository Ltd, the first depository in India, co-promoted by NSE.
November 1996	'Best IT Usage' award by Computer Society of India.
December 1996	Commencement of trading/settlement in dematerialised securities.
December 1996	Dataquest award for 'Top IT User.'
December 1996	Launch of CNX Nifty Junior.
November 1997	'Best IT Usage' award by Computer Society of India.
May 1998	Promotion of joint venture, India Index Services & Products Limited (IISL) (along with CRISIL) for index services.
May 1998	Launch of NSE's Web-site: www.nseindia.com.
July 1998	Launch of 'NSE's Certification Programme in Financial Markets.' (NCFM).
August 1998	'CYBER CORPORATE OF THE YEAR 1998' award.
April 1999	'CHIP Web Award' by CHIP magazine.
October 1999	Setting up of NSE. IT Ltd.
January 2000	Launch of NSE Research Initiative.
February 2000	Internet Trading in CM segment.
June 2000	Commencement of Derivatives Trading (in Index Futures).
September 2000	Launch of Zero Coupon Yield Curve.
June 2001	Commencement of Trading in Index Options.
July 2001	Commencement of Trading in Options on Individual Securities.
November 2001	Commencement of Trading in Futures on Individual Securities.
December 2001	Launch of NSE VAR for Government Securities.
January 2002	Launch of Exchange Traded Funds (ETFs).
May 2002	NSE wins the Wharton–Infosys Business Transformation award in the organisation-wide transformation category.
October 2002	Launch of Government Securities Index.
January 2003	Launch of Retail Debt of Government Securities.
June 2003	Launch of Exchange Traded Interest Rate derivatives on Notional 91-day T-bills and Notional 10-year bonds.
August 2003	Launch of Futures and Options on CNX IT Index.
June 2004	Launch of STP Interoperability.
August 2004	Launch of NSE electronic interface for listed companies.
March 2005	'India Innovation Award' by EMPI Business School, New Delhi.
June 2005	Launch of Futures & Options on BANK Nifty Index.
August 2006	Setting up of NSE Infotech Services Ltd.
December 2006	'Derivative Exchange of the Year,' by Asia Risk magazine.
January 2007	Launch of NSE–CNBC TV 18 media centre.

(*Continued*)

Month/Year	Event
March 2007	NSE, CRISIL announce launch of India Bond Watch.com
March 2007	Launch of Gold BeES—Exchange Traded Fund (ETF).(First Gold ETF).
June 2007	Launch of Futures & Options on CNX 100 and CNX Nifty Junior contracts.
October 2007	Launch of Futures & Options on Nifty Midcap 50.
January 2008	Launch of Mini Nifty derivative contracts.
March 2008	Launch of long-term option contracts on S&P CNX Nifty Index.
May 2008	Launch of NOW or 'NEAT on Web'platform.
April 2008	Launch of DMA
April 2008	Launch of Securities Lending & Borrowing Scheme.
April 2008	Launch of India VIX—The Volatility Index.
June 2008	Setting up of Power Exchange India Ltd.
August 2008	Launch of Currency Derivatives for the first time in India, currency futures are traded on a stock-exchange platform.
October 2008	Operationalisation of Power Exchange India Ltd. It provides a common electronic platform for trading of electricity.
August 2009	Launch of Interest Rate Futures.
November 2009	Launch of Mutual Fund Service System.

Source: *www.nseindia.com*

TABLE 8.7 Distribution of SEBI Registered Trading Members on NSE as on March 31, 2009

Particulars	C M	WDM	CM & WDM	CM, WDM and F&O	CM and F&O	CD	Total	PCMs
Corporates	95	6	9	47	941	40	1,138	20
Individuals	10	–	–	–	34		44	0
Firms	12	–	–	–	33		45	0
Total	**117**	**6**	**9**	**47**	**1,008**	**40**	**1,227**	**20**

CM=Capital Market, WDM=Wholesale Debt Market, F&O=Futures & Options, PCM=Professional Clearing Members, CD = Currency Derivatives
Source: www.nse-india.com
Source: www.nse-india-com

Indices

The NSE Fifty was rechristened as the S&P CNX Nifty on July 28, 1998. This index is widely used as it reflects the state of the market sentiments for 50 highly liquid scrips. The base period for the S&P CNX Nifty is November 3, 1995. The S&P CNX Nifty is computed using a float-adjusted, market capitalisation-weighted methodology. It accounts for 58.64% of the total market capitalisation of CM segment of NSE and 51.39% of the traded value of all the stocks on the NSE as at end-March 2008. It is used as a benchmarking fund portfolios, index-based derivatives and index funds.

The CNX Nifty Junior is a mid-cap index introduced in January 1997 to cater to the growth companies in the economy. The base period is November 3, 1996. Companies include those which are traded with an impact cost of less than 2.5% on 85% of the trading days. It accounts for 9.60% of the market capitalisation of CM segment of NSE as at end-March 2008.

A new index called the S&P CNX Defty (dollar-denominated S&P CNX Nifty) was introduced on November 26, 1997. It shows returns on the S&P CNX Nifty index in dollar terms. The S&P CNX Defty serves as a performance indicator to FIIs, offshore funds and others. It is also used as an effective tool for hedging Indian equity exposure. This new index is available online.

The other popular indices are the Nifty mid-cap 50, the CNX mid-cap 50, the S&P CNX Sectoral Indices, such as IT, Bank, FMCG, Public Sector Enterprises (PSE), MNC, Services, Energy, Pharma, Infrastructure, PSU Bank and Realty.

NSE launched on January 29, 2008 an environment, social and corporate governing (ESG) index, the first of its kind, to measure practices based on quantitative as opposed to subjective factors.

These indices are maintained, monitored and updated by India Index Services and Products Limited (IISL). A joint venture between the NSE and CRISIL, IISL is the only specialised organisation in the country to provide stock-index services. It introduced the country's first infotech, sector-specific index in September 1998.

National Securities Clearing Corporation Limited

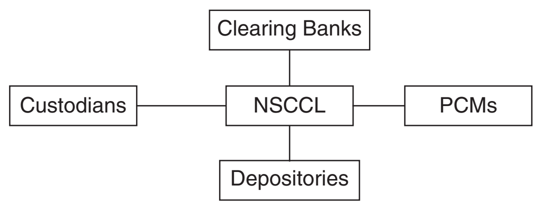
Functions of NSCCL

- Clears all trades
- Determines obligations of members
- Arranges for pay-in and pay-out of funds/securities
- Receives funds/securities
- Processes for shortages in funds/securities
- Guarantees settlement
- Collects and maintains margins/collateral/base capital/other funds
- Counter party to all settlement obligations of the members

In April 1995, the NSE set up the National Securities Clearing Corporation Limited (NSCCL), a wholly owned subsidiary, to undertake clearing and settlement at the exchange. It commenced operations from April 1996. It operates with a well-defined settlement cycle, aggregates trades over a trading period, nets the positions to determine the liabilities of the members, and ensures movement of funds and securities to meet respective liabilities. Its central functions are clearing and settlement of trades and risk management.

The NSCCL assumes the counter-party risk of each member and guarantees settlement. Settlement guarantee is a guarantee provided by the clearing corporation for the settlement of all trades even if a party defaults to deliver securities or pay cash. The NSCCL started the settlement guarantee fund for the capital market in June 1996 with an initial corpus of Rs. 300 crore (Table 8.9). This fund stood at Rs. 2,700 crore at the end of March 2006. It cushions itself from any residual risk. Members contribute to this fund which is utilised for the successful completion of settlement. A separate settlement guarantee fund (SGF) is maintained for the futures and options (F&O) segment.

There are four entities linked with the Clearing Corporation (NSCCL) in the clearing and settlement process.



- **Custodian/Clearing members:** Clearing members have to make available funds and/or securities in the designated accounts with clearing bank/depositories to meet their obligations on the settlement date. Custodian is a clearing member but not a trading member. They settle trades assigned to them by trading members. The NSCCL notifies the relevant trade details to custodians on the trade day who affirm back. If a custodian confirms to settle that trade, he is assigned that particular obligation by the NSCCL. There are 11 custodians empanelled with the NSCCL.
- **Clearing banks:** They are a key link between the clearing members and clearing corporation. Every clearing member is required to open a dedicated clearing account with one of the designated clearing banks. The NSCCL, in association with clearing banks, provides working capital funding to clearing members. A clearing bank has to enter into an agreement with the NSCCL and the clearing member and open clearing accounts with depositories. The clearing member has to approach its bank, which would extend the funding requirements in consultation with the NSCCL.
- **Depositories:** They hold securities in dematerialised form for the investors in their beneficiary accounts. Every clearing member is required to maintain a clearing pool account with the depositories. The depository runs on electronic file to transfer securities from accounts of the custodians/clearing member to that of the NSCCL and vice versa.
- **Professional Clearing Members (PCMs):** They are a special category of members with clearing rights but with no trading rights and who perform functions similar to those of custodians. PCMs clear and settle trade for their clients who may be individuals or institutions.

The NSCCL carries out the clearing and settlement process with the help of clearing banks and depositories which results in an actual movement of funds and securities on the prescribed pay-in and pay-out day.

NSCCL Products and Services

- Clearing and settlement
- Guarantee
- Risk management
- Direct payment to clients
- Constituent SGL account
- Mutual fund service system

The clearing members bring in the securities in designated accounts with the two depositories—the CM pool account in the case of the NSDL and designated settlement accounts in the case of the CDSL and funds in the designated accounts with clearing banks. The clearing banks, on receiving electronic instructions from the NSCCL, debit accounts of clearing banks and credit accounts of the clearing corporation. This is termed as pay-in of funds and securities (Table 8.8).

The NSCCL, after providing for shortages of funds/securities, sends electronic instructions to the depositors/clearing banks to credit accounts of clearing members and debit accounts of the clearing corporation. Thus, the settlement cycle is complete once the pay-out of funds and securities is done.

The settlement cycle and settlement statistics are shown in Tables 8.8 and 8.9.

Margin Requirements

The NSCCL imposes stringent margin requirements as part of its risk containment measures. For imposing margins, the stocks are categorised as follows:

TABLE 8.8 Settlement Cycle at NSCCL

Activity	T+2 Rolling System (From April 1, 2003)	
Trading	T	(Trade Details from Exchange to NSCCL)
Custodial Confirmation	T+1	(Custodians/Clearing Members (CMs) Confirm the Trade)
Determination of Obligation	T+1	(NSCCL Determines Obligations and Gives Pay-in Advice for Funds/Securities to Clearing Banks and Depositories, Respectively.
Securities/Funds Pay-in	T+2	(NSCCL Advises Depository and Clearing Banks to Debit Pool Account of Custodians/Clearing Members (CMs) and Credit its Account)
Securities/Funds Pay-out	T+2	(NSCCL Advises Depository and Clearing Banks to Credit Pool Account of Custodians/CMs and Debit Its Account)
		(Depository Informs Custodians/CMs through DPs)
		(Clearing Banks Inform Custodians/CMs)
Valuation Debit	T+2	
Auction	T+3	
Bad-delivery Reporting	T+4	
Auction Pay-in/Pay-out	T+5	
Close-out	T+5	
Rectified Bad-Delivery Pay-in/Pay-out	T+6	
Re-bad-delivery Reporting	T+8	
Close-out of Re-bad Delivery	T+9	

Source: NSE.

TABLE 8.9 Settlement Statistics—National Securities Clearing Corporation Limited

Year	*Traded Qty (Lakh)*	*% of Delivered Qty to Traded Qty*	*Delivered Value (Rs. in Crore)*	*% of Delivered Value to Total Turnover*	*Short Delivery [Auctioned Qty (Lakh)]*	*% of Short Delivery to Deliver*	*Unrectified Bad Delivery [Auctioned Qty (Lakh)]*	*% of Unrectified Bad Delivery to Deliver*	*Funds Pay in (Rs. in Crore)*
1994–95	1,330	51.74	898	51.98	6	0.85	1.76	0.26	300
1995–96	39,010	18.62	11,775	17.91	179	2.46	32.17	0.44	3,258
1996–97	1,34,317	12.25	32,640	11.17	382	2.32	66.25	0.40	7,212
1997–98	1,35,217	16.31	59,775	16.15	333	1.51	72.90	0.33	10,827
1998–99	1,65,310	16.93	66,204	16.01	305	1.09	69.73	0.25	12,175
1999–2000	2,38,605	20.42	82,607	10.29	635	1.30	110	0.23	27,992
2000–01	3,04,196	16.50	1,06,277	8.41	339	0.68	11.58	0.023	45,937
2001–02	2,74,695	21.59	71,766	14.12	364	0.61	0.08	0.001	28,048
2002–03	3,65,403	22.54	87,956	14.15	470	0.57	0.00	0.00	34,092
2003–04	7,04,537	24.92	2,21,364	20.29	1008	0.57	0.00	0.00	81,590
2004–05	7,87,996	25.67	2,77,102	26.35	867	0.42	0.00	0.00	97,241
2005–06	8,18,438	24.92	4,09,353	26.99	894	0.39	0.00	0.00	1,31,426
2006–07	8,50,515	28.11	5,44,434	28.06	769	0.32	–	–	1,73,188
2007–08	14,81,229	24.84	9,72,803	27.64	997	0.27	–	–	3,09,543
2008–09	14,18,928	21.42	6,11,535	22.44	625	0.21	–	–	2,20,704

Source: NSE.

- The stocks, which have traded atleast 80 per cent of the days during the previous 18 months, shall constitute Group I and Group II.
- Out of the scrips identified above, those having a mean impact cost of less than or equal to one per cent shall be under Group I and the scrips where the impact cost is more than one, shall be under Group II.
- The remaining stocks shall be under Group III.
- The impact cost shall be calculated on the 15th of each month on a rolling basis considering the order book snapshots of the previous six months. On the basis of the calculated impact cost, the scrip shall move from one group to another group from the 1st of the next month. The impact cost is required to be calculated for an order value of Rs. 1 lakh.

The daily margin is the the sum of mark to market margin (MTM margin) and value at risk-based margin (VaR-based margin). The VaR margin is applicable for all securities in rolling settlement.

For the securities listed in Group I, scripwise daily volatility is calculated using the exponentially weighted moving average which is 3.5 times the volatility. For the securities listed in Group II, the VaR margin is higher of scrip VaR (3.5 δ) or three times the index VaR and it is scaled up by root 3. For the securities listed in Group III, the VaR margin is equal to five times the index VaR and scaled up by square root of 3. The VaR margin rate for a security constitute the following.

- The index VaR would be the higher of the daily Index VaR based on the S&P CNX Nifty or the BSE Sensex. The index VaR would be subject to a minimum of 5 per cent.
- An additional VaR margin of 6 per cent as specified by the SEBI.
- The NSCCL may stipulate security specific margins for the securities from time to time.

The mark to market margin is calculated on the basis of a notional loss which the member would incur in case the cumulative net outstanding position of the member in all securities, at the end of the relevant day were closed out at the closing price of the securities as announced at the end of the day by the NSE. Mark to market margin is calculated by marking each transaction in a scrip to the closing price of the scrip at the end of trading. In case the security has not been traded on a particular day, the latest available closing price at the NSE is considered as the closing price. In the event of the net outstanding position of a member in any security being nil, the difference between the buy and sell values would be considered as notional loss for the purpose of calculating the mark to market margin payable. MTM profit/loss across different securities within the same settlement is set off to determine the MTM less for a settlement. Such MTM losses for settlements are computed at client level.

The NSCCL has introduced the facility of direct payment to clients' account on both the depositories—the NSDL and the CDSL. Based on the information received from members, the NSCCL sends pay-out instructions to the depositories which enables the clients to receive the pay-out directly into their accounts on pay-out day.

The NSCCL also offers constituent subsidiary general ledger (CSGL) facilities to investors in government securities. SGL is a facility provided by the RBI to large banks and financial institutions to hold their investments in government securities in the electronic book entry form. The securities held in SGL can be settled through a delivery-versus payment (DVP) mechanism which ensures simultaneous movement of funds and securities.

Mutual Fund Service System (MFSS) is a facility provided by the NSCCL to investors for transacting in dematerialised units of open-ended schemes of mutual funds. The objective is to provide to the investor a one-stop shop for transacting in financial products. MFSS addresses the need for a common platform for sale and repurchase of units of schemes managed by various funds. The exchange, with its extensive network covering around 400 cities and towns across the country, offers a mechanism for electronic online collection of orders from the market and the Clearing Corporation acts as a central agency for the clearing and settlement of all orders. The transactions are not covered by settlement guarantee.

The NSCCL was permitted to operate a stock lending/borrowing scheme from July 1998. The NSE and the NSCCL commenced the automated lending and borrowing mechanism (ALBM) for lending and borrowing of securities from February 10, 1999. The ALBM facilitated borrowing/lending of securities/funds at market-determined rates to meet immediate settlement requirements or payment obligations at a reasonable cost and low risk. The ALBM was NSE's answer to BSE's *badla*. The ALBM was restricted to only the S&P CNX Nifty and the CNX Nifty Junior Index securities. *Badla* was supposed to be a pure financing mechanism while ALBM was a security lending and borrowing mechanism. The trades in the ALBM segment were guaranteed by the settlement fund of the NSE. This deferral product has been banned by the SEBI along with other deferral products from July 2001.

Capital Market Segment of the NSE

NSE Segment	Market Share (%) 2008–09
• Capital market	71
• Wholesale debt market (Share in SGL)	43
• Futures and options	99
• Currency Derivatives	52

The capital market segment, which covers trading in equities, commenced trading on November 3, 1994. NSE adopted the order-driven trading system as opposed to a quote-driven system. The order-driven system helped reduce jobbing spreads to cut down transaction costs.

As on March 31, 2010, there were 1,470 listed companies on NSE. On an average, 85 per cent of their stocks are traded every day. The exchange covers 90 per cent of all-India market capitalisation.

Table 8.10 captures important indicators on the National Stock Exchange.

Trading volumes increased tremendously during the years 1994–95 to 2000–01. A major reason for this growth was the nationwide reach of the NSE. The superior technology of the NSE enabled an investor in a remote part of the country to trade safely. The liquidity in the NSE market was not limited to high-market capitalisation stocks but was found in other mid- and low-capitalisation stocks as well. Trading volumes declined in 2001–02 but again picked up in the first quarter of 2002–03. There was a strong buying interest in mid-cap technology stocks, in PSU scrips following acceleration of the disinvestment programme and in banking scrips due to their improved performance and relaxation in FDI limits. The market capitalisation of listed companies depicts a rising trend except in the year 2000–01 due to a decline in the market prices of IT stocks.

On June 4, 2007, the S&P CNX Nifty Index scaled to a peak of 4362.95 and the market capitalisation of the scrips was a record high of Rs. 39,78,381 crores on June 29, 2007. The secondary market was buoyant during 2005–06 and 2006–07 on account of earnings growth reported by Corporates, relaxation in fringe benefit tax (FBT) treating open-ended and close-ended equity or oriented schemes on par for dividend distribution tax, strong macro-economic fundamentals, raising FII limit in debt market and favourable global economic environment. The Nifty declined to 3,021 in 2008–09 on account of global economic crisis but with an improvement in global economic scenario increased to 5,249 in 2009–10.

Conclusion

The National Stock Exchange (NSE) completed 16 years of operations on June 30, 2010. The exchange is credited with technology innovation, speeding up of the process for dematerialisation, introduction of effective risk containment measures and the introduction of derivatives trading. It has spread to 364 cities using close to 3900 VSATs. Its Settlement Guarantee Fund has now swelled to almost Rs. 4,055 crore. It is a dominant stock exchange accounting for 66 per cent of the traded volume in the cash segment and 99 per cent of the traded volume in the derivatives segment.

The NSE has emerged as a technology-driven stock exchange. It has rightly positioned itself as 'the exchange with a difference'. In order to maintain its leading position among exchanges, it increases the number of users by trying to meet their growing and ever changing types of needs through innovative efforts. Its aim is to continuously upgrade technology systems and trading practices. The setting up of the NSE has changed the face of the Indian stock market. The NSE won the inaugural Wharton-Infosys Business Transformation Award in the 'organisation-wide transformation' category for Europe and the Asia-Pacific region for harnessing technology to create a world class exchange and using it as an instrument of change for the industry as a whole. The NSE was the third largest exchange in the world in 2005 in terms of the number of transactions.

THE OVER THE COUNTER EXCHANGE OF INDIA (OTCEI)

The OTCEI was promoted jointly by the ICICI, UTI, IDBI, IFCI, SBI Capital Markets Ltd, Canbank Financial Services Ltd, GIC, and LIC. It was recognised as a stock exchange under the Securities Contracts (Regulation) Act, 1956 with effect from August 23, 1989. The exchange was incorporated as a company under Section 25 of the Companies Act, 1956 on September 20, 1990, with an authorised capital of Rs. 10 crore and a paid-up capital of Rs. 5 crore.

It is based on the model of National Association of Securities Dealers Automated Quotation (NASDAQ) of USA, with modifications to suit Indian conditions. It commenced operations from October 6, 1992.

The OTCEI arose out of the need to have a second tier market in the country. It was set up to provide small and medium companies an access to the capital market for raising finance in a cost-effective manner and investors with a convenient, transparent, and efficient avenue for capital market investment.

The OTCEI was the first ringless, electronic national exchange with a screen-based trading system listing an entirely new set of companies of small size. It allowed companies with a paid-up capital as low as Rs. 30 lakh to get listed. It brought screen-based trading system in vogue for the first time. This meant that the buyer or seller could walk up to an OTCEI counter, tap on the computer screen, find quotes, and effect a purchase or sale depending on whether the prices met their targets. This was quite different from

TABLE 8.10 Important Indicators of the National Stock Exchange (Capital Market Segment)

Indicator	*1995–96*	*1996–97*	*1997– 98*	*1998–99*	*1999–2000*	*2000–01*	*2001–02*	*2002–03*	*2003–04*	*2004–05*	*2005–06*	*2006–07*	*2007–08*	*2008–09*	*2009–10*
(I) S & P CNX Nifty															
(i) Average	962.64	1,009.32	1,087.41	954.4	1,368.62	1,334.76	1,007	1,037	1,427	1,805	2,513	3,572	4,897	3,731	4,658
(ii) End of the Year	985.30	968.25	1,116.65	1,078.05	1,528.45	1,148.20	1,130	978	1,772	2,036	3,403	3,822	4,735	3,021	5,249
(II) Listed Companies	422	550	612	648	720	785	793	818	909	970	1,069	1,228	1,381	1,432	1,470
(III) Turnover Cash segment (Rs. in Crore)	67,287	2,94,504	3,70,193	4,14,474	8,39,052	13,39,511	5,13,167	6,17,984	10,99,535	11,40,071	15,69,556	19,45,285	35,51,038	27,52,023	41,38,023
(IV) Market Capitalisation (Rs. in Crore)	4,01,454	4,19,367	4,81,503	4,91,176	10,20,426	6,57,847	6,36,861	5,37,133	11,20,976	15,85,585	28,13,201	33,67,350	48,58,122	28,96,194	60,09,173
(V) Demat Securities Traded (Lakh)	–	–	–	8,542	1,53,772	3,07,222	2,77,717	3,64,049	7,13,301	7,97,684	8,44,486	8,55,456	14,98,469	14,26,354	22,15,530
(VI) Demat Turnover (Rs. Crore)	–	–	–	23,818	7,11,706	12,64,337	5,12,866	6,17,984	10,99,535	11,40,071	15,69,556	19,45,285	35,51,038	27,52,023	41,38,023

Source: www.nseindia.com

the open outcry system at the BSE. Moreover, each strip listed on the exchange had at least two market makers who continuously gave two-way quotes.

At the OTCEI, there are two ways of making a public offer: a direct offer and an indirect one. In a direct offer, a company can offer its shares directly to the public after getting it sponsored, while under an indirect offer, the company may sell the shares first to a sponsor who would offload them later.

The securities traded on the OTCEI are divided into three categories: listed, permitted and initiated companies. Initially, only those securities which were listed exclusively on the OTCEI were traded. Later, the OTCEI allowed trading in some listed companies on other stock exchanges. These are referred to as permitted securities. Units of UTI and other mutual funds are permitted to be traded on the OTCEI. Initiated debentures can be offered for trading on the OTCEI by any entity provided it holds at least one lakh debentures of a particular company and appoints an OTC member/dealer to carry out compulsory market making. The OTCEI started trading in debt instruments from May 20, 1993, with Infrastructure Leasing and Financial Services Ltd. as the compulsory market maker. It opened 25 representative offices in the major cities of the country. It has two major players—members and dealers who can perform the functions of broking, trading on their own accounts, and market making. While members can engage in sponsorship, dealers cannot. Scheduled banks, mutual funds, banking subsidiaries, financial institutions, merchant bankers, venture capital funds and non-banking finance companies other than finance and leasing companies having a minimum net worth of Rs. 2.5 crore can become members of the OTCEI.

Members are authorised to act as brokers for securities, make market in scrips, and act as sponsors to companies. A sponsor is a very important person in the OTCEI as he is responsible for activities such as appraising the company management capability, appraising the financial and technological viability of a project, valuing, holding and offering the scrip to the public, listing the scrip, and doing compulsory market making in the scrip for at least three years from the date of commencement. The sponsor has to arrange for at least one more market maker for a period of one year.

Market makers are merchant bankers willing to make a market in securities by continuously offering buy and sell quotes. They act as dealers-cum-stockists and do not charge any commission or brokerage. Their profit margin is the spread between the bid and offer prices. A voluntary market maker can be appointed for a period of six months. Market making is a unique concept of the OTCEI.

Dealers are permitted to trade in securities listed with the OTCEI on their own account or on behalf of their clients. To qualify as licensed dealers, they have to clear a nationwide test undertaken by the OTCEI.

The other player on the OTCEI is the Registrar/Custodian—a safekeeper of share certificates.

Trading Documents on the OTCEI

The trading documents on the OTCEI are counter receipts (CRs)—permanent and temporary CRs, sale confirmation slips, application acknowledgement slips, and transfer deeds.

Initially, CRs were issued instead of share certificates as a share certificate was not a mercantile document. The share certificate was kept with the registrar-cum-custodian and a CR was issued against this as a tradable document to the allottee along with the allotment advice. The CR contained details like names of the investor and the company, number of shares, name and address of the registrar, price, commission, date and time of the transaction, investor's signature, name of his bank, and signature of the issuing counter. Four copies of the CR were prepared and sent to the investor's counter, the OTCEI, the registrar, and the investor. The CR could be exchanged for a share certificate at any of the counters of the OTCEI. If the investor wanted to sell these shares on the OTCEI, he had just to surrender the permanent CR and transfer deed at the exchange and get a sale confirmation slip. Later, as the trading volumes dipped, CRs were replaced by share certificates from March 1999.

Advantages of OTCEI

The OTCEI was the first exchange in India to have an online trading-cum-depository. It became quote-driven and a transparent system of trading. It provides a liquid cash market for retail investors with a T+2 rolling settlement system and no problem of bad or short deliveries. Companies such as VIP Advanta, Sonora tiles and Brilliant Mineral Water have benefited by listing on the OTCEI. Despite the unique advantages of the system, the OTCEI got off to a poor start. Trading volumes were thin, liquidity was poor, and most of the investors were not even aware of its existence. This was the result of the absence of a nationwide network, lack of an online communication network of its own, and the fact that in the initial stages it restricted its business to Mumbai.

Steps to Improve Turnover on the OTCEI

During 1993–94, the OTCEI entered a memorandum of understanding (MOU) with the NASDAQ for enhanced cooperation between the two exchanges in the area of market technology, regulations, and business development.

As part of its expansion programme, the OTCEI invited applications in January 1995 for dealership in 54 cities, in 19 states across the country, to achieve nationwide coverage. As a result, the OTCEI could expand its dealer network from just five cities in 1995–96 to 23 cities during 1996–97. It has 60 national members and 145 dealers.

In order to increase the popularity of the OTCEI, the SEBI relaxed norms for listing on the OTCEI during March 1995. The minimum post-issue capital to be offered to the public to enable listing was lowered from 40 per cent to 25 per cent. The SEBI also permitted finance and leasing companies to get listed on the OTCEI. With the exposure of price rigging scams of finance companies, the OTCEI modified its guidelines in April 1995, making the listing of finance companies more stringent. Companies covered under the FERA/MRTP Act were permitted to be listed on the OTCEI. Hence, medium-sized companies belonging to big industrial groups could join the OTCEI.

In 1996–97, the OTCEI introduced trading of PSU bonds and launched a new segment called the listed mutual fund segment.

Despite relaxing the norms for the listing of securities, the turnover at the exchange steadily declined from 1994–95. Hence, the SEBI appointed two committees—Malegam and Dave Committees—to review the OTCEI's working and suggest measures to improve its functioning. The recommendations of these committees suggested relaxing the strict norms with which the OTCEI had begun operating. During 1997–98, the OTCEI relaunched trading in the permitted segment by moving over to a weekly settlement cycle in line with the recommendations of the Dave Committee. The relaunched permitted segment witnessed increased activity with a coverage of 15 cities.

The OTCEI revamped its trading activity by switching from the system of CRs to share certificates and dematerialisation, with effect from March 1, 1999. Under the CR system, it was difficult to match the buyer and seller receipts which resulted in delays. All CRs in circulation were converted to share certificates or dematerialised.

OTCEI, on November 25, 1999, launched a wholly owned subsidiary, OTCEI Securities Limited (OSL) to provide multiple benefits and greater business opportunities to its members. OSL was granted the certificate of commencement of business on January 14, 2000. When the volumes on the OTCEI were plummeting, to provide its members an access to the trading segment of the NSE at a considerably low cost, OSL became a member of the NSE. The members and dealers of the OTCEI are eligible to register themselves as sub-brokers of OSL. This increased business opportunities for members and reduced the brokerage charges payable by investors.

Telecommunications (DOT) to upgrade their I-Net communication, resulting in connectivity problems.

The share of the OTCEI in total (all-India) turnover was hardly 0.15 per cent in 1999–2000. A decade after its creation, it has failed to gain in terms of both turnover and listing.

Conclusion

The Washington-based NASDAQ, on the lines of which the OTCEI was formed, is the most vibrant OTC market in the world, mainly for small, growth-oriented companies. Some of the most innovative companies in the USA like Microsoft Corporation, Intel Corporation, and Oracle Corporation are listed on the NASDAQ. More than 50 per cent of the total shares traded in the USA are through the NASDAQ where trading is carried on by dealers or market makers.

Even though the OTCEI is based on the model of NASDAQ, it has been languishing right from the beginning. Inspite of the prevalence of exclusive concepts like market making, rolling settlement, depository based trading, sponsorship-based listing of companies and connectivity of operations simultaneously in 42 cities, the exchange has failed to take off. The main reason that can be attributed for its poor performance is the failure to create a unique impression in the minds of investors, the majority of whom are hardly aware of its existence and its mode of operations. It is perceived as a kindergarten exchange. Low investor interest has killed it. Hence, it should either be closed or merged with other stock exchanges.

THE INTER-CONNECTED STOCK EXCHANGE OF INDIA LTD

The Indian stock market has undergone a sea change with the opening up of the economy and economic reforms. With competition swaying the entire market, stock exchanges have been no exception.

The national reach of the BSE and the NSE and the cutthroat competition between them, threatened the very existence of the regional stock exchanges (RSEs). The volume of business on the RSEs, which accounted for 9.2 per cent of the total turnover in 1995–96, plummeted to 3.5 per cent in 1998–99. Trading at stock exchanges in Guwahati, Magadh, Indore, Mangalore, and Rajkot came to a halt even though trading at all these stock exchanges too had been automated. The survival of these RSEs, which once had a secure position, had now become a cause for concern. So these RSEs formed the Federation of Indian Stock Exchanges (FISE) in early 1996. The eroding market share, dwindling volumes, and declining profitability of members at the RSEs left the FISE with two options: join hands with the BOLT expansion plan or maintain status quo and wait until the capital market revived.

It was impossible for most of the RSEs to become members of either the BSE or the NSE. Hence, to improve market efficiency and facilitate trading among the RSEs, the FISE proposed an Inter-Connected Market System (ICMS). It sought technical assistance from the US Agency for International Development—Financial Institutions Reforms and Expansion (USAID-FIRE) Project, administered by Price Waterhouse. With its assistance, the Interconnected Stock Exchange of India (ISE) was set up as the twenty-third stock exchange in the country.

The ISE, promoted by nine RSEs, opened a new national segment of trade to all members of the exchanges while retaining the regional segments of trading at these exchanges. The ISE was granted recognition under the Securities Contracts (Regulation) Act, 1956 by the SEBI in November 1998. The ISE commenced its trading operations on February 26, 1999. The 15 participating exchanges of the ISE have about 4,500 members and about 3,500 securities listed on them. The ISE is the stock exchange of stock exchanges, members of the participating stock exchanges being only traders on the ISE.

The ISE has provided a highly automated trading system open to all the registered traders of the participating exchanges with direct access to its national level trading platform on an equal footing regardless of the location of the participating exchange and of the status of the exchange in terms of turnover, financial strength, and so on. It has not only a professionally qualified managing director and a full-time director, but also a public representative as the chairman of the exchange.

The ISE has a uniform trading and settlement cycle and a settlement guarantee fund. It is a centralised national level market for trading in securities, with decentralised operations as the participating regional stock exchanges continue to be centres for trading, clearing, and settlement as also for redressal of grievances of investors and others.

The ISE contributed a meagre turnover of Rs. 274 crore in 1999–2000, Rs. 237 crore during 2000–01, Rs. 70 crore in 2001–02, Rs. 53 crore in 2002–03 and 0.05 crore in 2004–05. This stock exchange has also failed to make its presence felt in the Indian stock market. The ISE failed to take-off as investors preferred buying scrips from the BSE or the NSE rather than from the ISE. The ISE is now a member of both the NSE and the BSE.

The ISE got demutualised in compliance of Inter-connected Stock Exchange of India Ltd (Corporatisation and Demutualisation) Scheme, 2005 and allotted its equity capital to public. The ISE is in process of reviving its trading platform.

REGIONAL STOCK EXCHANGES

One significant aspect of the Indian capital market is the existence of as many as 19 regional stock exchanges—the highest in the world. RSEs existed in developed markets also but ultimately, they had to shut down or merge with the principal exchanges. Over 20 stock exchanges existed in the UK until 1973. By 1965, the regional exchanges joined together to form the Federation of Stock Exchanges and amalgamated to become a fully unified stock exchange in 1973.

Australia had six exchanges which got together and established the Australia Associated Stock Exchanges (AASE), a company limited by its guarantee, to represent them at the national level. In 1987, the Australian Stock Exchange (ASX) commenced operation, with the six capital city exchanges as its wholly owned subsidiaries. In Italy, all securities listed on the Milan Stock Exchange and nine other RSEs were transferred to a national computerised order-driven trading system under the Italian Stock Exchange in 1991. Today, the Italian stock market is a computerised system which has no specific location.

In India, the area of operation and jurisdiction of the regional stock exchanges were specified. The emergence of a number of regional stock exchanges was the result of India's geographical and telecommunications limitations.

These regional stock exchanges provided investors an access to big brokers in Mumbai. They also served as a link between the local companies and local investors. Reputed local companies could get themselves listed on these exchanges and the regional stock exchanges promoted trading in these local scrips. This led to a competition among issuers and they listed their securities on as many exchanges as possible to attract

Box 8.6 *Dabba* Trading

An illegal form of trading known as *dabba* trading emerged in the markets. The SEBI banned *badla* trading in July 2001 and introduced four new derivative products—stock options, stock futures, index options and index futures—which are basically hedging mechanism. Since it had not given permission for derivatives trading to some of the exchanges, many brokers and traders indulged in *dabba* trading.

A *dabba* is a parallel exchange (exchange-like institution) in which a *dabba* broker invites bids from parties interested to trade in some scrips at a benchmark price. This trade is settled on the date mutually agreed upon.

In *dabba* trading, single trade transactions without paying any upfront margins, are entered into usually on Monday and squared off on Friday of the same week. The difference between the contracted price and the end-of-the-week price is settled between the two parties. One key broker known as the *dabba* trader acts as the exchange and all trades are routed through him. High networth speculators and bonafide members of major stock exchanges trade with *dabba* operators by using their black money, as most of the deals are unofficial. *Dabba* trading flourished as it allowed speculators to take a longer view on a stock.

Mumbai, Kolkata and Gujarat were the main centres of *dabba* and the daily *dabba* turnover ranged between Rs. 5000 crore and Rs. 6000 crore.

SEBI unearthed the scam of *dabba* trading in July 2003 and carried out nationwide raids on *dabba* traders.

investors from all over the country. Moreover, each regional stock exchange followed its own practice and procedures in respect of listing and trading of securities, clearing and settlement of transactions, and risk containment measures. This resulted in a waste of the resources of the issuers for complying with the listing requirement of a number of exchanges simultaneously. Again, competition amongst exchanges increased to attract as many issuers as possible. The listing fees constitutes a major source of income and to maintain these fees, listing standards were diluted. The regional stock exchanges did well till the beginning of the 1990s.

In the 1990s, new stock exchanges—the Over the Counter Exchange of India, the National Stock Exchange, and the Inter-Connected Stock Exchange of India—were set up and permitted nationwide trading. Subsequently, all stock exchanges were permitted to expand across the nation. Inspite of this expansion, the turnover did not increase because with the spread of online trading, traders in remote parts of the country could deal directly with the NSE or the BSE. Hence, there was no need to go through regional exchanges. Besides this, members of these regional stock exchanges involved themselves in speculation instead of reaching out to new investors and catering to local companies in an efficient manner. With turnovers plunging, most RSEs acquired membership of the BSE or the NSE and became their stockbrokers.

- Both BSE and NSE together accounted for 99.99% of turnover during 2009–10

Many large companies decided to delist on all stock exchanges except the BSE and the NSE. Since listing fees constitutes the major source of income, the question of viability of these stock exchanges arose. Apart from listing fees, another source of income for stock exchanges is interest and rent. These stock exchanges receive custodial deposits for risk management and earn interest on them. Despite increase in the interest income, most of the stock exchanges have incurred losses.

The daily turnover at the Delhi Stock Exchange plunged to Rs. 100 crore in 2002. Stock exchanges such as Guwahati, Cochin, Jaipur, Bhubaneshwar, Mangalore, Madhya Pradesh, and Magadh have an almost negligible turnover. There is insignificant or no trading at all in these stock exchanges. The percentage of turnover on regional stock exchanges was around 1.1 per cent in 2003–04.

In 2001–02, the NSE commanded around 80% of the turnover, while the BSE accounted for 16% only. The regional stock exchanges together accounted for the remaining 4% of the total turnover.

The share of the RSEs came down to a meagre 1% in 2004–05, 0.19% in 2005–06 and 0.01% in 2008–09. The Mangalore Stock Exchange was not given recognition by the SEBI in 2004–05. The Magadh, Hyderbad and Saurashta-Kutch ((SKSE) stock exchanges have been derecognised by the SEBI. After the derecognition, the stock exchange might continue as a corporate entity but cannot use the expression 'stock exchange' or any variant of this in its name or its subsidiary's name.

At present, there are only 19 stock exchanges in India. There was hardly any transaction in the 13 out of the 15 regional stock exchanges during 2008–09 (Table 8.11). With a significant decline in the trading at the RSEs, they set up subsidiaries; and these subsidiaries acquired access to national exchanges at concessional rates. Some of the subsidiaries are profit-making entities providing securities trading, depository participant services and distribution of mutual funds.

The RSEs were needed when there was no electronic trading. With the NSE and the BSE offering nationwide, screen-based trading, the question has arisen whether the RSEs are needed at all.

Looking at this scenario, it seems that, in the long run, there will be only two stock exchanges in India: the NSE and the BSE. The lead that the NSE has gained over the BSE will increase in the coming years as the NSE is perceived to be more investor-friendly than the BSE by most investors (Figure 8.2). The RSEs

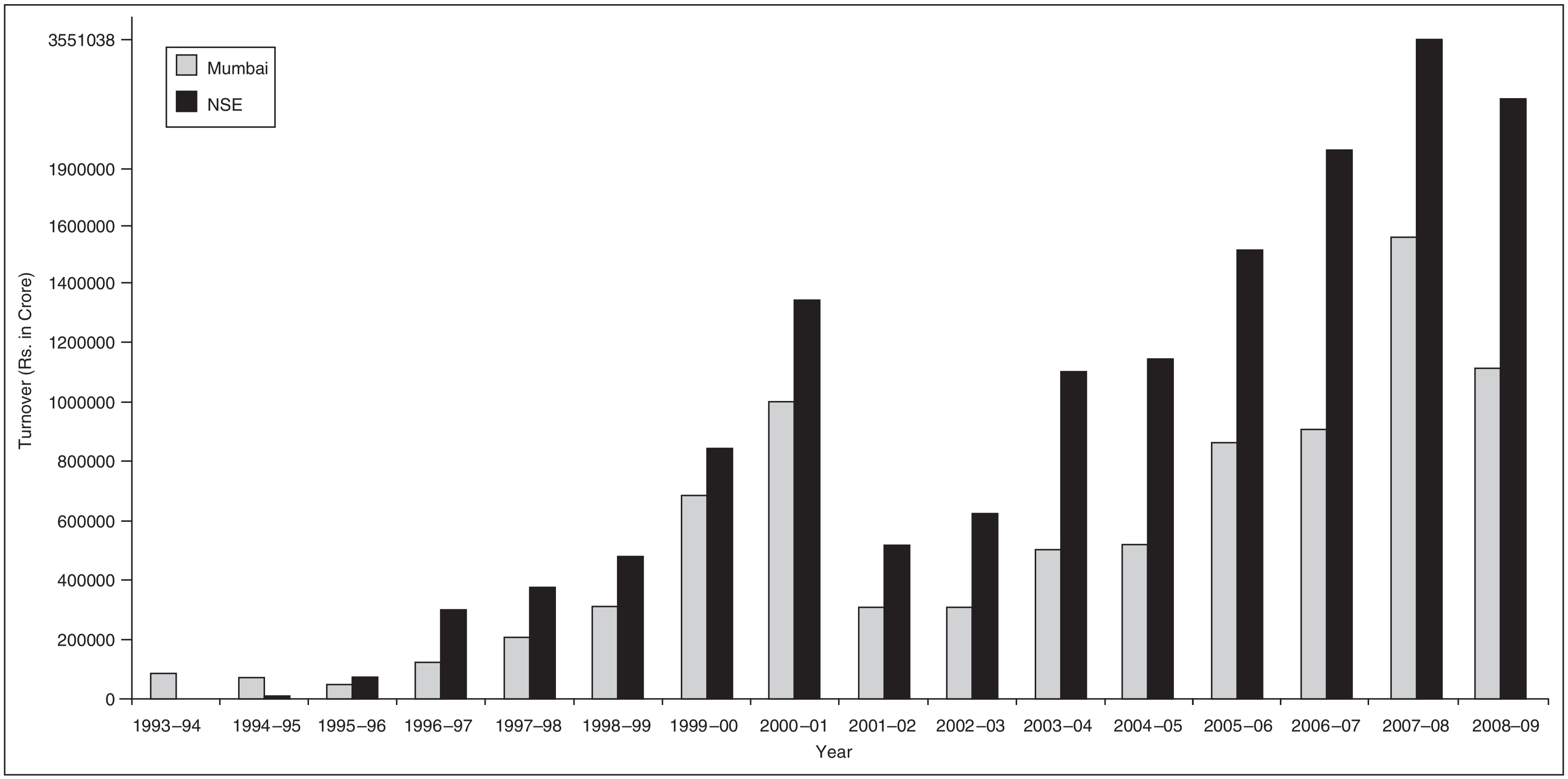


Figure 8.2 Volume of Turnover on BSE and NSE—A Comparison

TABLE 8.11 Growth and Distributions of Turnover on Stock Exchanges

Stock Exchanges	*2005–06*	*2006–07*	*2007–08*	*2008–09*	*2009–10*
Ahmedabad	0	0	0	0	0
Bangalore	0	0	0	0	0
Bhubaneshwar	0	0	0	0	0
BSE	8,16,074	9,56,186	15,78,854	11,00,074	13,78,809
Calcutta	2,800	694	446	393	N.A.
Cochin	0	0	0	0	0
Coimbatore	0	0	0	0	0
Delhi	0	0	0	0	0
Gauhati	0	0	0	0	0
Hyderabad	89	92	0	0	0
ISE	0	0	0	0	0
Jaipur	0	0	0	0	0
Ludhiana	0	0	0	0	0
Madhya Pradesh	0	0	0	0	0
Madras	5	2	0	0	0
Magadh (Patna)	91	0	0	0	0
NSE	15,69,558	19,45,287	35,51,038	27,52,023	41,38,023
OTCEI	0.01	0	0	0	0
Pune	0	0	0	0	0
Saurashtra-Kutch (SKSE)	0	0	0	0	0
Uttar Pradesh	1,486	799	475	89	25
Vadodara	0	0	0	0	0

Note: NA: Not Available.
The Magadh, Mangalore, Hyderabad and Saurashtra-Kutch (SKSE) stock exchanges have been derecognised by the SEBI.
Source: SEBI Bulletin, May 2010.

will be forced to down their shutters as low turnover volumes will result in huge revenue deficits. Moreover, most of the stock exchanges do not have the money to upgrade their IT infrastructure, a prerequisite to survive and compete in the future.

With a view to reviving the regional stock exchanges, the SEBI allowed the outside investors to invest in them. It allowed single-entity holding up to 15% in the stock exchanges. The government has allowed foreign direct and portfolio investors to buy into the equity of stock exchanges with a limit of 49%. However, despite the outside investors' investment, these stock exchanges have not yet managed to restart operations.

INDOnext

- INDOnext is a separate national-level trading platform to provide small and medium enterprises easy and an efficient access to capital market

Looking to the falling trading volumes and declining profitability of the RSEs, the SEBI issued a directive to them to consolidate to form a separate exchange or merge with either the BSE or the NSE. In response to this directive, the Federation of Indian Stock Exchanges (FISE), which is an association of 18 RSEs are members, put forth a proposal to the SEBI on June 5, 2003 to form an entity called 'INDOnext.' In March 2004, the BSE and the FISE put forth a joint proposal to form a common trading platform to provide small and medium enterprises (SMEs) easy and an efficient access to capital market.

The BSE launched this enterprise market for SMEs on January 7, 2005.

INDOnext is a separate national-level trading platform modelled on the lines of Euronext in Europe, the merged entity of the stock exchanges in Paris, Amsterdam, Brussels and Lisbon.

INDOnext will help in generating liquidity in illiquid scrips and thereby boost capital formation of the SME sector. The regional stock exchanges will be in a position to maintain their identity even after the formation of INDOnext.

Box 8.7 Euronext

Euronext is the first pan-European multinational exchange exclusively for small-cap companies, created by merging the Paris, Amsterdam and Brussels Exchanges in September 2000. The Lisbon Stock Exchange also joined later.

In Euronext, while companies are listed on their current exchanges, the shares are traded on a single integrated platform through the electronic system. Thus, trading is regulated by a single rulebook and listing requirements are harmonised. The trading has been designed to offer visible and correct price formation and equality in trade to allow the investors to benefit from rapid order execution to offer centralised liquidity and to give companies the possibility of being continuously traded. Its services ranged from initial public offerings to trading facilities for cash instruments and derivatives.

This cross-border merger of bourses has added up the equity trading volumes of over USD 1.5 trillion annually, more than the German Stock Exchange or the London Stock Exchange.

Source: Capital Market, December 8–21, 2003.

Out of the 6,000 plus listed companies on the BSE, hardly 10–15 per cent of these are traded. Liquidity and volumes of majority of the B1 and B2 companies are low. With INDOnext, trading interest in these companies will increase, thereby, benefitting the shareholders and promoters of these companies. Moreover, INDOnext will allow BSE trading members to trade in regional exchange-listed scrips and vice versa. The scrips admitted on INDOnext will cease trading on their respective exchanges to avoid duplication of trading.

INDOnext consolidates the order books of all exchanges by creating a nationwide electronic order book. The securities on this platform are traded through the single-order book on BSE's BOLT. Scrips of only small and mid-cap companies with less than Rs. 20 crore capital listed in the B1 and B2 segments of BSE and those listed on regional exchanges, but not on the BSE are traded on this platform. Some 4,200 companies trade on INDOnext with a uniform trading cycle.

Members are allowed to issue contract notes in the name of the regional exchange, trades are settled through respective clearing houses, and the RSEs, along with Inter-Connected Stock Exchange of India (ISE), handle the functions of listing, investor grievances redressal, arbitration and investor education. There is a separate governing board with representatives of regional exchanges and the BSE which decides on the matters relating to trading and ensures smooth functioning of the platform.

SEBI laid down a framework in November 2008, to promote several trading platforms or exchanges for trading of shares of small and medium enterprises (SMEs).

I Eligibility criteria for setting up of new stock exchange/platform of an existing stock exchange for the SME sector

Dedicated stock exchanges for the Small and Medium Enterprises (SME) sector may be set up after obtaining due recognition under the Securities Contracts (Regulation) Act—1956 (SCRA).

The eligibility criteria for the same are as under:

1. The proposed stock exchange should be set up as a corporatised entity since inception. It shall convert itself into a demutualised entity and comply with the Securities Contracts (Regulation) (Manner of Increasing and Maintaining Public Shareholding in Recognised Stock Exchanges) Regulations, 2006 within a specified period (1–2 years) from the date of commencement of trading.
2. The exchange shall have a balance sheet networth of atleast Rs. 100 crores.
3. The exchange shall have nation wide trading terminals and an online screen-based trading system, which also has a suitable business continuity plan including a disaster recovery site.
4. The exchange shall have an online surveillance capability which monitors positions, prices and volumes in real time so as to check market manipulation.
5. The exchange shall have adequate arbitration and investor grievances redressal mechanism operative from all the four regions of the country.
6. The exchange shall have adequate inspection capability.
7. The risk management system and surveillance system shall be the same as that of the cash market.
8. The trading members of the SME exchange shall register themselves with the exchange and SEBI.
9. Information about trades, quantities, and quotes shall be disseminated by the exchange in real time to at least two information vending networks which are accessible to investors in the country.

The above eligibility criteria shall also be applicable, wherever appropriate, to existing exchanges desirous of setting up a platform for the SME sector.

II Trading, clearing and settlement

1. The minimum trading lot shall be Rs. 1 lakh.
2. Trading system may either be order driven or quote driven. The settlement may either be on rolling, trade for trade or call auction basis.
3. The clearing function of the exchange may be performed by a clearing corporation/clearing house.

III Relaxations to the issuers whose securities are listed on SME exchange

1. Companies listed on the SME exchange may send to their shareholders a statement containing the salient features of all documents as prescribed in sub clause (iv) of clause (b) of proviso to section 219 of the Companies Act, 1956, instead of sending a full Annual Report.
2. Periodical financial results, may be submitted on 'half-yearly basis', instead of 'quarterly basis' and
3. SMEs need not publish their financial results, they can make it available on their website.

MEASURES TO BOOST LIQUIDITY IN THE SECONDARY MARKET

A number of measures were taken by the SEBI to increase liquidity in the stock market. The stock market was opened to foreign institutional investors (FIIs) for investment. The depository system, stock-lending system, buy-back of shares, market making system, margin trading of shares, and rolling settlement were introduced to increase liquidity in the stock market. A brief profile of each of these measures is presented below.

Investment by Foreign Institutional Investors in the Indian Stock Market

An important feature of the 1990s was the participation of FIIs in the stock market. FIIs were allowed to participate in the Indian capital market in September 1992. Earlier, FIIs could invest in Indian securities only through the purchase of GDR, foreign currency convertible bonds (FCCBs), and foreign currency bonds issued by Indian issuers.

The SEBI (Foreign Institutional Investors) Regulations, 1995, define foreign institutional investor as an institution established or incorporated outside India, which proposes to make investment in India in securities. They are eligible to purchase shares and convertible debentures issued by Indian companies under the Portfolio Investment Scheme (PIS).

FIIs commenced their operations in the Indian stock markets with a token investment of Rs. 0.6 crore in January 1993. They have become active investors since August 1993. FIIs such as mutual funds, pension funds, and country funds are operating in the Indian capital market.

Routes for Investment in Indian Stock Markets

FIIs in India

- Direct route
- Participatory notes
- FII sub-account

There are three routes through which FIIs can invest in the Indian stock market. The first is the direct route, the second is participatory notes and the third is through FII sub-accounts. In the direct route, the foreign entity applies to the SEBI for registration as FII. Sub-account means any person resident outside India, on whose behalf investments are proposed to be made in India by a foreign institutional investor and who is registered as a sub-account under SEBI (FII) regulations. The names of the sub-accounts on whose behalf the Foreign Institutional Investor is investing are to be disclosed to the SEBI by the Foreign Institutional Investor. An institution or fund or portfolio established or incorporated outside India, a broad based fund or proprietary fundor a foreign corporate or individual can register as sub-accounts. The government allowed listed foreign companies with an asset base of not less than $2 billion and a proven track record of profitability and foreign individuals with a minimum net worth of $50 million to register as sub accounts and trade in local stocks.

FIIs have to clearly segregate their own funds and that of their sub-accounts. The SEBI simplified the process of approval of sub-accounts of registered FIIs. FIIs can setup sub-accounts in Mauritius to enter India. While sub-accounts have certain administrative costs, it is less expensive than buying a participatory note. India has a double taxation avoidance agreement (DTAA) with Mauritius, which makes it an attractive platform for flow of investment to India. Because of the tax avoidance treaty, most FIIs are registered in Mauritius and declare their income as capital gains and pay no tax. SEBI has also made it mandatory for FIIs to disclose all information relating to sub-accounts through joint undertakings. The sub-account applicant and the FII through whom the application for registration is made, have to submit joint undertakings. These include a written submission that the sub-account is not a non-resident Indian (NRI) or an overseas corporate body and the source of income of the applicant is from known and legitimate means. The total number of FIIs and sub-accounts registered with SEBI as on September 18, 2008 was 1,506 and 4,576 respectively.

Participatory notes (P-notes) are overseas derivative instruments issued by SEBI-registered FII to foreign investors for trading in the Indian stock market. These derivative instruments derive value from underlying securities such as equity and equity-linked instruments. These foreign investors do not get registered with SEBI out of choice or regulatory issues. As they are not registered with the SEBI, the identity of the actual investor and source of funds remain disguised. These notes are generally issued by associates of India-based foreign brokerage houses. Morgan Stanley, Credit Lyonnais, Citigroup and Goldman Sachs are the biggest issuers of participatory notes. The SEBI issued some directives to monitor investment through participatory notes. It is mandatory for FIIs to fully disclose various details of offshore derivatives instruments such as participatory notes, equity linked notes and others With effect from February 2004, participatory notes against underlying Indian securities can be issued only to regulated entities and further transfers, if any, of these instruments can also be made to other regulated entities only subject to compliance with 'know your client requirements.' This means that FIIs can not issue participatory notes to unregulated entities such as Overseas Corporate Bodies (OCBs) and non-resident Indians (NRIs). It is mandatory for FIIs to report the issuance/renewal/cancellation/redemption of such instruments.

As per Regulation 6 of the SEBI (Foreign Institutional Investors) Regulations, 1995, FIIs are required to fulfil the following conditions to qualify for grant of registration.

- Applicant should have track record, professional competence, financial soundness, experience, general reputation of fairness and integrity.
- The applicant should be regulated by an appropriate foreign regulatory authority in the same capacity/category where registration is sought from the SEBI.
- The applicant is required to have the permission under the provisions of the Foreign Exchange Management Act, 1999 from the RBI.
- The applicant must be legally permitted to invest in securities outside the country of its incorporation/establishment.
- The applicant must be a 'fit and proper' person.
- The applicant has to appoint a local custodian and enter into an agreement with the custodian. Besides, it also has to appoint a designated bank to route its transactions. Pension funds, mutual funds, investment trusts, insurance or reinsurance companies, endowment funds, university funds, foundations or charitable trusts or charitable societies, who propose to invest on their own behalf, and asset management companies, institutional portfolio managers, trustees, power of attorney holders and banks who propose to invest their proprietary funds on behalf of 'broad-based' funds or on behalf of foreign corporates and individuals can register as FIIs. A broad-based fund is a fund which has atleast 20 shareholders and no single investor holds more than 49 per cent of shares and units of the fund. However, authorised recipients of foreign contributions such as charitable trusts, societies and certain companies are banned to invest in the Stock market.

To facilitate the operations of the FIIs, the SEBI granted permission to foreign brokers to extend assistance to all registered FIIs. The government now allows foreign financial service institutions to set up joint ventures in stock broking, asset management, merchant banking, and other financial services along with Indian partners. Foreign participation in financial services requires the approval of the Foreign Investment Promotion Board (FIPB).

FIIs, which were initially allowed to invest only in the equity shares, were later allowed to invest in the debt market, including dated government securities and treasury bills. The SEBI amended the SEBI FII Regulations, 1995, permitting FIIs to invest in unlisted companies through the 100 per cent debt route and to tender the securities directly in response to an offer made in terms of the SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 1997. The SEBI simplified the process of approval of sub-accounts of registered FIIs. The SEBI permitted FIIs, from June 1998, to buy and sell derivative contracts which are traded on stock exchanges.

Box 8.8 Hedge Funds

Hedge funds are allowed to invest in the domestic market by opening a sub-account with FIIs. A hedge fund is essentially an unregulated mutual fund, a pool of capital often organised as a private partnership of 25–50 investors. It is usually located in tax havens and is known for its secrecy. There are around 6,000 to 7,000 hedge funds operating in the USA and managing assets worth USD65–USD 750 billion.

A Foreign Institutional Investor can invest only in the following:

(a) Securities in the primary and secondary markets including shares, debentures and warrants of companies, unlisted, listed or to be listed on a recognised stock exchange in India; (b) units of schemes floated by domestic mutual funds including Unit Trust of India, whether listed on a recognised stock exchange or not (c) dated Government Securities (d) derivatives traded on a recognised stock exchange, (e) commercial paper and (f) Security receipts. No foreign institutional investor shall invest in security receipts on behalf of its sub account.

FIIs are not permitted to invest in equity shares issued by an Asset Reconstruction Company (ARC). They are also not allowed to invest in any company which is engaged or proposes to engage in the following activities:

1. Business of chit fund, or
2. Nidhi Company, or
3. Agricultural or plantation activities or
4. Real estate business, or construction of farm houses excluding development of townships, construction of residential/commercial premises, roads or bridges or
5. Trading in Transferable Development Rights (TDRs).

Investment Limits FIIs have been permitted to purchase equity shares and equity related instruments (including fully convertible debentures, convertible portion of partially convertible debentures and tradable warrants) of an Indian company through offer/private placement, subject to the ceilings prescribed as follows:

- The purchase of equity shares of each company by a Foreign Institutional Investor investing on his own account shall not exceed ten per cent of the total issued capital of that company.
- In respect of a Foreign Institutional Investor investing in equity shares of a company on behalf of his sub-accounts, the investment on behalf of each such sub-account shall not exceed ten per cent of the total issued capital of that company, provided that in case of foreign corporates or individuals, each of such sub-account shall not invest more than 5 per cent of the total issued capital of the company in which such investment is made.
- All FIIs/sub-accounts put together—24/49% of the paid-up capital of the Indian company or the sectoral caps as prescribed by the Government of India/Reserve Bank of India. Indian company is permitted to issue such shares, provided that:
    a. in the case of public offer, the price of shares to be issued is not less than the price at which the shares are issued to residents; and
    b. in the case of issue by a private placement, the price is not less than the price arrived at in terms of SEBI guidelines or the guidelines issued by the erstwhile Controller of Capital Issues, as applicable. Purchases can also be made of PCDs/FCDs/Right Renunciations/Warrants/Units of Domestic Mutual Fund Schemes.

This limit of 24/49% can be increased to the sectoral cap/statutory limit, as applicable to the Indian company concerned, by passing a resolution of its Board of Directors, followed by a special resolution to that effect by its General Body.

The investment ceiling for FII debt is determined by the government. The finance ministry raised the limit of FII investment in Government Securities to US$5.0 billion in May 2008, while their exposure in Corporate Bonds was raised to US$15 billion in March 2009. Of the US$15 billion in the corporate bonds, US$8 billion shall be allocated to the FIIs/sub-accounts in an open-bidding platform. The remaining limit for investment in the corporate debt shall be allocated among the FIIs/sub-accounts on a 'first-come first-serve' basis, subject to a ceiling of Rs. 249 crores, per registered entity. No single entity shall be allocated more than Rs. 300 crores of the government debt investment.

The SEBI introduced an auction based methodology where the registered FIIs/sub-accounts could bid through their trading members for getting the debt limits. The features of this methodology are:

- The allocation is done on an open screen based bidding platform wherein bidders pay a fee for taking
- the limits.
- The allocation is on a price time priority, where the highest bidder would take away the given limit subject to a minimum of Rs. 250 crore and a maximum of Rs.10,000 crore.
- The successful bidders pay a minimum of Rs.1,000 or the bid premium, which ever is higher.
- The premium amount collected through this mechanism is paid to the Consolidated Fund of India.
- 45 days period is provided to the entities for utilisation of limits under this allocation method.

Further to accommodate the FIIs/subaccounts who require smaller debt limit (upto Rs. 249 crore), the first-come-first serve methodology is being continued.

FII regulations have also been amended to allow FIIs to participate in the delisting offers. As per the amendment, FIIs may directly sell the securities in response to an offer made by any promoter or acquire in accordance with the SEBI (Delisting of Securities) Guidelines, 2003 and directly participate in bid for, or acquisition of securities, in response to an offer for disinvestment of shares made by the central government or any state government. Such transactions can be made without routing them through a stock broker. A FII or sub-account are permitted to short sell and borrow or lend securities through an approved intermediary in accordance with the stock lending and borrowing (SLB) scheme. Borrowing of equity shares by FIIs shall only be for the purpose of delivery into short sales.

The result of all these permissions and relaxations was that the FII investment of US$827 million in December 1993 gradually rose to US$89,333 million till March 2010—a 27% of foreign exchange reserves at US$251,985 million and over 8% of the total market capitalisation of Rs. 30 lakh crores of the BSE. Almost 50–60% of the deliveries are accounted for by FIIs.

FIIs and Their Impact on the Indian Stock Market

Role of FIIs in the Indian Stock Market

- Trendsetters
- Market movers
- Promoters of new technology and trading

It is the influence of the FIIs which changed the face of the Indian stock market. Screen-based trading and depository are realities today largely because of FIIs. Equity research was something unheard of in the Indian market a decade ago. It was FIIs who eased the pressure on the rupee from the balance of payments' position and lowered the cost of capital to Indian business. It is due to FIIs that a concept like corporate governance is being increasingly adopted by Indian companies; this is benefiting domestic investors also. FIIs are the trendsetters in any market. They were the first ones to identify the potential of the Indian technology stocks. When the rest of the investors invested in these scrips, they exited the scrips and booked the profits. Before the arrival of FIIs, the activity in stocks used to be evenly distributed, with a little difference between the volumes in specified and cash groups. However, since FIIs concentrate on the top 200 companies against the 6,000 listed companies on the BSE, stock-trading activity has concentrated in these liquid scrips, making the less-liquid scrips totally illiquid. Thus, FIIs have become the driving force behind the movements of stock indices in the Indian stock markets.

Looking to the active participation of FIIs in the Indian stock markets, many broking firms converted into corporate entities. This corporatisation of brokerage houses resulted in an increased transparency of broking firms and reduction of broking charges, which, in turn, added more depth and width into the bourses.

Rolling settlement was introduced at the insistence of FIIs, as they were uncomfortable with the *badla* system. The major beneficiaries of the rolling-settlement system are FIIs, as short-settlement cycles offer them a quick exit from the market.

With their massive financial muscle, FIIs have almost replaced the conventional market movers of the Indian bourses. Today, financial institutions and mutual funds including UTI can do little to help the stock markets at a time of crisis. Even UTI, which used to be a counter force for FIIs, has ceased to play that role in the Indian stock markets.

FII inflows create a bull run which encourages participation of small investors. FIIs caused the bull run of 2003 which enabled the government to carry out its disinvestment programme.

Trends in FII Investment

The total number of FIIs and sub-accounts registered with the SEBI as on May 31, 2010 were 1,713 and 5,378, respectively. Table 8.12 shows the net investments by FIIs in the Indian stock markets.

There was a substantial increase in the FII investment during the years 1995–96 and 1996–97. However, the FII investment declined in the year 1997–98 due to the selling pressure in the later part of the year, following the South-east Asian Crisis. Brief spells of net outflows occurred as a result of the Pokhran nuclear bomb blast and political instability, but they were made up. The overall investment during 1997–98 remained positive, though it declined in percentage terms (–20.6%). The net investment by FIIs turned negative for the first time during 1998–99 due to the imposition of economic sanctions and downgrading by international rating agencies. This negative investment affected the share prices of Indian businesses. FIIs turned buoyant in the subsequent years—1999–00 and 2000–01, and invested heavily in new economy scrips. A large number of FIIs arrived with 'emerging market' funds in 2000–01 wherein the FII net inflow touched a high of Rs. 12,189 crores in 2000–01. FIIs were permitted to trade in the derivatives market in February 2002.

The net FII inflow touched a record Rs. 30,893 crores in 2003 and Rs. 37,183 crores in 2004, with most of the investment in promising mid-cap stocks. The third wave which came in 2003 brought in new FIIs such as hedge funds, university funds and developed market funds to encash India's growth story.

TABLE 8.12 Trends in FII Investments

Year	Gross Purchases (Rs. Crore)	Gross Sales (Rs. Crore)	Net Investments (Purchase – Sales) (Rs. Crore)	Net Investments (US$ mn)
1992–93	17	4	13	1,634
1993–94	5,593	466	5,126	1,528
1994–95	7,631	2,835	4,796	2,036
1995–96	9,694	2,752	6,942	2,432
1996–97	15,554	6,979	8,575	1,650
1997–98	18,695	12,737	5,957	386
1998–99	16,115	17,699	–1,584	2,339
1999–2000	56,856	46,734	10,122	2,159
2000–01	74,051	64,116	9,934	1,846
2001–02	49,920	41,165	8,755	562
2002–03	47,061	44,373	2,689	9,950
2003–04	1,44,858	99,094	45,767	9,332
2004–05	2,16,953	1,71,072	45,881	
2005–06	3,46,978	3,05,512	41,467	
2006–07	5,20,508	4,89,667	30,840	6,708
2007–08	9,48,020	8,81,842	66,179	16,040
2008–09	6,14,579	6,60,389	–45,811	–9,837
2009–10	8,46,437	7,07,779	1,42,658	30,252
Total	**39,39,519**	**35,55,215**	**3,88,304**	**89,333**

Source: RBI, *Annual Report,* various issues.

FII investments in India grew by 1,602% in 2003–04. Moreover, an increasing trend in the growth rate was witnessed since June 2004. In November 2004 alone, FII investments crossed the US$1-billion mark. This trend revealed a growing global interest in the Indian stocks. A stream of good public issues, strong economy compared to other emerging markets, attractive valuations of well-managed companies and the resilience of the domestic economy even in times of rough global economic and financial cycle, contributed to the huge inflows. Moreover, introduction of the STT which removed the tax-related ambiguities like the double-taxation treaty with Mauritius that had existed earlier and abolition of long-term, capital-gain tax which lowered the cost of equity for FIIs made the Indian stock market more attractive.

FIIs pumped in US$16bn in the equity market during 2007–08 which was a historic high. Investment by FIIs in the equity segment and the debt segment rose by 111.6% to Rs. 53,404 crores and by 128% to Rs. 12,775 crores, in 2007–08, respectively. These FII inflows pushed up the price of stocks and P/E ratio of good companies beyond sustainable levels. This increased investment was on account of strong macroeconomic fundamentals, abolition of long-term, capital-gain tax, encouraging corporate results and attractive valuations. A large portion of this FII investment is concentrated in top-tier stocks. FIIs were net sellers during 2008–09 on account of the global financial crisis (Figure 8.3). During April to July of 2008, FIIs liquidated net Rs. 15,114 crores in the market, on account of the global liquidity crunch. When the global liquidity scenario improved, a large number of them turned to be net purchasers during the period April to November of 2009, reflecting a high level of confidence in Indian companies and economic growth prospects. The cumulative FII investment at acquisition cost was US$89.3 billion at the end of March 2010 (Table 8.12).

Infosys, Reliance Industries, HDFC, Bharti Airtel and ONGC have emerged as the top five companies favoured by foreign funds such as Capital Garudina Trust, Fidelity, Oppenheimer, Templeton Investment, Morgan Stanley and Barclay Global Fund.

Indian stock markets are an attractive investment avenue as Indian markets are not dependent on the world economy and have a large domestic base. Moreover, Indian markets offer a wide variety in terms of sectors and companies.

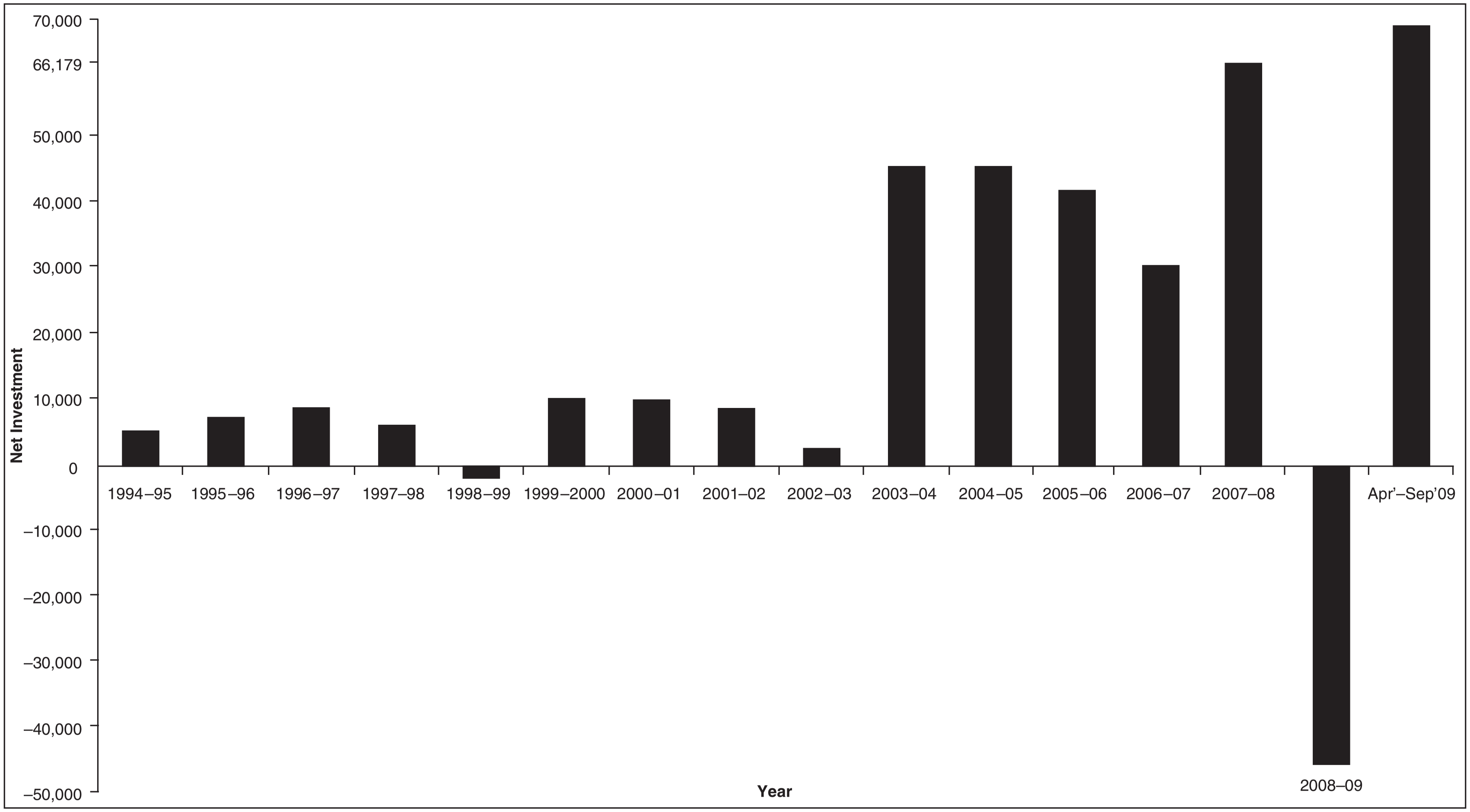


Figure 8.3 Trends in Investment of FIIs

The only factor that determines the behaviour of the FIIs is the opportunity for profit. If they feel that a market has the potential for profit, they will invest. It is company-specific success stories that have retained FIIs in the Indian market.

Depositories

The increase in the volume of activity on stock exchanges with the advent of on-screen trading coupled with operational inefficiencies of the former settlement and clearing system led to the emergence of a new system called the depository system. The SEBI mandated compulsory trading and settlement of select securities in dematerialised form. All securities are held, traded, and settled in demat form. Two depositories have come into existence—the NSDL and the CDSL. Demat settlements have eliminated bad deliveries and other related problems associated with physical securities.

Depositories are discussed in detail in Chapter 18.

Buy Back of Shares

Buy back of shares means that a company purchases or buys back its own shares, which it had issued previously to the shareholders. The company has the option to either cancel them or hold them as treasury-frozen stock. The difference, though technical, is significant. For example, a company buys back one crore equity shares of the face value of Rs. 10 at Rs. 100 each. If the shares are cancelled, the equity base of the company will be reduced by Rs. 10 crore, while the reserves will be depleted by Rs. 90 crore. If the repurchased shares are held as treasury stock, the shares will not be extinguished but will be held neither as an investment nor as equity. They can be revived by reissuing them at a later date or for employee option.

A company may be motivated to buy back its own shares for any of the following reasons:

- When a company repurchases its own shares, it is buy back of shares

- A company with surplus cash to invest and buy back may consider it to be a worthwhile investment proposition as it carries minimum risk compared with other avenues of investment such as investment in new projects, development of new products, acquisitions, and takeovers.
- For a company facing a threat of hostile takeover, share buy back would help its promoters to increase their proportional shareholding in the company.
- A company may think of altering its capital structure if its equity is disproportionately large. Buy back may help the company to achieve a target capital structure.
- A panic driven fall in share prices can be arrested through buy back of shares.
- A company intending to improve market quotes of its scrips may choose buy back rather than pay higher dividends as buy back signals management confidence. Moreover, buy back provides an exit route to investors in case of illiquid scrips.

Buy back is a tool to increase the wealth of the shareholders. With share buy back, a reduction in the floating stock of the company takes place, which improves the earnings per share (EPS) which, in turn, increases the market price of the share. At high market prices, a company can come out with new issues at a premium and thereby lower its cost of capital.

Methods of Share Buy Back The SEBI (Buy back of Securities) Regulations, 1998 contains the procedure for buy back. Share buy back can be done in two ways: through a tender offer or through an open market repurchase. The tender offer to shareholders can be either at the market price or at a premium to the market. In going for a tender offer route, a company can adopt a fixed price tender or go for an auction. Auctions are generally held when a company is under a takeover threat and is interested in buying back a large number of shares at the lowest possible price.

The open market repurchase route is used when the desired number of shares to be bought back is relatively small. Buy back from the open market can be either through the book building process or by direct purchase on the stock exchange. Most companies prefer the open market purchase route.

- A company can buy back its shares either through a tender offer or through an open market repurchase

Companies (Amendment) Ordinance, 1998 The buy back of shares was prohibited in India until October 31, 1998. Indian companies were permitted to buy back their own shares by the Companies (Amendment) Ordinance, 1998. The ordinance inserted two new sections (77A and 77B) in the Companies Act, 1956 which laid down the provisions and restrictions relating to buy back of shares. Under the new provision, a company may buy back its own shares or other specified securities from its free reserves, securities premium account, or the proceeds of an earlier issue other than a fresh issue of shares made specifically for buy back purpose.

Buy back is permitted only when the company satisfies the following conditions:

- It is authorised by its articles.
- A special resolution has been passed in the general meeting of the company authorising the buy back.
- The buy back does not exceed 25 per cent of the paid-up capital and free reserves of the company.
- The debt equity (including free reserves) ratio is not more than 2:1 after such buy back.
- All shares and other specified securities are fully paid-up.
- The buy back is in accordance with the SEBI regulations framed for the purpose.

It is further stipulated that a company that has defaulted on repayment of deposit, term loan, redemption of debenture/preference shares and so on, will not be permitted to buy back shares. Buy back of shares through subsidiary companies or investment companies is also prohibited.

Following the promulgation of the Companies (Amendment) Ordinance, the SEBI issued regulations on the buy back of shares by listed companies on November 10, 1998. The facility of buy back of securities by listed companies was introduced to increase liquidity in securities and to enable companies to enhance the shareholders' wealth.

The SEBI has a stipulated time limit to ensure the completion of the buy back process, speedily. If shares are bought back through stock exchanges, an offer for buy back should not remain open for more than 30 days. The verification of shares received in the buy back has to be completed within 15 days of the closure of the offer. The payments for accepted securities has to be made within 7 days of the completion of verification and bought-back shares have to be extinguished within 7 days of the date of the payment.

The SEBI relaxed buy back norms in 2001. Companies can now buy back shares upto 10 per cent of the equity capital and free reserves just by a board resolution, without seeking shareholders' approval. The moratorium on the fresh issue of shares after a buy back programme was reduced to 6 months from the earlier 24 months. On October 25, 2001, the SEBI relaxed the yearly creeping acquisition limit by promoters to 5 per cent from 10 per cent a year without the SEBI approval. On October 27, 2008, the SEBI allowed promoters to buy upto 75 per cent in listed companies through the creeping acquisition route-5 per cent a year without the SEBI approval.

These relaxed norms led to a spurt in buy back activity. The biggest buy back earmarked in 2001 was that of Reliance Industries Limited (RIL)—to the tune of Rs. 1,100 crore at Rs. 353 per share. The other large buy backs were Bajaj Auto (Rs. 720 crore) followed by Raymonds (Rs. 486 crore), GE Shipping (Rs. 150 crore), and Indian Rayon (Rs. 143 crore).

Most blue chip companies such as Cadburys, Reckitt Benckiser, Philips, and others offered to buy back shares at more than a 25 per cent premium to market price. This move was on account of various reasons. One of the reasons cited is that these MNCs were forced to go public by the government in the late 1970s. Now there were no restrictions or obligations for them to remain listed on the domestic exchanges. Another reason cited is that with stringent listing requirements—MNCs found it both difficult and expensive to adhere to these requirements. These delistings were done as a part of a cost-cutting exercise and not for shutting down of the Indian operations. Moreover, the centre has been liberalising foreign direct investment (FDI) norms since the early 1990s. MNCs can set up 100 per cent subsidiaries or increase the parent's stake in their existing subsidiaries, associates, or affiliates by way of creeping acquisition, or an open offer. These delistings are a loss to the domestic investors who not only part with the shares at a depressed price but are also deprived from participating in the future growth of these companies. The exit of these companies took place when there was dearth of good quality paper. Moreover, it had an adverse impact on market capitalisation, liquidity, as well as volumes at the exchanges.

Most of the buy backs by cash-rich corporates were at cheap prices, leaving minority shareholders stranded. The price of the share buy backs were based on prices of the previous six months and during that time, share prices were quite low. Many of the promoters took advantage of low prices to hike their stake.

Conclusion

Buy back of shares was permitted to increase liquidity in securities. However, buy backs resulted in the delisting of good scrips and brought low prices to small shareholders. To prevent the delisting of good scrips, the SEBI issued directives that a company could delist only if it had been listed on a stock exchange for a minimum period of three years. The draft of the new takeover code suggests that delisting would not be allowed through the buy back route. The centre should also revise the FDI guidelines with a view to encouraging even those MNCs which are setting up a 100 per cent subsidiary to list eventually within a certain time frame.

MARKET MAKING SYSTEM

The extensive reforms in the last decade have transformed the operations of the securities market. Transaction costs have reduced and transparency has increased with the introduction of electronic trading and order-matching system at all stock exchanges. However, there are still a large number of shares that are not actively traded despite the fact that many of them have some intrinsic value.

To provide liquidity to the illiquid scrips, market makers are required who will continuously provide two way quotes. A market maker puts up a buy quote and a sell quote simultaneously. Thus, he creates a market for a scrip wherein it can be easily bought and sold. This process is called market making mechanism. For rendering these services, the market maker is allowed to buy and sell at a different rate, with the differential rate ranging from 3 per cent to 10 per cent. This difference is his income for providing these services.

- Market maker is an individual or a firm who gives two-way: buy and sell quotes for a stock(s)

Market making was much in use during the floor-based trading era when jobbers used to play the role of market makers. However, market making is almost absent in the screen-based trading era. The major hindrances to its development are the non-availability of back-finances to brokers, lack of incentives such as authority to route trades through market makers, and lack of market depth. The market making scheme has been introduced in the derivatives segment also where it has not yielded the expected results.

Internationally, the market making concept is highly advanced and a highly specialised job, with select firms specialising in it. The market making responsibility is taken up by firms who have specialised in this activity on the basis of the size of the companies and select industries. Some market makers cater to particular regions of the country or purely to institutional clients. The market making activity is very active in the US markets, especially in NASDAQ. Among the top NASDAQ-listed companies, Oracle has as many as 101 active market makers followed by Cisco systems with 99, Dell Computer with 90, Applied Materials with 88, Intel with 86, and Microsoft with 82. Moreover, Indian stocks such as Sify, with 13 market makers, are clocking an average daily volume of around 50,000 to 60,000 trades, and Rediff, with 9 market makers, manages 4,000 to 5,000 trades. NASDAQ has around 4,730 companies listed, of which over 90 per cent manage to trade on any given day. This volume of trading is due to active market makers. However, in the BSE, out of 5,700 listed companies, hardly 1,500 manage to trade on a given day.

In India, a systematic and organised form of market making was initiated by the OTCEI. At the OTCEI, market making is a compulsory activity and the sponsor has to act as a market maker for at least three years. At the regional stock exchanges, some brokers tried to give two-way quotes to revive some illiquid scrips, but they could not be successful.

To facilitate the market making system on Indian stock exchanges, the SEBI set up a committee on market making under the chairmanship of G. P. Gupta (Chairman, IDBI) to study various facets of market making, including the merits and demerits of the two trading systems—the order driven system and quote driven system. The committee was of the view that shares could be classified into two categories—liquid and illiquid— and market making facility should be provided for illiquid shares. The committee stressed the obligation of market makers to offer continuous two-way quotes which would force them to carry an inventory of stocks. However, this would require a large commitment of capital and lead to an increased exposure to market risks. It is expected that the stock lending scheme and margin trading would give an impetus to market making.

In April, 2010, SEBI put in a framework for setting up of new exchange or separate platform of existing stock exchange having nationwide terminals for Small and Medium Enterprises (SMEs). Market making has been made mandatory in respect of all scrips listed and traded on SME exchange. The following guidelines shall be applicable to the Market Makers on this exchange.

Registration of the Market Maker Any member of the Exchange would be eligible to act as Market Maker provided the criteria laid down by the exchange are met. The member brokers desirous of acting as Market Maker in this exchange shall apply to the concerned stock exchange for registration as Market Makers unless already registered as a Market Maker.

The Obligations and Responsibilities of Market Makers The Market Maker shall fulfil the following conditions to provide depth and continuity on this exchange:

1. The Market Maker shall be required to provide a 2-way quote for 75 percent of the time in a day. The same shall be monitored by the stock exchange. Further, the Market Maker shall inform the exchange in advance for each and every black out period when the quotes are not being offered by the Market Maker.

2. The minimum depth of the quote shall be Rs.1,00,000/- . However, the investors with holdings of value less than Rs. 1,00,000 shall be allowed to offer their holding to the Market Maker in that scrip provided that he sells his entire holding in that scrip in one lot along with a declaration to the effect to the selling broker.
3. Execution of the order at the quoted price and quantity must be guaranteed by the Market Maker, for the quotes given by him.
4. There would not be more than five Market Makers for a scrip. These would be selected on the basis of objective criteria to be evolved by the Exchange which would include capital adequacy, networth, infrastructure, minimum volume of business etc.
5. The Market Maker may compete with other Market Makers for better quotes to the investors;
6. Once registered as a Market Maker, he has to start providing quotes from the day of the listing/ the day when designated as the Market Maker for the respective scrip and shall be subject to the guidelines laid down for market making by the exchange.
7. Once registered as a Market Maker, he has to act in that capacity for a period as mutually decided between the Merchant Banker and the market maker.
8. Further, the Market Maker shall be allowed to deregister by giving one month notice to the exchange.

Dissemination of Information The exchange should disseminate the list of Market Makers for the respective scrip to the public.

Number of Shares per Market Maker The number of companies in whose shares a Market Maker would make market should be linked to his capital adequacy as decided by the exchange.

Stock Lending and Borrowing (SLB)

Securities Lending and Borrowing scheme is a facility for lending and borrowing of shares to enable investors to honour trades involving short-selling. The stock lending and borrowing scheme is essentially a facility for short sellers. A short seller is a person who sells shares which he does not own/possess. With the ban on badla, short sellers were often left with uncovered positions when the prices of scrips moved against expectations. This had to be met through auctions, which led to an increase in the loss of short sellers, as auction prices were higher than the last traded prices. Short selling enables the seller to hedge the risk of a long position in the same security or a related security. It enhances market efficiency through price discovery, improves liquidity in the secondary market and reduces volatility in market returns. However, it may also lead to a downward trend in prices, thus, destabilising the market.

- Stock lending enables a short seller to borrow stocks from approved intermediaries

The SEBI allowed short selling with effect from December 20, 2007. The broad framework of the scheme is as follows:

- Naked short selling is not permitted in the Indian securities market and it is mandatory for all investors to honour their obligations of delivering the securities at the time of settlement;
- Institutional investors are not allowed to do day trading i.e., square-off their transactions intra-day. In other words, all transactions would be grossed for institutional investors at the custodians' level and the institutions would be required to fulfil their obligations on a gross basis.
- The stock exchanges are required to frame the necessary uniform deterrent provisions and take appropriate action against the brokers for failure to deliver securities at the time of settlement;
- The securities traded in futures and options segment are eligible for short selling; and
- It is mandatory for the brokers to collect the details on scrip-wise short sell positions, collate the data and upload it to the stock exchanges before the commencement of trading on the following trading day.
- All classes of investors, viz., retail and institutional investors, are permitted to short sell.

- Short selling is selling securities without owning them at the time of sale

Stock Lending

- Provides an avenue to stock lenders to earn income
- Increases liquidity of stock
- Stabilises market movements
- Avoids delivery failures
- Makes difficult manipulation of stock price

The stock lending and borrowing scheme enables a short seller to minimise his losses by borrowing shares at the time of settlement. As scrips are delivered at the time of settlement, the number of scrips auctioned reduces considerably.

The stock-lending scheme enables a seller to borrow shares from a SEBI-registered intermediary and deliver them to a buyer against outstanding commitments. When the price declines, he replaces the borrowed shares by buying from the market. The borrower of the securities pays the lender interest on the value of the securities borrowed. The borrowers of securities are usually brokers, speculators, market makers, custodian banks, clearing corporations, and finance companies. The lenders are mutual funds, insurance companies, custodian banks, finance companies, brokers, and high net worth individuals.

The SEBI allowed stock lending facility in 1997 by approving the Securities Lending Scheme recommended by the B. D. Shah Committee. This facility was allowed to induce liquidity, check volatility in prices, and to create a level playing field in overheated markets. The guidelines for stock lending announced by the SEBI on February 7, 1997, stipulated that securities could be borrowed or lent only through a registered intermediary who can meet certain eligibility criteria. Intermediaries were required to have a minimum net worth of Rs. 50 crore. Clearing houses or corporations having this net worth were also eligible to be registered as intermediaries.

As per the Securities Lending Scheme, 1997, a lender can place securities with a borrower only through an approved intermediary under an agreement for a specific period, on the condition that the borrower will return equivalent securities of the same type and class at the end of the specified period along with the corporate benefits accrued on the borrowed securities. The scheme puts the onus of safety of the lent stock on the intermediary. The intermediary is entitled to receive fees and collateral in the form of cash, bank guarantees, government securities, certificates of deposit, or other securities, as may be agreed upon with the borrower.

On March 19, 2004, the SEBI revised guidelines pertaining to the Securities Lending and Borrowing Scheme. Under the new scheme, any investor could participate by depositing securities in the clearing corporation.

Under this scheme, the clearing corporation/clearing house had to be registered as an approved intermediary with the SEBI for handling settlement shortages. The clearing corporation of the NSE and the clearing house of the BSE failed to operationalise the programme.

The SEBI put in place a full-fledged securities lending and borrowing scheme for all participants in the market under the overall framework of "Securities Lending Scheme (SLS), 1997" with effect from April 21, 2008 subject to conditions that:

1. The SLB shall be operated through Clearing Corporation/Clearing House of stock exchanges having nation-wide terminals who will be registered as Approved Intermediaries (AIs) under the SLS, 1997.
2. The SLB shall take place on an automated, screen based, order-matching platform which will be provided by the AIs. This platform shall be independent of the other trading platforms.
3. The securities traded in F&O segment shall be eligible for lending & borrowing under the scheme.
4. All categories of investors including retail, institutional etc. will be permitted to borrow and lend securities. The borrowers and lenders shall access the platform for lending/borrowing set up by the AIs through the clearing members (CMs) (including banks and custodians) who are authorised by the AIs in this regard.
5. The AIs, CMs and the clients shall enter into an agreement (which may have one or more parts) specifying the rights, responsibilities and obligations of the parties to the agreement.
6. The settlement cycle for SLB transactions is on T + 1 basis.
7. The tenure of lending/borrowing shall be fixed as standardised contracts. Tenure for SLB is a maximum period of 12 months. Hence, the borrower shall return the shares on T + tenure where T is the trading day of the SLB transaction. The lender is required to deliver the shares on T + 1 day itself.
8. The SLB tenure of 12 months will result in the need for appropriate adjustments for corporate actions. The corporate actions may be treated as follows:
   a. Dividend: The dividend amount would be worked out and recovered from the borrower at the time of reverse leg and passed on to the lender.
   b. Stock split: The positions of the borrower would be proportionately adjusted so that the lender receives the revised quantity of shares.
   c. Other corporate actions such as bonus/merger/amalgamation/open offer, etc.: The transactions would be foreclosed from the day prior to the ex-date. The lending fee would be recovered on a pro-rata basis from the lender and returned to the borrower.
9. The normal trade timings for SLB session are between 9:55 am and 3:30 pm.
10. The tenure of contracts in SLB may be upto a maximum period of 12 months. The Approved Intermediary (Clearing corporation/Clearing House) shall have the flexibility to decide the tenure (maximum period of 12 months).
11. The lender/borrower shall be provided with a facility for early recall/repayment of shares. In case the borrower fails to meet the margin obligations, the Approved Intermediary (AI) shall obtain securities and square off the position of such defaulting borrower, failing which there shall be a financial close-out.

12. In case lender recalls the securities anytime before completion of the contract, the AI shall try to borrow the security for the balance period and pass it onward to the lender. The AI will collect the lending fee from the lender who has sought early recall.
13. In case of early recall by the lender, the original contract between the lender and the AI will exist till the contract with the new lender for the balance period is executed and the securities returned to the original lender.
14. In case of early repayment of securities by the borrower, the margins shall be released immediately on the securities being returned by the borrower to the AI. The AI shall try to onward lend the securities and the income arising out of the same shall be passed on to the borrower making the early repayment of securities. In case, AI is unable to find a new borrower for the balance period, the original borrower will have to forego lending fee for the balance period.
15. In case of early recall by lender or early repayment of securities by borrower, the lending fee for the balance period shall be at a market determined rate.

Brokerages that wish to participate in SLB are required to enter into separate agreements with the stock exchanges and deposit Rs.10 lakhs as the base capital.

The SEBI-approved intermediaries are NSCCL and BOICL, the clearing house of the BSE. A person who owns securities can lend them through these approved intermediaries.

Advantages of SLB

Stock lending and borrowing (SLB) provides an avenue for institutional investors such as banks, mutual funds, financial institutions and insurance companies to earn income by lending their idle stock in the market. The lender of the stock charges interest for lending the stock. The rate of interest charged by the lender is determined by various factors such as liquidity of the scrip, quality of management, size of the underlying company and the risk involved in lending the stock. The lender does not cease to be the owner of the stock and gets all beneficial rights such as dividend, rights or bonus shares in respect of the stock lent. The borrower, however, has the legal title of the borrowed securities and is entitled to deal with and dispose of securities in any manner he deems fit.

Stock lending provides an avenue for institutional investors such as banks, mutual funds, financial institutions, and insurance companies to earn income by lending their idle stock in the market.

Stock lending increases the liquidity of stocks as more and more players are able to sell or take positions. It keeps a bull market in check. Stock lending through the clearing house can help carry forward short sales and check volatility in the share prices at the time of settlement. It facilitates timely settlement and avoids delivery failures.

Stock lending aids in the development of the derivatives markets. It enables investors to undertake arbitrage activities either against derivative trades or convertibles.

SLB increases the liquidity of stocks as more and more players are able to sell or take positions. It keeps a bull market in check. Stock lending through the clearing house can help carry forward short sales and check volatility in the share prices at the time of settlement. It facilitates timely settlement and avoids delivery failures.

SLB aids in the development of the derivatives markets. This scheme is largely used by the institutional investors while writing complex option contracts. It enables investors to undertake arbitrage activities either against the derivative trades or the convertibles.

The Central Board of Direct Taxes (CBDT) exempted stock lending from capital gains, making it even more attractive. With the depository system in operation and the process of dematerialisation almost complete, the risk involved (the chance of not getting the same clean stock) in stock lending is substantially reduced. It also does not attract STT.

The SEBI is considering a flexible tenure for SLB contracts which will enable both the lenders and borrowers to decide on the date of repayment among themselves.

Conclusion

The new scheme failed to take off. The market players find it to be unfriendly and over-regulated, citing the following reasons:

1. Margins levied on trades in the SLB segment are too high and, sometimes, work out to be 100% or more making the trade unviable. In the derivatives and off-shore lending market, the margin requirement is about 25–30% and 20%, respectively. The high execution costs are a hindrance.
2. There would be an attempt to distort prices or other forms of market manipulation if the details of SLB transactions executed by the market participants are publicly disseminated.

TABLE 8.13 Weekly Settlement and Rolling Settlement

Date	Weekly Settlement	T+5 Rolling Settlement
1	Buy 200 Shares	Buy 200 Shares
2	Sell 100 Shares	Sell 10 Shares
6		Pay for 200 Shares and get the Shares
7		Deliver 100 Shares and Get Paid for Them
14	Pay the Net Price for 100 Shares	
15	Get 100 Shares	

Source: Shah, Ajay and Susan Thomas, 'Developing the Indian Capital Market' in J. Hanson and Sanjay Kathuria (eds), *India: A Financial Sector for the Twenty-first Century,* pp. 205–65.

Rolling Settlement

- Rolling settlement is a system of settling transactions in a fixed number of days after the trade is agreed

The dematerialisation of shares and introduction of settlements in demat form changed the face of the Indian stock markets. The next major reform in the new millennium affecting the stock markets was the introduction of rolling settlement.

This concept is not new to the Indian stock market. The OTCEI was the first exchange to introduce rolling settlement when it started operations in 1992. Rolling settlement was not a success for the OTCEI as there was no margin trading facility for borrowing funds or shares.

Rolling settlement was introduced by the SEBI for the first time in January 2000 in selected scrips. Initially, 10 scrips were brought under rolling settlement. Subsequently, on March 8, 2000, 153 more scrips were introduced. Rolling settlement was introduced in the form of T+5 settlement system where 'T' is the trade date and '5' is the number of business days after the trade date on which delivery of securities and cash payments are due for settlement. In other words, T+5 means that all open positions at the end of trading date result in delivery and payment five working days later. If trading takes place on Thursday, it will be settled the following Thursday, so on and so forth. This cycle would be rolling and hence there would be a set of transactions for delivery every day. Thus, rolling settlement means converting the market into a cash market, since each day's transactions are settled in full.

The Table 8.13 illustrates Weekly Settlement and Rolling Settlement and Table 8.14 shows difference between weekly settlement and rolling settlement.

Rolling settlement system replaced the *badla* system from July 2, 2001. When 215 scrips were brought under the rolling system, bringing the total to 414 scrips. By January 2, 2002, all scrips were brought under the compulsory rolling mode. Internationally, most developed countries follow a T+3 cycle and are aiming to move to a T+1 cycle (next day settlement) or a T+0 cycle where trades are settled on the day they are executed (same evening settlement). This system of T+0 is prevalent in Switzerland and volumes are phenomenal when compared to the T+3 system. Indian stock markets moved to the T+3 system from April 2002, in line with the recommendations of the 'Group of Thirty' which suggested it as the minimum international standard.

Rolling Settlement

Prior to July 2001	Wednesday to Tuesday	Scrips
July 2, 2001	T+5 Rolling Settlement	414
December 31, 2001	T+5 Rolling Settlement	All
April 1, 2002	T+3 Rolling Settlement	All
April 1, 2003	T+2 Rolling Settlement	All

T+2 Rolling Settlement

Day	Time	Description of Activity
T		Trade Day
T+1	By 11:00 a.m.	Custodians Conform the Trades. However, There is a Facility for Late Confirmation
	By 1:30 p.m.	Process and Download Obligation Files to Brokers Custodians
T+2	By 11:00 a.m.	Pay-in of Securities and Funds
	By 1:30 p.m.	Pay-out of Securities and Funds

Source: NSE.

TABLE 8.14 Difference Between Weekly and Rolling Settlements

Item	*Weekly Settlement*	*T+2 Rolling Settlement*
Trading Period	Five-day Trading Period	T+2 (Trading Day+2 Working Days)
Settlement Day	Settlement Day is on Last Day of the Week	Daily Settlement
Squaring of Transactions	Squaring Can Be Done Any Day of the Settlement (Intra-Day and Intra-Settlement)	Only on Trading Day (Intra-Day on T+0)
Determination of Settlement	Settlement Determined By Open Position at the End of Trading Period	Open Position At the End of Each Trading Day

Source: *Capital Market*, March 3–16, 2003.

On the advice of the SEBI, stock exchanges levy an additional charge to discourage late confirmations by the custodians and have provided a system for handling shortages of funds and securities in an expeditious manner to adhere to the schedule for payment.

Day	*Time*	*Description of Activity*
T		Trade Day
T+2	Until 10:30 a.m.	Accept Any Pay-in Instructions from Investors into Pool Account
	By 10:30 a.m.	Submit Final Pay-in Files to the Depository and the Clearing Bank

Source: NSE.

The stock brokers are required to adhere to the following schedule in the T+2 rolling settlement.

In a T+2 settlement, confirmation and determination of obligation takes place on a T+1 basis, while pay-in and pay-out of funds and securities happens on the second day of trading. Shorter settlement cycles lower the trading costs for market participants and reduce the risk of counter-party failure. The SEBI now aims for a T+1 cycle. In a T+1 settlement, as soon as an investor buys shares, the broker's trading terminal will give the buy order, the system will check the investor's bank account and debit funds and in turn, deposit shares in his demat account within a few seconds.

Advantages of Rolling Settlement

- The basic advantage of rolling system over the *badla* system is its simplicity. The *badla* system was non-transparent and unregulated and the investors' exposure to risk and fraud was very high. The investor had to keep track of different stocks as they had different settlement systems. With rolling settlement, the investor has to merely keep track of the day of purchase/sale of scrips as all the scrips are settled in the same format on all trading screens.
- This system eliminates arbitrage opportunities in scrips.
- It improves the price discovery process as the settlement process is standardised and the participants can focus more on market outcomes.
- This improvement in price discovery would lead to a single, well-defined price that can be used for information processing by different economic agents.
- It reduces settlement risk and narrows the bid–ask spreads (difference between the bid and offer prices) due to its transparent nature.
- It encourages wider participation as institutional investors forbidden from doing *badla* or netting trades within a settlement can now take advantage of this system as it shortens delay in settlement of transactions.
- It eliminates fluctuations of prices which take place around settlement dates. With the setting up of clearing corporations, rolling settlement reduces the working capital requirements of brokerage firms.
- As it reduces price manipulation and arbitrage, it helps in reducing volatility and turbulence in the markets.
- Finally, retail investors benefit as it shortens the delays for converting securities into cash and vice versa.

Rolling Settlement

- Simple
- Eliminates arbitrage opportunities
- Improves price discovery process
- Reduces settlement risk
- Encourages wider participation
- Eliminates fluctuation of prices
- Reduces price manipulation

It is perceived that rolling settlement kills liquidity as it reduces speculation and arbitrage. This reduction in liquidity may be a short-term feature as investors and brokers need time to adjust to this new system and to digest the fact that they will not get any leverage. In rolling settlement, one cannot short sell a scrip which creates an impact on liquidity.

In the Indian stock markets, six to seven stocks account for nearly 70 per cent of the volume of trading. When these heavily traded forward stocks are covered under rolling settlement, liquidity is bound to reduce for some time. Moreover, day trading has emerged and will grow in a short span of time. Day traders are people who trade during the day and close all their positions at the end of the trading day. They take advantage of the day time movements of scrip prices and indices by directly executing orders, resulting in increased liquidity. Besides day traders, FIIs are more comfortable with the rolling settlement system and it is expected that money will be pumped into the Indian stock markets resulting in high liquidity.

According to a SEBI study titled 'Cost–Benefit Analysis of Contracting, Trading, Clearance and Settlement in Equities to T+1,' the cost–benefit ratio of migrating to T+1 works to 0.85. This means for every likely expense of 0.85 paise, there will be a benefit of Re 1 and the investors will be the biggest beneficiaries as they will be able to save in the form of interest on margin money.

The prerequisites for the success of the rolling system—margin trading, continuous net settlement, depository, futures and options, and a strong banking system with electronic fund transfer facility—are now in place. These will help in improving the efficiency and prospects of success of this system. It is superior technology and banking infrastructure such as electronic fund transfers which will enable Indian markets to move to the T+1 or T+0 settlement system.

Conclusion

Stock markets moved to the T+2 system from April 1, 2003. The SEBI intends to move to T+1. The move towards T+1 is part of the capital market reforms initiated by the SEBI, especially after the stock market scams. The rolling settlement system of share transactions prevents speculations in between the settlement periods. Movement to the T+1 system, requires real time gross settlement (RTGS) in banking transactions. RTGS would ensure that banking transactions are settled within a day's time. This would, in turn, facilitate share transactions to be settled within a day. For moving over to the T+1 system, the SEBI has implemented a straight through processing (STP) system to prevent delays in share transfer from the buyer to the seller. The STP system reduces the time gap between trading and settlement. It leads to greater transparency and reduction in counter-party risk. The STP system leads to an automatic debit or credit in the demat account and bank account of traders. The RBI has already directed banks to speed up branch automation and networking. The RTGS is already launched in April 2005.

Straight Through Processing (STP)

STP was launched in December 2002 in a limited manner to enable market participants to smoothly transit to a shorter settlement cycle of T+2 in April 2003.

STP allows electronic capturing and processing of transactions in one pass from the point of first deal to the final settlement. It allows any information generated at one end to reach its destination uninterrupted by avoiding manual interference. The entire process of trade execution and settlement is electronic and carried on through a seamless connectivity between custodian, fund manager and broker. It avoids re-entry of the same details by different market participants.

STP is a prerequisite for a shorter settlement cycle. Initially, it was used by institutional participants on a voluntary basis.

Now there are various service providers like NST, IT (NSE subsidiary), NSDL Financial Technologies and Omgeo (Joint Venture between the Depository Trust Clearing Corporation and Thomson Financial). These service providers provide STP connectivity to market participants. The RBI has also developed Infinet, a STP package devised only for banks and bank-related transactions.

In order to ensure inter-operability between market participants, the NSE has a sector STP Centralised Hub. All institutional trades, executed on the stock exchanges are mandatorily processed through the STP system effective from July 1, 2004.

Besides eliminating manipulation, STP also helps in reducing the settlement cycle, improving transparency, reducing counter-party risk, operational risk and avoiding punching errors.

Box 8.9 Real Time Gross Settlement (RTGS)

The RTGS system ensures transfer of funds on a real time and on a one-to-one basis (i.e., between a sender and a beneficiary) in an electronic mode. The system leads to reduced settlement and systemic risks, especially in high-value inter-bank transactions. The RBI launched RTGS on March 26, 2004. In RTGS, payments are settled transaction by transaction and settlement of funds is final, irrevocable and done in real time. Moreover, funds settled can be used immediately. Under the RTGS system, inter-bank transactions, customer-based inter-bank transactions and net-clearing transactions of both high value and retail payments can be settled. It is a fully secured system which uses digital signatures and public-key encryption for safe and secure message transmission. It is beginning to enable transfer of funds in a cheque-less environment.

The threshold limit for high value transactions is Rs. one lakh and below this limit low-value transactions take place. Clearing and settlement in the RTGS environment takes place electronically — based on instructions provided by banks to the clearing cell of the RBI. Atleast 72 banks have participated in the system, accounting for more than 90 per cent of the value of inter-bank settlement. Of the 72 banks, 32 participating banks offer customer-related RTGS fund transfer services through 840 branches in 134 major centres.

STP and Manual Trade: A Comparison

- Straight through processing is a seamless connectivity of trades from initiation to settlement without manual intervention

In a manual trade, the broker issues a contract note which is then passed on to the custodian or a depository participant. There are multiple data entries from paper documents during the different stages in the manual trade which makes the process susceptible to errors, discrepancies, delays and manipulation of trade. In STP, however, the contract note is issued in electronic forms and the entire trade is settled on the computer leaving no scope for manipulation. Moreover, compared to manual trade, STP is faster, risk-free and eliminates any failure in trade.

The SEBI also prescribed the framework for the system flow of the STP, which is as follows.

- An STP user intending to send an instruction should send the message to his STP service provider after digitally signing the same.
- The STP service provider after verification of the signature should forward it to the recipient user, if the recipient is availing services of the same STP service provider, or the STP centralised hub if the recipient is not with the same STP service provider. In such a case, the STP service provider should be required to prepare a message as per the STP centralised hub prescribed message format, enclose the user's message, digitally sign it and then send it to the STP centralised hub.
- On receipt of the message by the STP centralised hub, it should verify the signature of the sending STP service provider and then send an acknowledgement to the sending STP service provider.
- The STP centralised hub would then forward the message to the recipient STP service provider after digitally signing on the message.
- The recipient STP service provider, on receipt of the message from the STP centralised hub, has to verify the signature of the STP centralised hub, verify if the recipient STP user is associated with itself and send an appropriate acknowledgment with digital signature to the STP centralised hub. The STP centralised hub would, in turn, forward the acknowledgement (received from the recipient STP service provider) duly signed to the sending STP service provider.
- The recipient STP service provider should forward the message to the recipient STP user who would verify the signature of the recipient STP service provider and sending STP user.

STP and RTGS will pave the way for T+1 settlement.

Margin Trading

- Margin trading is a form of leveraged trading which allows an investor to invest in excess of his financial capacity by borrowing money

Margin trading is a new concept in India. The RBI has allowed banks to finance margin trading in shares w.e.f. September 18, 2001.

Margin trading allows an investor to invest in excess of his financial capacity by providing only a part of the funds for the deal. The balance funding comes from banks in the form of borrowing. Margin trading permits investors to buy shares by providing 40 per cent of the deal value as 'margin,' while borrowing 60 per cent from banks. Banks provide finance to investors through stockbrokers for trading in actively traded scrips. Initially, 53 scrips forming part of NSE Nifty and BSE Sensex were identified for margin trading. Banks extend funding for margin trading within the overall existing ceiling for bank exposure to the capital market.

The securities purchased by borrowing a portion of the deal from banks are used as collateral. Backed by the collateral, an investor can buy assets which are greater in value than the value of the collateral. Hence, margin trading is a form of leveraged trading which leads to an increase in the purchasing/selling power of the participants and helps them increase their earnings if the market price of securities move along expected lines.

The concept of margin trading is used as a means to infuse liquidity in the system. Banks, both private and public, can invest 5 per cent of total outstanding credit in equities with the leeway of fixing their own rates of interest. Today, banks are flush with funds and have immense potential to lend. However, they have to safeguard their loans and take risk containment measures.

Margin trading is a sort of deferral product. Investors generally use margins to own more shares without fully paying for them. However, margin trading creates a systemic risk that can lead to sharp volatility in the stock market.

The Mechanism of Margin Trading Suppose an investor has Rs. 40,000 and he is willing to buy a share quoting at Rs. 40. Under the present settlement system, he can buy a maximum of 1,000 shares with his own money. With margin trading, he can buy as many as 2,500 shares worth Rs. one lakh from his broker by paying Rs. 40,000 as margin and by borrowing the balance Rs. 60,000 from a bank through his broker. The broker pledges the 2,500 shares with the bank. The bank has a collateral of Rs. 1,00,000 backing the loan of Rs. 60,000.

Suppose the market price of the share moves up to Rs. 50 and the investor sells the shares. Had the investor not taken the benefit of margin trading, he would have realised only Rs. 10,000 (1,000 shares × (Rs. 50 − 40)) as profit. With margin trading, he gained Rs. 25,000 (2,500 shares × (Rs. 50 − 40)). His net gain would be equal to gains from the sale of shares less interest on bank borrowings.

If the market price of the share falls below Rs. 40, the bank will give a margin call under which the investor will have to furnish additional funds/securities for the broker to pass on to the bank.

The RBI hiked the margins borrowers have to keep with banks for loans against shares and investments in primary equity issues. From December 28, 2004, the margin requirement for advances against shares, initial public offerings and issue of guarantee will be 50 per cent as against 40 per cent earlier. The RBI also advised banks to raise the minimum cash margin of 20 per cent to 25 per cent. This means that the overall margin must have a 25 per cent cash component, which could be in the form of fixed deposit certificates, while the balance would be shares valued at the current market price.

Margin trading offers banks a unique opportunity to park short-term funds at a high rate of interest. Even small investors get an access to bank funds without being exploited by stockbrokers and other financiers. Margin trading is the cleanest form of leveraged buying of assets. It is a transparent mechanism for channelising funds into the stock markets. With margin trading, the chances of scams are also reduced.

Banks will have to evolve adequate risk management systems for safeguarding loans given by them against a collateral of securities. Moreover, reforms in the payment system are needed to bring about improvement in the infrastructure for funds transfer. Margin trading is an attractive mechanism which ensures a no-default market with high levels of collateral and offers modest leverage to investors thereby increasing liquidity in the stock market.

SEBI Margin Trading Norms Margin trading through bank financing failed to pick-up as banks were reluctant to fund stock market purchases. With a view to providing more liquidity in the stock markets and creating a level-playing field between institutional and small investors, the SEBI introduced margin trading with effect from April 2004. The SEBI has permitted brokers, banks, non-banking finance companies (NBFCs) registered with the Reserve Bank, insurance companies and financial institutions to finance margin trading, i.e., borrowing money to part-finance stock purchases.

The salient features of the new guidelines are as follows:

- Corporate brokers with a net worth of at least Rs. 3 crore are allowed to provide margin financing to clients.
- A broker may use his own funds or borrow from banks or the RBI-recognised NBFCs for financing their clients.
- Total indebtedness of a broker shall not exceed 5 times his net worth.
- A broker is expected to be prudent and should ensure that no concentration takes place in any single client.
- The investor (client) will have to provide an initial margin of 50 per cent and the remaining 50 per cent could be financed by the broker. The investor has to pay interest on the amount financed by the broker. In addition, the investor is required to keep a 40 per cent maintenance margin, i.e., a

minimum amount calculated as a percentage of the market value of the securities to be maintained by the client with the broker. If the margin falls below 40 per cent due to a fall in the value of the security, the broker or other sources will issue a margin call. The investor will then have to pay the margin on a T+1 basis, i.e., the cheque should be paid to the broker the next day. In case, the margin falls below 30 per cent, the broker could sell the security in the market.
- The margin trading facility is available only with respect to the securities in Group 1 of the stock exchanges, i.e., securities having a mean impact cost of less than or equivalent to one per cent and having traded at least for 80 per cent (plus or minus 5 per cent) of the days in the previous 18 months. Group 1 securities consists of 150 securities in which value at risk margins are imposed.

SEBI has also stipulated strict disclosure requirements for margin trading. Brokers will have to disclose, on a daily basis, their clientwise, scripwise and lenderwise position to the stock exchanges. The exchange will disclose details of scripwise margin financing to the public.

Margin Trading Benefits

- Increase in turnover on stock exchanges
- A new revenue stream for financiers
- Allows investors to take a long position
- Injects liquidity

Risks

- Encourages speculation restricted to few stocks

Deliberations of the Secondary Market Advisory Committee (SMAC) The SMAC reviewed the Margin Trading Facility in November 2004.

The committee observed that the margin trading facility has not been put to optimum use by the market participants. The committee made the following recommendations.

- **Securities eligible for the margin trading facility:** To expand the availability of eligible securities for margin trading, all the securities which are offered in the initial public offerings (IPOs) and which meet the conditions for inclusion in the derivatives segment of the stock exchanges may be made available for the margin trading facility also.
- **Form of maintenance of margins:** Fixed deposits with banks and bank guarantee may be treated as cash equivalent and may be considered as an acceptable form of initial and maintenance margins for the purpose of availing the margin trading facility.
- **No objection certificate:** Under the existing guidelines, before providing margin trading facility to a client who has availed of margin trading facility from another broker, the broker is required to obtain a no objection certificate in writing from the other broker. However, there is no time limit specified for this purpose. It has now been decided that the other broker would be obligated to convey his objection, if any, within a period of 21 days, failing which the broker would be free to proceed with providing margin trading facility to the client.
- Further, the SMAC also felt that, given the past history of misuse of carry forward transactions, appropriate care and caution must be exercised in regard to any scheme of margin trading. The SMAC was, therefore, not in favour of recommending any other modification to the margin trading facility.

Conclusion

Margin trading will add to volumes on stock exchanges through increased demand and supply of securities and funds. The move will open up a new revenue stream for brokers in line with international practices. It will also allow investors to take a long-term call on the market and borrow funds to take up positions. Being a leverage mechanism, it injects liquidity in the market which, in turn, adds to the depth of the market and aids in price discovery. It is a mechanism which leads to the integration of money and capital markets.

On the flip side, margin trading can be risky as it encourages speculation. To avoid this, the regulator will have to strictly collect data on margin trading and educate investors about the perils of margin trading.

Brokers perceive a margin requirement of 50 per cent to be high as they are used to providing funds between 20 to 30 per cent as margin. Further, margin trading may be unattractive in the derivative trading stocks where the initial margin is less than 50 per cent. Moreover, as individuals are barred from margin financing, the growth of the market is restricted.

IMPACT OF REFORMS AND MEASURES ON SECONDARY MARKET ACTIVITIES

Reforms were undertaken to widen and deepen the secondary market to turn it into a vibrant market. A vibrant secondary market is a prerequisite for the development of an active primary market. Whether reforms have made any positive impact on the volatility, liquidity, size, and transaction cost is a matter of analysis.

• Volatility is fluctuations or changes in a stock's market price

• **Volatility:** Volatility of a stock measures the frequency with which changes in its market price take place over a period of time. If a stock is highly volatile, i.e., if there are large fluctuations in its market prices, there is a risk and investors avoid these shares. Hence, volatility is a factor, which is taken into consideration when assessing the risk–return trade offs. Moreover, volatility has macro-economic implications in volatility of stocks. Volatility in the market is a function of information, misinformation (rumours) and sometimes lack of information.

  Volatility is caused by a number of factors such as speculation, the trading and settlement system, the government budget, inflation, interest rates, announcement of corporate results, the extent of integration with international markets, the regulatory framework governing the stock market, rumours, day trading, and derivatives trading. All these factors directly or indirectly influence movements in share prices.

  Indian stocks are found to be highly volatile. The volatility of Indian stocks can be measured in terms of the coefficient of variation (CV) in the BSE Sensex and S&P CNX Nifty. (Table 8.15)

  The volatility of major indices in the Indian Capital Market is shown in Table 8.16.

The coefficient of variation in both the BSE Sensex and the S&P CNX Nifty was high in the years 1998–99 and 1999–2000. This indices a high volatility of Indian stocks. The factors responsible for high volatility were as follows.

- Inclusion of the new economy stocks, most of which were over-valued in the BSE Sensex.
- Increased influence of international stock indices, especially the NASDAQ. The repercussion of the crash in technology stocks on the NASDAQ was witnessed on Indian IT stocks also.
- High speculation when the *badla* system was prevalent led to large fluctuations in prices.
- Day trading increased which led to wild fluctuations in intra-day prices.
- Foreign institutional investors FIIs, exit the markets at the slightest whiff of trouble. This increases volatility in the stock markets. Domestic investors follow FIIs and emulate their investment pattern. If FIIs buy, everyone buys and if FIIs sell, everyone sells.
- Indian markets have high volume but they lack depth as the volumes are contributed by few institutional participants. Indian markets lack hedge funds and pension funds, which can take a long-term view of the markets. Moreover, domestic financial institutions like UTI, which used to act as a counter-force in the time of crisis, have stopped being a force to reckon with. This lack of depth increases volatility in the stock market.

The volatility in share prices was contained in 2000–01 and 2001–02 due to the introduction of rolling settlement which restricts speculation. However, the volatility in share prices increased in 2003–04.

TABLE 8.15 Volatility in Share Prices

Year	*BSE Sensex Coefficient of Variation (In Per Cent)*	*S&P CNX Nifty Coefficient of Variation (In Per Cent)*
1995–96	5.5	–
1996–97	8.6	9.3
1997–98	7.9	7.2
1998–99	11.8	11.4
1999–00	13.2	14.7
2000–01	8.8	7.5
2001–02	7.2	6.8
2002–03	4.8	5.2
2003–04	23.0	23.3
2004–05	11.16	11.28
2005–06	16.72	15.60
2006–07	11.1	10.50
2007–08	13.7	14.4
2008–09	24.2	23.2
2009–10	11.8	11.3

Source: RBI, *Annual Report,* various issues.

TABLE 8.16 Volatility of Major Indices in the Indian Capital Market*

(In Per Cent)

Year	Sensex	BSE-100 Index	Dollex-200	S&P CNX Nifty	CNX Nifty Junior	S & P CNX Defty
1997–98	2.3	2.6	NA	2.0	4.0	NA
1998–99	1.8	1.7	NA	1.5	2.7	NA
1999–00	1.7	2.2	NA	1\.8	3.1	NA
2000–01	NA	NA	NA	NA	NA	NA
2001–02	1.5	1.6	1.6	1.4	1.6	1.4
2003–03	1.01	0.99	0.98	0.99	1.23	0.99
2003–04	1.4	1.51	1.52	1.43	1.57	1.46
2004–05	1.5	1.5	1.73	1.61	1.83	1.7
2005–06	1.03	0.98	0.99	1.04	1.13	1.44
2006–07	1.75	1.76	1.86	1.78	2.05	1.89
2007–08	1.93	2.04	2.20	2.02	2.41	2.20
2008–09	2.80	2.71	2.20	2.66	2.80	3.01
2009–10	1.87	1.85	2.97	1.88	1.97	2.23

NA = Not Available.
* Volatility is the standard deviation of daily returns.
Source: The BSE and the NSE.

The stock markets were volatile in 2003–04 due to various factors.

- The uncertainty relating to the formation of the new government after the general elections created a turbulence on May 17, 2004. The market ended the day with a net loss of 11.1 per cent as compared with the previous day's close. The trading was halted twice during the day due to the application of the index-based circuit breakers.
- External factors such as rising oil prices and apprehensions of rise in international rates contributed to high volatility.
- The announcement in the Union Budget 2004–05 regarding imposition of the Securities Transaction Tax (STT) affected the market sentiments adversely.
- Huge activity in the F&O segment has contributed to volatility in the cash market. Most of the volumes in the F&O segment arise from arbitrage trading to take advantage of price differentials in the cash and futures markets. FIIs, too, indulge in cash-futures arbitrage. Volatility tends to increase towards the close of every month, when futures expire. Squaring up of positions in the F&O market either by liquidating or roll over results in a corresponding fall in shares prices in the cash market. In a roll over, a trader liquidates the position for the current month and takes position for the forth-coming month.
- Short selling followed by hectic short covering of positions on rumours led to volatility. A trader can go short in the F&O market. Short selling is also allowed on an intra-day basis. Another option is to sell short in the cash market by borrowing shares. Big brokerages allow clients to sell short by lending shares from the pool account.
- Day traders thrive on intra-day movements of stocks and indices. A day trader purchases stocks at lower levels in early trade and sells them once the stock reaches his desired level. Uncertainty or lack of information means more opportunities for a day trader to enter and exit, resulting in increased turnover and volatility in the market.
- Rumours such as hearsay of income-tax raids on brokers, FII investments slowing down, an imminent ban on participatory notes and fresh margins in the FI segment of the NSE play havoc with the stability of the markets.
- The SEBI, the regulatory agency of the capital market, did not act fast in clarifying its stand on the participatory notes (PNs) which resulted in the Sensex shedding 470 points and over Rs. 1,25,000 crores in the market capitalisation during January 19–22, 2004. PNs are derivative instruments, which represent Indian shares issued overseas. Usually, registered FIIs or foreign brokerages issue PNs to those FIIs not registered in India but who want an exposure to the Indian markets. The SEBI suspected that a few overseas corporate bodies (OCBs) were funded by

non-resident Indians (NRIs) and were investing in the Indian markets through PNs. The SEBI banned fresh issuance of PNs to unregulated entities and granted a grace period of 5 years for liquidation of the existing outstanding PNs. Issuance and transfer of PNs can now be to regulated entities only.

There was a sharp increase in volatility in 2008–09 on account of the rise in crude-oil prices, depreciation of dollar and global financial turmoil. Exchanges impose scripwise (20%, 10%, 5% and 2%) and index-wise circuit filters to contain volatility. But there is a need for exchanges and regulators to take swift actions to contain volatility.

Exchanges impose scrip-wise (20%, 10%, 5%, and 2%) and index-wise circuit filters to contain volatility. But there is a need for exchanges and regulators to take swift actions to contain volatility.

Liquidity It is one of the most important indicators, that greatly influences stock market development and efficiency. It is also one of the factors affecting the price discovery mechanism. A market is considered to be liquid when large volume of trades can take place without any significant effects on price. When an investor is able to transact at a price close to the current market price in the stock market, the market is liquid.

Liquidity is an important parameter taken into consideration by FIIs while investing in a market. A highly liquid market implies higher FII inflows and reduced liquidity implies lower FII inflows, reduced market capitalisation, poor sentiments, and inability of market participants to transact easily. Moreover, corporates are also unable to raise money from the markets for investment. There are two methods for measuring stock market liquidity—turnover ratio and value-traded ratio.

- **Turnover ratio:** It equals the total value of domestic shares traded divided by market capitalisation. This ratio measures the trading of domestic equities on domestic exchanges relative to the size of the market. High turnover is often used as an indicator of low transaction costs. The turnover ratio also compliments the measure of stock market size since markets may be large but inactive. A large but inactive market will have a large market capitalisation ratio but a small turnover ratio.
- **Value traded ratio:** It equals the total value of domestic shares traded on the major stock exchanges divided by the gross domestic product (GDP). It measures organised trading of firm equity as a share of the national output and, therefore, reflects liquidity on an economy-wide basis.

- Turnover ratio measures trading relative to the size of the market while value-traded ratio measures trading relative to the size of the economy

The value traded ratio captures trading relative to the size of the economy, while the turnover ratio measures trading relative to the size of the market. Thus, a small liquid market will have a high turnover ratio but a small value traded ratio. Such a stock market would not provide significant liquidity to the economy as a whole.

An analysis of the turnover ratio and value traded ratio indicates that liquidity has increased in the post-reforms period (Table 8.17 and Table 8.18). The all-India turnover ratio and value traded ratio exhibit an increasing trend in the post-reforms era. The high turnover was due to the formation of the NSE in 1994–95. The turnover of the NSE surpassed the turnover of the BSE in the subsequent years of its existence. This contributed to a very high all-India turnover in the second half of the 1990s.

The turnover ratio increased substantially after the introduction of screen-based trading by the NSE. The turnover ratio increased from 21 in 1993–94 to 409.3 in 2000–01. This turnover ratio was one of the highest in the world. The value-traded ratio rose from 53.1 per cent in 2004–05 to 108.9 per cent in 2007–08. An increase in the value traded ratio reflects an increase in the liquidity on an economy-wide basis.

The average daily turnover on the NSE and the BSE is now in excess of USD 2 billion which reflects the increasing liquidity in the market. The turnover ratio is poor in case of India compared with other developed and emerging markets. This is on account of concentration of trading in few stocks and higher promoter holding in companies. FIIs are attracted to markets with high turnover ration as it means lower impact costs.

- The market capitalisation ratio has improved significantly indicating an increase in size of the market

Size of the Stock Market The market capitalisation ratio measures the size of the stock market and equals the value of listed domestic shares (market capitalisation) divided by the GDP. In terms of economic significance, the assumption underlying the use of this variable as an indicator of stock market development is that the size of the stock market is positively correlated with the ability to mobilise capital and diversify risk.

The value traded ratio complements the market capitalisation ratio. Although market capitalisation may be large, there may be little trading. Market capitalisation and value traded ratio together provide information about market size and liquidity.

TABLE 8.17 Indicators of Liquidity

Year	Turnover Ratio	(Per Cent) Value Traded Ratio
1993–94	21.1	9.8
1994–95	14.7	6.9
1995–96	20.5	9.9
1996–97	85.8	30.6
1997–98	98.0	38.0
1998–99	126.5	41.7
1999–00	167.0	78.1
2000–01	409.3	111.3
2001–02	134.0	36.0
2002–03	162.9	39.33
2003–04	133.4	58.71
2004–05	97.7	53.40
2005–06	78.9	66.76
2006–07	81.8	70.02
2007–08	99.9	108.86
2008–09	125	72.39

Note: # Market capitalisation is estimated assuming that the BSE accounts for 95 per cent of all-India market capitalisation.
Source: RBI, *Annual Report,* various issues.

TABLE 8.18 Indicators of Liquidity—the BSE and the NSE

Year	BSE Mcap/GDP	NSE Mcap/GDP	Turnover Ratio-BSE	Turnover Ratio-NSE	Traded Value Ratio-BSE	(Per Cent) Traded Value Ratio-NSE
1992–93	27.95	NA	24.29	NA	6.79	NA
1993–94	47.11	NA	22.97	NA	10.82	NA
1994–95	51.12	NA	14.45	NA	7.39	NA
1995–96	52.53	37.41	8.88	16.76	4.66	6.27
1996–97	40.62	33.72	24.59	70.44	9.99	23.75
1997–98	45.33	34.64	32.86	76.88	14.90	26.63
1998–99	38.77	30.73	50.16	84.38	19.44	25.93
1999–00	51.81	57.92	75.20	82.23	38.96	47.62
2000–01	25.8	28.9	174.97	203.62	52.55	70.39
2001–02	29.28	30.46	50.19	80.58	14.70	24.54
2002–03	23.28	21.85	54.89	115.05	13.96	27.47
2003–04	43.44	40.53	41.88	98.09	19.93	43.57
2004–05	54.32	50.71	41.9	98.1	18.2	39.8
2005–06	84.41	78.57	30.5	71.9	16.6	36.6
2006–07	85.51	81.22	26.97	57.77	23.06	46.92
2007–08	113.1	107.0	30.72	73.09	33.50	75.34
2008–09	759.0	55.4	35.65	95.02	NA	NA
2009–10	106.5	103.8	NA	NA	NA	NA

NA=Not Available.
Source: RBI, BSE, NSE.

An analysis of Table 8.19 reveals that the all-India market capitalisation ratio which was 19.4 per cent in 1990–91 rose to 54.2 per cent in 1991–92, the year after the reforms were initiated. This was a year of a sharp increase in share prices. However, this was an aberration and the ratio declined sharply to 30.6 per cent during 1992–93 as share prices plummeted. The ratio increased sharply to 46.8 per cent in 1999–2000 but declined to 27.2 per cent in 2000–01. The size of the market has more than doubled and new sectors such as information technology, communication, pharmaceuticals, and fast moving consumer goods account for a major share in market capitalisation. There was a sharp increase in the market capitalisation ratio in 2005–06 and 2006–07 on account of an improvment in macro-economic fundamentals and a rise in new listings.

On October 14, 2006, the market capitalisation of BSE crossed the country's GDP. The market capitalisation of all listed stocks on BSE rose to Rs. 33 lakh crore on October 14, 2006 and Rs. 34 lakh crore on October 16, 2006 exceeding the GDP figure of around Rs. 32 lakh during financial year 2006.

Types of Transaction Costs

(i) Explicit costs:
- Brokerage
- Commission
- Stampduty
- Depository charges
- Securities transaction tax

(ii) Implicit costs:
- Impact cost
- Clearing and settlement cost

Transaction Cost Transaction costs consists of explicit costs such as brokerage, commission, and stamp duty, and implicit cost such as, impact cost, clearing and settlement cost due to counter-party risk, paper work, bad delivery and bid and ask spread. Transaction costs substantially impact returns, volumes, and volatility. Low transaction costs can induce the investor to trade more often which would lead to increased volumes resulting in low volatility.

Transaction costs were very high in the 1980s and the first half of the 1990s due to problems relating to physical share certificates such as bad deliveries, theft, and paper work. Moreover, there was an involvement of a chain of brokers in the execution of transactions and the method of trading was not transparent. There were no guarantees, and brokerage charges were heavy.

Many revolutionary changes have taken place in the Indian secondary market since November, 1994.

- The setting up of the NSE and the introduction of open electronic limit order book market by NSE and other exchanges.
- The emergence of a nationwide market through the spread of NSE VSATs and BOLT terminals.
- Reduction in brokerage fees and improved broking services owing to increased competition from NSE members and foreign brokers.

TABLE 8.19 Market Capitalisation Ratio—Indicator of Market Size

Year	*(Per Cent) Market Capitalisation Ratio*
1990–91	19.4
1991–92	54.2
1992–93	30.6
1993–94	46.6
1994–95	46.7
1995–96	48.2
1996–97	35.7
1997–98	38.7
1998–99	33.0
1999–2000	46.8
2000–01	27.2
2001–02	26.8
2002–03	23.3
2003–04	43.4
2004–05	54.3
2005–06	84.4
2006–07	86.5
2007–08	109.5
2008–09	58.1

Source: RBI.

- Elimination of counter-party risk through the setting up of a clearing corporation—National Securities Clearing Corporation (NSCC)—with strict enforcement of margins and exposure limits.
- The launch of a depository system in November, 1996 and majority of the shares compulsorily dematerialised.

All these developments have an impact upon transaction costs. An attempt was made by Shah and Thomas (1997) to quantify transaction costs, which are shown in Tables 8.20 and 8.21.

Market impact cost is the cost faced by a user who places a market order as compared with an ideal price. In other words, it is a cost associated with percentage degradation in price due to the execution of large orders. The impact cost is considered as the most practical definition of liquidity. The impact cost is the percentage mark up from the (bid+ask)/2 suffered in executing a transaction. For example, if the bid–ask spread of a scrip is 10 to 20 paise and if the market price of the scrip is ruling at Rs. 215, then, if an investor is able to buy it at Rs. 215.15, the impact cost is minimum. Higher the liquidity of the stock, lesser is the impact cost and vice–versa. Impact cost is lower in markets with increasing trading depth. This results in lower cost of equity and thereby improves returns to shareholders. Impact cost is important for fund managers. High impact cost could lead to the index funds providing substantially lower returns than the benchmark index. According to the Economic Survey 2002–03, the impact cost for the purchase or sale of Rs. 50 lakh Nifty portfolio dropped from 0.12 per cent in 2002 to 0.08 per cent in 2005 suggesting that the liquidity of stocks has improved.

Market Impact Cost

- Market impact is the cost resulting from any change in the market price due to the execution of a large order of a given security at any given point of time

A new tax—Securities Transaction Tax (STT) has been imposed on Indian investor. STT has to be paid at the time of making the transaction. If it is a share or an equity mutual fund unit being traded on stock exchanges and it is a delivery based transaction then, at the time of purchase, STT at the rate of 0.125 per cent has to be paid by the purchaser and an equivalent tax has to be paid by the seller. Further, sale of units back to a mutual fund entails a tax at the rate of 0.25 per cent for the investor.

TABLE 8.20 Transaction Costs in India's Equity Market

Component	*Mid-1993*	*India (1997)*	*Future*	*New York (1997)*
Trading	3.75	0.75	0.40	1.23
Brokerage	3.00	0.50	0.25	1.00
Market Impact Cost Clearing	0.75	0.25	0.15	0.23
Counter-party Risk	Present	In Part	Nil	Nil
Settlement	1.25	1.75	0.10	0.05
Paper Work Cost	0.75	0.75	0.10	0.05
Bad Paper Risk	0.50	1.00	0.00	0.00
Total	**5.00**	**2.50**	**0.50**	**1.28**

Note: This table attempts to quantify transaction costs borne by retail investors (i.e., with small delivery-oriented transaction).
Source: Shah, A. and S. Thomas 'Securities Markets: Towards Greater Efficiency' in K. S. Parikh (eds), *India Development Report,* 1997, Chapter 10, pp. 167–92.

TABLE 8.21 Transaction Costs on the Indian Stock Exchange

Year	*1994*	*1999*	*(Per Cent) Global Best*
Trading			
Fees	2.50	0.25	0.25
Market Impact Cost	0.75	0.25	0.20
Clearing	Present	Nil	Nil
Settlement			
Paper Work	0.75	0.10	0
Bad Delivery	0.50	0	0
Stamp Duty	0.25	0	0
Total	**4.75**	**0.60**	**0.45**

Source: Indian Securities Market—A Review, NSE, September 2000.

Table 8.20 shows that there was an almost 50 per cent reduction in costs in 1997. With complete dematerialisation of shares in the future, the transaction cost is expected to come down by around 80 per cent.

The transaction costs declined substantially from 4.75 per cent in 1994 and 2.50 per cent in 1997 to 0.60 per cent of selling/buying price in 1999. A round-trip transaction cost of a transaction of Rs. 50,000 works out at 2.30 per cent in 2006 – brokerage of about one per cent, impact cost about 1 per cent, securities transaction tax 0.25 per cent and depository transaction charges about 0.05 per cent.The transaction cost compares well with the global best markets. The reduction in transaction costs is an indicator of improvement in market efficiency and stock market development.

Conclusion

Indian stock markets have a history of more than 125 years. They have undergone a sea change in the last decade. Technology has changed the face of the stock markets. New trading systems, new stock exchanges, new players, new instruments, and new markets have come into existence. Today, the Indian equity market is one of the most technologically developed in the world and is on par with other developed markets abroad. The introduction of an online trading system, dematerialisation, ban of the *badla* system, and introduction of rolling settlement have facilitated quick trading and settlements which lead to larger volumes. The setting up of the National Stock Exchange of India Limited has revolutionalised the face of the stock markets. Today the NSE is the market leader and the 125-year-old BSE is lagging behind. The NSE, in a very short span of time, has taken the leading position as it is perceived to be investor-friendly. The BSE and other RSEs are surrounded by controversies relating to issues such as price manipulation, insider trading, and circular trading which have eroded investor confidence with the result that investors have shied away from the market. RSEs are on the verge of closure and are planning to merge either with the BSE or the NSE. In the future only two exchanges will survive—the NSE and the BSE. With globalisation, these exchanges will face stiff competition internationally. They will have to gear themselves up to face international competition. They should strive to increase transparency, strictly enforce corporate governance norms, provide more value added services to investors, and take steps to increase investor confidence. These stock exchanges will have to plan strategic tie-ups with their foreign counterparts to get an international platform. A developed and vibrant secondary market can be an engine for the revival and growth of the primary market.

KEY TERMS

Anchor Investor, Direct Market Access, Algorithmic Trading, Short Selling, Stock Lending and Borrowing, Volatility, Liquidity, Value-traded Ratio, Turnover Ratio, Market Capitalisation Ratio.

SUMMARY

1. Secondary market is a market in which existing securities are resold or traded. This market is also known as the stock market.
2. In all, there are, at present, 23 stock exchanges in India—19 RSEs, the BSE, the NSE, the OTCEI, and the Inter-connected Stock Exchange of India (ISE).
3. The OTCEI and the NSE are demutualised exchanges wherein the ownership and management of the exchange are separated from the right to trade on exchange.
4. Demutualisation is the process by which any member-owned organisation can become a shareholder-owned company. Such a company could either be listed on a stock exchange or be closely held by its shareholders.
5. A company has to list its securities on the exchange so that they are available for trading. A company can seek listing on more than one stock exchange but it is compulsory to list on the RSE nearest to its registered office. The basic norms for listing of securities are uniform for all exchanges. The SEBI has set up a central listing authority (CLA). It has spelled out the norms for the CLA.
6. The open outcry system, prevalent a few years ago on regional stock exchanges, has been replaced by an online screen-based electronic trading system. The NSE and the OTCEI had adopted screen-based trading right from inception.
7. The electronic trading system is superior to the open outcry system of the past. It ensures transparency, increases information efficiency by allowing faster incorporation of price sensitive information into prevailing prices and results in operational efficiency as there is a reduction in time, cost, risk of error, and fraud and elimination of a chain of brokers and jobbers, which result in low transaction costs.
8. The circuit breakers bring about a halt/suspension in trading automatically for a specified period if the market prices vary unusually on either side, i.e., move out of a pre-specified band.
9. To eliminate various problems such as theft, fake/forged transfers, transfer delays, and the paperwork associated with physical certificates, an electronic book entry form of holding and transferring securities has been introduced.
10. Internet trading in India made its debut in April 2000. Through this means of trading, investors can buy and sell shares online through the Internet.
11. The stock market index is the most important indices of all as it measures overall market sentiment through a set of stocks that are representative of the market. The stock market index is a barometer of market behaviour. It reflects market direction and indicates day-to-day fluctuations in stock prices.
12. There are two major indices in India: the BSE Sensex and the NSE Nifty. The BSE Sensitive Index of equity share prices was launched in 1986. It comprises 30 shares and its base year is 1978–79.

Another index which has become very popular in a short span of time is the S&P CNX NIFTY.

13. The carry forward system, or *badla,* was a unique feature of the Indian stock exchanges, particularly of the BSE. *Badla* was a unique selling proposition of the BSE. *Badla* provided the facility for carrying forward the transaction from one settlement to another. This old system has been replaced by a new system—rolling settlement.
14. The oldest stock exchange of India (the BSE) faced rough weather when the National Stock Exchange (NSE) was set up in 1994. It was opined that the BSE would not be in a position to face stiff competition from this new and modern stock exchange. However, the BSE revamped its operations quickly, adopted modern technology, and gave tough competition to the NSE. This competition among the exchanges has made the Indian capital market more mature.
15. The National Stock Exchange (NSE) completed 16 years of operations on June 30, 2010. The exchange is credited with technology innovation, speeding up of the process for dematerialisation, introduction of effective risk containment measures and the introduction of derivatives trading. It is a dominant stock exchange accounting for over 85 per cent of the traded volume in the cash and futures segment.
16. The OTCEI is based on the model of National Association of Securities Dealers Automated Quotation (NASDAQ) of USA, with modifications to suit the Indian conditions. It commenced operations from October 6, 1992. Even though the OTCEI is based on the model of NASDAQ, it has been languishing right from the beginning.
17. The Inter-connected Stock Exchange of India (ISE) was set up as the twenty-third stock exchange in the country. The ISE, promoted by 15 RSEs, opened a new national segment of trade to all members of the exchanges while retaining the regional segments of trading at these exchanges. This stock exchange has also failed to make its presence felt in the Indian stock market. It failed to take-off as investors preferred buying scrips from the BSE or the NSE rather than from the ISE. The ISE is now a member of both the NSE and the BSE.
18. One significant aspect of the Indian capital market is the existence of as many as 15 regional stock exchanges (RSEs)—the highest in the world. The emergence of a number of RSEs was the result of India's geographical and telecommunications limitations. There is insignificant or no trading at all in these stock exchanges. The percentage of turnover on regional stock exchanges is negligible.
19. In March 2004, the BSE and the Federation of Indian Stock Exchanges (FISE) put forth a joint proposal to form a common trading platform to provide small and medium enterprises (SMEs) easy and an efficient access to capital market. The BSE launched this enterprise market—INDOnext for small and medium enterprises (SMEs) on January 7, 2005.
20. An important feature of the 1990s was the participation of FIIs in the stock market. FIIs were allowed to participate in the Indian capital market in September, 1992. They have become active investors since August, 1993. FIIs such as mutual funds, pension funds, and country funds are operating in the Indian capital market. The total number of FIIs registered with the SEBI till January 2005 stood at 638 and they pumped in USD 8.5 billion into India, which was also a historic high. FII inflows create a bull run which encourages participation of small investors. FIIs caused the bull run of 2003 which enabled the government to carry out its disinvestment programme.
21. Buy back of shares means that a company purchases or buys back its own shares, which it had issued previously to the shareholders. Buy back is a tool to increase the wealth of the shareholders. The SEBI (Buy Back of Securities) Regulations, 1998 contain the procedure for buy back. Share buy back can be done in two ways: through a tender offer or through an open market repurchase. Most of the buy backs by cash-rich corporates were at cheap prices, leaving minority shareholders stranded.
22. To provide liquidity to the illiquid scrips, market makers are required who will continuously provide two-way quotes. A market maker puts up buy quote and a sell quote simultaneously. Thus, he creates a market for a scrip wherein it can be easily bought and sold. This process is called market making mechanism. In India, systematic and organised form of market making was initiated by the OTCEI where, market making is a compulsory activity and the sponsor has to act as a market maker for at least three years. At the regional stock exchanges, some brokers tried to give two-way quotes to revive some illiquid scrips, but they could not be successful.
23. The stock lending scheme enables a seller to borrow shares from a SEBI-registered intermediary and deliver them to a buyer against outstanding commitments. When the price declines, he replaces the borrowed shares by buying from the market. The borrower of the securities pays the lender interest on the value of the securities borrowed. On March 19, 2004, the SEBI revised guidelines pertaining to securities lending and borrowing scheme. Under the new scheme, any investor can participate by depositing securities in the clearing corporation.
24. Rolling settlement system replaced the *badla* system from July 2, 2001. This concept is not new to the Indian stock market. The OTCEI was the first exchange to introduce rolling settlement when it started operations in 1992. Stock markets moved to the T+2 system from April 1, 2003. In a T+2 settlement, confirmation and determination of obligation takes place on a T+1 basis, while pay-in and pay-out of funds and securities happens on the second day of trading.
25. The rolling settlement system of share transactions prevents speculations in between the settlement periods. Movement to T+1 system, requires real time gross settlement (RTGS) in banking transactions. For moving over to the T+1 system, the SEBI has implemented a straight through processing (STP) system to prevent delays in share transfer from the buyer to seller. The STP system reduces the time gap between trading and settlement.
26. Margin trading permits investors to buy shares by providing 50 per cent of the deal value as 'margin,' while borrowing 50 per cent from banks. From April 2004, the SEBI has permitted brokers, banks, non-banking finance companies (NBFCs) registered with the Reserve Bank, insurance companies and financial institutions to finance margin trading—borrowing money to part-finance stock purchases.
27. The stock market reforms were undertaken to have a positive impact on volatility, liquidity, size and transaction cost.
28. Volatility of a stock measures the frequency with which changes in its market price take place over a period of time. The stock markets were volatile in 2003–04 due to various factors such as uncertainty relating to formation of a new government, external factors relating to oil prices, huge activity in the F&O segment and rumours.
29. Liquidity is one of the most important indicators that greatly influences stock market development and efficiency. It is also one of the factors affecting the price discovery mechanism. When an investor is able to transact at a price close to the current market price in the stock market, the market is liquid.
30. There are two methods for measuring stock market liquidity—turnover ratio and value traded ratio. Turnover ratio equals the total value of domestic shares traded divided by market capitalisation. Value traded ratio equals the total value of domestic shares traded on the major stock exchanges divided by the gross domestic product (GDP).
31. The market capitalisation ratio measures the size of the stock market and equals the value of listed domestic shares (market capitalisation) divided by the GDP.
32. Transaction costs substantially impact returns, volumes, and volatility. Low transaction costs can induce the investor to trade more often which would lead to increased volumes resulting in low volatility.

REVIEW QUESTIONS

1. What are the services provided by a stock exchange? What are the distinctive features of stock markets in India?
2. What is listing of securities? Why should there be central listing?
3. What is a stock market index? Which are the major indices in India?
4. Explain *badla* and comment on this system.
5. How is the OTCEI different from other exchanges? State the reasons for the dismal performance of the OTCEI.
6. What are the measures taken by the SEBI for increasing liquidity in stock markets?
7. What is buy back of shares? What are the different methods of buy back?
8. Discuss the impact of reforms in secondary market.
9. What is security lending and borrowing (SLB)? State the revised norms for SLB. What are the benefits of SLB?
10. What is margin trading? Explain the mechanism of margin trading. State the salient features of the SEBI margin-trading norms.
11. What is rolling settlement? State the advantages of a rolling settlement.
12. State the routes through which an FII can invest in the Indian Stock Market. What are the conditions required to be fulfilled for an FII to qualify for grant of registration by the SEBI? Discuss the impact of FIIs on the Indian Stock Market.
13. 'FIIs are fair-weather friends.' Do you agree? Why?
14. State the steps taken by the SEBI for reviving the regional stock exchanges.
15. Describe the clearing and settlement process of NSCCL.
16. What is listing of securities? State the process to be undertaken by a company to list its shares?

Answer in Brief

1. What is Central Listing Authority? Why is this authority needed?
2. Why are circuit breakers used?
3. What is free-float capitalisation method?
4. How is free-float capitalisation method superior to full-market capitalisation method?
5. What are free-float factors? How are they assigned?
6. What is demutualisation and corporatisation of stock exchanges? Why was it undertaken?
7. Compare straight through processing and manual trade.
8. Explain the following;
   (i) Stock-market volatility; (ii) Stock-market liquidity;
   (iii) Market-impact cost.
9. What are the methods for measuring stock market liquidity?
10. What is direct market access? What are the benefits of direct market access?
11. Why are there a large number of unlisted companies in India.
12. State the listing norms prescribed by the SEBI for small and medium enterprises?
13. What is an auction of shares? Why it is held?
14. What is screen-based trading?
15. What is a contract note?
16. What is the role of the secondary market?
17. What is a clearing corporation?
18. What is a rolling settlement?
19. What is pay-in and pay-out?

Choose the Right Answer

1. The _____ratio measures the size of the stock market.
   (a) market capitalisation (c) value traded
   (b) turnover
2. The value-traded ratio capture trading relative to the size of the ______.
   (a) economy (c) market and economy
   (b) market
3. Stock markets moved to the _____ system from April 1, 2003.
   (a) T+1 (c) T+3
   (b) T+2 (d) T+5
4. The government has permitted ___% foreign investment in stock exchanges.
   (a) 26 (b) 74 (c) 49 (d) 10
5. At present, there are ___ stock exchanges in India.
   (a) 19 (b) 21 (c) 23 (d) 25
6. The BSE Sensex comprises ___ scrips and the CNX Nifty comprises ___ scrips.
   (a) 50,30 (c) 30,50
   (b) 25,50 (d) 100,50
7. The ______is based on the model of NASDAQ of the United States.
   (a) Inter-connected Stock Exchange of India
   (b) INDOnext
   (c) Over-the-Counter Exchange of India
8. The ____ is the stock exchange for small-cap companies.
   (a) Inter-connected Stock Exchange of India
   (b) INDOnext
   (c) Over-the-Counter Exchange of India
9. _______ are instruments used by foreign funds not registered in the country for trading in the Indian market.
   (a) Participatory notes
   (b) Secured notes
   (c) Warrants
10. Screen-based trading system matches orders in the________ priority basis.
    (a) time/price (b) price/quantity
    (c) price/time (d) quantity/price
11. Auction price applicable is _______.
    (a) previous day's close price
    (b) last trade price on that day
    (c) that day's close price
    (d) previous day's last trade price
12. A professional clearing member is _________.
    (a) a trading and clearing member and can settle trades for clients/ trading members
    (b) a trading and clearing member and is not entitled to settle trades for client
    (c) only a clearing member and can clear and settle trades for his clients
13. At the time of listing the securities of a company on a stock exchange, the company is required to enter into a(n) _____ with the exchange.
    (a) listing agreement
    (b) memorandum of understanding
    (c) understanding
14. The stock exchanges may delist companies which have been suspended for a minimum period of ____ months for non-compliance with the listing agreement.
    (a) 6 (b) 9 (c) 12 (d) 3

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9

The Derivatives Market

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *Meaning of derivatives*
2. *Economic benefits of derivatives*
3. *History of derivatives trading*
4. *Need for financial derivatives*
5. *Types of financial derivatives*
6. *Distinctive features of the derivatives market*
7. *Exchange-traded versus OTC derivatives markets*
8. *Traders in the derivatives market*
9. *The derivatives market in India*
10. *Forwards and futures—need for futures markets, futures terminology, and pricing futures*
11. *Futures trading strategies*
12. *Options—types, salient features, terminology, option greeks, comparing futures and options, benefits of options, payoff profile of put and call options, and Black–Scholes option pricing model*
13. *Options trading strategies*
14. *Derivatives trading in India*

INTRODUCTION

Derivatives are one of the most complex of instruments. The word 'derivative' comes from the verb 'to derive.' It indicates that it has no independent value. A derivative is a contract whose value is derived from the value of another asset, known as the underlying, which could be a share, a stock market index, an interest rate, a commodity, or a currency. The underlying is the identification tag for a derivative contract. When the price of this underlying changes, the value of the derivative also changes. Without an underlying, derivatives do not have any meaning. For example, the value of a gold futures contract derives from the value of the underlying asset, i.e., gold.

To understand the meaning of derivatives, let us take the example of a commodity such as cotton, which is the raw material for the textile industry. It may so happen that the price of cotton rises before and after the harvest but falls at the time of harvest. The farmer, who is exposed to such price fluctuations, can eliminate this risk by selling his harvest at a future date by entering into a forward, or futures, contract. This forward, or futures, contract takes place in the 'derivatives' market. The prices in the derivatives market are driven by the spot or cash market price of the underlying asset, which is cotton in this example.

Derivatives are very similar to insurance. Insurance protects against specific risks, such as fire, floods, and theft. Derivatives, on the other hand, take care of market risks—volatility in interest rates, currency rates, commodity prices, and share prices. Derivatives offer a sound mechanism for insuring against various kinds of risks arising in the world of finance. They offer a range of mechanisms to improve redistribution of risk, which can be extended to every product existing, from coffee to cotton and live cattle to debt instruments.

In this era of globalisation, the world is a riskier place and exposure to risk is growing. Risk cannot be avoided or ignored. Man, however, is 'risk-averse.' This risk-averse characteristic of human beings has brought about growth in derivatives. Derivatives help the risk-averse individual by offering a mechanism for hedging risks.

Derivative products, several centuries ago, emerged as hedging devices against fluctuations in commodity prices. Commodity futures and options have had a lively existence for several centuries. Financial derivatives came into the limelight in the post-1970 period; today they account for 75 per cent of the financial market activity in Europe, North America, and East Asia. The basic difference between commodity and financial derivatives lies in the nature of the underlying instrument. In commodity derivatives, the underlying is a commodity; it may be wheat, cotton, pepper, turmeric, corn, oats, soyabeans, orange, rice, crude oil, natural gas, gold, silver, and so on. In financial derivatives, the underlying includes treasuries, bonds, stocks, stock index, foreign exchange, and currency.

The market for financial derivatives has grown tremendously both in terms of variety of instruments and turnover. Derivatives can be futures, options, swaps, forwards, puts, calls, swap options, and index-linked derivatives. The value of the underlying assets of these derivatives is more than USD 16 trillion (more than Rs. 50 lakh crore), which is about three times the value of stocks traded on the New York Stock Exchange (NYSE) and twice the size of the United States GDP. The explosive growth of derivatives in the developed centuries is fuelled by the following.

- The increased volatility in global financial markets.
- The technological changes enabling cheaper communications and computing power.
- Breakthrough in modern financial theory, providing economic agents a wider choice of risk management strategies and instruments that optimally combine the risk and returns over a large number of financial assets.
- Political developments, wherein the role of the government in the economic arena has become more of a facilitator and less of a prime mover. Thus, the move towards market-oriented policies and the deregulation in financial markets has led to an increase in financial risk at the individual participants' level.
- Increased integration of domestic financial markets with international markets.

Economic Benefits of Derivatives

- Derivatives reduce risk and thereby increase the willingness to hold the underlying asset. They enable hedging, which is the prime social rationale for future trading. Hedging is also the equivalent of insurance facility against risk from market price fluctuations.
- Derivatives enhance the liquidity of the underlying asset market. A liquid market is a market with enough trading activity to allow traders to readily trade goods for a price that is close to its true value. The trading volume increases in the underlying market as derivatives enable participation by a large number of players.
- Derivatives lower transaction costs. These costs associated with trading a financial derivative are substantially lower than the cost of trading the underlying instrument.
- Derivatives enhance the price discovery process. Price discovery is the revealing of information about future cash market prices through the futures market. The prices in the derivatives market reflect the perception of market participants about the future, and lead the prices of the underlying to the perceived future level. The prices of derivatives converge with the prices of the underlying at the expiration of a derivatives contract. Thus, derivatives help in the discovery of future as well as current prices.
- Derivatives can help the investors to adjust the risk and return characteristics of their stock portfolio carefully. For instance, a risky stock and a risky option may be combined to form a riskless portfolio. They also provide a wide choice of hedging structures each with a unique risk/return profile to meet the exact requirements of each market participant.
- Derivatives provide information on the magnitude and the direction in which various market indices are expected to move. The cash markets lookout to the futures market for signals that could give market players information as to where the markets are heading. The measures that are widely tracked by the markets include Nifty discounts, which implies a lower value for Nifty futures contract compared to the cash price; open interest outstanding which is the total number of shares outstanding in the futures market; put–call ratios, which is the ratio of put options outstanding for every call option; and FII purchases and sales in the derivatives segment.

Benefits of Derivatives

- Reduce risk
- Enhance liquidity of the underlying asset
- Lower transaction costs
- Enhance price discovery process
- Portfolio Management
- Provide signals of market movements
- Facilitates financial markets integration

Derivatives Defined Under the Securities Contracts (Regulation) Act, 1956

The Securities Contracts (Regulation) [Act SC(R)A], 1956, defines derivatives in the following manner. Derivatives include the following.

- A security derived from a debt instrument, share, loan (whether secured or unsecured), risk instrument, or contract for differences, or any other form of security.
- A contract which derives its value from the prices or index of prices of underlying securities.

History of Derivatives Trading

Forward delivery contracts, stating what is to be delivered for a fixed price at a specified place on a specified date, existed in ancient Greece and Rome. Roman emperors entered forward contracts to provide the masses with their supply of Egyptian grain. These contracts were also undertaken between farmers and merchants to eliminate the risk arising out of uncertain future prices of grains. Thus, forward contracts have existed for centuries for hedging price risk.

The first organised commodity exchange came into existence in the early 1700s in Japan. The first formal commodities exchange, the Chicago Board of Trade (CBOT), was formed in 1848 in the US to deal with the problem of 'credit risk' and to provide centralised location to negotiate forward contracts. From 'forward' trading in commodities emerged the commodity 'futures.' The first futures type contract was called 'to arrive at.' Trading in futures began on the CBOT in the 1860s. In 1865, CBOT listed the first 'exchange-traded' derivatives contracts, known as the futures contracts. Futures trading grew out of the need for hedging the price risk involved in many commercial operations. The Chicago Mercantile Exchange (CME), *a* spin-off of CBOT, was formed in 1919, though it did exist before in 1874 under the names of 'Chicago Produce Exchange' and 'Chicago Butter and Egg Board.' The first financial futures to emerge were the currency futures in 1972 in the US. The first foreign currency futures contracts were traded on May 16, 1972, on the International Monetary Market (IMM), a division of the CME. The currency futures traded on the IMM were the British pound, the Canadian dollar, the Japanese yen, the Swiss franc, the German mark, the Australian dollar, and the euro-dollar. Currency futures were followed soon by interest rate futures. Interest rate futures contracts were traded for the first time on the CBOT on October 20, 1975. Stock Index futures and options emerged in 1982. The first stock index futures contracts were traded on Kansas City Board of Trade on February 24, 1982.

The first of the several networks, which offered a trading link between two exchanges, was formed between the Singapore International Monetary Exchange (SIMEX) and the CME on September 7, 1984.

Options are as old as futures. Their history also dates back to ancient Greece and Rome. The first account of options and its creator, Thales was published in Aristotle's *Polities* in 332 BC. Thales used a small amount of money to secure the right to use olive presses during harvest season. During olive-picking time, he sold his options for a great deal more than he paid for them.

Options were very popular with speculators in the tulip craze of seventeenth century Holland. Tulips, the brightly coloured flowers, were a symbol of affluence; owing to a high demand, tulip bulb prices shot up. Dutch growers and dealers traded in tulip bulb options. There was so much speculation that people even mortgaged their homes and businesses. These speculators were wiped out when the tulip craze collapsed in 1637 as there was no mechanism to guarantee the performance of the option terms.

The first puts and calls options were invented by an American financier, Russel Sage, in 1872. These options were traded over the counter. Agricultural commodities options were traded in the nineteenth century in England and the US. Options on shares were available in the US on the over-the-counter (OTC) market only until 1973 without much knowledge of valuation. A group of firms known as Put and Call Brokers and Dealers' Association was set up in early 1900s to provide a mechanism for bringing buyers and sellers together.

On April 26, 1973, the Chicago Board Options Exchange (CBOE) was set up at the CBOT for the purpose of trading stock options. It was in 1973 again that Black, Merton, and Scholes invented the famous Black–Scholes option formula. This model helped in assessing the fair price of an option which led to an increased interest in trading of options. With the options markets becoming increasingly popular, the American Stock Exchange (AMEX) and the Philadelphia Stock Exchange (PHLX) began trading in options in 1975.

The market for futures and options grew at a rapid pace in the 1980s and 1990s. The collapse of the Bretton Woods regime of fixed parities and the introduction of floating rates for currencies in the international financial markets paved the way for development of a number of financial derivatives, which served as effective risk management tools to cope with market uncertainties.

The CBOT and the CME are the two largest financial exchanges in the world on which futures contracts are traded. The CBOT now offers 48 futures and options contracts (with the annual volume at more than 211 million in 2001). The CBOE is the largest exchange for trading stock options. The CBOE trades options on the S&P 100 and the S&P 500 stock indices. The Philadelphia Stock Exchange is the premier exchange for trading foreign exchange options.

The most traded stock indices include S&P 500, the Dow Jones Industrial Average, the Nasdaq 100, the Nikkei 225. The US indices and the Nikkei 225 trade almost round the clock. The N225 is also traded on the Chicago Mercantile Exchange.

Eurex, the German Swiss derivatives exchange, was the world's biggest financial futures exchange at the end of 2001. Eurex closed 2001 with a record volume of more than 556 million contracts accounting for a 18.8 per cent share among the international futures and options exchanges. Chicago Mercantile Exchange (CME), the biggest US futures market, was the next in line, trading 333 million contracts in 2001 (11.3 per cent share) while the CBOE traded 276 million contracts and London's International Financial Futures Exchange (LIFFE) traded 177 million contracts.

History of Derivatives: A Time Line

The Ancient: Derivatives

1400s	Japanese rice futures
1600s	Dutch tulip bulb options
1800s	Puts and calls options

The Recent: Financial Derivatives Listed Markets

1972	Financial currency futures
1973	Stock options
1977	Treasury bond futures
1981	Eurodollar futures
1982	Index futures
1983	Stock index options
1990	Foreign index warrants and leaps
1991	Swap futures
1992	Insurance futures
1993	Flex options

OTC Markets

1981	Currency swaps
1982	Interest rate swaps
1983	Currency and bond options
1987	Equity derivatives markets
1988	Hybrid derivatives

Source: Fortune India, September 16–30, 1993, p. 5.

Major Derivatives Exchanges

Exchange	*Underlying*	*Exchange*	*Underlying*
American Stock Exchange	Hang Seng, Nikkei	Manila International Futures Exchange	Sugar, Soyabean, Coffee
Chicago Board Options Exchanges	NASDAQ 100, S&P 100, S&P 500	Mid-America Commodity Exchange	Silver, Wheat, Treasury Bonds
Chicago Board of Trade	Corn, Oats, Wheat, Silver, Treasury Bonds, Treasury Notes, Municipal Bonds Index	Minneapolis Grain Exchange	Wheat
		Osaka Futures Exchange	Nikkei
		New York Cotton Exchange	Cotton
Chicago Mercantile Exchange	Cattle, Hog, Treasury Bills, LIBOR, Eurodollar Yen, Deutsch Mark, Canadian Dollar, Franc Sterling, S&P 500 Index, S&P Midcap 400 Nikkei-225	New York Futures Exchange	NYSE Composite Index
		New York Mercantile Exchange	Platinum, Palladium, Crude Oil, Gasoline, Natural Gas
		New York Stock Exchange	Select Scripts
Commodity Exchange	Copper, Gold, Silver, Eurotop100 Index	New Zealand Futures Exchange	Barclays-5-year NZ $ Bonds, NZ $ Bank Bills
Coffee Sugar & Cocoa Exchange	Cocoa, Coffee, Sugar, Cotton	Pacific Stock Exchange	Select Scrips
		Philadelphia Stock Exchange	Select Scrips, Gold, Silver
Hong Kong Futures Exchange	Hang Seng, Gold	Singapore International Monetary Exchange	Nikkei 225, Yen, Deutsche Mark, Eurodollar
International Petroleum Exchange of London	Brent Crude, Gas Oil	Sydney Futures Exchange	All Ordinaries Share Price Index.
Kansas City Board of Trade	Wheat, KC Value Line Index	Tokyo Stock Exchange	10-Year Yen Bonds
London International Financial Futures Exchange	Sterling, Long Gilt, Euromark, Euroswiss	Winnipeg Commodity Exchange	Barley, Canola, Flaxseed, Wheat
	German Government Bonds, Italian Govt. Bonds		

Source: Business Today, March 22, April 6, 1995, pp. 170.

- Derivatives are a mechanism to hedge market, interest rate, and exchange rate risks

Need for Financial Derivatives There are several risks inherent in financial transactions and asset liability positions. Derivatives are risk-shifting devices; they shift risk from those 'who have it but may not want it' to 'those who have the appetite and are willing to take it.'

The three broad types of price risks are as follows

- **Market risk:** Market risk arises when security prices go up due to reasons affecting the sentiments of the whole market. Market risk is also referred to as 'systematic risk' since it cannot be diversified away because the stock market as a whole may go up or down from time to time.
- **Interest rate risk:** This risk arises in the case of fixed income securities, such as treasury bills, government securities, and bonds, whose market price could fluctuate heavily if interest rates change. For example, the market price of fixed income securities could fall if the interest rate shot up.
- **Exchange rate risk:** In the case of imports, exports, foreign loans or investments, foreign currency is involved which gives rise to exchange rate risk.

To hedge these risks, equity derivatives, interest rate derivatives, and currency derivatives have emerged.

Types of Financial Derivatives

In recent years, derivatives have become increasingly important in the field of finance. Forwards, futures, options, swaps, warrants, and convertibles are the major types of financial derivatives. A complex variety of composite derivatives, such as swaptions, have emerged by combining some of the major types of financial derivatives.

- **Forwards:** A forward contract is a contract between two parties obligating each to exchange a particular good or instrument at a set price on a future date. It is an over-the-counter agreement and has standardised market features.
- **Futures:** Futures are standardised contracts between the buyers and sellers, which fix the terms of the exchange that will take place between them at some fixed future date. A futures contract is a legally binding agreement. Futures are special types of forward contracts which are exchange traded, that is, traded on an organised exchange. The major types of futures are stock index futures, interest rate futures, and currency futures.
- **Options:** Options are contracts between the option writers and buyers which obligate the former and entitles (without obligation) the latter to sell/buy stated assets as per the provisions of contracts. The major types of options are stock options, bond options, currency options, stock index options, futures options, and options on swaps.

  Options are of two types: calls and puts. A call option gives a buyer/holder a right but not an obligation to buy the underlying on or before a specified time at a specified price (usually called strike/exercise price) and quantity. A put option gives a holder of that option a right but not an obligation to sell the underlying on or before a specified time at a specified price and quantity.
- **Warrants:** Warrants are long-term options with three to seven years of expiration. In contrast, stock options have a maximum life of nine months. Warrants are issued by companies as a means of raising finance with no initial servicing costs, such as dividend or interest. They are like a call option on the stock of the issuing firm. A warrant is a security with a market price of its own that can be converted into a specific share at a predetermined price and date. If warrants are exercised, the issuing firm has to create a new share which leads to a dilution of ownership. Warrants are sweeteners attached to bonds to make these bonds more attractive to the investor. Most of the warrants are detachable and can be traded in their own right or separately. Warrants are also available on stock indices and currencies.
- **Swaps:** Swaps are generally customised arrangements between counterparts to exchange one set of financial obligations for another as per the terms of agreement. The major types of swaps are currency swaps, and interest-rate swaps, bond swaps, coupon swaps, debt–equity swaps.
- **Swaptions:** Swaptions are options on swaps. It is an option that entitles the holder the right to enter into or cancel a swap at a future date. Swaptions become operative at the expiry of the options. Instead of having calls and puts, swaptions have receiver swaption (an option to receive fixed and pay floating) and a payer swaption (an option to pay fixed and receive floating).

Distinctive Features of the Derivatives Market

- The derivatives market is like any other market,
- It is a highly leveraged market in the sense that loss/profit can be magnified compared to the initial margin. The investor pays only a fraction of the investment amount to take an exposure. The investor can take large positions even when he does not hold the underlying security.
- Market view is as important in the derivatives market as in the cash market. The profit/loss positions are dependent on the market view. Derivatives are double-edged swords.
- Derivatives contracts have a definite lifespan or a fixed expiration date. They are primarily a tool to employ short-term expectations about a stock or an index to hedge or trade.
- The derivatives market is the only market where an investor can go long and short on the same asset at the same time.
- Derivatives carry risks that stocks do not. A stock loses its value in extreme circumstances, while an option loses its entire value if it is not exercised.
- Derivatives contracts are flexible as they allow investors to translate a particular view into a variety of different trades, depending on their risk appetite and availability of capital. Suppose an investor is bullish on Infuses, then he can either buy Infuses futures or buy a call option or sell a put option. Moreover, investors can capitalise on a bearish view as well as either by selling futures or buying a put, or writing a call.
- Margin-based trading makes trading in derivative products attractive. The margin requirement is about 12 per cent for futures and 8 per cent for options. One can trade in derivatives by paying just a small fraction of the total value. So, by depositing, say Rs. 25,000, it may be possible to trade in Nifty futures worth Rs. 2 lakh.

Exchange-traded Versus OTC Derivatives Markets

There has been a sharp growth of around 40 per cent a year in the OTC derivatives markets globally. In the OTC market transactions take place via telephone, fax, and other electronic means of communication as opposed to the trading floor of an exchange. Information Technology (IT) has enabled this fast growth in the OTC derivatives markets. OTC derivatives contracts are more flexible than exchange-traded contracts. However, OTC derivatives markets are characterised by the absence of formal rules for risk (a prerequisite for market stability and integrity), the absence of formal centralised limits or individual positions, leverage or margining, and the absence of a regulatory authority. Moreover, certain features of OTC derivatives markets, such as the dynamic nature of gross/credit exposures, information asymmetries, the effect of OTC derivative activities on available aggregate credit, high concentrations of OTC derivative activities in major institutions, and the central role of OTC derivatives markets in the global financial system, give rise to instability in institutions, markets, and financial systems. The highly leveraged institutions and their OTC derivative positions were the main cause of turbulence in financial markets in 1998. Indian law considers OTC derivatives as illegal. The L. C. Gupta Committee on derivatives has recommended only exchange-traded derivatives and made no reference of OTC derivatives.

Traders in Derivatives Market

There are three types of traders in the derivatives market:

- Hedger
- Speculator
- Arbitrageur

Traders in Derivatives Market

- Enable smooth functioning of the market
- Provide liquidity and depth to the market
- Enable price discovery

Hedger A hedge is a position taken in order to offset the risk associated with some other position. A hedger is someone who faces risk associated with price movement of an asset and who uses derivatives as a means of reducing that risk. A hedger is a trader who enters the futures market to reduce a pre-existing risk.

Speculator While hedgers are interested in reducing or eliminating risk, speculators buy and sell derivatives to make profit and not to reduce risk. Speculators willingly take increased risks. Speculators wish to take a position in the market by betting on the future price movements of an asset. Futures and options contracts can increase both the potential gains and losses in a speculative venture. Speculators are important to derivatives markets as they facilitate hedging, provide liquidity, ensure accurate pricing, and help to maintain price stability. It is the speculators who keep the market going because they bear risks which no one else is willing to bear.

Arbitrageur An arbitrageur is a person who simultaneously enters into transactions in two or more markets to take advantage of the discrepancy between prices in these markets. For example, if the futures price of an asset is very high relative to the cash price, an arbitrageur will make profit by buying the asset and simultaneously selling futures. Hence, arbitrage involves making profits from relative mispricing. Arbitrageurs also help to make markets liquid, ensure accurate and uniform pricing, and enhance price stability.

All three types of traders and investors are required for a healthy functioning of the derivatives market. Hedgers and investors provide economic substance to this market, and without them the markets would become mere tools of gambling. Speculators provide liquidity and depth to the market. Arbitrageurs help in bringing about price uniformity and price discovery. The presence of hedgers, speculators, and arbitrageurs, not only enables the smooth functioning of the derivatives market, but also helps in increasing the liquidity of the market.

FORWARDS AND FUTURES

Forward Contracts

- A forward contract is an over-the-counter customised agreement between two parties obligating each to exchange a particular good or instrument at a set price on a future date

A forward contract is a customised contract between two parties where settlement takes place on a specific date in the future at a price agreed today. They are over-the-counter traded contracts. Forward contracts are private agreements between two financial institutions or between a financial institution and its corporate client.

In a forward contract, one party takes a long position by agreeing to buy the asset at a certain specified date for a specified price and the other party takes a short position by agreeing to sell the asset on the same date for the same price.

The main features of forward contracts are as follows

- They are bilateral contracts wherein all the contract details, such as delivery date, price, and quantity, are negotiated bilaterally by the parties to the contract. Being bilateral in nature, they are exposed to counter-party risk.
- Each contract is custom designed in the sense that the terms of a forward contract are individually agreed between two counter-parties. Hence, each contract is unique in terms of contract size, expiration date, and the asset type and quality.
- As each contract is customised, the contract price is generally not available in public domain.
- The contract has to be settled by delivery of the asset on the expiry date.
- In case, the party wishes to reverse the contract, it has to compulsorily approach the same counter-party, which being in a monopoly situation can command a high price.

Forward markets for some goods are highly developed and have standardised market features. Some forward contracts do have liquid markets. In particular, the forward foreign exchange market and the forward market for interest rates are highly liquid. Forward contracts' dominance is very high for the purposes of hedging foreign exchange exposures, particularly in Europe. Forward contracts help in hedging risks arising out of foreign exchange rate fluctuations. For instance, an exporter who expects to receive payments in dollars three months later can sell dollars forward and an importer who is required to make payment in dollars can buy dollars forward, thereby reducing their exposure to exchange-rate fluctuations.

Forward markets are not free from limitations. As these contracts are customised, they are non-tradeable. Moreover, there is a possibility of default by any one party to the transaction and this gives rise to counter-party risk which is a very serious issue worldwide.

- Futures are exchange-traded standardised contracts between two parties obligating each to exchange a particular good or instrument at an agreed price on a future date

Futures Contracts

Futures are exchange-traded contracts, or agreements, to buy or sell a specified quantity of financial instrument/commodity in a designated future month at a price agreed upon by the seller and buyer. Futures contracts have certain standardised specifications, such as the following.

- Quantity of the underlying.
- Quality of the underlying (not required in financial futures).

- Date and month of delivery.
- Units of price quotation (not the price itself) and minimum change in price (tick size). A tick is a change in the price of a contract be it up or down.
- Location of settlement.

Futures is a type of forward contract. The structure, pay-off profile, and basic utility for both futures and forward are the same. However, futures contracts differ from forward contracts in several ways.

- Futures are exchange-traded contracts, while forwards are OTC contracts, not traded on a stock exchange.
- Futures contracts being traded on exchanges are standardised, that is, have terms standardised by the exchange. Only the price is negotiated. In contrast, all elements of forward contracts are negotiated and each contract is customised, that is, all the terms of a forward contract are individually agreed between two parties.
- Futures markets are transparent while the forward markets are not transparent, as forwards are over-the-counter instruments. The latter are private bilateral agreements and as these agreements are not visible to other parties, the forward market is not transparent. In futures market, everyone can see the prices available as they are exchange traded.
- Futures contracts are usually more liquid than forward contracts, because they are standardised and traded on futures exchanges. In contrast, most forward contracts, due to their customised nature, are less liquid.
- Futures contracts frequently involve a range of delivery dates whereas there is generally a single delivery date in a forward contract.
- Futures contracts are marked-to-market daily whereas forward contracts are not.
- Profits and losses on a futures contract are realised on a daily basis (via the marking to market process). The profit or loss from a forward is realised when the contract matures.
- Most futures contracts are closed prior to delivery whereas a forward contract is not usually settled until the end of its life. Hence, futures allow flexibility as to the date of closing out. Most forward contracts do lead to delivery of the physical onset or a cash settlement as they are not typically tradeable.
- A futures contract can be reversed with any member of the exchange whereas a forward contract can be reversed only with the same counter-party.
- The futures trading system has effective safeguards against defaults. Futures do not carry a credit risk, as there is a clearing house, which guarantees both payment and delivery. Forward contracts, on the other hand, are exposed to default risk by a counter-party as there is no such clearing house involved.
- Futures markets are regulated by a financial regulator, while forward contracts, in general, trade in an unregulated market.

Thus, forwards and futures are basically similar concepts. They differ only in terms of the institutional setting in which they trade, the degree of flexibility, and cost efficiency. Futures are recognised as the best and most cost-efficient way of risk hedging.

Need for Futures Markets

Futures markets exist for several reasons.

- Futures allow hedging against adverse price changes. Hedgers transfer price risk to speculators who willingly undertake risk to take advantage of fluctuations in prices.
- Futures help in price-discovery. By observing the current futures price, producers and consumers can estimate what the future spot price will be or what future supply and demand of a good will be.
- Futures prices contain and reflect information which helps in optimal allocation of resources.
- Futures make transactions across time easier, speedier, and less costly.

Futures Terminology

- *Futures:* A forward contract traded on an exchange.
- *Long:* A party is said to be long on an instrument when he or she owns the instrument. An investor who purchases stock with his own capital is said to be long stock. A long position indicates a net over bought position.

- *Short: A* party is said to be short if he or she has sold the contracts. An investor who sells a stock that he does not currently own is short stock. Short positions indicate an over-sold position.
- *Spot price:* The price at which an asset trades in the spot market.
- *Futures price:* The price at which the futures contract trades in the futures market.
- *Expiry date:* The last day on which the contract will be traded, at the end of which it will cease to exist. The expiry day is the last Thursday of the expiry month or the previous trading day if the last Thursday is a trading holiday.
- *Contract size:* The amount of asset that has to be delivered under one contract. For instance, the contract size on the NSE's futures market is 200 Nifties.
- *Contract cycle:* The period over which a contract trades. The index futures contracts on the NSE have one (near) month, two (next) months and three (far) months expiry cycles which expire on the last Thursday of the month. On the Friday following the last Thursday, a new contract having a three-month expiry would be introduced for trading.
- *Marking-to-market:* The practice of periodically adjusting a margin account by adding or subtracting funds based on changes in market value to reflect the investors' gain or loss. This is to ensure there are no defaults.
- *Margin:* An amount of money deposited by both buyers and sellers of futures contracts to ensure performance of the terms of the contract. The aim of margin money is to minimise the risk of default by either counter-party. The payment of margin ensures that the risk is limited to the previous day's price movement on each outstanding position. However, even this risk is offset by the initial margin holdings. There are different types of margins such as initial margin, variation margin, maintenance margin and additional margin.
- *Initial margin:* The amount that must be deposited in the margin account at the time a futures contract is first entered into. The purpose of initial margin is to cover the largest potential loss in one day. Both buyer and seller have to deposit margins. The technique of value-at-risk (VaR) is used for calculating this margin. This margin is calculated on the basis of variance observed in daily price of the underlying over a specified historical period. The margin is kept in a way that it covers price movements more than 99 per cent of the time. Usually three sigma (standard deviation) is used for this measurement.
- *Maintenance margin:* The amount that is set aside to ensure that the balance in the margin account never becomes negative is called maintenance margin. It is usually lower than the initial margin. If the balance in the margin account falls below the maintenance margin, the investor receives a margin call.
- *Variation or mark-to-market margin:* The amount that is deposited as a further collateral to meet daily losses. This margin is required by the close of business, the following day. Any profits on the contract are credited to the client's variation margin account.
- *Additional margin:* The amount that may be called for by the exchange in case of sudden higher-than-expected volatility. This is a preemptive move by the exchange to prevent breakdown.
- *Hedge ratio:* The number of futures contracts required to buy or sell to offset risk. If the instrument to be hedged shows high volatility, then a larger number of future contracts are required than in the case of a more stable instrument. This depends on the value of a futures contract, value of the portfolio to be hedged, and sensitivity of the movement of the portfolio price to that of the index called beta. The hedge ratio is closely linked to the correlation between the asset (portfolio of shares) to be hedged and the underlying (index) from which futures is derived. When a stock index futures contract is used to hedge a position in a portfolio of stocks or a position in an individual stock, the optimal number of futures contracts is equal to the beta of the position times the ratio of the value of the portfolio to the futures contract price.
- *Closing out contracts:* A long position in futures can be closed out by selling futures while a short position in futures can be closed out by buying futures on the exchange. The net difference is settled in cash without any delivery of the underlying. Most contracts are not held till expiry, but closed out before that. If held until expiry, some are settled for cash and others for physical delivery.
- *Basis:* The difference between spot price of an asset and its futures price. Even through the spot and futures prices generally move in tandem with each other, the basis is not constant. Changes in interest rates or expected dividends cause unexpected changes in basis. Unexpected changes in basis render hedges imperfect. Basis decreases with time and, on expiry, it is zero, and futures price equals spot price.
- *Contango:* Under normal market conditions, futures contracts are priced above the expected future spot price. This is known as contango.

- *Backwardation:* When futures price prevail below the expected future spot price, it is known as backwardation. This situation may prevail when the cost of carry is negative or when the underlying asset is in short supply in the cash market but there is an expectation of increased supply in future.
- *Maturity periods for futures contracts:* In India, there are different maturity periods for the futures contract—one, two, and three months with the last Thursday of the month serving as expiry date. Suppose at the end of July the one-month contract comes to an end, the August contract automatically becomes a one-month contract, the September contract, a two-month contract and the October contract, a three-month contract. In the futures market, the broker through whom the futures was bought has to be retained throughout the contract or till the conclusion of the contract.
- *Settlement basis:* The settlement basis is mark-to-market and final settlement is cash settled on T + 1 basis.
- *Settlement price:* Daily settlement price is the closing price of the futures contracts for the trading day and the final settlement price is the closing price of the underlying asset on the last trading day.

Role of Clearing House/Corporation

A clearing house/corporation acts as a counter-party to all deals in the derivatives market and guarantees settlement. A clearing corporation performs full novation, that is, it interposes itself between both legs of every trade, becoming the legal counter-party to both or alternatively provides an unconditional guarantee for settlement of all trades. It matches the transactions, reconciles sales and purchases, and does daily settlement. It also undertakes risk management of its members and carries on inspection, surveillance, and so on. Besides collecting margin capital, it also monitors the net worth requirements of the members.

The National Securities Clearing Corporation Limited (NSCCL) undertakes clearing and settlement of all deals executed on the NSE's F&O (derivatives) segment. NSCCL has an online position monitoring system which monitors all clearing members' open positions on a real time basis.

Pricing Futures

The study of futures prices is essential for understanding all features of the futures market. Futures prices bear important relationships with the spot price, expected future spot price, the basis, the spreads, and the cost of storage. These are fundamental factors that affect futures prices.

- Factors that affect futures prices are the spot price, expected future spot price, the basis, the spreads, and the cost of storage

Spot Price The price of a good for immediate delivery. It is also referred to as the cash price or the current price.

Basis The difference between cash price and the futures prices of a particular good.

$$\text{Basis} = \text{Current cash price} - \text{Futures price.}$$

As the futures contract approaches maturity, the basis narrows. At the maturity of the futures contract, the basis is zero. This behaviour of the basis over time is known as convergence, i.e., convergence of futures price towards the spot price. The basis is much more stable than the futures price or the cash price. The futures price or the cash price may vary widely when considered in isolation, but basis tends to be relatively stable. Hence, basis is important for speculation and hedging. Arbitrage opportunities can also arise if the basis during the life of a contract is incorrect.

Spreads A spread is the difference between two futures prices. Spreads may be classified as intra-commodity spread and inter-commodity spread. If the two futures prices that form a spread are futures prices for futures contracts on the same underlying good but with different expiration dates, the spread is an intra-commodity spread. An intra-commodity spread indicates the relative price differentials for a commodity to be delivered at two points in time. If two futures prices that form a spread are futures prices for two underlying goods, such as silver futures and gold futures, then the spread is an inter-commodity spread.

Spreads are important for speculators. Spreads are more stable when compared to futures prices. Arbitrage opportunities can arise if the spreads are incorrect.

Expected Future Spot Price The expectations of market participants also help in determining the futures prices. If market participants believe that silver will sell for Rs. 7,000 per kg in three months, then the price of the futures contract for delivery of silver in three months cannot be Rs. 9,000 per kg.

Cost of Storage The price for storing the good underlying the futures contract also affects futures prices. The cost of storing is the cost of storing the underlying good from the present to the delivery date. It is the cost of carry related arbitrage that drives the behaviour of the futures prices.

Cost of Carry Model of Futures Prices The cost of carry model determines futures prices in such a way that no arbitrage opportunities arise.

The assumptions of this model are as follows

- Markets are perfect
- All assets are infinitely divisible
- There are no transaction costs
- No bid-ask spread exists
- There are no restrictions on short selling
- Forward and futures prices are equal
- Borrowing and lending rates are equal
- There are no limitations to storing

The price of the contract defined under this model is:

$$F = S + C$$

Futures price = Spot price + Carry costs

The above equation can also be expressed as:

$$F = S\,(1 + r)^T$$

where

F = Futures prices
S = Spot price
r = Cost of financing
T = Time till expiration

If the above equation holds true, then there will be no arbitrage opportunities. If $F < S\ (1+r)^T$ or $F > S\ (1+r)^T$, arbitrage opportunities would exist.

- Carrying costs are costs incurred for buying and holding on to the deliverable asset. They include storage, insurance transportation, and financing costs

Carrying costs are the total costs to carry an asset forward in time. In other words, they are costs incurred for buying and holding on to the deliverable asset. The components of carrying costs are storage costs, insurance costs, transportation costs, and financing costs. Storage cost is the cost of warehousing the asset. Insurance cost is the cost of protecting the asset against fire, water, and other dangers. Transportation cost is the cost of transporting the asset to different locations. Financing cost is the cost of financing the asset. The cost of financing may be interest on borrowings for financing the asset.

These components may vary with contracts on different times and may even be negative. The holding cost for commodity futures is a sum total of all the four components. In the case of some financial futures, such as equity futures, the holding cost is the cost of financing minus the carry return. The carry return consists of the future value of the cash inflows that the deliverable asset provides to its holder. For example, dividend returns, actual or accrued interest income, and so on. Hence, for some financial futures,

$$F = S + C - CR$$

where CR = Carry return

The cost of carry model gives a good idea about the futures price but does not provide a complete determination of futures prices due to market imperfections.

Cost of Carry Model for Stock Index Futures

Stock index futures gives its owner the right and obligation to buy or sell the portfolio of stocks characterised by the index. Stock index futures are cash settled as there is no delivery of the underlying stock. Equity index futures differ from commodity futures in two ways. No costs of storage are involved in holding equity and equity comes with a dividend stream, which is a negative cost if the investor is long the stock and a positive cost if the investor is short the stock. Hence, stock index futures face one complication, namely, dividends. Therefore, in stock index futures,

$$\text{Cost of carry} = \text{Financing cost} - \text{Dividends}$$

where financing cost is the cost of financing the purchase of the portfolio underlying the index; dividends are the present value of dividends obtained from the stocks in the index portfolio. As dividends are a crucial aspect of stock index futures, there should be an accurate forecast of dividends. If the dividend flow throughout the year is uniform, then it would be easier to calculate the annual dividend yield. Index futures, therefore, can be priced when given the expected dividend yield.

$$F = S[1 + (r - d)^T]$$

where

F = Futures prices of index
S = Spot index value
r = Cost of financing
d = Expected dividend yield on the index portfolio
T = Number of days in the funding period, that is, n/365 days or n/12 months

The excess of the financing cost of holding the stock over the dividend receipts constitutes the net cost of carry.

Consider a one-month futures contract traded on the NSE. The spot value of Nifty is Rs. 1,150. The cost of financing is 11 per cent per annum and the Nifty gives a dividend yield of 1 per cent per annum. The fair value of the futures contract is $= 1{,}150\ [(1 + (0.11 - 0.01)^{12}] =$ Rs. 1,159.

A steady rise in cost of carry is a bullish signal as it suggests investors are ready to incur this extra cost for buying long positions. In other words, it suggests creation of long positions in stock futures using index futures as a hedging tool (short position)

FUTURES TRADING STRATEGIES

Strategies are game plans created by an investor. These game plans are based on an investor's expectations of how the market will move. Usually, there are four views that an investor can take on market movements: bullish, bearish, volatile, and neutral.

Bullish: The investor anticipates a price rise.

Bearish: The investor anticipates a price decline.

Volatile: The investor anticipates a significant and rapid movement either in the market or scrip but he is not clear of the direction of the movement.

Neutral: The investor believes that market or scrip will not move significantly in any direction. It is opposite of the volatile view.

Different strategies are available for different views on market movements. These strategies can be classified into three groups.

- Hedging strategies
- Speculative trading strategies
- Arbitrage strategies

Hedging with Index Futures

Futures contracts in India are available on two stock indices—the S&P CNX Nifty and the BSE Sensex. A hedge reduces the price risk of an existing or anticipated position in the cash market. A hedge can help lock in existing profits. Hedging does not mean maximisation of return! Its purpose is to reduce the volatility of a portfolio by reducing the risk. Stock index futures are used to reduce stock market risk in the anticipation that any losses arising from movements in stock prices are offset by gains from parallel movements in futures prices. Hedgers sell futures when they are long the cash asset and buy futures when they are short the cash asset.

In stock index futures, there is no delivery and receipt of stock. Stock index futures contracts are cash settled.

It is necessary to know the beta of a stock to measure the extent to which it moves in line with the market index. The market index is assumed to have a beta (P) one (1). A stock with a beta of 0.5 is half as volatile as the market index and a stock with 2 is one with double the degree of volatility. If the P of a stock is 1.2, then the stock tends to change by 20 per cent more than the stock index. The relatively large losses (or profits) arising from high volatility require correspondingly large offsetting profits (or losses) from futures contracts and thus a large number of futures contracts.

Stock index futures are of immense importance to mutual funds.

Some examples where hedging strategies are useful for mutual funds are as follows

- Reducing the equity exposure of a mutual fund by selling index futures.
- Investing funds raised by new schemes in index futures so that market exposure is immediately taken.
- Partial liquidation of portfolio by selling the index future instead of the actual shares where the cost of transaction is higher.

Besides mutual funds, stock index futures help in neutralising market volatility, arising out of sudden changes from the FII flow of funds.

There are four hedging strategies in case of index futures.

- Long stock, short index futures
- Short stock, long index futures
- Hedging a portfolio with short index futures
- Hedging with long index futures

Long Stock, Short Index Futures An investor might be a skilled stock picker but a poor market timer. He might feel that the stock is intrinsically undervalued but the entire market may move against his thinking even though it is correct. His understanding that the stock is intrinsically undervalued is wrong and the stock is not worth more than the market price. Hence to remove risk from fluctuations of the market index, he takes a long position in a stock plus short position in index. With this strategy, he has hedged his index exposure.

Suppose an investor adopts a position of Rs. 2 lakh long Infosys on September 1, 2001. He plans to hold the position till September 25, 2001. Suppose the beta of Infosys is 1.2. Hence the size of the position that he needs on the index futures to completely remove the hidden index exposure (risk) is $1.2 \times 2{,}00{,}000 =$ Rs. 2,40,000. On September 1, 2001, Nifty is 1000 and the nearest futures contract (with expiration November 25, 2001) trading at about 1,020. Suppose each market lot of the futures is 200 Nifties. Hence this market lot is worth Rs. 2,04,000. The investor sells 200 Nifties to get the position. On September 21, 2001, Nifty crashed because of the terrorist attack on the World Trade Centre. The investor unwinds both his positions. He has suffered a loss in the position on Infosys as the market price dropped but he earns a profit on short Nifty futures and thereby makes an overall gain.

Consider an investor who buys 1,000 shares of Reliance at Rs. 200 and hedges by shorting 300 Nifties at Rs. 992 each. He closes out his position at the closing price of the next day when Reliance has dropped 5 per cent and the Nifty futures have dropped 4 per cent. His Reliance position loses Rs. 10,000 (Rs. 2,00,000 − Rs. 1,90,000) and the short position on the Nifty earns him Rs. 11,904 (Rs. 2,97,600 − Rs. 2,85,696). His overall profit on the position is Rs. 1,904.

Short Stock, Long Index Futures If an investor feels that the stock was intrinsically overvalued, then he should take a short position in the cash market and a long position in the index. This position is short stock plus long index and helps him to hedge his index exposure.

Consider an investor who sells 1,000 shares of Reliance at Rs. 200 each and hedges by buying 300 Nifties at Rs. 992 each. He closes out his position at the closing price of the next day when Reliance has risen by 5 per cent and the Nifty futures have risen by 4 per cent. His Reliance position loses Rs. 10,000 and the long position on Nifty earns him Rs. 11,904 leading to an overall profit of Rs. 1,904.

Hedging a Portfolio with Short Index Futures An investor with a portfolio of shares may have a view that stock prices will fall in the near future. Every portfolio contains a hidden index exposure. Hence, the investor may hedge his portfolio by selling index futures. This strategy makes sense for short periods of time when he anticipates a short-term market volatility. This hedging strategy is designed to reduce budget-related volatility. Market volatility increases one week before and two weeks after a budget. Hence, many investors can avoid these fluctuations by hedging their portfolio with short index futures.

Consider an investor who has a portfolio consisting of five shares and the total portfolio value is Rs. 1,90,000. The portfolio's beta is 0.95. For complete hedging, he needs to sell $0.95 \times 1{,}90{,}000$ of the futures, that is, Rs. 1,80,500. On February 10, 2002, the Nifty is at 1,125. So he will sell 200

Nifties and his short position on the Nifty futures will expire on March 10, 2002, worth Rs. 2,25,000. On March 5, 2002, the Nifty falls to 963. This drop was due to the budget announcement on February 28, 2002. On March 5, 2002, he buys back his futures thus ending his hedging. His portfolio value came down to Rs. 1,55,000 and his loss on portfolio amounted to Rs. 35,000. His profits on the futures hedging are Rs. 32,400 (Rs. 2,25,000 – Rs. 1,92,600). Hence, his net loss is Rs. 2,600. Had he not hedged his portfolio, his loss would have been Rs. 35,000. If the budget announcement had led to a rise in the Nifty, then the investor would have gained.

This strategy of selling index futures may be of great help to a balanced mutual fund scheme which decides to reduce its equity exposure. If the mutual funds actually sells its equity holdings, then such selling would depress equity prices to the disadvantage of the scheme and increase cost and time taken. Instead of actually selling the required portfolio, the mutual fund can opt for selling index futures at much less cost and with a low impact on the cash market. The mutual fund can then, on the one hand, undertake actual sale of its holdings, depending on market conditions, and realise best possible prices. On the other hand, the mutual fund can reduce or unwind the short index futures position correspondingly.

Another advantage of this strategy for mutual funds is that they can preserve the value of portfolio during times of market stress.

Hedging with Long Index Futures There are situations in which a person has funds or anticipates funds in the near future and wants to invest in equity shares. However, investing in the stock market is a time consuming process as a person may need to do equity research and decide his portfolio. Moreover, certain mutual funds, such as a closed-ended fund, which has received funds through its initial public offering, or an open-ended fund, which has received funds by selling fresh units, require time for stock selection and investment. During this time, however, the index may rise. Hence, the investor/fund may have to purchase shares at unusually high prices. This risk can be hedged by buying index futures. Later, the investor/fund can gradually acquire shares and thereby reduce the long index position corresponding. This strategy, therefore, enables the investor/fund to choose shares carefully and spend more time in placing aggressive limit orders.

Strategies for Speculation

There are two strategies for speculation. If the speculator is bullish about the index, then he can buy index futures. If the speculator is bearish about the index, then he can sell index futures.

Long Index Futures If the speculator thinks that the index will go up, he should buy the index futures. Once a speculator is long index, using the futures market, he gains if the index rises and loses if the index falls.

Consider a speculator who feels that the index will rise. He buys on August 1, 2002, 200 Nifties with expiration date on August 31, 2002. On August 1, 2002, the Nifty August contract cost him Rs. 950 and hence his position is worth Rs. 1,90,000. On August 16, 2000, Nifty rose to Rs. 957 and the Nifty's August contract rose to Rs. 970. He sells off his position at Rs. 970 to make a profit of Rs. 4,000.

Short Index Futures If the speculator thinks that the market index will fall, he should sell the index futures. Once a speculator is short index using the futures market, he gains if the index falls and loses if the index rises.

Futures are available at different expirations. Longer dated futures are suitable for long-term forecasts of index movement and shorter dated futures are more liquid (i.e., one with the highest bid–ask spread). The most overpriced futures contract should be sold. There is also a third strategy available for speculating, which is referred to as basis trading.

Basis Trading This is a strategy of playing the spreads, in which case the speculator trades the 'basis.' When a basis risk is taken, the speculator primarily bets on the cost of carry, which is the interest rate in case of index futures going up or going down. In case of the cost of carry going up, the speculator will pay the basis, and in case of the cost of carry going down, the speculator will receive the basis.

Paying the basis implies going short on a future with near month maturity while at the same time going long on a future with longer term maturity. Receiving the basis implies going long on a future with near month maturity while at the same time going short on a future with longer term maturity.

Arbitrage Strategies

The index arbitrage is the arbitrage between the index value and the prices of the underlying stocks.

- If an investor has funds, he can lend this money in the stock market. But he faces two types of risk, namely, price risk of shares and credit risk of default. To avoid these risks, the lender can buy all stocks of Nifty in the cash market and simultaneously sell them at a future date on the futures market. The price risk is completely hedged and there is no default risk as the National Securities Clearing Corporation Limited (NSCCL) acts as a counter-party.
- Similarly, if an investor has securities, he can lend these securities and earn a rate of return on them. This mechanism is provided by the index futures market wherein the investor sells off all 50 stocks in Nifty and buys them back at a future date, using index futures. The money received from the sale of securities can be invested until the futures expiration. The NSE offers the NEAT software through which an investor can take buy or sell position.
- Arbitrage opportunities exist if the futures price is less than or greater than the spot price plus the cost of carry. If $F > S\ (1+r)^T$, arbitrageurs will borrow funds, buy the spot with these borrowed funds, sell the futures contract, and carry the asset forward to deliver against the futures contract. This is called cash-and-carry arbitrage. If $F < S\ (1+r)^T$, arbitrageurs will sell the asset, invest the proceeds from this sale, and buy futures cheap. This is called reverse cash-and-carry. This process continues till the prices are at equilibrium.
- Arbitrage opportunities arise when the basis between spot and futures or the spread between two futures contracts is incorrect. When the spread between the two futures contracts narrows, the arbitrageur buys the far month contract and sells the near month contract. When the spread between two futures contracts widens, the arbitrageur sells the far month contract and buys the near month contract. This mispricing is wiped off as soon as the market arrives at an equilibrium.

If investors expect a good budget and the market is already long on the March futures, then one could sell the March futures as March futures are already overvalued and buy the cheapest near month future. The market will then converge to its fair value.

Calendar spreads is a good strategy if the traders have a time-bound view. For instance, if a good monsoon is expected then one could buy the near month and sell the distant month futures.

Similarly, if it is anticipated that the interest rates will come down then one can buy the near month and sell the distant month futures. The distant month value could fall and/or the near month value could rise due to a change in the carrying cost.

OPTIONS

- Options are contracts that give the holder the right but not the obligation to buy or sell underlying assets

Options are contracts that give the holder the option to buy/sell specified quantity of the underlying assets at a particular (strike) price on or before a specified time period. The word 'option' implies that the holder of the options has the right but not the obligation to buy or sell underlying assets. The underlying may be physical commodities such as wheat/rice/cotton/oilseeds/gold, or financial instruments such as equity shares, stock index, bonds and so on. In a forward or futures market, the two parties commit to buy and sell, while the option gives the holder of the option the right to buy or sell. However, the holder of the options has to pay the price of the options, termed as the 'premium.' If the holder does not exercise the option, he loses only the premium. Hence, options are fundamentally different from forward or futures.

Types of Options

- European-style options can be exercised only on the expiry date while American-style options can be exercised at any time before and on the expiry date

Options are of two basic types—'call' option and 'put' option. A call option is a right to buy an underlying asset at a specified price on or before a particular day by paying a premium. A 'put' option is a right to sell an underlying asset at a specified price on or before a particular day by paying a premium.

There are two other important types of options: European-style options and American-style options. European-style options can be exercised only on the maturity date of the option, which is known as the expiry date. American-style options can be exercised at any time before and on the expiry date. The American option permits early exercise while a European option does not. Both these types are traded throughout the world. European options are easier to analyse than American options and properties of an American option are frequently deduced from those of its European counterpart.

Options can be over the counter and exchange traded. Over-the-counter (OTC) options are private agreements between two parties and are tailor-made to the requirements of the party buying the option. Exchange-traded options are bought and sold on an organised exchange and are standardised contracts. Most exchange-traded options are American-style options.

Salient Features of Options

- Options have a fixed maturity date on which they expire; this is termed expiry date. European-style options can be exercised only on the expiry date while American-style options can be exercised on any day before the expiry date. The expiry date is also known as the exercise date, the strike date, or the maturity date.
- The price at which the option is exercised is called the exercise price, or strike price. The exercise price is specified in the contract.
- The person who writes the option is the 'option writer.' The seller of an option is usually referred to as 'writer.' The option writer is obliged to buy/sell the shares if the holder (buyer) exercises his option. The writer of a call, option is generally bearish and writer of a put option is generally bullish. The writer of a call option must deliver the stock and the writer of a put option must buy the stock at the strike prices if the option buyer or seller chooses to exercise his right. The profits/losses of options writers equal the losses/profits of the buyers. The maximum profit for the writer in case of an option unexercised is the premium received. The writer of a call has unlimited loss potential, while the writer of a put has limited loss potential. Option writing is risky and hence it requires a higher degree of understanding risk management ability and an active, regular presence in the derivatives market regularly.
- The option premium is the price paid for the option by the buyer to the seller.
- The value of option (premium) depends on the exercise price, the time of expiration, the price of the asset involved, the variance of returns of the asset concerned, the risk free rate, and the dividends expected during the life of the option. The value of a call generally increases as the current stock price, the time to expiration, the volatility, and the risk free interest rate increase. The value of a call decreases as the strike price and expected dividends increase. The value of a put generally increases as the strike price, the time to expiration, the volatility, and the expected dividends increase. The value of a put decreases as the current stock price and the risk free interest rate increases. The non-quantifiable factors affecting the value of the option premium are market participants' varying estimates of the underlying assets' future volatility, an individual's varying estimates of future performance of the underlying asset based on fundamental or technical analysis, the effect of supply and demand both in the options market place and in the market for the underlying asset and the depth of the market for that option—the number of transactions and the contract's trading volume on any given day.

  Option pricing models have been developed to assist the traders in keeping the prices of calls and puts in proper numerical relationship to each other and helping the trader make bids and offer quickly. The Black–Scholes option pricing model and the binomial model are the two most popular models used to determine the value of an option.
- An intermediary, usually a clearing house, interposes between the writer and the buyer, and guarantees performance of the contract. It acts as the opposite party to any transaction. The parties can terminate their position at any time by making an off-setting transaction.

Box 9.1 Value of Option

A call option represents a long position in a stock and a put option represents a short position; therefore, an increase in the stock price increases the value of a call option and reduces the value of a put. The difference between the stock price and the exercise price is known as payoff. The payoff from exercising a call option increases when the stock price increases and the exercise price declines. Hence, call options with a lower strike price and put options with higher strike price are valuable. Moreover, the longer the time to expiration, higher are the opportunities for the option holder to exercise his option. Hence, both American calls and puts become more valuable as the time to expiration increases. Volatility is a measure of the degree of price movement in a particular stock. The increase in volatility is beneficial to the option holder as his downside is limited to the price he has paid for the option. An increase in the risk-free interest rate increases the expected return required by investors in the stock and this leads to an increase in the value of a call option but decreases the value of a put. A dividend payment reduces the stock price and if higher the expected dividend during the life of the option, lower is the call option's value and higher is the put option's value.

Example of a call option: An investor buys a call option to buy 100 Reliance shares at a price of Rs. 300 on October 15, 2002. The current price is Rs. 250 and the premium (price) for the option is Rs. 25 per share. The investor will have to pay Rs. 2,500 as the premium for buying the call option, which is also referred to as the initial investment. He is entitled to get 100 shares of Reliance at a price of Rs. 300 on October 15, 2002. If the market price of Reliance goes up to Rs. 400, the investor will exercise his right by paying Rs. 30,000, the original contract price. He can sell these shares in the market at the current price of Rs. 400 and get Rs. 40,000. The net gain to the investor is Rs. 7,500 [(spot price – strike price) – premium], that is, [(Rs. 40,000 – Rs. 30,000) – Rs. 2,500]. Suppose, the price of Reliance shares goes down to Rs. 200 by October 15, the investor will not exercise his option as he is under no obligation to buy the shares. His loss will be only Rs. 2,500, the premium he had paid to buy the call option.

A call option has unlimited profit potential as there is no upper limit to the stock price.

Example of a put option: An investor buys a put option to sell Reliance shares at a price of Rs. 300 by October 15, 2002. He pays a premium of Rs. 25 per share to buy this option. Now if the share price of Reliance goes down, to say, Rs. 200, the investor can exercise his right to sell these 100 shares at the strike price of Rs. 300. He will buy 100 shares at Rs. 200 per share to sell them at Rs. 300 per share. His net gain is Rs. 7,500 [(strike price – spot price) – premium)], i.e., [(Rs. 30,000 – Rs. 20,000) – Rs. 2,500]. Suppose, the share price of Reliance goes up to Rs. 350, the investor will not exercise his option and his loss will be Rs. 2,500 he had paid as premium. It is worthwhile exercising a put option only if the market price of the stock turns out to be lower than the strike price. If the strike price is greater than the stock price, the option has an intrinsic value. The buyer of an option pays a premium which consists of the intrinsic value, if any, plus time value. The maximum profit from buying a put option is limited only by the fact that the stock price cannot fall below zero.

At any point, several puts are quoted in the market. For instance, Reliance 320, 300, 280, 260, and 220. There are minimum of five strike prices available. On volatile scrips, the number of strike prices are around seven on an average. In case of puts, higher strike prices carry a higher premium and lower strike prices carry a lower premium. With lower strike puts, the protection starts late and the investor should be willing to bear loss till the scrip reaches the strike price. With higher strike puts, protection starts the moment the scrip quotes below the strike price.

Margins Applicable on Options

Option buyers have to merely pay the premium and no margins are applicable to them. The exchanges levy margins on option writers as they face unlimited losses.

The margining system currently adopted by India is a sophisticated mechanism based on SPAN software, a program developed by Chicago Mercantile Exchange. This program creates 16 imaginary scenarios for each option position. These scenarios are based on varying levels of price movements and volatility movements. After accounting for all these, the maximum possible loss that an investor can incur is calculated. This maximum possible loss is the margin amount to be paid by an investor. An option writer should be prepared to bring in margins of around 20 to 40 per cent of the Notional Contract Value. If volatility of a scrip is high, margins are also high.

The investor has to pay this margin to his broker in cash or cash equivalents or equity securities. Cash equivalents comprise government securities, debt securities, bank guarantees, fixed deposits, and treasury bills.

	Call Options	*Put Options*
Option Buyer or Option Holder	Buys the Right to Buy the Underlying Asset at the Specified Price.	Buys the Right to Sell the Underlying Asset at the Specified Price.
Option Seller or Option Writer	Has the Obligation to Sell the Underlying Asset (to the Option Holder) at the Specified Price	Has the Obligation to Buy the Underlying Asset (From the Option Holder) at the Specified Price.

Options Terminology

Underlying: The specific security/asset on which an option contract is based. It is the asset whose price movement determines the value of the option.

Option premium: The price paid by the buyer to the seller to acquire the right to buy or sell.

Strike price: The pre-decided price at which the option may be exercised. It is also known as the exercise price.

The strike price is linked to the price of the underlying asset in the cash market. The SEBI has stipulated a minimum of three strike prices—one near the spot price of the asset, one above, and one below. But both the BSE and the NSE offer options at five strike prices—one close to the spot price, two above, and two below.

Strike price intervals: The difference between two strike prices, which is a constant, is called strike price interval. The NSE has set a strike price interval of 20 points on its Nifty options while the BSE has set strike price intervals of 50 points on its Sensex options. If Nifty, closes at 1,100 on 26 September (the last Thursday of the month), then on 27 September, the NSE will offer strike price of 1,060, 1,080, 1,100, 1,120, and 1,140 on the Nifty December option series. The stock intervals of stocks in case of stock options is linked to stock price and a slab structure has been developed by the NSE. For instance, if stock price is below Rs. 100, the strike price interval in case of stock options is Rs. 5; if stock price is Rs. 100 to Rs. 200, the strike price interval is Rs. 10 and so on.

Expiration date: The date on which the option expires is known as the expiration date. On the expiration date, either the option is exercised or it expires worthless.

Exercise date: The date on which the option is actually exercised. In case of European options, the exercise date is same as the expiry date while in case of American options, the options contract may be exercised any day between the purchase of the contract and its expiry date.

Open interest: The total number of options contracts outstanding in the market at any given point of time. In other words, open interest represents the total number of option contracts that have not yet been exercised, expired, or squared off. A change in open interest in a stock indicates fresh positions being initiated or positions being closed. Open interest has to be read in conjunction with the change in price of the stock as well as volume. An increase in open interest with rising prices indicates a fresh entry of longs and a decrease of open interest with rising prices indicates profit booking by long position holders. While an increase in open interest with falling price indicates an increase of fresh short positions and decrease in open interest with declining prices, indicates profit booking by short position holders.

Option holder: One who buys an option which can either be a call or a put option. He enjoys the right to buy or sell the underlying asset at a specified price on or before specified time. His upside potential (profit) is unlimited while losses are limited to the premium paid by him to the option writer.

Option seller/writer: One who is obligated to buy (in case of a put option) or to sell (in case of a call option) the underlying asset in case the buyer of the option decides to exercise his option. His profits are limited to the premium received from the buyer while his downside is unlimited.

Option class: All listed options of a particular type (i.e., call or put) on a particular underlying instrument. For example, all Sensex call options or all Sensex put options.

Option series: A series that consists of all the options of a given class with the same expiry date and strike price. For example BSXCMY 300 is an option series which includes all Sensex call options that are traded with a strike price of 300 and expiry in May [BSX stands for BSE sensex (underlying asset), C for call option, May is expiry date, and strike price is Rs. 300].

Assignment: The process in which a randomly selected option seller is assigned the obligation to honour the underlying contract when the holder of an option exercises his right to buy/sell.

Put–Call Ratio: It is the ratio of puts (right to sell) to calls (right to buy) traded in the market. This ratio represents the number of bearish versus bullish participants. A fall in the put–call ratio (PCR) implies a higher number of call buyers in the market which indicates that the market sentiment is bullish. It can be computed in two ways—as the ratio of the number of puts traded to the number of calls traded, or the number of puts outstanding to the number of calls outstanding. The PCR can be calculated for a particular stock (say, Infosys), or index (Nifty) or the market as a whole (all stocks in the derivatives segment). An increase in the PCR can be caused by a rise in the number of puts traded/outstanding or a fall in the number of calls traded/outstanding.

Moneyness: An option concept that refers to the potential profit or loss from the exercise of an option. An option may be in the money, out of the money, or at the money.

In-the-money (ITM) option: When the underlying asset price (S) is greater than the strike price (X) of the call option, that is, S>X. An in-the-money option would lead to a positive cash flow to the holder if it were exercised immediately. For example, a Sensex call option with strike of 4,900 is in the money when the spot Sensex is at 5,100 as S>X. The call holder has the right to buy a Sensex at 4,900 and sell it at

5,100 and make a profit. If the index is much higher than the strike price, the call is said to be deep in the money. In case of a put option, the put is in the money if the index is below the strike price.

Out-of-the-money option: When the underlying asset price (S) is less than the strike price (X of the call option), that is, $S<X$. An out-of-the-money option would lead to a negative cash flow if exercised immediately. If, in the above example, the Sensex falls to 4,700, the call option no longer has positive exercise value. The call holder will not exercise the option to buy Sensex at 4,900 when the current index is 4,700. If the index is much lower than the strike price, the call is said to be a deep out-of-the-money option. In the case of a put option, the put is out of the money if the index is above the strike price.

At-the-money option: When the option's underlying asset price is equal to the option's strike price, that is, $S=X$. It would lead to zero cash flow if exercised immediately.

Consider an investor who buys a one-month Nifty 1,160 call option for a premium of Rs. 10. The spot value of Nifty is 1,140. Hence, the option is out of the money. If the Nifty crosses 1,160, the option is in the money.

	Call Option	*Put Option*
In-the-money	Spot Price of Underlying Asset > Strike Price (S>X).	Spot Price of Underlying Asset < Strike Price (S<X).
At-the-money*	Spot Price of Underlying Asset = Strike Price.	Spot Price of Underlying Asset = Strike Price.
Out-of-the-money	Spot Price of Underlying Asset < Strike Price (S<X).	Spot Price of Underlying Asset > Strike Price (S>X).

* When the market price is very near to the strike price, the option is called near-the-money option.

The option premium can be broken down into two components—intrinsic value of an option and time value of an option.

Intrinsic Value of Options The intrinsic value of an option is the greater of zero, or the amount that is in-the-money. Only in-the-money options have intrinsic value. It is defined as the amount by which an option is in the money, or the immediate exercise value of the option when the underlying position is marked-to-market.

For a call option: Intrinsic value = Spot price − Strike price.
For a put option: Intrinsic value = Strike price − Spot price.

The intrinsic value of an option must be a positive number or zero. It cannot be negative. For a call option, the strike price must be less than the price of the underlying asset for the call to have an intrinsic value greater than zero. In other words the intrinsic value of a call is max $(S-X, O)$, which means the intrinsic value of a call is the greater of $S-X$ or O. For a put option, the strike price must be greater than the underlying price for it to have intrinsic value. In other words, the intrinsic value of a put is max $(X-S, O)$.

Time Value of Options The time value of an option is the difference between its premium and its intrinsic value. Time value is the amount option buyers are willing to pay for the possibility that the option may become profitable prior to expiration due to favourable change in the price of the underlying. Thus, it is a payment for the possibility that the intrinsic value might increase prior to the expiry date. The magnitude of the options' time value reflects the potential of the option to gain intrinsic value during its life. Prior to expiration, options will almost have some time value, the exceptions are deep in-the-money European options. When an option is sold, rather than exercised, time value is received in addition to the intrinsic value. Time value cannot be negative. An option loses its time value as its expiration date nears. Time value premium decreases at an accelerated rate as the option approaches maturity. At expiration, an option is worth only its intrinsic value.

A call that is out of the money or at the money has only time value. Usually, the maximum time value exists when the option is at the money.

One of the factors that determine time value is the market expectation of price volatility. If the market expectation of price volatility of an underlying asset is high, the time value will also be high, reflecting the strong possibility of a substantial increase in intrinsic value.

Time value premium is maximum when the stock price and the strike price are the same. When stock price is far above or below the strike price, the option is worth only its intrinsic value. Consider a stock which is currently selling at Rs. 50. The call option to buy the stock at Rs. 49 costs Rs. 4. Here, the call premium is Rs. 4, which is a sum of both the intrinsic value and time value. The intrinsic value of the option is Re 1 (50 − 49). The time value is Rs. 3 (4 − 1).

Cash settled: When the investor is paid the difference between the strike price and the market price on expiry it is referred to as 'cash settled'. Index options are always cash settled as physical settlement of the index itself is impractical.

Delivery-based settlement: When a put buyer delivers the scrips on the day of expiry and the seller is paid the expiry price, it is referred to as a 'delivery-based settlement.' In case of calls, the buyer of a call gets the delivery of the scrips and makes the payment. Delivery-based settlement is expected to be introduced in India in the coming future.

LEAPS (Long-term Equity Anticipation Securities): In India, options generally expire within three months or less. LEAPS are a variation of standard option contracts in the sense that they are long dated with an expiration date upto three years into the future. These long-term options provide the holder the right to purchase (in case of a call), or sell (in case of a put), a specified amount of the underlying stock at a pre-determined price for a specified period of time, which can be upto three years in the future. LEAPS enable investors to trade for the long-term without making an outright stock purchase.

Option Greeks: Tools to measure the sensitivity of the option price to certain factors, such as stock price, time to expiry, volatility, interest rate, and amount and timing of dividends. Sometimes options become complicated when used in combinations or two or more factors affect option price simultaneously which lead to complications in analysis. Analytical tools are available, which help in simplifying complicated option position. These analytical tools are collectively referred to as Greeks and individually as *delta*, *theta*, *gamma*, *rho* and *vega*. Greeks are used by professional traders for trading and managing the risk of large positions in options.

- Option Greeks are tools to measure the sensitivity of the option price to certain factors, such as stock price, time to expiry, volatility interest rate and amount and timing of dividends

The various option Greeks are as follows:

- *Delta:* Measures the sensitivity of an option's premium/price to a change in the value of the underlying asset. Delta is the ratio of the change in an option's price for a small change in the price of the underlying asset. An option's delta may be positive or negative. An option that has a positive delta will increase in value as the underlying asset increases in value; it will decrease in value as the underlying asset decreases in value. A negative delta means that an option's price moves in an opposite direction from that of the underlying asset's price. A long call and short put have a positive delta as their values rise and fall along with the underlying asset. A long put and a short call have negative deltas.
- *Gamma:* Measures the change in delta of an option for a change in the price of the underlying asset. Gamma is expressed as a number between zero and one for both calls and puts. Gamma can be positive or negative. A positive gamma means that an options' delta rises and falls along with the underlying asset. A negative gamma means that the delta of an option will decrease with the increase in the underlying price and will increase with the decrease in the underlying price. The long call and the long put have a positive gamma as their delta increase and decrease with the underlying asset. The short put and the short call have a negative gamma.
- *Theta:* Measures the rate at which an option's time premium diminishes as time passes. The theta of an option is expressed as a negative number so as to reflect the losing theoretical value of an option. Theta is always negative for both calls and puts as with a decrease in the time to maturity, the option loses value. Theta is the most negative for at-the-money option and low for deep in or out-of-the-money option. However, theta can be high for out-of-the-money options with high implied volatility. In a delta-neutral portfolio, theta is used as a proxy for another option Greek, gamma. Options that have a negative theta have a positive gamma and vice versa. Both, theta and gamma together provide useful information concerning the risks of holding the position over time.
- *Rho:* Measures the change in the option price for a change in the risk-free interest rates. In other words, it measures the sensitivity of option prices to changes in interest rates. Rho is a positive number for calls and a negative number for puts. Long-term options have greater rhos than short-term options. Hence, the greater the amount of time to expiry the greater the effect of change in interest rates. Rho is usually ignored as a measure of risk as interest rates change slowly and in small magnitudes.
- *Vega:* Measures the sensitivity of an option's price to a change in its implied volatility. The options that have the same strike prices but have longer time to expiry have larger vega as volatility has more opportunities to make its presence felt. Vega is the rate of change of the option price with respect to volatility of the stock. A high vega implies that the option is highly sensitive to small changes in volatility. Volatility enhances the value of an option as an increase in volatility increases the chances of a higher return but does not affect risk in an options contract. Vega has the same sign for both calls and puts—they gain value when volatility increases and lose value when volatility falls.

Comparing Futures and Options

Both futures and options come into existence only if they are bought and sold. If they are not traded, they will not exist. The profit of one trader is the loss of another.

However, futures and options are significantly different from each other in the following ways.

- Futures are contracts to buy or sell specified quantity of underlying assets at an agreed price on or before a specified time. Both the buyer and seller are committed or obligated to buy/sell the underlying asset. By contrast, in case of options, the buyer enjoys the right and not the obligation to buy or sell the underlying asset. Thus, options are rights for buyers and obligation for sellers.
- Futures contracts have symmetric risk profile for both the buyer as well as the seller, whereas options have an asymmetric risk profile. In case of options, for a buyer or holder of the option, the downside is limited to the premium he has paid while the profits may be unlimited. For a seller or writer of an option, the downside is unlimited while profits are limited to the premium received from the buyer.
- Futures contracts prices are affected mainly by the prices of the underlying assets. Option prices are influenced not only by the prices of the underlying asset but also by the time remaining for expiry of the contract and volatility of the underlying asset. Thus, options provide exposure to a number of dimensions.
- It costs nothing to enter into a futures contract whereas there is a cost of entering into an options contract, termed as premium.
- Regulatory complexities are greater with options as compared to futures contract. Moreover, options trading strategies can be highly complicated as compared to futures trading strategies.

Both, financial futures and options are available world over as they together provide the users with a wide array of hedging instruments.

Benefits of Options

Options are versatile derivative instruments. Options have helped to revolutionise finance. Corporations use them in their financing decisions to control risk.

Options are a means of insurance against adverse price movement. A call option is a means of ensuring a maximum purchase price and a put option provides a minimum selling price. A hedger uses options when the price movement is uncertain. So, options supply the insurance needed to overcome the uncertainty in prices.

Options provide high leverage as with a small investment in the form of premium, one can take exposure in the underlying asset of much greater value.

There is a pre-known maximum risk and a large profit potential for an option buyer.

Employers stock options (ESOPs) have become a popular compensation tool with more and more companies offering the same to their employees. ESOPs are subject to lock-in periods, which could reduce capital gains in falling markets. An ESOP holder can buy put options in the underlying stock and exercise the same if the market falls below the strike price and lock-in his sale price.

Many investors trade options to speculate on the price movements of the underlying stock.

Institutional investors, such as mutual funds and pension funds, use options to adjust the risk-and-return characteristics of their portfolio.

Trading in options is cheaper than trading in stocks due to lower transaction costs in options trading.

Options provide a means of taking a short-position on a stock by buying puts or writing calls. Options allow speculators to take views on the direction of stock price movements, on the speed and extent of such movements, and on changes in market expectations and extent of price volatility.

Options help creating synthetic products which reveal and increase the trading potential of otherwise not traded assets/contract.

Pay-off Profile of Call Options

The pay-off from exercising a call option is the difference between the stock price and the strike price.

Call Option Buyer A call option gives the buyer of that option the right, but not the obligation, to buy the underlying asset at a particular price, known as the exercise, or strike price. The buyer of an option has to pay a premium at the time the option is bought. As the buyer is not obliged to exercise an option, he can simply disregard it or not exercise it, in which case he loses the premium paid. His risk or maximum loss is limited to the extent of the premium paid. But there is no upper limit to his potential profits if prices of the underlying asset go up. His break-even point is equal to the strike price plus premium.

Consider a share whose strike price is Rs. 100 per share and the call premium is Rs. 6 per share. If, at expiration, the share price is Rs. 100 or lower, the option expires worthless. The call buyer will lose the premium of Rs. 6 per share. If the share price on the expiration date is Rs. 106, the call buyer breaks even (Rs. 100 strike price plus Rs. 6 premium less Rs. 106 share price on expiration). At any share price above Rs. 106, the call buyer will profit. Hence, for every one rupee rise in the stock price, the call is worth Rs. one more.

The buyer of a call option is said to have a long call position. There are no margin requirements for a call option buyer. Time affects the call buyer adversely as with passage of time the value of the call option falls to nearly zero.

Call Option Seller For every buyer of an option, there must be a seller who is usually referred to as the writer. The seller of the call option is said to have a short call position. The seller is moderately bearish as he expects the prices of the underlying asset to go down. As options are zero-sum games, profits of the buyer must equal losses of the seller, and vice versa. The seller or writer of a call option must deliver the stock at the strike price agreed upon if the buyer chooses to exercise the option. The call option seller receives the premium from the buyer. He is subject to margin requirement. This margin can change on a day-to-day basis, depending predominantly on the price of the scrip itself. The call option seller's risk profile is unlimited, if prices go up. His profit potential or maximum profit is limited to the premium received. His break-even point is equal to the strike price plus premium received. A call option will fall in value if the underlying scrip or index falls. The investor, in such a case, should buy it back and earn profits. Suppose, Reliance is quoting at Rs. 285 and the Reliance 280 call is quoting at Rs. 20. If Reliance falls to Rs. 265 in a week, the call might have moved down to Rs. 10. The investor, on buying it back, earns a profit of Rs. 10.

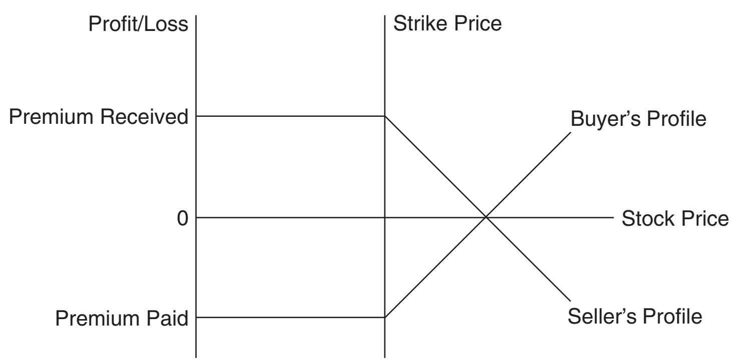

Figure 9.1 Pay-off Profile of Call Options

Pay-off Profile of Put Options

Put Option Buyer A put option gives the buyer of the option the right, but not the obligation, to sell the underlying asset. The buyer of an option can exercise it or allow it to expire worthless at expiration. The buyer of an option pays a premium and exercises this option only if the market price of the underlying asset turns out to be lower than the strike price.

Consider a put option with an exercise price of Rs. 200 and at a premium of Rs. 8. If the underlying stock price exceeds Rs. 200, say Rs. 210 at expiration, the holder cannot exercise profitably. This involves surrendering a stock worth Rs. 210 and receiving an exercise price of Rs. 200 and losing the premium of Rs. 8. If the stock price at expiration is less than Rs. 200—say Rs. 190—there will be a profit. This involves surrendering a stock worth Rs. 190, receiving Rs. 200 exercise price and paying a premium of Rs. 8. The net gain is Rs. 2.

There are no margin requirements for a put option buyer. His profit potential is unlimited if prices of the underlying asset go down. But practically the maximum profit is limited as the price of the underlying cannot fall below zero. The maximum profit from a put option is the strike price minus the premium paid. His risk profile is limited as the premium paid is the maximum loss the buyer of the option can incur.

The put option will rise in value as the underlying (scrip or index) drops. If an investor buys a put option and the scrip falls as per his expectation, he can sell at a later date. Suppose Reliance 280 put is quoting at Rs. 25 when Reliance is quoted at Rs. 285. If Reliance falls to Rs. 265 in a week, the put will move up to Rs. 35. The investor makes a profit of Rs. 10 if he sells the put.

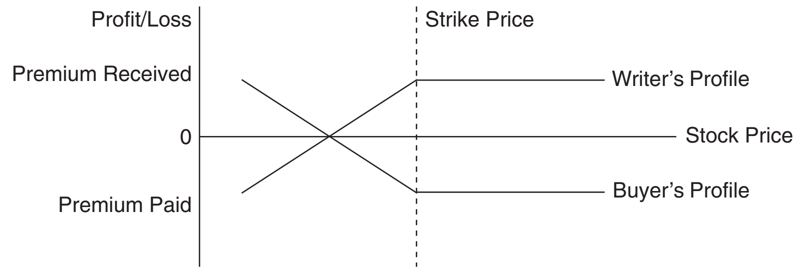

Figure 9.2 Pay-off Profile of Put Options

Put Option Seller The seller or writer of a put option has an obligation to buy the underlying asset at strike price if the option is exercised. The put option seller receives premium and is subject to margin requirements. His profit is potential is limited to the extent of premium received. His risk profile is practically limited as the price of the asset cannot go below zero. Hence, his maximum loss is equal to strike price minus premium received (Figure 9.2).

Pricing Options

Options values or prices are derived from theoretical models. The Black–Scholes option pricing model is the most popular model which provides the theoretical price of options. The other popular models are the binomial model developed by Cox, Ross, and Rubinstein and the Addison Whaley model. These are slightly more sophisticated than the Black–Scholes model but option values derived from these models are not significantly different. The Black–Scholes option calculators are available on various websites, and spreadsheets come with a built in Black–Scholes options pricing formula. Hence, an investor need not memorise the formula; he needs to just key in the basic parameters of the formula.

Black–Scholes Option Pricing Model This model was originally developed for European-style options on non-dividend paying stocks by Fischer Black and Myron Scholes.

The Black–Scholes pricing model assumes that percentage change in the price of underlying follows a normal distribution. This model uses lognormal rather than normal distributions to avoid the possibility of negative stock prices. A variable with a normal distribution can take any positive or negative value, while a lognormal distributed variable can take only positive values. A normal distribution is symmetrical, a lognormal distribution is skewed with the mean, median, and mode all different. According to Black and Scholes, stock returns have a lognormal distribution meaning that the logarithm of the stock's return will follow the normal (bell-shaped) distribution.

Although not the first, the pricing model was the first model to reduce the number of computations necessary for deriving the values.

The factors affecting the determination of options pricing are the underlying stock price, the exercise price, time to expiry, volatility, and the risk-free rate.

- *Underlying stock price:* The underlying stock price does not remain constant. Any future changes in the underlying stock price may affect the value of an option, hence the underlying stock price is important for determining the value of an option.
- *Strike/exercise price:* The strike price remains fixed throughout the life of an option and never changes.
- *Time until expiration:* An option's expiration date is fixed for the life of the option. There is a direct relationship between an option's price and amount of time until the option's expiration. Options that have a distant expiry date trade at a premium relative to those that are approaching expiry. The theoretical value of the option decreases as the time to expiry decreases.
- *Interest rates:* The interest rate is the cost of carrying the option. The higher the interest rate, the higher the call price and the lower the put price. The lower the interest rate, the lower the call price and the higher the put price. The theoretical value of an option is affected by the correlation between a change in interest rates and the amount of time until expiry.
- *Volatility:* Volatility is the fluctuation in the price of the underlying. It is a measure of the speed and magnitude at which the underlying stock price changes. If the movement in the price of a security is quite high as compared to the index, the security is more volatile than the index. Volatility is the standard deviation of the daily returns on an underlying. Volatility is a very important variable affecting an options price. The higher the volatility, the higher the option premium.

- Volatility is a measure of the degree of the price movement in the underlying security

The other inputs or factors are readily determinable but determining volatility is a difficult task. Moreover, as exposure to all other inputs or factors can be hedged away, the price of the option then entirely depends on volatility.

There are different ways to measure volatility.

- Historical volatility is a measure of actual changes in an underlying over a specific period in the past. It is often referred to as actual volatility or realised volatility. It measures how active a stock price is over a certain period of time. Short term traders use shorter time periods such as 5-day, 10-day, 20-day and 30-day while intermediate and long-term investors use 60-day, 180-day or 360-day for measuring historical volatility. The most common measure of volatility is standard deviation. It is calculated by taking the daily percentage price changes in a stock and finding the average of the deviations from the mean. The average is then expressed as an annualised percentage by multiplying the daily standard deviation by the square root of 250, which is the average number of trading days in a year.
- Forecast volatility is an estimate of expected changes in an underlying over a specific period in the future.
- Implied volatility is the market's assessment of the expected volatility of the underlying. It acts as a proxy for option value. Options with different strike prices and expiration dates will have a different implied volatility. Even within the same expiration, options with different strike prices will have a different implied volatility. Implied volatility can be derived by entering the current market price of an option into the pricing model along with other factors. The number that is derived is the volatility that the market is using to price the option—the implied volatility. Hence, an option trader will first of all find out the historical volatility of a stock and factor into the historical volatility his anticipations of the future to arrive at a best guess of future volatility of the stock.

After arriving at his best estimate of future volatility of the stock, the trader will compare his estimate with the volatility determined by the market known as the implied volatility.

Implied volatility might or might not be equal to the trader's estimate of future volatility. If the implied volatility is greater than the trader's estimate, it implies that either the market is expecting the future volatility to increase or that the market is mispricing the option or that there is some good news about the company that could move the price favourably. If the implied volatility is less than the trader's estimate, it implies that the option is underpriced or the market believes that the stock will now trade at a low level or there is some bad news which might affect the price of the stock adversely.

Hence, volatility serves as a benchmark for knowing overpriced and underpriced options and the extent of mispricing.

In the Black–Scholes option pricing model, only two of the above factors are allowed to change, namely, the time to expiry and the underlying stock price.

Black and Scholes use the stochastic calculus to define how the option price changes when stock price and time to expiry are changed.

The Black–Scholes model relating to non-dividend paying stocks can be expressed as follows:

where

$$C = S.N(d_1) - Ke^{-rT}.\ N(d_2)$$
$$P = Ke^{-rT}\ N(-d_2) - SN(-d_1)$$

where

$$d_1 = \text{In } S/K + (r + \sigma^2/2)^T/\sigma\sqrt{T}$$
$$d_2 = d_1 - \sigma/\sqrt{T}$$

where

C is the call price.
P is the put option price.
S is stock price.

Box 9.2 Implied Volatility

Implied volatility is a measure of the future volatility of the cash market as expected by market participants and reflected in the derivatives market.

The implied volatilities of calls and puts show a distinct pattern, called the volatility skew. Implied volatility tends to be higher for out-of-the-money options as compared to at-the-money options. The risk of out-of-the-money options increases on large movements of prices and hence to compensate for this risk, they tend to be priced higher.

N () is the cumulative normal distribution. $N(d_1)$ is called the delta of the option which is a measure of change in the option price with respect to change in the price of the underlying.

K is the strike price.

e is the exponential (which has the constant value of 2.7182818 and appears on most hand-held calculators).

r is the risk-free annualised interest rate as a decimal. If annual risk free rate is 12% then r is In 1.12 or 0.1133.

T is the time to expiry in years. If T is given in days or months, it has to be converted into years. If time to expiry is 22 days, then T in the formula should be 22/365 = 0.06.

σ is the annualised standard deviation of stock returns (volatility) as a decimal. When daily sigma are given they need to be converted into annualised sigma. σ annual $= \sigma$ daily $\times \sqrt{\text{Number of trading days in a year}}$. On an average, there are 250 trading days in a year. If daily σ is 1.95, then annualised sigma is $1.95 \times \sqrt{1.95} = 31$ per cent or 0.31. e^{-rT} is a discount term similar to $1(1+r)^T$ and it discounts the present value of a future sum of money on a continuous basis.

Assumptions Underlying the Black–Scholes Option Pricing Model

- There are no transactions costs or taxes. All securities are perfectly divisible.
- There are no dividends on the stock during the life of the options.
- There are no riskless arbitrage opportunities.
- Security trading is continuous.
- Investors can borrow or lend at the same risk-free rate of interest.
- The short-term risk-free rate of interest, r, is constant.

The Black–Scholes option pricing model is an analytical model that helps in pricing options within the framework of its assumptions.

With Black–Scholes option calculators available, an investor has to key in the basic parameters, such as current share price, option strike price, time left for expiry, volatility, and interest rate. This model helps in assessing the fair price of an option, risks that are associated with a position and how an option's value changes as market conditions change. The theoretical value of an option arrived at with the help of this model is then compared with the actual market price prevailing and the difference between the two reflects whether the option is underpriced or overpriced.

OPTIONS TRADING STRATEGIES

Option Spreads

- A spread that is designed to profit if the price goes up is called a bull spread

The risk profile of option buyers and sellers is different. Option buyers are exposed to unlimited profits and limited losses position and option sellers are exposed to unlimited losses and limited profits position. Spreads create a limited profit and loss profile for both buyers and sellers. An option spread involves taking a position in two or more options of the same type (i.e., two or more calls or two or more puts). For example, buying a call and selling another call either with a different strike or a different expiration is termed as a spread. A spread is used to take a bull position or a bear position, or to finance the purchase of other options. Option spreads are important for speculators.

There are different types of spreads and the degree of risk reduction differs among the different types of spreads. Option spreads may be categorised as vertical spread, horizontal spread and diagonal spread.

Vertical Spreads Vertical spreads involve the simultaneous buying and selling of options on the same underlying instrument for the same expiration date but with different exercise prices. Vertical spreads are also called price spreads.

1. Bull spread: A spread that is created by buying a low strike price option and selling a high strike price option on the same stock. It is designed to profit if the price goes up. When an investor thinks that the market is more likely to rise than fall, he enters into a bull spread hoping that the market price will increase. A bull spread can be created with calls or with puts.

The buyer of a bull spread buys a call with an exercise price below current index and sells a call option with an exercise price above the current index. He hopes to profit from a rise in the index and hence the spread is termed as a bull spread. This bull spread limits both the upside potential as well as the downside risk. The pay-off is the difference between the strike price of a call option bought and the strike price of the call option sold (Figure 9.3).

Suppose an investor buys one market lot of February 1,100 Nifty calls at Rs. 96 a call and sells one market lot of February 1,200 Nifty calls for Rs. 60 a call. If Nifty closes between 1,100 and 1,200, the pay-off is the amount by which the index exceeds 1,100. In this case, suppose the index closes at 1,160 on the expiration date, then the pay-off is 60. The cost of setting up the spread is Rs. 36 (96 – 60)—the difference between the call premium paid and received. The net profit from the position is Rs. 24 (60 – 36).

The bullish option spread (with calls) produces a net initial debit since a low strike price option is more expensive than a high strike price option.

The maximum profit is equal to the higher strike price less the lower strike price less net premium paid; the maximum loss is equal to lower strike premium less higher strike premium (or net premium paid). The breakeven price is equal to lower strike price plus net premium paid.

There are three types of bull spreads:

- Both calls initially out of the money.
- One call initially in the money, the other call initially out of the money.
- Both calls initially in the money.

The first type is the most aggressive bull spread as it costs very little to set up and has a small probability of giving a relatively high pay-off. The second type is not so aggressive a bull spread while the third type is the least aggressive most conservative bull spread. The decision as to which of the three spreads to undertake depends upon how much risk the investor is willing to take.

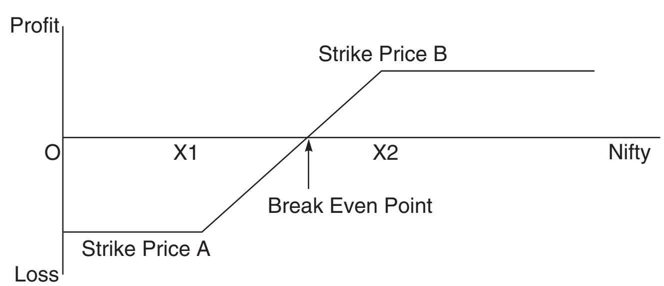

Figure 9.3 Bull Spread—Pay-off Using Call Options

In case of put options, the bull spread consists of buying a put with a lower exercise price and selling a put with a higher exercise price. It produces a net initial credit as the high strike price option is more expensive than the low strike price option. The maximum profit is equal to the net option premium income (or net credit); the maximum loss is equal to the higher strike price less the lower strike price less net premium received. Break-even price is equal to the higher strike price less the net option premium income.

The margins on call-based bull spreads will be far lower than that on put-based bull spreads. The possibility of losses in call-based spreads is negligible as the differential premium is paid upfront.

An investor can create 42 spreads on one scrip in one month series—21 spreads on calls and 21 on puts.

2. Bear spread: An investor who enters into a bear spread has mild to moderate bearish perspective, i.e., he is hoping that the prices will decline. A spread that is designed to profit if the price goes down is called a bear spread. Bearish vertical spreads are created by buying a high strike option and selling a low strike option. Bearish spreads can be created with calls or with puts.

- A spread that is designed to profit if the price goes down is called a bear spread

Bearish vertical spreads with calls are created by the sale of a call with a low strike (exercise) price and purchase of call with a high strike (exercise) price. It produces a net credit strategy since a low strike price option is more expensive than a high strike price option. The maximum profit is equal to the net premium received and the maximum loss is equal to the higher strike option price less the lower strike option price less the net premium received. The break-even price is equal to lower strike price plus net premium received. Thus, the bear spread with call options not only limits the trader's risk but it also limits the profit potential, i.e., it limits both the upside potential as well as the downside risk (Figure 9.4).

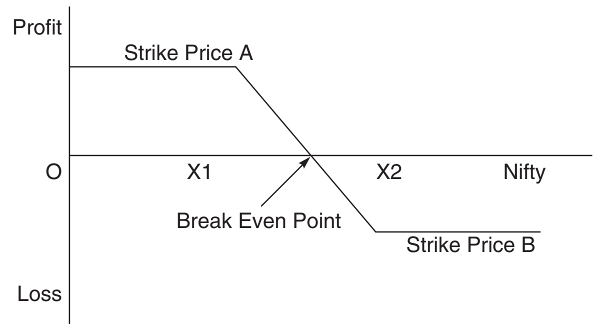

Figure 9.4 Bear Spread—Pay-off Using Call Options

Suppose an investor buys one market lot of February 1,500 Nifty calls at Rs. 60 a call and sells one market lot of February 1,400 Nifty calls for Rs. 96 a call. If Nifty closes at 1,420 on the expiration date, his profits gets reduced to the extent it falls short of the lower strike. In this case, the index falls short of the lower strike by 20. Hence, his pay-off is Rs. $96-60-20=$Rs. 16.

In case of bearish option spreads with puts, the investor buys a put with a high strike price and sells a put with a low strike price. This produces a net debit strategy as a high strike price option is more expensive than a low strike price option. The maximum profit is equal to the higher strike price option less the lower strike price option less the net premium paid. The maximum loss is equal to the net premium paid. The break-even price is equal to the higher strike price less the net premium paid. Thus, the upside potential and downside risk is limited.

A vertical spread is used by an investor when he believes that the prices will move only to the strike price that generates maximum profit.

- A horizontal or calendar spread is a spread where the options used have the same strike price but different expiry dates

Horizontal or Calendar Spread A horizontal or calendar spread is a spread where the options used have the same strike price but different expiration dates. A calendar spread trading strategy is used by an investor who thinks that the market will be weak in the short-term but rally in the long-term. The investor makes an attempt to gain from the declining time value of options. Calendar spread can be created with call options as well as put options.

A calendar spread can be created by selling a short maturity call option with a certain strike price and buying a longer maturity call option with the same strike price. The two option series would be identical in every respect except the expiry month. The short option position is a liability while a long option position is an asset. The value of the liability declines more quickly than the value of the asset. Hence, the option should be allowed to run to the expiry date. As the longer maturity option is expensive, a calendar spread requires an initial investment. The investor makes a profit if the stock price at the expiration of the short maturity option is close to the strike price of the short maturity option, otherwise a loss is incurred. The downside risk is limited to the initial debit incurred for establishing the spread. The break-even point at expiry is the strike price plus premium. There is a risk of the sold option being called, i.e., exercised. A calendar spread can be created with call options as well as put options.

In a calendar spread with put options, the investor buys a long maturity put option and sells a short maturity put option. In a bullish calendar spread, a strike price higher than the current stock price is chosen while a bearish calendar spread involves a lower strike price. In a reverse calendar spread, the investor buys a short maturity option and sells a long maturity option.

- A diagonal spread combines the features of both vertical and horizontal spreads

Diagonal Spreads This spread combines both vertical and horizontal features. In a diagonal spread, both the expiration date and the strike price of the calls are different.

A diagonal bull spread is adopted when the investor is bearish in the immediate near term and bullish in the long-term. In other words, the investor thinks that the market will be weak in the short-term but then rally later. Hence, a near-dated call option is sold and a longer dated out-of-the-money call option is bought. The upside potential is unlimited if the bought option is held after the short option expires. The downside risk is limited to the difference in strikes plus/minus the initial debit/credit when establishing the spread. But there is a risk of the sold options being called or exercised.

A diagonal bearish strategy is adopted when the investor thinks that the market will be flat or rise only slightly in the short-term, but will then fall later. In this strategy, a near-dated put option is sold and a longer-dated out-of-the-money put is bought. The upside potential is large if the bought option is held after the short option expires. The downside risk is limited to the difference in strikes plus/minus the initial debit/credit when establishing the spread but there is a risk of the sold options being called.

Volatility Trading

Volatility trading is taking positions on changes in market expectations of price volatility. The main strategies for trading volatility are straddles, strangles, and butterflies. Straddles and strangles are examples of 'combinations' which are option trading strategies that involve taking a position in both calls and puts on the same stock.

Straddle Straddle is a position of buying a put and call with the same price and expiration date. Straddle is an expensive strategy as the trader pays two premiums. But a price swing in either direction compensates this high cost.

- Straddle is a strategy of buying a put and call with the same price and expiry dates

The investor believes that the price of the underlying asset will either rise or fall significantly but does not know the direction of the price movement. Major pronouncements such as divestment, budget time, acquisitions announcement by companies, and lawsuits to be decided on a particular day are good times to buy straddles.

A long straddle is buying one put and one call option simultaneously on the same stock at the same exercise (strike) price with same maturity. A short straddle is a simultaneous sale of two such options at the same strike price and expiration date (Figure 9.5).

The long straddle is also referred to as bottom straddle and short straddle as a top straddle. The purchaser of a long straddle takes the view that volatility will be high in the future, whereas the seller of a straddle takes the view that volatility will be low (marginal). The profit potential on a long straddle is unlimited on the upside and limited on the downside, while profit potential on a short straddle is limited to the receipt of the premium, which occurs if the price at the expiration is the same as the strike price of the options. The maximum loss on long straddle is the loss of premium paid and occurs if the price at the expiration is the same as the strike price of the options while loss on a short straddle is unlimited on the upside and limited on the downside. A short straddle is a highly risky strategy.

Suppose an investor feels that the stock price is likely to move significantly in the next three months. The stock is currently trading at Rs. 690. A three-month call with a strike price of Rs. 700 costs Rs. 40 while a three-month put with the same strike price costs Rs. 30. The trader buys both the put and the call. If the stock price is Rs. 700 in three months, the strategy costs the trader Rs. 70 (Rs. 40 plus Rs. 30). The buyer will profit from this strategy only if the stock price moves further away from Rs. 700. Suppose the stock price is Rs. 900 the strategy leads to a profit of Rs. 130 (Rs. 900 – Rs. 700 – Rs. 70). If the stock price moves down to Rs. 550, the strategy leads to a profit of Rs. 80.

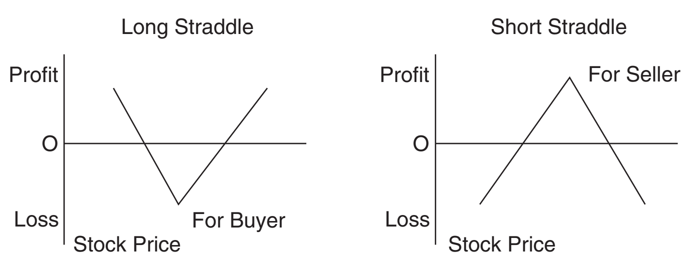

Figure 9.5 Pay-off Profile of Straddles

Strangle Like a straddle, a strangle is the buying/selling of a combination of one call option and one put option with same maturity. But unlike straddle, strangle has different exercise prices. In a strangle, the call has an exercise price above the stock price and the put has an exercise price below the stock price.

- Strangle is a strategy of buying/selling a combination of one call option and one put option with same maturity but with different exercise prices

A long strangle is buying one put and one call option at different strike prices as the trader expects a significant movement in prices. A long strangle is an aggressive form of straddle position. The profit potential is unlimited on the upside and limited on the downside while the maximum loss is the loss of premium paid.

A short strangle is selling one call and one put option at different strike prices. The seller expects that the market prices will move marginally or be less volatile. This is a conservative form of straddle position. The profit potential is limited to the receipt of the premium and the loss is unlimited on the upside and limited on the downside (Figure 9.6).

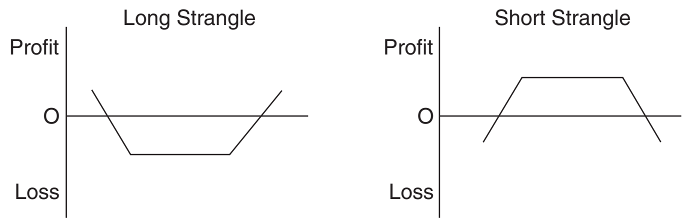

Figure 9.6 Pay-off Profile of Strangle

Butterfly Spreads A butterfly spread is a combination of a bull and bear spread. This strategy is used when the investors expect that the stock prices will not significantly rise or decline by expiration. This position is created by buying two call options, one with a relatively low strike price X1, and the other with a relatively high strike price, X3 and selling two call options with a strike price X2, half way between X1 and X3. Thus, X1 < X2 < X3.

Strike Price (Rs.)	*Call Price (Rs.)*
85	10
90	7
95	5

In a butterfly spread, risk and profits are limited. Maximum profit is realised if the stock price at expiration is close to X2 (Figure 9.7).

Suppose a stock is selling for Rs. 91. The prices of call options expiring in six months are quoted as follows:

The investor can create a butterfly spread by buying one call with a Rs. 85 strike price (X1), buying another call with a Rs. 95 strike price (X3) and selling two calls with a Rs. 90 strike price (X2). This costs the investor Rs. 10 + Rs. 5 − (2 × Rs. 7) = Re 1. The net loss would be equal to Re 1 if the stock price moves outside the range of Rs. 86 to Rs. 94 but would lead to a maximum profit of Rs. 4 if the stock price is Rs. 90 at the expiration date. If the stock price is Rs. 90, the long call with an exercise price of Rs. 95 loses its full purchase price of Rs. 5. The long call with an exercise price of Rs. 85 loses Rs. 5 (Rs. 5 stock profit minus Rs. 10 purchase price). Together, the long calls lose Rs. 10. The short call gives a profit of Rs. 7 per option, for a profit of Rs. 14 on the two options. This gives a net profit of Rs. 4 if the stock price is Rs. 90.

By using put options, the investor buys two puts, one with a low strike price and another with a high strike price and sells two puts with an intermediate strike price.

A limitation of this strategy is that it may be difficult to execute it quickly.

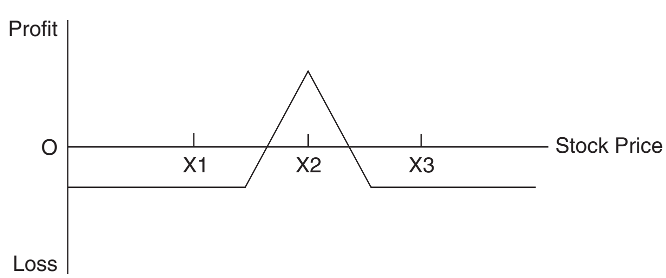

Figure 9.7 Pay-off from a Butterfly Spread

A butterfly spread can also be created with the help of only put or a combination of one call and one put.

Comparison of Volatility Trading Strategies

Straddles involve highest potential profits but also the greatest potential losses. In strangles there is a low maximum loss but likelihood of occurrence of losses is higher. Butterflies involve small potential losses but at the cost of limited profit possibilities. A butterfly spread resembles a short position in the straddle. Compared to the straddle, the risk of a large loss is reduced by the butterfly spread. A general rule underlying all volatility trading strategies is that higher potential profits are obtained at the cost of higher risk.

Arbitrage with Options

Pure arbitrage is the process of making riskless profits from mispricing without the arbitrageur's own resources being used. If the arbitrageur's own capital is used, the process is known as quasi-arbitrage. An arbitrageur buys/sells the derivative while simultaneously taking an opposite position on a synthetically constructed derivative. Arbitrage tends to maintain certain option–price relationships. A systematic price relationship must exist among the various assets that can be combined to create synthetic assets.

- Put–call parity explains the relationship between put, call, stock, and bond prices

Put–Call Parity The put and the call prices are related by a condition called put–call parity. Put–call parity is nothing more than the observation that buying a put is equivalent to selling the underlying and buying a call. The put–call parity explains the relationship between put, call, stock, and bond prices. The put–call parity is a relationship between the price, c of a European call option on a stock, and the price, p, of a European put option on a stock. It is expressed as:

$$S + p = c + \frac{X}{(l + r)^T}$$

where,

S = Spot price of the underlying
p = Price of European put option
c = Price of European call option
X = Exercise price of options
T = Time to expiration
r = Risk-free rate of interest

According to the above equation, the value of a European call with a certain exercise price and exercise date can be deduced from the value of a European put with the same exercise price and date, and vice versa.

In other words, pay-off from holding a call plus an amount of cash equal to $\frac{X}{(l+r)^T}$ is the same as that of holding a put option plus the underlying.

If $S + p \neq c \frac{X}{(l + r)^T}$, then an arbitrage opportunity exists. Suppose S is Index, then we can think of index plus put as portfolio A and call plus cash $\left(\frac{X}{(l+r)^T}\right)$ as portfolio B. If portfolio A is overpriced relative to portfolio B, the arbitrageur would sell the securities in portfolio A and buy the securities in portfolio B.

Suppose Nifty stands at 1065, the risk free rate of interest is 12 per cent per annum, the price of a three-month Nifty 1060 call is Rs. 90.00 and the price of a three-month Nifty 1060 put is Rs. 60. In this case,

$$S + p = c + \left(\frac{X}{(1 + r)^T}\right)$$

$$1065 + 60 = 90 + \frac{1060}{(1.12)^{1/4}} = 1125 > 1120.43.$$

Portfolio A is overpriced relative to portfolio B.

Hence, to exploit the arbitrage, the arbitrageur should sell the index plus a put and buy a call. This strategy generates a positive cash flow of Rs. 1,035.00 (1,065 + 60.00 − 90.00). When invested at the risk-free interest rate of 12 per cent, this grows to Rs. 1,065.05. If the index at expiration of the option is greater than 1,060, the call will be exercised. If it is less than 1,060, the put will be exercised. In either case, the investor ends up buying the index at Rs. 1,060. Hence, the net profit on the entire transaction is Rs. 5.05 (i.e., Rs. 1,065.05 − Rs. 1,060).

If portfolio B is overpriced relative to portfolio A, an arbitrageur can short the securities in portfolio B (sell a call) and buy the index and a put.

For a dividend paying stock, the put–call parity relationship is

$$c + \left(\frac{X}{(1 + r)^T}\right) + D = p + S.$$

Put–call parity does not hold for American options.

Arbitrage Beyond Upper and Lower Bounds There are six factors affecting the value of an option before expiration. They are: the price of the underlying stock, the exercise price of the option, the time remaining until expiration, the risk-free rate of interest, the volatility of the underlying assets and dividends expected during the life of the option. These factors set the general boundaries for option prices. If the option price is above the upper bound or below the lower bound, there are profitable opportunities for arbitrageurs.

Upper bounds: A call option gives the holder the right to buy a stock or an index for a certain price. As the option can never be worth more than the stock/index, the stock price/index is an upper bound to the option price.

$C < S$, where
C = Price of call option
S = Current stock price/current index level

If the above relationship does not hold true, an arbitrageur can easily make a riskless profit by buying the stock and selling the call option.

A put option gives the holder the right to sell a stock/index for a price X. No matter how low the stock price/index level becomes, the option can never be worth more than X. Hence, $P \leq X$.

If the above relationship does not hold true, the arbitrageur would make a profit by writing puts.

Lower bounds: The lower bound for the price of a call option is $S - X(1+r)^{-T}$. If the price of a call is not worth at least this much, then it will be possible to make riskless profits.

If the call is available at a premium which is less than the lower bound, that is, if $S \# X(1+r)^{-T} < C$, the arbitrageur can buy the call and short the stock/index and earn riskless profits.

Consider a three-month Nifty call option with a strike price of 1,060. The spot index stands at 1,150. The risk-free rate of interest is 12 per cent per annum. In this case, the lower bound for the option price is $1150 - 1060\ (1+0.12)^{-0.25} = 1150 - 1030.40 =$ Rs. 119.60. If the call premium falls below Rs. 119.60, arbitrage opportunities exist. Suppose the call is available at Rs. 115, an arbitrageur can buy the call and short the index. This provides a cash flow of Rs. 1150 − Rs. 115 = Rs. 1035. If Rs. 1035 is invested for three months at 12 per cent per annum, then Rs. 1035 grows to Rs. 1066.05. At the end of the expiry of the option, the index can be either above 1,060 or below 1,060. If the index is above 1,060, the arbitrageur exercises his option and buys back the index at 1,060 making a profit of Rs. 1,066.05 − 1,060 = Rs. 6.05. If the index is at say 1,050, the arbitrageur buys back the index at the market price, i.e., 1,050 and makes a higher profit of Rs. 1,066.05 − 1,050 = Rs. 16.05.

The lower bound for the price of a put option is $X(1+r)^{-T} - S$.

The price of a put must be worth at least this, otherwise it will be possible to make riskless profit.

If the price of a put is not worth at least this, then it will be possible to make a riskless profit. If the put is available at a premium which is less than the lower bound, that is, if $X(1+r)^{-T} - S < P$, the arbitrageur can buy both the put and the stock/index by borrowing money and earn riskless profits.

Consider a two-month Nifty put option with a strike of 1,260. The spot index stands at 1,185. The risk-free rate of interest is 12 per cent per annum. The lower bound for the put option is $X(1+r)^{-T} - S = 1260\ (1+0.12)^{-0.166} - 1185 =$ Rs. 51.50. Suppose the put is available at a premium of Rs. 40, the arbitrageur can borrow Rs. 1225 for two months to buy both the put and the index. At the end of the two months, the arbitrageur will be required to pay at 12 per cent per annum, Rs. 1249.50. At the end of the two months, the index can be either below 1,260 or above 1,260. If the index is below 1,260, the arbitrageur will exercise the option of selling the index at 1,260, repaying the loan amount of Rs. 1249.50 and thereby making a profit of Rs. 10.50. If the index goes upto 1,270, the arbitrageur will discard the option, sell the index at 1,270, repay the loan amount of Rs. 1249.50 and make a higher profit of Rs. 1270 − 1249.50 = Rs. 20.50.

Hedging with Options

Options are a means of hedging (insurance) against adverse price movement which have no directions. A call option is a means of ensuring a maximum purchase price and a put option ensures a minimum selling price. The purchase of a put option, or alternatively, selling of a call option are a means of hedging against a price fall. The purchase of a call option or, alternatively, selling of a put option are a means of protection from a price rise. The strategy of writing options is preferable if the price change is not significant or is modest whereas buying options is a better strategy if the price movement is significant or substantial.

Covered Writing Covered writing refers to selling call options corresponding to assets held or selling put options when the liquidity for the purchase of the underlying asset is held. Writing covered calls involves writing call options when the asset that might have to be delivered are already owned. For example, a writer writes a call on Infosys and at the same time holds shares of Infosys so that if the call is exercised by the buyer, he can deliver the stock.

A call option that is not covered by an opposite position in the underlying asset is called a naked call. In case of a naked call, if the option holder exercises his right, the writer will have to purchase the underlying asset to meet his call obligation, his loss will be the excess of purchase price over the exercise price of the call reduced by the premium received for writing the call. However, in case of covered calls, the worst that can happen is that the investor is required to sell shares already owned at below their market value. Hence, covered calls are less risky than naked calls.

As the investor expects prices to remain stable/go mildly up, he establishes a position of long on underlying and short on call, i.e., buying the stock and selling a call option on stock. It is similar to selling a put option. This strategy reduces the cost of acquisition, but the receipt of premium limits the upside potential. It offers an opportunity to earn while holding the underlying.

The reverse of writing a covered call is a short position in a stock combined with a long position in a call option.

Covered Call This is a bearish strategy wherein the investor holds the underlying asset and sells a call. Through this strategy, he avoids unlimited losses by selling the underlying assets that he is holding, whenever the need arises. The number of call options sold will be determined by the investor's market view and the size of stock holding. The investor's maximum profit is equal to the strike price minus the market price plus the premium received. (Figure 9.8) Moreover, an investor is subject to margin requirements. Suppose an investor is currently holding Reliance, which is quoting at Rs. 280. He is bearish on Reliance and feels that the price of Reliance will fall to Rs. 250 in the next month. Hence, he sells a call with strike price of Rs. 270 for Rs. 25, which is his income. Suppose on the expiry date, the price of Reliance shoots up to Rs. 300 (against his expectations). Hence, he as a seller of the call will pay Rs. 30 (Reliance price on expiry and strike price, i.e., Rs. 300 − Rs. 270). As he holds the shares of Reliance, his loss on call is offset by the appreciation of his holding, which is Rs. 20 (Rs. 300 − Rs. 280). His overall profit is equal to income from sale of call plus appreciation in holding minus payout on exercise of call = Rs. 25 + Rs. 20 − Rs. 30 = Rs. 15.

- In a covered call, the investor covers his short option position by taking a position in the underlying share

This covered call strategy can also be used by an investor who is bullish on a scrip but expects that the price will not move beyond a particular limit. This strategy enables him to reduce his overall effective cost. Suppose Reliance is quoting at Rs. 285 and an investor believes that the price of Reliance will not move beyond Rs. 300 in the next month. The investor can buy the scrips or its futures for Rs. 285 and simultaneously sell a call on the scrip with strike price of Rs. 300 for Rs. 15. The investor thus reduces his effective cost of acquisition to Rs. 270 (Rs. 285 less Rs. 15 premium received). But there is a risk of opportunity loss if the market rises. The investor gives up all appreciation benefits beyond Rs. 300.

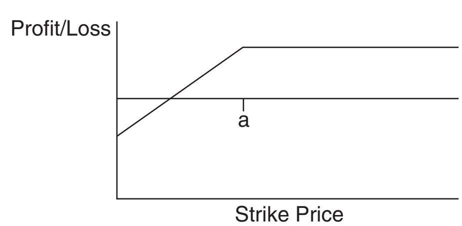

Figure 9.8 Covered Call: Long Stock, Sell Call

Protective Put Strategy This strategy involves buying a put option on a stock and the stock itself. A protective put consists of a long position in a put option combined with a long position in the underlying asset. It is equivalent to a long position in a call option plus a certain amount of cash. A protective put strategy is used when an investor expects market prices to go down. Protective put strategy escalates the cost of acquisition. But this escalated cost limits the downside risk.

DERIVATIVES MARKET IN INDIA

In India, commodity futures dates back to 1875. The government banned futures trading in many of the commodities in the 1960s and the 1970s. Forward trading was banned in the 1960s by the government despite the fact that India had a long tradition of forward markets. Derivatives were not referred to as options and futures but as *'tezi-mandi.'*

In exercise of the power conferred on it under Section 16 of the Securities Contracts (Regulation) Act, the government, by its notification issued in 1969, prohibited all forward trading in securities. However, the forward contracts in the rupee dollar exchange rates (foreign exchange market) are allowed by the RBI and used on a fairly large scale. Futures trading is permitted in 41 commodities. There are 18 commodity exchanges in India. The Forward Markets Commission, under the Ministry of Food and Consumer Affairs, acts as a regulator.

In the case of capital markets, the indigenous 125-year-old *badla* system was very popular among the broking and investor community. The advent of foreign institutional investors in the nineties and a large number of scams led to a ban on *badla*. The foreign institutional investors (FIIs) were not comfortable with this system and they insisted on adequate risk-management tools. Hence, the Securities and Exchange Board of India (SEBI) decided to introduce financial derivatives in India. However, there were many legal hurdles which had to be overcome before introducing financial derivatives. The preamble of the Securities Contract (Regulation) Act, states that the act was to prevent undesirable transactions in securities by regulating business of dealing therein, by prohibiting options, and by providing for certain other matters connected therewith. Section 20 of the act explicitly prohibits all options in securities. The first step, therefore, was to withdraw all these prohibitions and make necessary amendments in the act. The Securities Laws (Amendment) Ordinance, 1995, promulgated on January 25, 1995, withdrew the prohibitions by repealing Section 20 of the SC(R)A, and amending its preamble.

Later on, it was found that there was no regulatory framework to govern trading of derivatives. Hence, the SEBI set up a committee under the chairmanship of Dr L. C. Gupta on November 18, 1996, to develop a regulatory framework for derivatives trading in India. The committee submitted its report on March 17, 1998.

One of the major recommendations of the committee was to expand the definition of ‘securities’ to include derivatives within its ambit so that trading in derivatives could be introduced and regulated under SC(R)A. In order to make the necessary amendments in the act, the Securities Contracts (Regulation) Amendment Bill, 1998, was introduced in the Lok Sabha on July 4, 1998, which was then referred to the Standing Committee on Finance (SCF) on July 10, 1998, for examination and reporting thereon. This bill lapsed following the dissolution of the 12th Lok Sabha. A new bill, the Securities Laws (Amendment) Bill, 1999, incorporating the amendments proposed in the earlier bill and suggestions of the SCF was introduced in the Lok Sabha on 28 October 1999. The act inserted Clause (aa) in Section 2 to define derivatives to include (a) a security derived from a debt instrument, share, loan whether secured or unsecured, risk instrument or contract for differences or any other form of security, and (b) a contract which derives its value from the prices or index of prices of underlying securities. It also inserted sub-Clause (ia) in Section 2(h) to include derivatives within the ambit of securities. The act allows only exchange-traded derivatives and prohibits over-the-counter traded derivatives.

In June 1998, the SEBI constituted a group under the Chairmanship of Prof. J. R. Verma to recommend measures for risk containment in the derivatives market to be followed by all exchanges. The group submitted its report in October 1998 and the main recommendations were accepted by the SEBI in March 1999.

On March 1, 2000, the government lifted the three-decade-old prohibition on forward trading in securities by rescinding the 1969 notification.

Derivatives trading formally commenced in June 2000 on the two major stock exchanges, the BSE and the NSE. Futures trading based on the Sensex commenced at the BSE on June 9, 2000, while futures trading based on the S&P CNX Nifty commenced at the NSE on June 12, 2000.

The SEBI set up a technical group to lay down the broad framework for risk management of index options. The trading in index options commenced in June 2001 and trading in options on individual securities commenced in July 2001. Trading in stock futures commenced in January 2002.

New products such as interest rate futures contracts and futures and options contracts were introduced in June 2003 and August 2003 respectively.

FIIs and NRIs have been permitted to invest in all exchange traded derivative contracts.

Exchange traded derivatives contracts on a notional 10-year government bond have been allowed for trading.

Stock brokers have been allowed to trade in derivatives.

The NSE is the leading stock exchange for both equity and derivatives trading. More than 99 per cent of the contracts take place on the NSE. The NSE has trained more than 11,200 investors in the intricacies of derivatives.

Derivatives Market at the NSE

Trading Mechanism The futures and options trading system of the NSE, called NEAT–F&O trading system, provides a fully automated screen-based trading for the S&P CNX Nifty futures on a nationwide basis and an online monitoring and surveillance mechanism. It supports an order-driven market and is accessed by two types of users: trading members and clearing members. The trading members (TMs) have access to functions such as order entry, order matching, order and trade management while the clearing members (CMs) use the trader workstation for the purpose of monitoring the trading member(s) for whom they clear the trades. They can also enter and set limits to positions which a trading member can take. At present, there are more than 200 derivative members on the NSE. An investor has to sign a client–broker agreement with a member of the derivatives segment before undertaking derivatives trading. A fresh agreement is not needed for options trading if an agreement is already signed for index futures trading. The investor has to pay a commission to his broker-member on the value (strike price plus premium) of his contract. Brokerage rates range between 0.1 and 0.2 per cent of the contract value. An option buyer does not have to pay margins but an option seller has to pay daily marked-to-market margins to the exchange. The broker-member is required to give a contract note for all options and futures transactions done by an investor within 48 hours of the trade.

The minimum contract size in the derivatives market is Rs. 2 lakh and the market lot for every scrip is prescribed corresponding to the minimum size. A derivatives investor can deal only in multiples of the prescribed market lot. The market lot determines the margins or premium to be paid in order to enter into a derivatives contract.

The NSE reduced the lot size for derivative trades in 24 stocks from April 1, 2005. The lot size was pruned as the stock prices of these scrips had gone up. As a result, the value of derivative contracts exceeded the prescribed minimum value of Rs. 2 lakh. In many scrips, the value of derivative contracts exceeded Rs. 4 lakh and this prohibited many investors to participate in the derivatives market. Hence, the derivative contracts with a contract size/value of more than Rs. 4 lakh were halved and the revised market lot size was arrived at by dividing the existing market lot by two. The lot size of the S&P CNX Nifty is 50, S&P CNXMINIFTY 20, Nifty Midcap 300, CNXIT 100, and Bank Nifty 50.

- The lot size is the number of units that form one futures or options contract for a particular share or an index

To start trading in the derivatives market, an investor has to make an initial deposit with a broker which may vary from Rs. 15,000 to Rs. 50,000 depending on the size of the positions he wishes to take and the instrument (futures/options) he is interested in. This deposit is collected by the broker to pay initial and mark-to-market margins. Margins have to be paid on all futures positions (long as well as short) and on short options positions. Buying options requires no margins, only the upfront premium is to be paid. Margins are comparatively lower on trading in index futures and options rather than on stock futures and options as volatility in the index is lower than in individual stocks. Brokerage rates in the derivatives market ranges from 5 to 25 paise, depending on the broker and the volume of business done.

Clearing and Settlement The National Securities Clearing Corporation Limited (NSCCL) undertakes clearing and settlement of all deals executed on the NSE's derivatives segment. It acts as a legal counterparty to all deals on the derivatives segment and guarantees settlement. NSCCL has developed a comprehensive risk containment mechanism for the derivatives market. The actual margining happens on a daily basis and online position monitoring on an intra-day basis.

Settlement System The Nifty Index futures are cash settled. Index options on the Nifty are European-style, which means that they can only be exercised upon maturity. In case of futures, settlement is done on a daily basis by marking to market all open positions on the basis of daily settlement price. Members are required to pay the mark-to-market losses by T+1 day. The contracts are finally settled on the expiry of the Nifty Index Futures Contract. Index options contracts on the Nifty have a daily premium settlement and a formal settlement on the exercise day.

Mutual Funds and Derivatives The SEBI has permitted mutual funds to trade in derivatives. Mutual funds can use derivatives only for hedging and portfolio balancing. Mutual funds have to hold the cash or underlying security equal to the total exposure they take in derivatives. Hence, there is no scope for speculation. In other words, mutual funds cannot use leverage.

Other guidelines of the SEBI state that a fund's offer document has to clearly state that the fund can use derivatives. The fund has to keep its trustees updated (informed) regularly. The mutual fund has to take an approval of the shareholders to take positions in the derivatives market.

DERIVATIVES TRADING IN INDIA

Trading in stock index futures contracts started in June 2000. The BSE was the first exchange to commence derivatives trading on June 9, 2000, followed by the NSE on June 12, 2000. Exactly after a year, trading in index options and trading in individual stock options commenced in June 2001 and July 2001, respectively. Then in November 2001, futures trading in individual stocks was permitted. There are now four equity derivative products in the Indian market. Worldwide, the most successful equity derivative contracts are index futures, followed by index options and stock options.

The index futures and index options contracts traded on NSE are based on S & P CNX Nifty, CNXIT, and the CNX Bank Indices. Stock futures and options are available on 123 securities. While the index options are European style, stock options are American style.

Stock Index Options

- While the index options are European-style, stock options are America-style

Stock index options are options where the underlying asset is a stock Index. For example, the S&P CNX Nifty or the BSE Sensex are the underlying securities. Index options were first introduced by the Chicago Board of Options Exchange (CBOE) in 1983 on its index S&P 100. The CBOE is the largest exchange for trading stock options. In index options, one buys or sells the 'entire stock market.' as a single entity. Index options give an investor the right to buy or sell the value of an index, which consists of a certain number of stocks.

Index options enable investors to gain exposure to a broad market with one trading decision and with one transaction. This reduces the transaction costs. The premium of index option, a percentage of the underlying value, is also low.

Both individual investors and professionals, such as mutual fund managers, use stock index options. Individual investors use stock index options to capitalise on market options (bullish, bearish, or neutral) by acting on their views of the broad market or one of its sectors. Professionals use stock index options as tools for enhancing market timing decisions and adjusting asset mixes for asset allocation.

In case of stock index options, an investor can exercise his option only on the last day. These are called European-style options. Stock index options are cash settled.

The index options contract has a minimum size of Rs. 2 lakh and a maximum maturity of 12 months with a minimum of three strikes: in the money, near the money, and out of the money. Both the NSE and the BSE offer seven strike prices. The lot size for Nifty and Sensex is 200 units and 100 units, respectively. A portfolio-based margining approach is adopted so that an integrated view of the risk involved in the portfolio of each client is possible. For instance, if the Nifty is 1,500 and if an investor is bullish on the market, he can buy one contract (of a lot size of 200) of Nifty October for say Rs. 20 each. The investor pays a premium of (Rs. 20×200) Rs. 4,000. If the strike price is Rs. 1,550, the investor will break even at the Nifty level of 1,570 (1,550+20). If at expiration, the Nifty rises by 5 per cent or rises to 1,575, the investor makes a profit of Rs. 5 per Nifty (1,575−1,570) and a total profit of Rs. 1000 (5×200). If Nifty goes to or below 1,570 at expiration, the investor will not exercise the option and will lose the entire premium of Rs. 4,000.

All futures and options on stocks are American-style, while the index options and futures are European-style. Currently, both index and stock options are cash settled.

Individual Stock Options Individual stock options are contracts where the underlying asset is an equity stock. They are mostly American-style options, i.e., they can be exercised on any day during their tenure. Prices are normally quoted in terms of premium per share although each contract is for a larger number of shares.

Suppose an investor bought a June Infosys put (a right to sell) on April 3 at a strike price of Rs. 3,800 paying a premium of Rs. 650. On that day, spot Infosys was Rs. 3,300. The option is 'in the money' as the strike price is greater than the spot price. If it is exercised immediately, the investors profit of Rs. 500 (3,800−3,300) is less than the premium of Rs. 650 a shortfall of Rs. 150. The investor will make a profit when Infosys falls below Rs. 3,150. Stock options are exercised at the closing spot prices of the underlying stock.

Individual stock options provide a wide array of trading strategies to both hedgers and speculators. Investors can insure their portfolio of equity stocks by buying a protective put. Individual stock options enable investors to enjoy more leverage in the form of greater exposure by paying a small amount of premium. Individual stock options are beneficial to ESOP (Employee Stock Options) holders. ESOPs are subject to lock-in periods and this lock-in period could reduce capital gain in falling markets. Hence, an ESOP holder can buy a put option in the underlying stock and exercise the same if the market price falls below the price of the stock.

In India, options contracts on individual securities are American style and cash settled (Table 9.2). Cash settlement encourages large speculative practices. Cash settlement offers savings in delivery-related costs and induces time and effort for participants. But manipulators on taking large long or short positions attempt to either inflate or depress the prices in the spot market. Hence, SEBI is planning to enforce delivery based settlement in option contracts on individual stocks.

Stock Index Futures Stock index represents a change in the value of a set of stocks over the base year. This set of stocks constitute the index. For example, the BSE Sensex is a weighted average of the prices of 30 shares and S&P CNX Nifty is a weighted average of the prices of 50 shares.

Stock index futures are futures contracts where the underlying asset is the index. Trading in stock index futures means that market participants are taking a view on the way the index will move. Stock index futures are merely a tool to guess the mood of the market over the period of the contract. The market participants buy the entire stock market instead of individual securities by taking a position on index futures. Index futures can be used for hedging, speculating, arbitrage, cash flow management, and asset allocation. Index futures are settled in cash but investors are required to pay a small fraction of the total contract as margins. With relatively small amount of margins, the investor can take a position that is higher than the value of the risk capital actually invested. This is known as leverage or gearing. Stock index futures enable shuffling of portfolios to change the composition of assets. It carries no risk of dishonour of commitment as the clearing corporation of the exchange is a counter-party to every trade.

Stock index futures are available on the BSE Sensex, S&P CNX Nifty, CNXIT, CNX Nifty Junior, CNX 100, Nifty Midcap 50 and the CNX Bank Indices (Table 9.1). The permitted minimum lot size in case of the NSE's S&P CNX Nifty is 200 units and multiples thereof. Thus, if the index value is around 1,000, then the appropriate value of a single index futures contract is Rs. 2,00,000. In case of the BSE Sensex, the minimum market lot is fixed at 50 times the index. In other words, a minimum of 50 contracts of Sensex futures. If the index value is around 5,000, then the appropriate value of a

TABLE 9.1 Contract Specification for Index Futures and Options

Particulars	*Index Futures*	*Index Options*	*Mini Index Futures*	*Mini Index Options*	*Long Term Index Options*
Security Description	**FUTIDX**	**OPTIDX**	**FUTIDX** ———	**OPTIDX** ———	
Underlying Index	S&P CNX Nifty/ CNX Nifty Junior CNX 100/Bank Nifty/ CNX IT/Nifty Midcap 50		——— S&P CNX Nifty ———		
Style of Option	NAEuropean	NA ——— European ———			
Contract Size	As specified by SEBI, currently minimum Rs. 2 lakhs at the time of introduction	As specified by SEBI currently minimum Rs.1 lakh at the time of introduction			As specified by SEBI currently minimum Rs. 2 lakhs at the time of introduction
Price Step	——— Rs. 0.05 ———				
Last Trading/Expiration Day	Last Thursday of the expiry month or the preceding trading day, if last Thursday is a trading holiday				
Expiration Period	——— 3 months ———				Atleast 3 years
Trading Cycle	A maximum of three month trading cycle— • Near month (One) • Next month (Two) and • Far month (Three). New contract is introduced on the next trading day following the expiry of near month contract				• 3 year month expiries • Three following quarterly expiries of the cycle (March, June, Sept & Dec) • After these 5 following half yearly expiries of cycle (June/Dec)
Settlement	——— In cash on T+1 basis ———				

Source: NSE, *Factbook*, 2008–09.

TABLE 9.2 Contract Specification for Stock Futures and Options

Particulars	*Stock Futures*	*Stock Options*
Security Description	FUTSTK	OPTSTK
Underlying	Individual Securities	Individual Securities
Style of Option	NA	American
Contract Size	As specified by SEBI; Currently minimum Rs. 2 lakhs at the time of introduction	As specified by SEBI; Currently minimum Rs. 2 lakhs at the time of introduction
Price Steps	Rs. 0.05	Rs. 0.05
Expiration Period	3 months	3 months
Trading Cycle	A maximum of three month trading cycle—the near month (one), the next month (two), and the far month (three). New contract is introduced on the next trading day following the expiry of near month contract	A maximum of three month trading cycle—the near month (one), the next month (two), and the far month (three). New contract is introduced on the next trading day following the expiry of near month contract
Last Trading/Expiration Day	Last Thursday of the expiry month or the preceding trading day, if last Thursday is a trading holiday	Last Thursday of the expiry month or the preceding trading day, if last Thursday is a trading holiday
No. of strike Prices	NA	7 strikes (3 ITM, 1 ATM, and 3 OTM) for every option type (i.e., call and put)
Strike Price Interval	NA	Underlying Price / Strike Price Interval: 0–50 / 2.5; 50–250 / 5; 250–500 / 10; 500–1000 / 20; 1000–2500 / 30; >2500 / 50
Settlement	In cash on T+1 basis	In cash on T+1 basis
Settlement Day	Last Trading day	Last Trading day
Final Settlement Price	Closing value of security on expiry day	Closing Price of security on exercise day or expiry day

Note:
ITM: In-the-Money
ATM: At-the-Money
OTM: Out-of-the-Money
NA: Not Applicable
Source: NSE, *Factbook*, 2008–09.

single index futures contract on the BSE is Rs. 2,50,000. The minimum tick size for an index futures contract on NSE is 0.05 units and the minimum tick size on BSE is 0.1 Sensex points. Thus, a single move in the index value on the NSE would imply a price (gain or loss) of Rs. 10 (Rs. 0.05×200 units) on an open position of 200 units. In case of BSE Sensex, the tick size is equivalent to Rs. 5 (tick size × multiplier, i.e., 0.1×50).

Stock index futures are more suitable to institutional and large equity holders as they provide portfolio hedging facility. Pension funds in the US use stock index futures for risk hedging. Stock index is difficult to be manipulated as compared to individual stock prices. Moreover, stock index is much less than individual stock prices. Due to low volatility, capital adequacy and margin requirements are low, which induce more players to participate in the market.

Stock Futures Stock futures are futures contracts on the shares of individual companies. The contract specification for stock futures on NSE is given in Table 9.2. Stock futures are simple compared to stock options. Suppose an investor is bullish on Reliance which is currently quoting at Rs. 290 per share. The investor expects Reliance price to move up to Rs. 340 in the next month. If the investor buys Reliance for Rs. 290 and sells at Rs. 350 he makes a profit of Rs. 50 which turns out to be a return of 17 per cent in one month. Instead of buying the scrip if the investor buys stock futures, then he has to merely pay a margin of, say, 20 per cent and can earn a profit of Rs. 50 on an investment of Rs. 58. His rate of return is 86 per cent in one month.

As stock futures in India are not linked to delivery, an investor should buy stock futures when he predicts an upward price movement and sell futures when he anticipates a downward price movement. Stock futures provide the advantage of leverage. Traders can carry forward positions and investors can take a position in the market by paying a small amount called margins. The risks are that losses will also get leveraged or multiplied as profits do. A safe strategy for an investor is to go long on futures when they trade at a premium and short when the cost of carrying is negative.

Hedging effectiveness increases with stock futures rather than index futures. It is relatively easier to arbitrage the difference in the price of the underlying stock rather than hedge the index.

Stock futures have features similar to the *badla* system. In *vyaj badla*, the broker used to buy shares at lower rates and sell at higher rates. Similarly, in stock futures, investors take advantage of price differences in the cash market and the futures market. But stock futures are superior to *badla* as the cost of carrying futures (the interest or premium) is known to both the seller and the buyer at the time of entering into a contract. In *badla*, the returns were dependent on the demand-and-supply situation of stocks/funds, and decided on a weekly basis. Similarly stock futures can combine positions in futures as well as options to take advantage of upside profits and cover the downside losses as well.

The number of contracts provided in options on index is based on the range in previous day's closing value of the underlying index and applicable as per Table 9.3.

TABLE 9.3 Strike Price Intervals

Index Level	*Strike Interval*	*Strike Introduced*
Upto 2,000	50	4-1-4
>2,001 Upto 4,000	100	6-1-6
>4,001 Upto 6,000	100	6-1-6
>6,000	100	7-1-7

Source: NSE, *Factbook*, 2008–09.

The above strike parameters scheme are applicable for all long terms contracts also.

Individual stock futures are not very popular in some countries as price volatility in individual stocks is much higher than the index. High price volatility leads to higher risk of clearing corporation and levying of higher margins. Hence, individual stock futures in some countries suffer from lack of depth and trading. While, in India, due to its similarity with *badla* trading, stock futures have become popular and contribute to 32 per cent of the total turnover of the derivatives segment. Since January 2008, the average daily volume in stock futures in terms of the number of contracts being traded on the NSE is the highest in the world.

As may be seen from Table 9.4, the trade turnover has significantly increased in the index futures market. This increase was more remarkable at the NSE. The turnover and the number of contracts traded on the BSE have declined.

The share of index options in the total turnover was the highest (34 per cent) in 2008–09, followed by index futures (32.4 per cent). Index futures have started gaining popularity. Institutional investors use index futures as a proxy for the market. Lower margins on index products attract small investors to trade in index products.

The derivatives market has grown rapidly. The average daily turnover in the derivatives segment is about Rs. 53,119 crore which is much larger than the total turnover of the cash market. There has been a tremendous growth not only in volume but also in the number of client accounts.

During 2007–08, the turnover of derivatives market was higher by 259.9 per cent of the combined cash market turnover of the BSE and the NSE.

The NSE's market share is almost 99 per cent in the derivatives segment. When derivatives trading commenced the derivatives market in India was predominantly a retail market with retail customers accounting for 95 per cent of the total traded volumes in the derivatives segment. However, during 2008–09, the retail investors accounted for 55.63 per cent of the turnover on the F&O segment of the NSE Exchange.

Derivatives trading in India has come of age. However, when compared to other world markets, the Indian derivatives market is quite small. The Indian derivatives market contributes less than 1 per cent to the world markets in terms of number of contracts and national turnover. The volume of activity in the derivatives market can still increase provided the following issues are resolved.

TABLE 9.4 Turnover in Equity Derivatives Market

(Rs. in Crore)

Year	The Stock Exchange, Mumbai				National Stock Exchange			
	Index Futures	Index Options	Stock Futures	Stock Options	Index Futures	Index Options	Stock Futures	Stock Options
2000–01	1,672.6	–	–	–	2,365	–	–	–
2001–02	1,276.3	78.3	451.6	115.5	21,482	3,766	51,516	25,163
2002–03	1,810.99	1.98	644.30	21.17	43,952	9,247	2,86,532	1,00,133
2003–04	6,572	0.03	5,171.05	331.61	5,54,446	52,816	13,05,939	2,17,207
2004–05	13,600	2297	213	3	7,72,174	1,21,954	14,84,067	1,68,858
2005–06	5	3.20	0.48	0.1	15,13,791	3,38,469	27,91,721	1,80,270
2006–07	55,491	0.06	3,515	0	25,39,575	7,91,912	38,30,972	1,93,811
2007–08	2,34,660	39	7,609	0	38,20,667	13,62,111	75,48,563	3,59,136
2008–09	12,250	9	9	0	35,70,111	37,31,507	34,79,642	2,29,227
2009–09	NA	NA	NA	NA	39,34,389	80,27,965	59,95,247	5,06,055

NA: Not Available
Source: SEBI, *Bulletin*, various issues.

- The introduction of the proposed physical settlement of stock futures is still pending. The physical settlement of stock futures will make stock futures akin to *badla*. This facility would serve as a mechanism for arbitrage traders to earn safe and steady returns by buying stocks in the cash market and selling them in the futures at a premium. The physical settlement of derivatives contract seeks to integrate both the derivative and cash markets. If introduced, it will drive volumes and lead to efficient price discovery. The SEBI has allowed stock lending which will enable physical delivery of derivative products in the market.
- In 2009, the total number of scrips available for derivatives trading on NSE was 179. Some of the new included stocks have low liquidity and encourage speculation which increases the risk in the system.

In April 2010, the SEBI allowed the stock exchanges to introduce equity derivatives with tenures upto 5 years, derivative contracts on volatility indexes which have a track record of atleast one year and physical settlement of equity derivatives.

Conclusion

The derivatives market has grown tremendously world over. This market, just like other markets, is not immune to disasters and breakdowns. Excessive speculation in the futures markets led to the collapse of 200 year-old bank, Barings, as well as of Germany's big industrial group, Metallgesellschaft. Similarly, the Long Term Capital Management (LTCM), an institution created by two professors who won the Nobel Prize, had USD 120 billion in balance-sheet exposure and USD 1.2 trillion of notional derivatives exposure. This institution was closed down by the US government within one year of its operations.

In India, the derivatives market is new but is just catching up. Proper checks and controls are necessary for a smooth functioning of this market to prevent excessive speculation and scams.

KEY TERMS

Derivatives, Forwards, Futures, Options, Warrants, Swaps, Swaptions, Exchange-Traded Derivative, OTC Derivatives, Hedger, Speculator, Arbitrageur, Forward Contracts, Futures Contracts, Spot Price, Spreads, Cost of Carry, In-the-money Option, Out-of-the-money Option, At-the-money Option, Intrinsic Value of Options, Time Value of Options, Volatility, Bull spread, Bear Spread, Straddle, Strangle and Covered Call.

SUMMARY

1. A derivative is a contract whose value is derived from the value of another asset, known as the underlying, which could be a share, a stock market index, an interest rate, a commodity, or a currency.
2. The explosive growth of derivatives in developed centuries is fuelled by the increased volatility in global financial markets, the technological changes, breakthrough in modern financial theory, political developments, and increased integration of domestic financial markets with international markets.
3. Derivatives reduce risk, enhance liquidity, lower transaction costs, enhance the efficiency price discovery process, help investors to adjust the risk and return characteristics of their stock portfolio and provide information on the magnitude and the direction in which various market indices are expected to move.

4. The Securities Contracts (Regulation) Act [SC(R)A], 1956, defines derivatives in the following manner. Derivatives include: (i) a security derived from a debt instrument, share, loan (whether secured or unsecured), risk instrument, or contract for differences, or any other form of security. (ii) a contract which derives its value from the prices or index of prices of underlying securities.
5. The different types of financial derivatives are forwards, futures, options, warrants, swaps, and swaptions.
6. The different traders in derivatives market are hedger, speculators, and arbitrageurs.
7. Derivatives trading in India formally commenced in June 2000 on the two major stock exchanges—the BSE and the NSE. Futures trading based on the Sensex commenced at the BSE on June 9, 2000, while futures trading based on the S&P CNX Nifty commenced at the NSE on June 12, 2000.
8. A forward contract is a customised contract between two parties where settlement takes place on a specific date in the future at a price agreed today. They are over-the-counter traded contracts.
9. Futures are exchange-traded contracts, or agreements, to buy or sell a specified quantity of financial instrument/commodity in a designated future month at a price agreed upon by the seller and buyer.
10. Futures allow hedging against adverse price changes, help in price-discovery, make transactions across time easier, speedier, and less costly and help in optimal allocation of resources.
11. There are four views that an investor can take on market movements: bullish, bearish, volatile, and neutral. Different strategies are available for different views on market movements. These strategies can be classified into three groups: hedging strategies, speculative trading strategies and arbitrage strategies.
12. The price of the contract defined under cost of carry model of futures prices is:

$$F = S + C$$

Futures price = Spot price + Carry costs

The above equation can also be expressed as:

$$F = S\,(1+r)^T$$

13. Cost of carry model for stock index futures = Financing cost − Dividends.

Price of Index futures when given the expected dividend yield.

$$F = S\,[1+(r-d)^T]$$

14. There are four hedging strategies in case of index futures: Long stock, short index futures; short stock, long index futures; hedging a portfolio with short index futures; and hedging with long index futures.
15. There are two strategies for speculation in case of index futures: long index futures, short index futures and basis trading.
16. Options are contracts that give the holder the option to buy/sell specified quantity of the underlying assets at a particular (strike) price on or before a specified time period. The word 'option' implies that the holder of the options has the right but not the obligation to buy or sell underlying assets.
17. Options are of two basic types—'call' option and 'put' option. A call option is a right to buy an underlying asset at a specified price on or before a particular day by paying a premium. A 'put' option is a right to sell an underlying asset at a specified price on or before a particular day by paying a premium.
18. An option may be in the money, out of the money, or at the money. When the underlying asset price (S) is greater than the strike price (X) of the call option, that is, S > X is in-the-money option. When the underlying asset price (S) is less than the strike price (*X* of the call option), that is, S < X is an out-of-the-money option. When the option's underlying asset price is equal to the option's strike price, that is, S = X is at-the-money option. It would lead to zero cash flow if exercised immediately.
19. The intrinsic value of an option is the greater of zero, or the amount that is in-the-money. Only in-the-money options have intrinsic value. It is defined as the amount by which an option is in the money, or the immediate exercise value of the option when the underlying position is marked-to-market.

For a call option: Intrinsic value = Spot price − Strike price.

For a put option: Intrinsic value = Strike price − Spot price.

20. The time value of an option is the difference between its premium and its intrinsic value. Time value is the amount option buyers are willing to pay for the possibility that the option may become profitable prior to expiration due to favourable change in the price of the underlying.
21. The various option Greeks are: *Delta*, *Gamma*, *Theta*, *Rho*, and *Vega*. *Delta* measures the sensitivity of an option's premium/price to a change in the value of the underlying asset. *Gamma* measures the change in *delta* of an option for a change in the price of the underlying asset. *Theta* measures the rate at which an option's time premium diminishes as time passes. *Rho* measures the change in the option price for a change in the risk-free interest rates. *Vega* measures the sensitivity of an option's price to a change in its implied volatility.
22. Options are versatile derivative instruments as they are a means of insurance against adverse price movement, and provide high leverage.
23. The different types of options trading strategies are option spreads—vertical spreads, horizontal spreads, and diagonal spreads; volatility trading—Straddle, strangle, and butterfly spread; put–call parity; arbitrage beyond upper and lower bounds and covered writing.
24. Vertical spreads involve the simultaneous buying and selling of options on the same underlying instrument for the same expiration date but with different exercise prices. Bull spread is a spread that is created by buying a low strike price option and selling a high strike price option on the same stock. It is designed to profit if the price goes up. A spread that is designed to profit if the price goes down is called a bear spread. A horizontal or calendar spread is a spread where the options used have the same strike price but different expiration dates. A calendar spread trading strategy is used by an investor who thinks that the market will be weak in the short-term but rally in the long-term. Diagonal spread combines both vertical and horizontal features. In a diagonal spread, both the expiration date and the strike price of the calls are different. Straddle is a position of buying a put and call with the same price and expiration date. Like a straddle, a strangle is the buying/selling of a combination of one call option and one put option with same maturity. But unlike straddle, strangle has different exercise prices. A butterfly spread is a combination of a bull and bear spread. This strategy is used when the investors expect that the stock prices will not significantly rise or decline by expiration.
25. The Black–Scholes Option Pricing Model was originally developed for European-style options on non-dividend paying stocks by Fischer Black and Myron Scholes.

$$C = S.N(d_1) - Ke^{-rT}.N(d_2)$$

$$P = Ke^{-rT}\,N(-d_2) - SN(-d_1)$$

where

$$d_1 = \text{In } S/K + \left(r + \sigma^2/2\right)^T/\sigma\sqrt{T}$$

$$d_2 = d_1 - \sigma/\sqrt{T}$$

26. Put–call parity relationship is expressed as

$$S + p = c + \frac{X}{\left(l + r\right)^T}$$

where,

S = Spot price of the underlying
p = Price of European put option
c = Price of European call option
X = Exercise price of options
T = Time to expiration
r = Risk-free rate of interest

If $S + p \neq c \frac{X}{\left(l + r\right)^T}$, then an arbitrage opportunity exists.

For a dividend paying stock, the put–call parity relationship is

$$c + \frac{X}{(l + r)^T} + D = p + S.$$

27. A call option gives the holder the right to buy a stock or an index for a certain price. As the option can never be worth more than the stock/index, the stock price/index is an upper bound to the option price.

$C < S$, where
C = Price of call option
S = Current stock price/current index level

The lower bound for the price of a call option is $S - X\,(l+r)^{-T}$. If the price of a call is not worth at least this much, then it will be possible to make riskless profits.

28. A call option is a means of ensuring a maximum purchase price and a put option ensures a minimum selling price. The purchase of a put option, or alternatively, selling of a call option are a means of hedging against a price fall. The purchase of a call option or, alternatively, selling of a put option are a means of protection from a price rise. The strategy of writing options is preferable if the price change is not significant or is modest whereas buying options is a better strategy if the price movement is significant or substantial.
29. There are now four equity derivative products in the Indian market. Stock index options are options where the underlying asset is a stock index. Individual stock options are contracts where the underlying asset is an equity stock. Stock index futures are futures contracts where the underlying asset is the index. Stock futures are futures contracts on the shares of individual companies.

REVIEW QUESTIONS

1. What are derivatives? State the reasons for the explosive growth of derivatives.
2. Explain the difference between hedging, speculation, and arbitrage.
3. How do futures contracts differ from forward contracts?
4. How do futures differ from options?
5. Explain the cost of carry model of future prices.
6. What are options? Explain the different types of options.
7. When is a call option in the money, out of the money, and at the money?
8. Discuss options trading strategies.
9. What is volatility trading? Which are the different strategies for volatility trading?
10. Which issues still need to be resolved for the growth of the Indian derivatives market?
11. Fill in the blanks
    i. Spot value of Nifty is 1,120. An investor buys a one month Nifty 1,130 call option for a premium of Rs. 7. The option is ________.
       (a) in the money (c) at the money
       (b) out of the money (d) none of the above
    ii. A stock is currently selling at Rs. 90. The call option to buy the stock at Rs. 85 costs Rs. 10. What is the time value of the option?
       (a) Rs. 4 (d) Rs. 2
       (b) Rs. 5 (e) Rs. 6
       (c) Rs. 3
    iii. A bull spread is created by __________.
       (a) buying a call and a put
       (b) buying a call and a spread
       (c) buying two calls
       (d) selling two calls
    iv. Nifty stands at 1,065, the risk-free rate of interest is 12 per cent per annum, the price of a three-month Nifty 1,060 calls is Rs. 90 and the price of three months Nifty put is Rs. 60. To exploit the arbitrage, an investor should __________.
       (a) sell the index plus a put and buy a call
       (b) sell the index plus a call and buy a put
       (c) buy the index plus a put and sell a call
       (d) none of the above
    v. On January 1, call option on the Nifty with a strike of 1,160 is available for trading. Expiration date is January 20. The T that is used in the Black–Scholes formula should be:
       (a) 0.091 (c) 20
       (b) 0.055 (d) none of the above

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10
The Debt Market

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Meaning, history and characteristics of the debt market*
2 *Participants in the debt market*
3 *Primary and secondary segments of the debt market*
4 *The private corporate debt market*
5 *The public sector undertaking bonds market*
6 *The government securities market*
7 *Tools for managing liquidity in the government securities market*
8 *Infrastructure development of the government securities market*
9 *Measures to strengthen the government securities market infrastructure*
10 *Impact of reforms on the government securities market*

- The debt market is a market where fixed income securities of various types and features are issued and traded

INTRODUCTION

The debt market is one of the most critical components of the financial system of any economy and acts as the fulcrum of a modern financial system. The debt market in most developed countries is many times bigger than the other financial markets, including the equity market. The US bond market is more than USD 35 trillion in size with a turnover exceeding 500 billion daily, representing the largest securities market in the world. The size of the world bonds market is close to USD 47 trillion which is nearly equivalent to the total GDP of all the countries in the world.

The total size of the Indian debt market is currently estimated to be in the range of USD 150 billion to 200 billion. India's debt market accounts for approximately 30 per cent of its GDP. The Indian bond market, measured by the estimated value of the bonds outstanding, is next only to the Japanese and Korean bond markets in Asia. The Indian debt market, in terms of volume, is larger than the equity market. In terms of the daily settled deals, the debt and the forex markets currently (2008–09) command a volume of Rs. 1,40,000 crore against a meagre Rs. 20,000 crore in the equity markets (including equity derivatives).

In the post-reforms era, a fairly well-segmented debt market has emerged comprising the following:

- Private corporate debt market
- Public sector undertaking bond market
- Government securities market

The government securities market accounts for more than 90 per cent of the turnover in the debt market. It constitutes the principal segment of the debt market.

History of the Indian Debt Market

The Indian debt market has traditionally been a wholesale market with participation restricted to a few institutional players—mainly banks. Banks were the major participants in the government securities market due to statutory requirements. The turnover in the debt market too was quite low at a few hundred crores till the early 1990s. The debt market was fairly underdeveloped due to the administered interest rate regime and the availability of investment avenues which gave a higher rate of return to investors.

In the early 1990s, the government needed a large amount of money for investment in development and infrastructure projects. The government realised the need of a vibrant, efficient, and healthy debt market and undertook reform measures. The Reserve Bank put in substantial efforts to develop the government securities market but its two segments, the private corporate debt market and public sector undertaking bond market, have not yet fully developed in terms of volume and liquidity.

The debt market plays a key role in the efficient mobilisation and allocation of resources in the economy, financing the development activities of the government, transmitting signals for implementation of the monetary policy, facilitating liquidity management in tune with both short-term and long-term objectives, and pricing of non-government securities in financial markets.

It is the debt market which can provide returns commensurate to the risk, a variety of instruments to match the risk and liquidity preferences of investors, greater safety, and lower volatility. Hence, the debt market has a lot of potential for growth in the future. The debt market is critical to the development of a developing country like India which requires a large amount of capital for achieving industrial and infrastructure growth.

Regulation of the Debt Market The RBI regulates the government securities market and money market while the corporate debt market comes under the purview of the Securities Exchange and Board of India (SEBI).

In order to promote an orderly development of the market, the government issued a notification on March 2, 2000, delineating the areas of responsibility between the Reserve Bank and the SEBI. The contracts for sale and purchase of government securities, gold related securities, money market securities and securities derived from these securities, and ready forward contracts in debt securities shall be regulated by the RBI. Such contracts, if executed on the stock exchanges shall, however, be regulated by SEBI in a manner that is consistent with the guidelines issued by the RBI.

Link Between the Money Market and the Debt Market

The money market is a market dealing in short-term debt instruments (upto one year) while the debt market is a market for long-term debt instruments (more than one year). The money market supports the long-term debt market by increasing the liquidity of securities. A developed money market is a prerequisite for the development of a debt market.

Characteristics of the Debt Market

The characteristics of an efficient debt market are a competitive market structure, low transaction costs, a strong and safe market infrastructure and a high level of heterogeneity among market participants. An efficient debt market helps in reducing the borrowing cost of the government, reducing the pressure on institutional financing by providing greater funding avenues, enhancing mobilisation of resources by unlocking unproductive investment like gold, and developing a stable yield curve.

Participants in the Debt Market

The participants in the debt market are a small number of large players which has resulted in the debt market evolving into a wholesale market. Most primary debt issues are privately placed or auctioned to the participants while secondary market dealings are negotiated over the telephone. The NSE Wholesale Debt Market Segment (WDM) has emerged as an active platform for trading in debt instruments. Recently, the BSE also started trading in debt instruments. The primary dealers act as market makers in the government securities market. The debt market has become more diversified with the entry of new participants such as high net worth individuals, cooperative banks, large corporates, mutual funds, and insurance companies.

The major participants in the debt market are as follows:

- **Central and state governments:** The central government raises money through the issue of dated securities and treasury bills to finance the budget deficit and other short-term and long-term financial requirements. The Reserve Bank is the investment banker, which performs the task of raising money and issuing securities on behalf of the government.

  The state government, municipalities, and local bodies also issue securities to finance their budgetary deficits and developmental projects,
- **Primary dealers:** They are market makers appointed by the Reserve Bank and have emerged as active intermediaries in the government securities market and money market.
- **Public Sector Undertakings (PSUs):** They issue tax-free and taxable bonds to meet their longterm and working capital needs. They also invest in debt securities to park their surplus funds.
- **Corporates:** They are both issuers and investors in the debt market.
- **Banks:** They are the captive investors in the government securities market. They participate both as lenders and borrowers in the call money market and as arrangers and investors in the commercial paper market. They issue certificates of deposits (CDs) to finance their short-term requirements and bonds to finance their long-term requirements.

Box 10.1 Risks Associated with Debt Securities and Trading in Debt Securities

Risks associated with debt securities:

- Default/Credit Risk: The issuer of a debt security may be unable to make timely payment of interest or principal amount or comply with the provision of a bond indenture.
- Interest Rate Risk: Risk arising from an adverse change in the interest rate which affects the yield on the existing instruments.
- Reinvestment Rate Risk: The probability of a fall in the interest rate resulting in lack of options to invest the interest received at regular intervals at higher rates or at comparable rates in the market.

Risks associated with trading in debt securities:

- Counter-party Risk: Risk arising due to the inability of the opposite party to the contract to deliver either the promised security or the sale value at the time of settlement.
- Price Risk: Risk arising on account of the inability to receive the expected price due to an adverse movement in the prices.

Source: BSE.

- **Mutual funds:** Mutual funds are the predominant investors, in the debt market. They have specialised debt funds such as money market mutual funds, gilt funds, and so on. They have also emerged as active participants and traders in the debt market.
- **Insurance companies:** They have been permitted to invest in the debt market and the limits of investment have been specified by the IRDA.
- **Foreign Institutional Investors (FIIs):** They have been permitted to invest in government securities and corporate bonds. The limits of their investment have been specified.
- **Provident Funds (PFs) and pension funds:** They are large investors in government securities and PSU bonds. They are not active traders in their portfolios.
- **Charitable institutions and trusts:** They are large investors in government securities and bonds specified in the bye-laws governing them. They are also not active traders in their portfolios. Satellite dealers (SDs) were also one of the participants in the debt market but the Reserve Bank discontinued their participation from May 2002.

In the government securities market, the Negotiated Dealing System (NDS) has replaced the system of negotiations through telephones. The Clearing Corporation of India Limited (CCIL) has revolutionised the clearing and settlement system in the government securities market. Both the NDS and the CCIL have brought about a radical transformation in the debt market similar to that brought about by NSE in the equity market.

Types of Instruments Traded in the Debt Market

The different types of instruments traded in the debt market can be classified into following segments:

Market Segment	*Issuer*	*Instruments*
Government Securities	Central Government	Zero Coupon Bonds, Coupon Bearing Bonds, Treasury Bills, Floating Rate Bonds, STRIPS, Dated Securities (Including MSS)
	State Governments	Coupon Bearing Bonds, Floating Rate Bonds.
Public Sector Bonds	Government Agencies/ Statutory Bodies	Government Guaranteed Bonds, Debentures.
	Public Sector Units	PSU Bonds–Taxable and Tax-free, Debentures, Commercial Paper, Deep Discount Bonds.
Private Sector Bonds	Corporates	Debentures, Bonds, Commercial Paper, Floating Rate Bonds, Secured Premium Notes, Zero Coupon Bonds, Inter-corporate Deposits.
	Banks	Certificates of Deposit, Debentures, Bonds.
	Financial Institutions	Certificates of Deposits, Bonds.

Source: BSE.

Dematerialisation of Debt Securities

The government abolished stamp duty on debt securities to boost the dematerialisation of debt securities and enhance levels of trading in corporate debt securities. Both the NSDL and the CDSL were permitted to admit debt instruments to the depository. The debt instruments include debentures, bonds, commercial papers, and certificate of deposit, irrespective of whether these instruments are listed, unlisted or privately placed.

With dematerialisation, it has become possible for banks to sell securities in smaller lots to corporate clients, provident funds, trusts, and others. The cost of holding securities in demat form is negligible as most of the banks are depository participants (DPs) of NSDL. Moreover, these banks can STRIP these securities and create a retail market for the same.

With effect from October 31, 2001, banks, financial institutions, and primary dealers can make fresh investments in and hold bonds and debentures, privately placed or otherwise, only in demat form.

Primary and Secondary Segments of Debt Market

- The private placement market for debt issues is popular because the cost of raising funds is low

In the primary market, new debt issues are floated either through public prospectus, rights issue, or private placement. The private placement market is more attractive because the cost of raising a loan is only half of that of raising loans from the market. Under the current guidelines, corporates are required to report details of resources raised through private placements to the stock exchanges–BSE and NSE. This was aimed at giving investors a good idea of how the companies propose to use these funds and also guage the risk return allowed. In mid-2006, the US private placement market was opened up for Indian companies. Reliance Industries Limited became the first Indian company to tap the US private placement market, raising $300 million through a 10–12 year loan. More Indian companies are likely to tap this market.

The debt instruments are traded on the OTCEI, the BSE, and the WDM segment of the NSE. The BSE is the first exchange in the country to provide an electronic trading platform for corporate and other non-government debt securities through the order-matching system. The clearing and settlement of the trades is undertaken through the clearing house of the exchange.

At present, bond deals in India are struck over phones, following which the players report the transactions on NDS. The negotiated dealing system (NDS) is used predominantly as a reporting platform. The RBI wants the price discovery, order matching and deals to take place on the NDS.

The National Stock Exchange of India Ltd set up a separate segment for trading in debt securities known as the Wholesale Debt Market segment of the exchange. In fact, the NSE commenced operations in June 1994 with the WDM segment of the exchange. Prior to the commencement of trading in the WDM segment of the NSE, the only trading mechanism available in the debt market was the telephone. The NSE provided, for the first time in the country, an online, automated, screen-based system known as NEAT (National Exchange for Automated Trading) across a wide range of debt instruments. NEAT supports an anonymous order-driven market and also provides on-line market information system.

In the WDM trading system, there are two markets: (a) Continuous Market, and (b) Negotiated Market. In the continuous market, the buyer and seller do not know each other and they put their orders. If the orders match, it results in a trade which is settled directly between the participants. In the NEAT-WDM system, all participants can set up their counter-party exposure limits against all probable counter-parties which enables them to reduce/minimise the counter-party risk. In the negotiated market, trades take place outside the exchange but are reported to the Exchange and disclosed to the market through NEAT-WDM system. In the negotiated market, no counter-party exposure limit needs to be involved as the participants are familiar with each other.This system is an order-driven system which matches the best buy and sell orders on a price time priority and simultaneously protects the identity of the buyer and the seller. Trading under this system leads to a risk-free, efficient price mechanism and transparency.

Initially, government securities, T-bills, and bonds issued by public sector undertakings were made available for trading. Now this range has been widened to include non-traditional instruments, such as floating rate bonds, zero coupon bonds, index bonds, commercial papers, certificates of deposit, corporate debentures, state government loans, SLR and non-SLR bonds issued by financial institutions and local bodies, units of mutual funds, and securitised debt.

Types of Entitles on the NSE-WDM Segment

- Brokers
- Trading Members
- Participants

On the NSE-WDM segment, brokers are involved merely in order execution for their clients. Besides brokers, there are two types of entities in this segment: trading members and participants. Trading membership is open to corporates, subsidiaries of banks and financial institutions, satellite dealers and primary dealers who have a minimum net worth of Rs. 2 crore. They can place orders and execute trades on the system. Participants take direct settlement responsibility for trade executed on the exchange on their behalf by an NSE trading member. Participants comprise large investors such as banks, primary dealers, and institutions who are not members of NSE and therefore, cannot directly transact but effect transactions through the NSE-WDM segment.

Types of Trades on the NSE-WDM Segment

- Outright
- Repos

The government security trade on the WDM segment could be outright trade or repo transactions with a flexibility for varying days of settlement which, in turn, is to be clearly specified. However, for non-government securities only outright transactions are allowed. All outright secondary market transactions in government securities are settled on T+1 basis from May 24, 2005. In case of repo transactions in government securities, the first leg can be settled either on T+0 basis or T+1 basis. All outright transactions of non-government securities can be settled up to T+2. All trade in government securities is reported to RBI-SGL through the Negotiated Dealing System (NDS) or the order matching of RBI. The Clearing Corporation of India Limited (CCIL) provides settlement guarantee for transactions in government securities including repos. The trades are settled on a net basis through the DVP-III system while the trades for non-government securities are settled on a gross basis directly between participants on delivery versus payment basis. The settlement cycle for government securities was standardised to T+1 from May 11, 2005.

THE PRIVATE CORPORATE DEBT MARKET

- The private corporate debt market is a market wherein debt securities of corporates are issued and traded

The private corporate sector needs large amounts of long-term funds for expansion, modernisation, restructuring operations and mergers/acquisitions. It can raise funds through equity and debt. Equity is risk capital and there are limits to which a corporate can raise funds through equity shares. Corporates need to diversify funding sources. Hence, they can raise capital either through long-term borrowings from banks and financial institutions or by issuing debentures/bonds in the debt market. Banks do lend long-term loans but they do not have the capacity nor the appetite for such long-term loans. Moreover, lending a large number of long-term loans would create asset-liability mismatch problem for the banks as banks accept short-term deposits. But, banks would be willing to invest in 10 to 20 years bonds issued by corporates if they have an exit route, i.e., they are in a position to sell the bonds when they need the money. This exit route is provided by the corporate bond market. The corporate debt market is a market wherein debt securities of corporates are issued and traded therein. A well-developed corporate bond market enables corporates to raise long-term capital for long-gestation projects/acquisitions at a lower cost and thereby aid in economic growth. The corporate debt market supplements the banking system. It enables a better asset-liability match for both corporates and banks. Moreover, rating of debt securities by credit rating agencies helps in increasing investor confidence, which, in turn, enables investors to hold a diversified portfolio consisting of both debt and equity instruments. As investors such as mutual funds, banks, and insurance companies need a steady flow of income to cater to the varying needs of their customers, they are major investors in this market. An active corporate debt market fosters market discipline and nurtures credit culture.

Significance of the Corporate Debt Market

- Aids in economic growth by providing long-term capital
- Supplements the banking system
- A stable source of finance
- Reduces cost of capital of corporates
- Fosters market discipline and nurtures credit culture
- Enables investors to hold a diversified portfolio
- Enables a better asset-liability match for banks and corporates

SEBI (Issue and Listing of Debt Securities) Regulations, 2008 define ‘debt securities’ as non-convertible debt securities which create or acknowledge indebtedness, and include debenture, bonds and such other securities of a body corporate or any statutory body constituted by virtue of a legislation, whether constituting a charge on the assets of the body corporate or not, but excludes bonds issued by Government or such other bodies as may be specified by the SEBI, security receipts and securitised debt instruments.

The investors in this market are banks, financial institutions, insurance companies, mutual funds, retirement funds, provident funds, and foreign institutional investors.

Private sector companies raise funds from the debt market by issuing debentures. These debentures may be convertible debentures, which can be converted into equity (partially or fully convertible debentures), or non-convertible debentures (NCDs). These are governed by the provisions of the Companies Act. Interest on these debentures is calculated on an actual 365-day basis. Tax deduction at source (TDS) is applicable. Convertible bonds is a preferred source of raising funds in volatile markets. In 2007, India was the fourth most active market in the world in convertible debenture issuances.

Corporates adopt either the public offering route or the private placement route for issuing debentures/bonds. The public issues of debentures are open to all investors and allotment is made on a pro-rata basis. Coupon rates are fixed by the issuer and lead manager prior to the offering. In the case of privately placed debentures, the terms of the issue are decided by negotiations between issuers and bidders. Some privately placed debt instruments are subsequently listed on stock exchanges.

The private corporate sector has designed a hybrid variety of instruments combining the features of both debt and equity. A wide variety of instruments with longer maturity and with call and put options have been issued by the private corporate sector. Many corporates have issued floating rate bonds (FRBs), besides fixed rate bonds.

Regulatory Agencies Responsible for Regulating Different Segments of the Corporate Debt Market

The SEBI is responsible for primary market (public issues as well as private placements by listed companies) and secondary market (OTC as well as exchange) for the corporate debt market.

The RBI is responsible for the market for repo/reverse repo transactions in corporate debt. However, if it is traded on exchanges, trading and settlement procedure would be determined by the SEBI.

Regulations on Issue and Listing of Debt Securities

The SEBI issued regulations on issue and listing of debt securities on June 6, 2008 which are as follows:

1. An issuer cannot make any public issue of debt securities if on the date of filing of draft offer document and final offer document, the issuer or the person in control of the issuer, or its promoter, has been restrained or prohibited or debarred by the SEBI from accessing the securities market or dealing in securities and such direction or order is in force. Moreover, the issuer needs to apply to one or more recognised stock exchanges for listing of such securities therein. If the application is made to more than one recognised stock exchanges having nationwide trading terminals, the issuer shall choose one of them as the designated stock exchange. 'Designated stock exchange' means a stock exchange in which securities of the issuer are listed or proposed to be listed and which is chosen by the issuer for the purposes of a particular issue.
2. The issuer shall appoint one or more merchant bankers registered with the SEBI at least one of whom shall be a lead merchant banker and one or more debenture trustees in accordance with the provisions of Section 117B of the Companies Act, 1956 (1 of 1956) and Securities and Exchange Board of India (Debenture Trustees) Regulations, 1993.
3. The issuer shall not issue debt securities for providing loan to or acquisition of shares of any person who is part of the same group or who is under the same management. Two persons shall be deemed to be 'part of the same group' if they belong to the same group within the meaning of clause (ef) of Section 2 of the Monopolies and Restrictive Trade Practices Act, 1969 (54 of 1969) or if they own 'inter-connected undertakings' within the meaning of clause (g) of Section 2 of that Act; The expression 'under the same management' shall have the meaning derived from sub-section (1B) of Section 370 of the Companies Act, 1956 (1 of 1956).
4. The offer document shall contain all material disclosures which are necessary for the subscribers of the debt securities to take an informed investment decision.

   The offer document shall contain the disclosures specified in *Schedule II* of the Companies Act, 1956, disclosure specified in *Schedule I* of these regulations; and additional disclosures as may be specified by the SEBI. For the purpose of this regulation, 'material' means anything which is likely to impact an investors' investment decision.
5. a. An issuer cannot make a public issue of debt securities unless a draft offer document has been filed with the designated stock exchange through the lead merchant banker and this draft offer shall be made public by posting the same on the website of the designated stock exchange for seeking public comments for a period of seven working days from the date of filing the draft offer document with such exchange
   b. The draft offer document may also be displayed on the website of the issuer, merchant bankers and the stock exchanges where the debt securities are proposed to be listed.
   c. The Lead Merchant Banker shall ensure that all comments received on the draft offer document are suitably addressed prior to the filing of the offer document with the Registrar of Companies.
   d. A copy of draft and final offer document shall also be forwarded to the SEBI for its records, simultaneously with filing of these documents with designated stock exchange.
   e. The lead merchant banker and the debenture trustee shall, prior to filing of the offer document with the Registrar of Companies, furnish to the SEBI a due diligence certificate as per Schedule II and Schedule III respectively of these regulations.
6. The issuer shall make a advertisement in an national daily with a wide circulation, on or before the issue opening date and the advertisement shall be truthful, fair, and clear and shall not contain a statement, promise, or forecast which is untrue or misleading.
7. The issuer may determine the price of debt securities in consultation with the lead merchant banker and the issue may be at fixed price or the price may be determined through book building process. The issuer may decide the amount of minimum subscription which it seeks to raise by issue of debt securities and disclose the same in the offer document. In the event of non receipt

of minimum subscription, all application moneys received in the public issue shall be refunded forthwith to the applicants.

8. A public issue of debt securities may be underwritten by an underwriter registered with the SEBI and in such a case adequate disclosures regarding underwriting arrangements shall be disclosed in the offer document.
9. A trust deed for securing the issue of debt securities shall be executed by the issuer in favour of the debenture trustee within three months of the closure of the issue.

   The trust deed shall contain such clauses as may be prescribed under Section 117A of the Companies Act, 1956 and those mentioned in Schedule IV of the Securities and Exchange Board of India (Debenture Trustees) Regulations, 1993.
10. For the redemption of the debt securities issued by a company, the issuer shall create debenture redemption reserve in accordance with the provisions of the Companies Act, 1956 and circulars issued by Central Government in this regard. Where the issuer has defaulted in payment of interest on debt securities or redemption thereof or in creation of security as per the terms of the issue of debt securities, any distribution of dividend shall require approval of the debenture trustees.
11. The proposal to create a charge or security, if any, in respect of secured debt securities shall be disclosed in the offer document along with its implications. The issuer shall give an undertaking in the offer document that the assets on which charge is created are free from any encumbrances and if the assets are already charged to secure a debt, the permissions or consent to create second or *pari pasu* charge on the assets of the issuer have been obtained from the earlier creditor. The issue proceeds shall be kept in an escrow account until the documents for creation of security as stated in the offer document, are executed.
12. The issuer shall redeem the debt securities in terms of the offer document. Where the issuer desires to roll-over the debt securities issued by it, it shall do so only upon passing of a special resolution of holders of such securities and give twenty one days notice of the proposed roll over to them. The notice shall contain disclosures with regard to credit rating and rationale for roll-over. The debt securities issued can be rolled over subject to the following conditions:
    a. The roll-over is approved by a special resolution passed by the holders of debt securities through postal ballot having the consent of not less than 75 per cent of the holders by value of such debt securities;
    b. At least one rating is obtained from a credit rating agency within a period of six months prior to the due date of redemption and is disclosed in the notice as referred to above.
    c. Fresh trust deed shall be executed at the time of such roll-over or the existing trust deed may be continued if the trust deed provides for such continuation;
    d. Adequate security shall be created or maintained in respect of such debt securities to be rolled-over.

       The issuer shall redeem the debt securities of all the debt securities holders, who have not given their positive consent to the roll-over.
13. It is mandatory for an issuer making an offer of debt securities to the public to apply for listing to one or more recognised stock exchanges in terms of Sub-section (1) of Section 73 of the Companies Act, 1956 (1 of 1956).
14. An issuer may list its debt securities issued on private placement basis on a recognised stock exchange subject to the following conditions:
    a. Such debt securities are issued in compliance with the provisions of the Companies Act, 1956, rules prescribed there under and other applicable laws;
    b. Credit rating has been obtained in respect of such debt securities from at least one credit rating agency registered with the SEBI;
    c. The debt securities proposed to be listed are in dematerialised form;
    d. Necessary disclosures as provided in regulations have been made.

       SEBI has made mandatory for all debenture issuers the following disclosure requirements to protect the interests of investors:
       i. An issuer shall not make material modification to the structure of the debentures issued in terms of coupon, conversion, and redemption or otherwise without prior approval of the stock exchanges where they are listed. The stock exchanges would also ensure that such information relating to modification or proposed modification is disseminated on the exchange website.
       ii. The companies issuing debentures and the respective debenture trustees/ stock exchanges shall disseminate all information regarding the debentures to the investors and the general public by issuing a press release and also displaying the details on their respective websites, in the event of:

- Default by issuer to pay interest/redemption amount;
- Failure to create a charge on the assets; and
- Revision of rating assigned to the debentures.

iii. Issuer shall make public, information/reports on debentures issued including compliance reports filed by companies and debenture trustees by placing them on websites of the companies and the debenture trustees. The same is also to be submitted to stock exchanges for dissemination through their websites.

15. The debt securities issued to the public or on a private placement basis, which are listed in recognised stock exchanges, shall be traded and such trades shall be cleared and settled in recognised stock exchanges. In case of trades of debt securities which have been made over the counter, such trades shall be reported on a recognised stock exchange having a nation wide trading terminal or such other platform as may be specified by the SEBI.

The Primary Market for Corporate Debt

- The average size of issue of privately placed bonds in 2005–06 was around Rs. 90 crore, less than half of the average size of an equity issue
- The corporate debt market accounts for 3.9% of GDP in India, while it is 61% in Korea and 37.5% in Malaysia

Table 10.1 shows that debt issues were very popular till 1991–92. With the initiation of reforms and the development of equity cult, the proportion of debt issues in the total capital issues declined in the subsequent years. In 1997–98, the proportion of debt issues to total capital issues increased to 63 per cent due to sluggish equity market conditions. However, there was a decline in this proportion from 1998–99 to 2000–01. This trend reversed in 2001–02 during which the amount raised through debentures substantially increased by 125 per cent and the proportion of debt issues to total capital constituted 85 per cent. Since 2002–03, this trend once again reversed with debt issues constituting 1–2 per cent of the total resource mobilisation. Of the 119 public issues floated during 2007–08, only three were debt issues, while there were no public issues floated during 2008–09 (Tables 10.1 and 10.2).

Debt issues comprise debentures and bonds. The proportion of bonds to total debt issues was around 98 per cent, 96 per cent, and 84 per cent in 1999–2000, 2000–01, and 2001–02 respectively. Convertible debentures were popular in 2001–02 as against non-convertible debentures which dominated the debt market in the preceding three years from 1998–99 to 2000–01. Earlier, 20 per cent to 30 per cent of bond

TABLE 10.1 Funds Mobilised by the Corporate Sector Through Issue of Debt Instruments

Year	*Debentures and Bonds*		*Per Cent of Debenture Issues to Total Capital Issues*
	No.	*Amount (Rs. in Crore)*	
1990–91	115	3,014.8	70
1991–92	145	4,275.4	69
1992–93	171	9,850.3	50
1993–94	149	9,370.3	48
1994–95	121	8,870.9	33
1995–96	63	3,970.1	25
1996–97	32	4,233.2	41
1997–98	12	1,971.6	63
1998–99	12	2,390.7	48
1999–00	10	2,400.8	46
2000–01	9	2,140.3	44
2001–02	13	4,832.0	85
2002–03	4	1418.0	75
2003–04	3	1251.0	39
2004–05	3	1627.0	18
2005–06	2	245.0	1.0
2006–07	3	850.0	3.0
2007–08	3	1,309.0	2.0
2008–09	–	–	–

Source: RBI, *Handbook of Statistics on Indian Economy*, 2008–09.

TABLE 10.2 Resources Raised by Corporate Sector

		Debt Issues			Resource Mobilisation	Share (%) of Private Placement		(Rs. Crore)
Year	Public Equity Issues***	Public and Rights issues	Private Placements	Total (3+4)	(2+5)	Total Debt	Total Resource Mobilisation	Share (%) of Debt in Total Resource Mobilisation
1	2	3	4	5	6	7	8	9
1995–96	14,830	5,974	13,361	19,335	34,165	69.1	39.1	56.6
1996–97	7,919	6,357	15,066	21,423	29,342	70.3	51.3	73.0
1997–98	1,892	2,678	30,099	32,777	34,669	91.8	86.8	94.5
1998–99	935	4,652	49,679	54,331	55,266	91.4	89.9	98.3
1999–00	4,566	3,251	61,259	64,510	69,076	95.0	88.7	93.4
2000–01	3,368	2,740	67,836	70,577	73,944	96.1	91.7	95.4
2001–02	1,272	6,271	64,876	71,147	72,419	91.2	89.6	98.2
2002–03	1,457	2,613	66,948	69,561	71,018	96.2	94.3	97.9
2003–04	18,948	4,324	63,901	68,224	87,172	93.7	73.3	78.3
2004–05	24,388	3,867	84,052	87,920	1,12,308	95.6	74.8	78.3
2005–06	27,372	10	96473	96483	1,23,855	100.0	77.9	77.9
2006–07	32,903	605	1,45,866	1,46,471	1,79,374	99.6	81.3	81.7
2007–08	79,379	7,290	2,12,725	2,20,015	2,99,754	96.7	71.0	73.4
2008–09P	14,272	1,948	2,02,745	2,04,693	2,18,965	99.0	92.6	93.5

* Data from 2000–01 onwards include only issues with a tenure and put/call option of one year or more, while data for earlier years include privately placed debt issues irrespective of tenure.
*** Includes Offers for Sale.
P: Provisional.
Source: SEBI Handbook of Statistics on Indian Securities Market, 2009.

issues were 'bought-out' in nature, while the rest was normal private placement. Bought-out deals flooded the bond market in 2002. In a bought-out deal, the entire issue is picked up by a single investor. It is unlike a private placement where a debt paper is sold to several investors. Corporates do not prefer the private placement route because in a private placement, the issuer has to circulate the information memorandum to different market players and keep the bidding open for about five days. During these five days, the market can change due to fresh political uncertainties, border tensions, or an interest rate view aired by a central banker. A bought-out deal avoids all these and hence has become a preferred route for corporates. In a bought-out deal, funds can be raised within a very short time and with little disclosure.

The average annual issuance in the private corporate bond market is close to Rs. 70,000 crore predominantly through private placements.

The Secondary Market for Corporate Debt

Corporate debt securities are traded either on over the counter (OTC) as bilateral agreements or on a stock exchange through brokers. SEBI prohibits negotiated deals in respect of corporate listed debt securities. Trades of listed debt securities are to be executed on the basis of price and order matching mechanism of stock exchanges. The corporate debt securities are traded on the WDM segment of NSE, OTCEI, and on the BSE (w.e.f. January 9, 1996).

SEBI Regulations Relating to Trading of Debt Securities

1. The debt securities issued to the public or on a private placement basis, which are listed in recognised stock exchanges, shall be traded on recognised stock exchanges. In case of trades of debt securities which have been made over the counter, such trades shall be reported on a recognised stock exchange having a nationwide trading terminal or such other platform as may be specified by the SEBI.
2. All trades in corporate bonds traded over the counter (OTC) or on the debt segment of stock exchanges on or after December 01, 2009 between specified entities, namely, mutual funds, foreign institutional investors/sub-accounts, venture capital funds, foreign venture capital investors,

TABLE 10.3 Traded Volume of Corporate Debentures on NSE

Year	*Debentures Traded on NSE (Rs. Crore)*
1994–95	0.50
1995–96	55.00
1996–97	479.00
1997–98	1,148.00
1998–99	971.00
1999–00	559.37
2000–01	708.88
2001–02	2,191.91
2002–03	5815.76
2003–04	7,816.38
2004–05	17,521.27
2005–06	10,619.36
2006–07	6,639.78
2007–08	8,576.11
2008–09	11,934.44
2009–10	54,476.53

Source: RBI, *Bulletin,* various issues.

TABLE 10.3(a) Secondary Market Trades at the OTC and Exchanges

Year	*BSE*		*NSE*		*FIMMDA*		*Grand Total*	
	No. of Trades	*Amount (Rs. Crore)*	*No. of Trades*	*Amount (Rs. Crore)*	*No. of Trades*	*Amount (Rs. Crore)*	*No. of Trades*	*Amount (Rs. Crore)*
2007–08	27,697	41,187	3,787	31,453	4,089	23,479	35,573	96,119
2008–09	8,327	37,320	4,902	49,505	9,501	61,535	22,730	1,48,360
2009–10	7,408	53,323	12,522	1,51,920	18,300	1,95,955	38,230	4,01,198

Source: SEBI, Bulletin, June 2010.

TABLE 10.3(b) Private Placement of Corporate Bonds Reported to BSE and NSE

Year	*BSE*	*NSE*	*Total*
2006–07	35,859	74,659	1,04,974
2007–08	30,024	98,578	1,28,602
2008–09	40,181	1,66,984	2,07,164

Source: NSE Fact book 2009.

portfolio mangers, and RBI regulated entities, as specified by RBI shall be cleared and settled through the National Securities Clearing Corporation Limited (NSCCL) or the Indian Clearing Corporation Limited (ICCL).

However, the trades in corporate bonds that are traded on the Capital Market segment/ Equity Segment of the Stock Exchanges are required to be settled through clearing corporations/ clearing houses of Stock Exchanges.

For facilitating settlement of OTC corporate bond transactions in real time gross settlement (RTGS) system on a DVP-I basis (i.e., on a trade-by-trade basis), the clearing houses of the exchanges have been allowed to have a transitory pooling account facility with the Reserve Bank. Under the proposed settlement mechanism, the buyer of securities will transfer the funds through his bank to this transitory account through RTGS. The clearing house will thereafter transfer the securities from the seller's account to the buyer's account and effect the release of funds from the transitory account to the seller's account.

The secondary market for corporate debt has not yet fully developed in India. The volumes traded are quite low. The average daily volumes in the corporate bond market is around Rs. 100 crore which is abysmally low. On the BSE and the OTCEI, the volume of turnover is quite low, but the volume of turnover has picked up on the NSE-WDM segment.

The traded volume of debt was highest in the year 2004–05. A declining trend was witnessed in the subsequent years. The proportion of traded volume of debentures to total turnover is abysmally low and owing to this, the size of the corporate debt market is small.

The corporate debt market has a large potential to grow. The following are the problems and the measures that need to be taken to solve the problems:

- The turnover ratio for corporate bonds was less than 2 per cent in 2004. The turnover ratio is the total value of bonds traded divided by bond market capitalisation

- The absence of a benchmark rate has restricted the development of new and innovative instruments in the debt market. There is a need to develop a benchmark or a reference rate.
- The corporate bond market needs well-capitalised market makers just like the primary dealers in the government securities market. Market making should be encouraged to enhance liquidity.
- Cooperative banks and charitable trusts are permitted to invest in corporate paper but permissions are granted only on a case-to-case basis for each specific issue rather than on the basis of broad investment guidelines. These banks and trusts should be permitted to invest in good quality rated paper by laying down broad investment guidelines.
- Provident funds (PFs) currently hold funds close to Rs. 1,00,000 crore. These funds are invested as per prescribed norms in government securities, state guaranteed papers, public sector debt, and recently in corporate bonds. PFs are traditionally risk-averse and hence have shied away from investing in private sector bonds. These PFs can be encouraged to invest in private sector bonds by assuring them better return and safety.
- The private placement of corporate bonds has restricted open market trading in these instruments. The private corporate bond market is a market with a small investor base, mainly institutional players such as mutual funds insurance companies and banks who hold on to the securities till their maturity. Moreover, they have low risk appetites, which make it increasingly difficult for lower rated-borrowers to raise debt directly. An active secondary market is needed for reaching a wider investor base, reducing borrowing costs, and lengthening maturities. Efforts should be made to activate the secondary market by increasing the number of players and instruments.
- Banks prefer to lend to corporates rather than subscribing to their debt issuances. Banks limit their investment in corporate bonds either due to credit risks or due to the limits on exposures to particular sectors. The corporate bonds held by banks can be sold to retail customers (investors) which banks do not do.
- There is a lack of uniform stamp duty structure. The stamp duty on debentures is 0.375 per cent ad valorem. Promissory notes attract a duty of 0.05 per cent. Further, stamp duty is different in different states for mortgage and assignment. Stamp duty should be lowered to reduce the cost of issue of bond paper. The R. H. Patil Committee on debt market reforms suggested that the maximum stamp duty should be 0.25 per cent ad valorem with a cap of Rs. 25 lakh for 7-year instrument.
- There are not enough underwriters for debt issuances leading to a decline in bond issues. Since early 2008, foreign banks have begun to cut down on underwriting issues because of tight liquidity conditions globally. Moreover, lack of investor demand for lower-rated paper led to a decline in underwriting fees. Hence, few firms are willing to offer underwriting services.
- An absence of a trading platform similar to equity markets has inhibited the growth of corporate bond market.
- Lack of investor awareness about the advantages of investing in rated debt instruments rather than unrated fixed deposits.

A liquid and active corporate debt market can aid in industrial growth and reduce the pressure on institutional financing.

A well-developed corporate debt market will enable the small and medium enterprises (SMEs) to raise long-term finance. A well-functioning debt market allows appropriate risk-return pricing thereby attracting investors who are willing to take on higher risk for commensurate higher rewards.

Measures to Promote the Corporate Debt Market

The interest rate ceiling on corporate debt has been removed and conversion has been made optional at the choice of the investor. The ceiling on bank investments in corporate debt has been removed.

- Non-government securities accounted for a meagre 0.73% of total turnover in debt market during 2008–09

Listing of privately placed debt paper in the secondary market is allowed. It is possible now for the debt of a corporate to be listed even though the equity may not be listed.

Securitised debt paper has generated a great deal of interest and this paper is now traded in the secondary market.

FIIs have been permitted to participate in the corporate debt market. The limit of FII investment in corporate US $15 billion and US $249 per entity. Money Market Mutual Funds (MMMFs) have been permitted to invest in rated corporate paper.

All publicly issued debt instruments, irrespective of their maturity, are required to be rated by a credit rating agency. The role of trustees, in case of bond and debenture issues, has been strengthened over the years.

The SEBI appointed a High Level Committee on corporate bonds and securitisation under the chairmanship of Dr. R. H. Patil. The following are the recommendations:

1. To make the corporate debt market exchange traded.
2. To exempt the corporate debt papers from tax-deduction at source.
3. Foreign funds be allowed to invest in these papers.
4. To develop a primary market for debt, the central government should address the issue of differential stamp duties levied by the state governments. This includes making the rates on housing mortgage and unsecured debentures uniform. The rates should be linked to the tenure of the securities.
5. There should be 'stringent disclosure requirements' for public issue of bonds at par with those for equities.
6. To increase the confidence level of retail investors, SEBI should encourage development of professional trustee companies.
7. To introduce repos in corporate bonds in order to improve secondary market trading and give an opportunity to investors who have illiquid corporate bonds to recycle the same and borrow money against these securities.

In December 2007, to facilitate the development of primary corporate debt market, the SEBI simplified issuance norms of corporate bonds by making the following changes:

1. For public/rights issues of bonds, issuers now need to obtain rating from only one credit rating agency instead of from two, so as to reduce the cost of issuances.
2. Bonds below investment grade are allowed to be issued to the public to suit the risk/return appetite of investors. The investor has to decide whether or not to invest in a non-investment grade debt instrument.
3. Structural restrictions currently placed on debt instruments such as those on maturity, put/call option on conversion, etc. were removed. This was done to provide issuers flexibility in structuring debt instruments to suit their requirements.

- The BSE and NSE have launched trading and reporting platforms to capture all information relating to trading in corporate bonds

The BSE and NSE have launched trading and reporting platforms on January 1, and March 1, 2007, respectively, to capture all information related to trading in corporate bonds. Later, in September 2007, Fixed Income Money Market and Derivatives Association of India (FIMMDA) started Corporate Bond Trade Reporting Platform. The trade matching platform is now order driven with essential features of OTC market. Both the stock exchanges disseminate information relating to corporate bonds comprising issuer name, maturity date, current coupon, last price traded, last amount traded, last yield (annualised) traded, weighted average yield price, total amount traded, and the rating of the bond and any other additional information. They also provide their services for clearing and settlement of corporate bonds traded.

The shut period in corporate bonds has been reduced to align it with that applicable for Government Securities. The shut period in corporate bonds is similar to the record date in case of rights issues. Government securities/ corporate bonds/debentures are traded in the secondary and hence keep changing hands. Issuer of debt securities pays interest to the holders registered in its register on a certain date known as record date. Securities are not transferred in the books of issuer during the period in which such records are updated for payment of interest etc. Such period is called as shut period. For government securities held in demat form (SGL), shut period is three working days.

Tradable lots in corporate bonds have been reduced to Rs. 1 lakh for all the entities. It has been made mandatory for all new issues of corporate bonds to have an actual day count convention. There are conventions for calculation of the number of days that has elapsed between two dates for payment of interest. The objective of any convention is to calculate (days in a month)/(days in a year). The actual number of days elapsed between the two dates may be divided by 360, or by 365 or by actual number of days in a year. Assume a bond with face value Rs. 100, coupon 9.50 per cent, last coupon paid on June 15, 2008, and traded for value October 5, 2008. If the year is assumed to have 360 days, then the accrued interest is Rs. $9.5 * 112/360 = 2.9556$. If the year is assumed to have 365 days, then the accrued interest is 2.9151.

Further, to streamline the process of interest and redemption payments, the RBI has allowed issuers the use of Electronic Clearing Services (ECS), Real time Gross Settlements (RTGS), or National Electronic Funds Transfer (NEFT).

In January 2008, Draft Regulations on Issue and Listing of Debt Securities were framed to provide for simplified regulatory framework for issuance and listing of non-convertible debt securities issued by any company, public sector undertaking, or statutory corporation. The salient features of the draft regulations include: (i) rationalisation of disclosure requirements, (ii) enhanced responsibilities of merchant bankers for exercising due diligence, (iii) mandatory listing of private placement of debt by companies which were earlier not listed, (iv) reissuances of corporate debt, and (v) a proposal to introduce rationalised listing requirements for debt of a listed issuer. The regulations were notified on June 6, 2008.

The Finance Minister in his budget speech 2008–09 proposed some more measures to expand the market for corporate bonds such as

- take measures to develop the bond, currency, and derivatives markets that will include launching exchange-traded currency and interest rate futures and developing a transparent credit derivatives market with appropriate safeguards;
- enhance the tradability of domestic convertible bonds by putting in place a mechanism that will enable investors to separate the embedded equity option from the convertible bond and trade it separately; and
- encourage the development of a market-based system for classifying financial instruments based on their complexity and implicit risks.

The Finance Minister also proposed to exempt corporate debt instruments issued in demat form and listed on recognised stock exchanges from tax deducted at source (TDS).

The RBI in its Annual Policy Statement for the year 2008–09 announced that it will consider introducing repos in corporate bonds provided there is (i) an efficient price discovery through greater public issuances and secondary market trading and (ii) safe settlement system based on delivery versus payment (DVP) III and straight through processing.

- Repo transactions in corporate debt securities is allowed

The RBI issued draft guidelines on repo in corporate debts in September 2009 and the guidelins will come into force with effect from March 01, 2010. Entities such as commercial banks, non-banking financial companies (NBFCs), financial institutions like Exim Bank, NABARD, NHB and SIDBI, insurance companies, mutual funds, housing finance companies, primary dealers, and other regulated entities, subject to the approval of the regulators concerned will be allowed to undertake repo transactions in corporate debt. Under repo transactions, entities holding listed corporate debts would be able to sell them to other entities with an option to repurchase them at a later date at a pre-determined price. The repo buyer, who is the lender of funds, cannot sell the security acquired under repo during the tenure of repo. Only listed corporate debt securities which are rated 'AA' or above by the rating agencies, that are held in the security account of the repo seller, in demat form, shall be eligible securities for undertaking repo. Commercial papers, certificate of deposits and instruments having a residual maturity of less than one year will not be eligible for repo transactions. Repos in corporate debt securities shall be for a minimum period of one day and a maximum period of one year. Participants shall enter into repo transactions in corporate debt securities in the OTC market All repo trades shall be reported within 15 minutes of the trade on the FIMMDA reporting platform. The trades shall also be reported to any of the clearing houses of the exchanges for clearing and settlement. Amount borrowed by selling of corporate debt securities would be considered as borrowings for computation of cash reserve ratio and statutory liquidity ratio by banks. All repo trades in corporate debt securities should settle either on a T+1 basis or T+2 basis under DVP I (gross basis) framework. Repo transactions in corporate debt securities shall settle in the same manner as outright OTC trades in corporate debt securities. On the date of reversal of repo trades, the clearing houses shall compute the obligations of the parties and facilitate settlement on DVP basis. A haircut of 25 per cent (or higher as maybe decided by the participants depending on the term of the repo) shall be applicable on the market value of the corporate debt security prevailing on the date of trade of first leg. A haircut is a percentage that is subtracted from the face or market value of the assets that are being used as collateral. The size of the haircut depends on the riskiness of the security offered as collateral. Participants may refer to the rating-haircut matrix that may be published by the Fixed Income Money Market and Derivatives Association of India (FIMMDA), to determine the appropriate haircut. For arriving at the market value of the corporate debt security, the participants undertaking repo in corporate bonds may refer to the credit spreads published by the FIMMDA. The repo transactions in corporate debt securities shall attract capital charge. The details of corporate debt securities lent or acquired under repo or reverse repo transactions shall be disclosed in the "Notes on Accounts" to the Balance Sheet.

The SEBI set up a 'Corporate Bonds and Securitisation Advisory Committee' (CoBoSAC) in 2009 under the chairmanship of Dr R. H. Patil for making recommendations regarding the market for corporate bonds and securitised debt instruments.

The corporate debt market constitutes a small segment of the debt market despite measures taken to promote this market. A great deal of investor education is required for developing a retail corporate bond market. Retail investors need to be made aware of advantages of rated debt instruments and the use of interest rate futures to hedge their fixed income exposures.

THE PUBLIC SECTOR UNDERTAKING BOND MARKET

- Public sector undertaking bonds are medium- and long-term obligations issued by public sector undertakings. They are privately placed with banks or large investors

Public sector undertaking bonds are medium-and long-term obligations issued by public sector undertakings.

PSU bonds issues is a phenomenon of the late 1980s when the central government stopped/reduced funding to PSUs through the general budget. PSUs float bonds in the primary market to raise funds. PSUs borrow funds from the market for their regular working capital or capital expenditure requirement by issuing bonds. The market for PSU bonds has grown substantially over the past decade. All PSU bonds have a bullet redemption and some of them are embedded with put or call options. Many of these are issued by infrastructure related companies such as railways and power companies, and their issue sizes vary widely from Rs. 10 to 1,000 crore. PSU bonds have maturities ranging between five and ten years. They are issued in denominations of Rs. 1,000 each.

The majority of PSU bonds are privately placed with banks or large investors. In privately placed issues, rating is not mandatory while public issues are mandatorily rated by one or more of the four rating agencies in India. Historically, default rates of PSU bonds are negligible and PSUs are perceived as quasi-sovereign bodies. Usually, bonds issued by state-owned PSUs carry interest payment and principal payment guaranteed by the respective state government. Such guarantees are issued mainly to facilitate the fund raising programmes for various long gestation infrastructure projects.

PSUs are permitted to issue two types of bonds: tax-free and taxable bonds. Tax-free bonds are bonds for which the amount of interest is exempted from the investor's income. PSUs issue tax-free bonds or bonds with certain exemptions under the Income Tax Act with prior approval from the government through the Central Board of Direct Taxes (CBDT) for raising funds for such projects. PSUs which have raised funds through the issue of tax-free bonds are central PSUs such as MTNL and NTPC, and state PSUs such as State Electricity Boards (SEBs) and State Financial Corporations (SFCs). The bonds issued by the State Financial Corporations are SLR eligible for cooperative banks and non-banking finance companies (NBFCs). Interest on these bonds is calculated on actual/365 days basis. Tax deduction at source is applicable. In the pre-reforms period, that is, before 1991, the maximum interest rate on taxable bonds was stipulated at 14 per cent and maximum interest rate on tax-free bonds was fixed at 10 per cent. The ceiling of banks' investment in PSU bonds was 1.5 per cent of incremental deposits. With effect from August 1991, the ceiling on interest rate on PSU bonds was removed and subsequently some of the PSUs floated bonds at an interest rate of 17 to 18 per cent. Later, ceiling on tax-free bonds was raised to 10.5 per cent. The ceiling of bank's investments in PSU bonds was also removed which enabled banks to invest freely in them.

Provident funds were initially allowed to invest 15 per cent of their incremental deposit in PSU bonds. Later, this limit was increased to 30 per cent.

The revised guidelines for the issue of PSU bonds were issued in October 1993. The guidelines indicate that the minimum maturity of tax-free bonds should be seven years whereas PSUs will have the freedom to fix the maturities of taxable bonds. The public issues shall be subject to guidelines issued by the SEBI.

PSUs are allowed to issue floating rate bonds, deep discount bonds, and a variety of other bonds. All new issues have to be listed on a stock exchange.

Investors in PSU bonds include banks, insurance companies, non-banking finance companies, provident funds, mutual funds, financial institutions, and individuals.

Table 10.4 reveals a declining trend in the amount raised through the issue of tax-free bonds. Since 1991–92, taxable bonds have become popular as the ceiling on interest rate on taxable bonds was removed. PSU bonds which traditionally were floated in the public issue market were privately placed in the 1990s. The PSUs preferred the private placement route for the issue of bonds. They have not tapped the primary market since 1997–98. As the secondary market in PSU bonds is not active, PSUs prefer the private placement route. Moreover, it is easier and cheaper to raise funds through this route. The PSUs continued to tap the private placement market for their capital requirements.

Secondary Market in PSU Bonds

PSU bonds are generally issued and traded in the form of promissory notes or stock certificates. Promissory notes are transferable by endorsement and delivery while stock certificates are transferable by duly executed transfer deed and stamp duty is applicable unless specifically exempted.

TABLE 10.4 Bonds Issued by Public Sector Undertakings

(Rs. in Crore)

Year	*Tax-free Bonds*	*Taxable Bonds*	*Total*	*Public Issue*	*Private Placement*
1991–92	2,468.6	3,242.2	5,710.8	–	5,710.80
1992–93	10.5	1,052.0	1,062.5	–	1,062.50
1993–94	1,413.9	4,172.0	5,585.9	504.50	5,081.40
1994–95	1,198.3	1,871.8	3,070.1	–	3,070.10
1995–96	547.4	1,743.8	2,291.2	–	2,291.20
1996–97	67.0	3,327.3	3,394.3	50.0	3,344.30
1997–98	570.1	2,412.4	2,982.5	–	2,982.50
1998–99	406.0	3,956.9	4,362.9	–	4,941.90
1999–00	400.0	8,296.8	8,696.8	–	8,621.80
2000–01	662.2	15,969.4	16,631.6	–	15,587.60
2001–02	274.2	14,161.5	14,435.7	–	–
2002–03	286	7243	7243	–	7529.00
2003–04	–	5443	5443	–	10,168.9
2004–05	–	7541	7541	–	18,671.1
2005–06	–	4846	4846	–	27,635.6
2006–07	–	10,325	10,325	–	–
2007–08	–	13,404	13,404	–	–
2008–09	–	12,840	12,840	–	–

P = provisional.
Source: SEBI, *Handbook of Statistics on Indian Securities Market,* 2009.

Clearing and settlement is now in a registered form. PSU bonds require no transfer deed for registration of new ownership and therefore are exempt from stamp duty. However, contract notes for transactions of PSU bonds require a stamp duty at 0.01 per cent.

Repos are permitted if PSU bonds are in demat form. To improve the secondary market activity, the Union Budget for 1999–2000 abolished stamp duty on transfer of dematerialised instruments.

PSU bonds are traded on the WDM segment of the NSE and debt (F) segment of the BSE.

PSU bonds have low liquidity though it is higher than that of government-guaranteed bonds or state government securities. Most trades are done through brokers. Brokerage costs and bid offer spreads are lower in case of PSU bonds than in the case of state government and government-guaranteed bonds. Trading takes place in multiples of Rs. 5 lakh for state-run pension funds and other financial institutions, and in multiples of Rs. 1,00,000 for small trusts and retail investors. Daily trading volumes average Rs. 5 crore with a transaction size of Rs. 2 crore.

PSU bonds offered better yield in the early 1990s. Owing to this, other cash-rich PSUs, mutual funds, and commercial banks invested in these bonds. They were one of the most active instruments in the early 1990s. The tax-free bonds were the most popular as the market used 'tax stripping repo strategies' to arbitrage tax differentials. This market was highly misused in the Securities Scam of 1992 as it was through this market that the funds were diverted from the banking system. This market revived in 1993 when PSU bond issues were deregulated to a greater extent. This led to a significant increase in institutional activity in this segment.

The volume traded has no doubt increased since 2000–01 but the percentage share in the total volume traded has decreased. The level of activity is quite low as most of the PSU bonds are privately placed leading to a reduction in the floating stock. The volume of activity has not picked up at a faster pace as retail investors are not interested in trading and there is an absence of standard norms.

Standard norms and market practices should be laid down to bring about greater transparency and liquidity in this segment. A primary dealer system akin to government securities market can be introduced in the PSU bond market. This will enhance trading and liquidity in the secondary market which, in turn, will help in the growth of the PSU bond market.

THE GOVERNMENT SECURITIES MARKET

Introduction

The government needs enormous amount of money to perform the following main functions:

- Provision of public services such as law and order, justice, and national defence.
- Central banking and monetary regulation.
- Regulating economic activity in the private sector.
- Creation and maintenance of physical infrastructure.

The government generates revenue in the form of taxes and income from ownership of assets. Besides these, it borrows extensively from banks, financial institutions, and the public, to finance its expenditure in excess of its revenues.

- The government securities are referred to as SLR securities as they are eligible securities for maintenance of the SLR ratio by the banks

One of the important source of borrowing funds is the government securities market (GSM). The government raises short-term and long-term funds by issuing securities. These securities do not carry risk and are as good as gold as the government guarantees the payment of interest and the repayment of principal. They are, therefore, referred to as gilt-edged securities. The government securities market is the largest market in any economic system and therefore, is the benchmark for other markets.

Importance of the Government Securities Market (GSM)

GSM constitutes the principal segment of the debt market. It not only provides resources to the government for meeting its short-term and long-term needs but also acts as a benchmark for pricing corporate papers of varying maturities. Development of the government securities market is a pre-requisite for the development of corporate bond market. It acts as a channel for integration of various segments of the domestic financial market and helps in establishing inter-linkages between the domestic and external financial markets.

The government securities issues are helpful in implementing the fiscal policy of the government. It is critical in bringing about an effective and reliable transmission channel for the use of indirect instruments of monetary control. The working of the two of the major techniques of monetary control—open market operations (OMOs) and Statutory Liquidity Ratio (SLR)—are closely connected with the dynamics of this market.

Government securities provide the highest type of collateral for borrowing against their pledge. They have the highest degree of security of capital and the return on each security depends on the coupon rate and period of maturity. They are traded for both long-and short-term periods depending on the investment and liquidity preference of the investors. Switches between the short-dated and long-dated securities take place on the basis of difference in redemption yields.

Issuers, Investors, and Types of Government Securities

Significance of the Government Securities Market

- Principal segment of the debt market
- Acts as a benchmark for pricing debt securities
- Plays a crucial role in the monetary policy transmission mechanism
- Facilitates government borrowings at reasonable cost

Government securities are issued by the central government, state governments and semi-government authorities which also include local government authorities such as city corporations and municipalities.

The major investors in this market are the nationalised banks as they have to subscribe to these securities to meet their reserve requirements. The other investors are insurance companies, state governments, provident funds, individuals, corporates, non-banking finance companies, primary dealers, financial institutions, and, to a limited extent, foreign institutional investors and non-resident Indians (NRIs).

These investors can be classified into three segments:

- Wholesale market segment, namely institutional players such as banks, financial institutions, insurance companies, primary dealers, and mutual funds.
- Middle segment comprising corporates, provident funds, trusts, non-banking finance companies, and small cooperative banks with an average liquidity ranging from Rs. 7 crore to Rs. 25 crore.
- Retail segment consisting of less active investors such as individuals and non-institutional investors.

The insurance companies are the second largest investors in government securities as the Insurance Regulation and Development Authority of India (IRDA) has stipulated that 20 per cent of the assets of general insurance and pension business and 25 per cent of life insurance business should be invested in government securities.

The government securities market is mostly an institutional investors market as standard lots of trade are around Rs. 1 crore and 99 per cent of all trade is done through the subsidiary general ledger (SGL) account, which is a kind of depository account held by the RBI. Individuals cannot open SGL accounts. They have to open SGL-II accounts with a bank or a primary dealer provided they have a huge balance and agree to trade on an ongoing basis.

Government securities are of two types: treasury bills and government dated securities. The latter carry varying coupon rates and are of different maturities. Sometimes, the RBI converts maturing treasury bills into bonds thereby rolling over the government's debt.

In the government securities market, trading is done over the telephone through brokers. The trade is then reported on the negotiated dealing system (NDS). Subsequently, the trade is cleared and settled on Clearing Corporation of India Limited (CCIL).

The RBI has proposed a screen-based trading system in government securities. Like equities, market players will be able to buy or sell bonds through the order matching screen-based system. The order matching system will provide a new window for price discovery of bonds.

Government Securities Market in the Pre-1991 Period

The RBI was established in 1935, after which it issued government securities on behalf of the government and sold them to various institutions and the public at large. In the 1930s, the government issued securities at interest rates as low as 2.5 per cent, as the cheap money policy was adopted. After independence, the RBI was nationalised; since then, it frames the monetary policy, structure of interest rates, and the programme of borrowing through government securities on instructions from the government.

The programme of borrowing was gradually stepped up in the 1950s to finance development projects in various sectors of the economy. The rates of interest on government securities were also gradually stepped up to enable resource mobilisation. To facilitate this programme of higher borrowings, the RBI carried out open market operations which helped in creating a genuine market for government securities. The RBI appointed reputed firms of brokers and jobbers to carry out OMOs. Brokers were appointed for carrying out transactions between commercial banks. The traders in government securities were commercial banks, life insurance companies, general insurance companies, charitable and religious trusts, provident funds, and some individuals. There was daily trading in government securities either for long-term investment or for switching from long-term to short-term securities or vice-versa. Till the 1950s, government securities were more popular with individuals than with institutions.

Since the 1960s and until the 1990s, the government securities market remained dormant. The government was borrowing at pre-announced coupon rates from banks which were the predominant group of investors. To maintain the cost of borrowings at a low level, the coupon rates offered on government securities remained negative, in real terms, till about the mid-1980s. During the 1980s, the volumes of both long and short-term debt expanded considerably, especially the latter due to automatic accommodation through the issue of ad hoc T-bills. The RBI had little control over some of the essential facets of debt management such as volume and maturity structure of securities to be marketed and the term structure of interest rates. The maturity structure of market loans remained highly skewed in favour of a longer term of more than 15 years.

The government securities market was constrained mainly by the absence of a definite limit on the automatic monetisation of the central government budget deficits and by relatively low coupon rates offered on government securities to investors. Thus, a passive internal debt management coupled with automatic monetisation of budget deficit made the government securities market dormant and prevented it from being deep and vibrant.

Considering the significance of a vibrant government securities market and for activating an internal debt management policy, a number of measures were announced in the middle of 1991 to reform the government securities market.

Objectives of Reforms in the Government Securities Market

Reforms were undertaken in the government securities market for the following reasons:

- Increase the operational autonomy of the RBI.
- Improve institutional infrastructure.
- Improve the breadth and depth of the markets by introducing a variety of new instruments and bring about improvements in the market micro-structure such as yield-based and price-based auctions,

tap loans, pre-announcing notified amounts, re-issues of dated securities, announcing calendar of T-bills, and liquidity support to primary dealers.
- Enable sound legal and regulatory framework by amendment to the Securities Contracts (Regulation) Act and propose introduction of the Government Securities Act.
- Bring in technology-related improvements which include initiation of computerisation of public debt offices (PDOs) of the RBI and of real time gross settlement system (RTGS).
- Improve transparency and introduce standardised codes for market practices for encouraging standardised accounting norms.

Some Policy Measures Undertaken in the 1990s

Keeping the above objectives in view, reforms were undertaken to strengthen the primary and secondary segments of the government securities market. Policy measures were undertaken by the RBI to raise resources for the government in a cost-effective manner and to improve trading systems, clearing and settlement infrastructure, and liquidity in the secondary market. The auction system for the sale of medium-and long-term securities was introduced from June 3, 1992. Some innovative instruments such as conversion of auction T-bills into term securities, zero coupon bonds, capital indexed bonds, tap stocks and partly paid stock were introduced.

From April 28, 1992, 364-day T-bill auctions were introduced and 91-day T-bill auctions from January 8, 1993. On June 6, 1997, 14-day T-bills were introduced but they were discontinued from May 2001.

Auctions of repurchase agreements (repo) of dated government securities were introduced from December 1992.

To develop the market, the Securities Trading Corporation of India (STCI) was set up in May 1994. It began its operations in June 1994.

The most notable policy development in the government securities market during 1994–95 was the delinking of the budget deficit from automatic monetisation by initially limiting the creation of ad hoc T-bills and subsequently discontinuing them.

The NSE started trading in government securities from June 30, 1994.

As a move towards greater transparency, the transactions of government securities through SGL accounts have been made public by the Reserve Bank on a regular basis from September 1, 1994.

A delivery versus payment (DVP) system for transactions in government securities was introduced with effect from July 17, 1995. The DVP system synchronises the transfer of securities with cash payment thereby reducing the settlement risk in securities transactions and also preventing the diversion of funds in case of transactions routed through the SGL accounts. In 1999, the computer networking between RBI's SGL and NSDL was completed thus enabling electronic settlement for investors having depository accounts with the NSDL.

The RBI set up a strong regulatory system which required that every trade must settle with funds and delivery of securities. lOUs and netting were prohibited. Trade reporting of the negotiated deals was made compulsory at the WDM segment of NSE.

In May 1995, the government, for the first time, issued guidelines for non-government provident funds, superannuation funds, and gratuity funds to earmark 25 per cent of their total corpus for investment in central government securities.

A well-developed government securities market enables other segments of the debt market to develop. As a step towards this, the government went for diversification of instruments—introduction of floating rate bonds indexed to yield on 364-day T-bills. Moreover, it re-issued securities of two-year, three-year, five-year, and ten-year maturities at fixed coupon. Further, it permitted commercial banks to retail government securities with non-bank clients.

A scheme of ways and means advances (WMAs) was introduced effectively from April 1, 1997, to accommodate temporary mismatches between government receipts and payments. This scheme replaced the practice of automatic monetisation of deficit.

For building up a viable institutional framework and to diversify investor base, the RBI appointed primary dealers (PDs) and satellite dealers to perform the role of market makers in government securities. Foreign institutional investors (FIIs), with a ceiling of 30 per cent investment in debt instruments, have been permitted to invest in dated-government securities. This ceiling of 30 per cent was removed in October 2008. In order to facilitate custodial and depository services to FIIs in dated-government securities and T-bills, FII investments are now permitted through the SGL account of depositories, in addition to the SGL account of the designated banks, subject to certain conditions. The limit of FII investment in government securities is USD 5 billion.

A flexible approach to the market borrowing programme of the state governments was introduced whereby they were given the option to raise 5 to 35 per cent of their market borrowings in a flexible manner as regards timing, maturity, and rate of interest.

With a view to moderating the adverse impact of a large borrowing programme, the RBI accepts private placement of government stock and releases them to the market when interest rate expectations become favourable. After a gap of nearly seven years, the government issued a long-term paper with a maturity of 20 years in 1998–99.

To encourage retail participation in the primary market for dated government securities, an allocation of upto 5 per cent has been provided to retail investors on a non-competitive basis. Participation in the auction process on a 'non-competitive' basis is open to any person including firms, companies, corporate bodies, institutions, provident funds, trusts, and any other entity as may be prescribed by the Reserve Bank as also to the investors who do not maintain current account (CA) or subsidiary general ledger (SGL) account with the Reserve Bank. However, non-competitive bidding in T-Bills is available only to State Governments and other select entities and is not available to the cooperative banks.In the case of auction for Treasury Bills, there is no ceiling for non-competitive bids. Only one bid is allowed to be submitted by an investor either through a bank or primary dealer.

The uniform price auction format for auctions which was confined to the auction of 91-day treasury bills was extended to the auction of dated securities. The central government issued two floating rate bonds on the basis of uniform price auction on November 21 and December 5, 2001, on an experimental basis.

The trading entities have been allowed to sell government securities allotted to them in primary issues on the same day thus enabling sale, settlement, and transfer on the same day.

There were instances of gridlock in the DVP system due to a shortfall of funds on gross basis in the current account of one or more SGL holders. To take care of such unusual occurrences, a scheme of special fund facility was introduced with effect from October 3, 2000, to provide intra-day funds to SGL holders for facilitating settlement of securities transactions in case of gridlock. The scheme provides for automatic invocation by the SGL account holder of undrawn refinance/liquidity support from the RBI for facilitating smooth securities settlement. All transferable government of India dated securities and treasury bills are eligible for automatic invocation of special intra-day fund facility from the RBI.

Some significant steps for further development of the government securities market which the RBI has taken in 2001–02 are as follows:

- Enhancing fungibility and liquidity through consolidation by re-issuance of existing loans.
- Promoting retailing of government securities and introduction of floating rate bonds.
- Elongation of the maturity profile of outstanding issuance including issuance of bonds with a maturity of 25 years.
- Development of new benchmark government securities by consolidating new issuance in key maturities.
- Setting up of an electronic negotiated dealing system (NDS) and Clearing Corporation of India Limited (CCIL) for facilitating trading and settlement in government securities. The NDS (Phase I) was operationalised from February 15, 2002 and CCIL too commenced its operations for clearing and settling of transactions in government securities including repos.
- A proposal by the RBI to the government to replace the existing Public Debt Act, 1944 by the Government Securities Act to simplify the procedures for transactions in government securities, allow lien marking/pledging of securities as also electronic transfer in dematerialised form is under consideration of the government.
- The electronic funds transfer (EFT) and real time gross settlement (RTGS) system are being put in force by the RBI.
- A road map for developing separate trading for registered interest and principal of securities (STRIPS) was prepared, and put on the RBI's website for comments and suggestions from the market participants.
- The regulatory and supervisory framework for the primary dealers had been strengthened in line with international practices.
- An indicative advance calendar for issuance of dated securities for the first half of 2002–03 was announced in March 2002, to improve transparency in primary issuance of central government securities and to enable both institutional and retail investors to plan their investments.

The government also announced, on February 28, 2001 that comprehensive legislation will be introduced on securitisation, and clarification will be issued by the Central Board of Direct Taxes (CBDT) to promote the issuance of STRIPS, zero coupon bonds, deep discount bonds, and the like.

Some major developments in government securities market in 2002–03 were as follows:

- Introduction of the system of publishing a calendar by the RBI that outlines the issue of dated government securities every half year. The calendar for the financial year of 2002–03 was issued in March 2003.
- Screen-based order-driven trading in government securities on the stock exchanges was introduced on January 16, 2003.
- CSGL account holders permitted to enter into repo transactions in government securities, effective from March 3, 2003.
- Guidelines for uniform accounting of repo/reverse repo transactions were issued by the RBI.
- Under the securities lending scheme, the Clearing Corporation of India Limited (CCIL) has been permitted to borrow required government securities from selected members.
- In accordance with the RBI policy of consolidation of government debt, the practice of re-issuances of existing government securities continued in 2002–03 also. Of the 31 securities issued during 2002–03, 19 were re-issues. This accounts for 59 per cent (Rs. 74,000 crore of the gross amount of Rs. 1,25,000 crore raised through dated government securities under the market borrowing programme of the central government).

Retail trading in government securities at select stock exchanges commenced in January 2003.

The countrywide anonymous, screen-based and order-driven trading in government securities was introduced in January 2003 on the NSE, the BSE and the OTCEI. Following the recommendations of the Working Group on screen-based trading in Government Securities, an anonymous, Screen-Based order matching trading system was incorporated on the negotiated dealing system (NDS) from August 11, 2004.

The RBI permitted market participants to sell government securities from April 2, 2004 against confirmed purchase contracts provided the previous purchase contracts were either guaranteed by the CCIL or have the RBI as the counterparty. This sale transaction was introduced to reduce the market risk of participants and facilitate rollover of repos. It was operationalised by switching over to the DVP III mode of settlement of government securities transactions under which securities are settled on a net basis.

In April 2005, listed corporates were allowed to undertake repos in government securities thereby giving them a new avenue to deploy funds. The RBI also allowed urban cooperative banks (UCBs) and listed companies having gilt accounts with banks to undertake repos, subject to eligibility criteria and safeguards. Corporates will need to open a constituent subsidiary general ledger (CSGL) account with a bank to be able to undertake repo transactions.

The settlement of all outright secondary market transactions in government securities is on T + 1 basis since May 2005.

The Reserve Bank permitted sale of government securities allotted to successful bidders in primary issues on the day of allotment, with and between Constituents Subsidiary General Ledger (CSGL) account holders. It also permitted a buyer from an allottee in primary auction to resell the security.

The NDS-OM trading module was introduced on August 1, 2005 to provide NDS members with a more advanced and efficient trading platform in government securities.

In February 2006, the Reserve Bank permitted banks which fulfilled certain eligibility criteria to undertake primary dealer business departmentally. Banks and PDs were permitted to undertake intra-day short sale in central government dated securities subject to the same being covered by outright purchase in secondary market within the same trading day. This period was extended to five trading days in October 2006. Stand-alone PDs were permitted to diversify their activities in addition to existing business of government securities, subject to limits.

The NDS-OM members were permitted to enter into 'When Issued' transactions in central government securities that have been notified for issuance but not actually issued. The Government Securities Act, 2006 was passed by the Parliament in August 2006.

With effect from January 1, 2008, the cover transactions of short sales and when-issued can be undertaken outside NDS-OM, that is, through the telephone or through purchases in primary market. The sale leg of short sales continues to be undertaken on NDS-OM.

It is mandatory for NDS members, both bank and non-bank including primary dealers, to hold a current account and SGL account with the Reserve Bank for settlement of government security transactions. To facilitate phasing out of current accounts of non-banks and non-PD entities with the Reserve Bank, a new system of 'multi modal settlements' (MMS) in government securities market was introduced in June 2008. Under this system, settlement of the securities leg of government security transactions undertaken by the non-bank and non-PD NDS members will continue to take place in the SGL account maintained with the Reserve Bank, while the funds leg will settle through the fund accounts maintained by these

Box 10.2 Reforms in Government Securities Market—A Bird's Eye View

Year	Reform	Objective
June 1992	Auction of Government Securities	Transparency/price discovery
January 1993	91-day T-Bills	Instrument for managing liquidity
January 1994	Zero-coupon bond	New instrument
	Securities Trading Corporation of India (STCI)	New intermediary
August 1994	Capping net issue of ad hoc	Pave way for abolition of ad hocs
March 1995	Primary dealers	Strengthen market intermediation
July 1995	Delivery versus payment	Reduce settlement risk
September 1995	Floating rate bonds	Increase range of instruments
January 1997	Technical advisory committee	Consultation and collaboration
March 1997	Ways and means advances	Autonomy in monetary policy
April 1997	FIMMDA established	SRO (self regulatory organisation)
	Repo permitted in all G-Secs	Greater thrust on collateralised market
July 1997	FIIs permitted in G-Secs	Broaden market
December 1997	Capital indexed bonds	Wider array of instruments
June 2000	LAF	Liquidity management tool
February 2002	NDS	Transparency in trading and reduced
	CCIL	settlement risk
May 2002	Compulsory demat of G-Sec	Reduce settlement risk
June 2002	PDs under Board for Financial Supervision	Integrated supervision
October 2002	Trades in NDS reported on RBI website	Transparency
January 2003	Trading in G-Secs on stock exchange	Promote retailing
February 2003	Widen repo market to non-banks	Widen market and coordinate with call market reforms
June 2003	Interest rate derivatives	To facilitate market to hedge risk
July 2003	Debt buyback scheme	Active consolidation
March 2004	RTGS trial run and DVP III	Reduce payments risk
August 2005	NDS-OM	Provide the NDS members with an efficient trading platform
February 2006	Intra-day short-selling permitted	To improve liquidity in market
August 2006	Commencement of when-issued trading Government Securities Act, 2006 passed by the Parliament.	To facilitate price discovery
January 2008	Short sales and when-issued transactions outside NDS-OM.	To encourage wider market participation
June 2008	Multi-modal Settlements	To facilitate settlement of government security transactions undertaken by non-bank and non-PD-NDS members. To facilitate wider participation in G-sec market

Source: Rakesh Mohan; 'A Decade of Reforms in the Government Securities Market and Agenda for the Future,' *www.rbi.org.in*.

entities with select commercial banks appointed as 'Designated Settlement Banks' (DSBs) by the CCIL. Three scheduled commercial banks-HDFC Bank, Axis Bank and Citibank-have been appointed as the DSBs. From June 30, 2008 onwards, secondary market transactions in government securities undertaken by mutual funds are being settled only through the DSBs.

STRIPS in the Government Securities Market

- Separate trading for registered interest and principal of securities is a process of converting one underlying security into a number of zero-coupon securities

Separate trading for registered interest and principal of securities (STRIPS) is a process of stripping a conventional coupon bearing security into a number of zero coupon securities which can be traded separately. To illustrate, a 10-year government security can be stripped into a principal component and a set of 20 individual coupons/assuming half-yearly coupon payments. Each of these 21 stripped securities can be treated as zero coupon bonds which can be traded at varying yields.

The conversion of one underlying security into a number of zero coupon securities called STRIPS increases the breadth of the debt market and provides a continuous market which ultimately helps in improving liquidity. It also leads to the development of a market determined zero coupon yield curve. The creation of securities of varied maturities from a single security satisfies the needs of different investors who have diverse risk profiles and investment horizons. STRIPS are discounted instruments with no periodic interest payment and hence there would be no need for reinvestment of intermediate cash flows. This would be an attractive feature for retail/noninstitutional investors. STRIPS benefits not only investors, but also issuers. STRIPS allow the issuer to issue securities with long-term maturity for any amount. These long-term securities can be stripped to meet the market needs for short-term securities. Moreover, the supply of securities increases with stripping and this boosts secondary market activity. Further, banks can issue STRIPS against the securities held by them. Thus, STRIPS facilitates the management of the banks' asset-liability mismatches.

The RBI's policy of re-issuance of existing loans and alignment of coupon payment dates across loans facilitating creation of volumes in certain benchmark securities is creating an environment for STRIPS. The secondary market volumes have increased and the market has the requisite size to make STRIPS a success. The necessary provisions have been made to facilitate the introduction of STRIPS in the Government Securities Act which is to replace the existing Public Debt Act, 1944.

In April 2005, the RBI announced its plan to consolidate debt securities with the intention of providing better liquidity and price discovery in the market. This consolidation will combine different securities into a particular maturity profile thus resulting in few securities with large issue sizes, which will be traded more actively. For example, if there are 15 different securities available for trading in the market that matures in the year 2015, these could be consolidated into one lot of securities which could mature in 2015. This will encourage an active STRIPS market in government securities as the large issue size will allow the coupon component to be floated and traded separately.

Accordingly, a new security, namely the 6.01 per cent Government Stock 2028 was issued on August 7, 2003 and its coupon payment dates were aligned to March 25/September 25. PDs which meet certain laid down financial criteria, would be authorised to undertake stripping and reconstruction of securities. The Public Debt Office of the RBI would act as a registry of stripped bonds.

The salient features of the operational guidelines issued by the RBI are

1. Any entity, including individuals, holding government securities that are eligible for stripping/reconstitution (as notified by RBI from time to time) can strip/reconstitute these securities. Stripping/reconstitution, however, is permitted only in the eligible government securities held in Subsidiary General Leger (SGL)/Constituent Subsidiary General Ledger (CSGL) accounts maintained at Public Debt Office, RBI, Mumbai. Hence, any participant desirous of stripping/reconstituting government securities must open and maintain a demat account (SGL account or a Gilt account with a constituent) and hold government securities in electronic form.
2. The process of stripping/reconstitution of government securities shall be carried out at Public Debt Office, in the PDO-NDS as a straight-through process without any manual intervention.
3. Holders of government securities shall place their requests for stripping/reconstitution with an authorised entity. Initially, all PDs would be eligible to authorise stripping/reconstitution requests.
4. Stripping/reconstitution may be done at the option of the holder at any time from the date of issuance of a government security till its maturity.
5. All dated government securities having coupon payment dates on January 2 and July 2, irrespective of the year of maturity shall be eligible for stripping/reconstitution.
6. The minimum amount of securities that needs to be submitted for stripping/reconstitution will be Rs. 1 crore (face value) and multiples thereof.
7. STRIPS will be reckoned as eligible government securities for SLR purposes and retain all the characteristics of government security. They will be eligible securities for market repo as well as repo under LAF of RBI but with appropriate haircut.

8. STRIPS, being zero coupon securities, trade at a discount and are redeemed at face value. To begin with, STRIPS will be tradable only in the OTC market and such trades in STRIPS need to be reported on NDS for clearing and settlement through CCIL.

   The guidelines relating to STRIPS became effective from April 1, 2010.

Retailing of Government Securities

Measures to Promote Retail Trading in Government Securities

- Banks allowed to freely buy and sell securities
- Exempted from TDS
- Support to primary dealers
- Dematerialisation of securities
- Setting up of mutual funds dealing exclusively in these securities
- A non-competitive bidding facility
- Depositories allowed to open a second SGL account
- Retail trading in stock exchanges

The existence of a strong retail segment is a prerequisite for the development of the government securities market. Individuals can buy government securities from the RBI's public debt office during auctions. However, most investors are not familiar with the functioning of the government securities market and most of them perceive government securities as an instrument meant for institutional investors. Owing to this, the retail market of government securities did not develop. The RBI has made efforts to promote retailing of government securities.

Banks are allowed to freely buy and sell government securities on an outright basis at prevailing market prices. They retail government securities to non-bank clients without any restriction on the period between sale and purchase. Further, the interest income on government securities was exempted from the provision of tax deduction at source with effect from June 1997 to facilitate genuine trading in the secondary market. With no TDS, government securities become an attractive investment for those interested in avoiding TDS, such as senior citizens.

One of the major objectives of setting up the primary dealer system and satellite dealer system was to increase the distribution channels and encourage voluntary holding of government securities among a wider investor base. The RBI has extended to them a scheme for availing liquidity support and the facility of repos (as lenders) for increasing the retail network.

With a view to enabling dematerialisation of securities of retail investors, the National Securities Depository Limited (NSDL), the Stock Holding Corporation of India Limited (SHCIL) and the National Securities Clearing Corporation Limited (NSCCL) were allowed to open SGL accounts with the RBI. The RBI allowed NSDL and CDSL to open a second SGL account for depository participants who, in turn, can hold in custody, government securities on behalf of the ultimate investors. Retail investment in government securities has been made easy via demat accounts. The procedural hassles have been considerably reduced.

The RBI encouraged the setting up of mutual funds dealing exclusively in government securities, called gilt funds, with a view to creating a wider investor base for them. The RBI provides special liquidity support to the extent of 20 per cent of the investment in government dated securities. A primary dealer sells gilts with a minimum investment of Rs. 25,000 while gilt funds provide access to an individual investor with a low investment minimum of Rs. 5,000. The awareness about gilt funds is rising as they are offering good returns. PNB Gilts is using the Punjab National Bank branch network to popularise government securities with retail investors. It has tied up with NSDL to work around the problem of physical transfers and has also launched an advertising campaign to inform the public about the advantages of investing in government securities. At present there are 15 dedicated gilt funds eligible to draw liquidity support from the RBI.

In order to encourage retail participation, in particular by mid-segment investors such as urban cooperative banks (UCBs), non-banking financial companies, trusts, and others in the primary market of government dated securities, the RBI announced on December 7, 2001, a scheme of non-competitive bidding facility. According to this scheme, retail investors would be allocated upto 5 per cent of the notified amount at the weighted rate that evolves in the case of competitive bidding. The scheme became operational on January 14, 2002, when an auction of a 15-year government stock was held.

Retail trading in stock exchanges, viz., national Stock Exchange (NSE) and Bombay Stock Exchange (BSE) and over the counter exchanges of India (OTCEI) commenced from January 16, 2003. For this purpose, banks and financial institutions were permitted to open demat accounts with depository participants in addition to their SGL accounts. The minimum order size was kept low at Rs. 1,000 but trading through stock exchanges failed to activate retail participation.

A few banks and primary dealers have taken useful initiatives to promote retail investment in government securities by offering these securities for sale at retail outlets. However, not much has been achieved by these efforts. Banks have been reluctant to market government securities to retail investors apprehending the creation of an adverse impact on their own deposits. Moreover, not much headway has been made in retailing government stock by NSE, NSDL, and so on which were given the facility of a second SGL account.

It is the primary dealers who can effectively build awareness regarding the advantages of holding government securities. They should be given all infrastructure support to create a retail market for government securities. PDs and banks may also provide both sale and purchase facility to ensure that retail investors are assured of liquidity of such investments. Besides these, the stock exchange network and the gilt funds can be used to expand the retail segment of the government securities market.

'When-issued' Market in Government Securities

The Reserve Bank allowed short-selling of government securities in the secondary market. It permitted intra-day short-selling of government securities with a stipulation that such a sale would be covered by purchase of bonds from the secondary market on the same trading day. This measure is expected to enhance liquidity in the government securities market. In July 2006, scheduled commercial banks and primary dealers were allowed to cover their short positions in Central Government Securities within an extended period of five trading days and to deliver a shorted security by borrowing it through the repo market.

- When issued trading is trading of government securities between the time a new issue is announced and the time it is actually issued

The RBI issued guidelines in May 2006 for the development of 'when-issued' market in government securities. 'When Issued' is a short form of 'when, as and if issued.' All 'when-issued' transactions are on an 'if' basis, to be settled if and when the actual security is issued. 'When-issued' market enables market participants to trade in government bonds ahead of sale of such securities in a primary auction. This enables market participants to hedge themselves against movement in prices after the auction and build a secondary market in the bonds. Moreover, it facilitates the distribution process for government securities by stretching the actual distribution period for each issue and allowing the market more time to absorb large issues without disruption. It also facilitates price discovery process by reducing uncertainties surrounding auctions. According to the guidelines, transactions in a security on a 'When Issued' basis shall be undertaken in the following manner:

1. 'When-issued' transactions can be undertaken in case of new securities as well as securities that are being reissued.
2. 'When issued' transactions would commence on the notification date and cease on the working day immediately preceding the date of issue.
3. All when-issued transactions for all trade dates will be contracted for settlement on the date of issue.
4. At the time of settlement on the date of issue, trades in the when-issued security can be netted off with trades in the existing security.
5. When issued transactions may be undertaken only on NDS-OM.
6. Any 'when-issued' trade must have a Primary Dealer as a counter-party (both counter-parties can be PDs). In other words, non-PDs cannot be both buyer and seller in a when issued transaction.
7. Only PDs can take a short position in the 'when-issued' market. Non-PD entities can sell the when-issued security only if they have a preceding purchase contract for equivalent or higher amount.
8. Open positions in the 'when-issued' market are subject to the following limits:
   a. Non-PD entities—Long position, not exceeding 5 per cent of the notified amount. (only buy side for banks)
   b. PDs—Long or Short Position, not exceeding 10 per cent of the notified amount. (both buy and sell for PDs)
9. In case a PD is unable to deliver securities to the buyer after the auction on the settlement (or issue) date, the transaction will be settled as per the default settlement mechanism of CCIL.
10. In the event of cancellation of the auction for whatever reason, all 'when-issued' trade will be deemed null and void ab-initio on grounds of force majeure.

When-issued Trading

- A tool to hedge risk
- Facilitates distribution process
- Facilitates price discovery
- Enables PDs to bid and underwrite accordingly
- Enhances liquidity in the government securities market

With the opening up of 'when-issued' market, the security can be traded from the next day of the announcement of the auction with settlement, following the day of auction. The 'when-issued' market allows PDs to get a better understanding of what amounts they need to underwrite in an auction. It also gives them a better idea of what would be the likely yields for the security, enabling them to bid accordingly. As only 5 per cent of the total notified amount can be acquired by a single entity, there is a likelihood for wider distribution of the stock. It allows market more time to absorb large issues without disruption and facilitates price discovery by reducing uncertainty surrounding auctions.

The trading in 'when issued' market commenced with the auction of central government securities in the calendar week August 1 to 8, 2006.

In the US, a vibrant 'when issued' market for bonds as well as equities exists.

The System of Ways and Means Advances (WMA) for the Centre

The ad hoc treasury bills emerged as a popular mode of financing the central government's deficit in the mid-1950s. For the smooth conduct of the government's business, it was mutually agreed between the central government and the RBI that a minimum cash balance of Rs. 50 crore on Fridays and Rs. 4 crore on other days would be held by the central government. To adhere to this administrative arrangement, it was agreed that whenever the cash balances fell below Rs. 50 crore, the RBI would automatically issue fresh ad hoc T-bills of an amount that would restore the balance to Rs. 50 crore. This mechanism ensured an unlimited access to the RBI's resources. The ad hoc T-bills which were meant to be temporary, gained a permanent as well as a cumulative character. Indeed, it became an attractive source of financing government expenditure since it was available at an interest rate of 4.6 per cent per annum since 1974.

The RBI's credit to government is a source of reserve money generation and any investment in central government's securities by the RBI results in monetisation of government deficit. Monetised deficit is the increase in the net RBI credit to the central government which is the sum of increase in the RBI's holdings of the government of India's dated securities, treasury bills, rupee coins, and loans and advances from the RBI to the centre since April 1, 1997, adjusted for changes in the centre's cash balances with the RBI. The RBI was expected to compulsorily finance ad hocs. The increase in the central bank's credit to the government led to an increase in money supply and inflation. The RBI had no way of containing monetisation of the budget deficit and effectively implementing its monetary policy. In order to restore the role of the monetary policy in the economy, the government entered into an agreement with the RBI to put an annual ceiling on the issue of treasury bills, to reduce that ceiling over time, and finally to eliminate ad hocs.

The process of elimination of ad hocs was designed in three stages:

- Through limits on creation of ad hoc T-bills which operated between 1994–95 and 1996–97.
- Through a transition period of two years which began on April 1, 1997, when ad hocs were eliminated, and the new system of ways and means was introduced. However, overdraft above ways and means was made permissible only beyond ten continuous working days; though at a cost.
- The full-fledged system of WMA has been operating effectively since April 1999.

What is Ways and Means Advances?

- This scheme has been evolved to accommodate temporary mismatches in government receipts and payments.
- The limit for WMA and the rate of interest on WMA will be mutually agreed upon between the RBI and the government from time to time.
- Any withdrawals by the government from the RBI in excess of the limit of WMA would be permissible only for ten consecutive working days.
- When 75 per cent of WMA is utilised, the RBI would trigger fresh floatation of government securities.
- Consistent with the discontinuance of ad hoc T-bills, the system of 91-day tap T-bills was also discontinued with effect from April 1, 1997. The outstanding ad hoc and tap T-bills as on March 31, 1997, were funded into special securities without any specified maturity, at an interest rate of 4.6 per cent per annum on April 1, 1997.
- With the discontinuance of ad hoc T-bills and tap T-bills and with the introduction of WMA, the concept of conventional budget deficit was no more relevant. Therefore, the practice of showing budgetary deficit was discontinued; the gross fiscal deposit (GFD) is now the key indicator of deficit. Gross fiscal deficit is the excess of total expenditure including loans, net of recoveries over revenue receipts (including external grants) and non-debt capital receipts.

- Ways and Means Advances is a mechanism to accommodate temporary mismatches in government receipts and payments

WMA is not a source of financing budget deficit and is not included in the budget estimates. It is only a mechanism to cover day-to-day mismatches in receipts and payments of the government. It is charged at market related interest rate. Hence, the use of WMA may have to be periodically abandoned.

Advantages of WMA

- It is expected that WMA will not put an undue pressure on money supply as it is not a source of financing deficit.
- It would reflect the perceptions of both the issuer (the government) and the investors since the entire market borrowing programme of the government is on an auction basis. This would lead to the

deepening of the government securities market which, in turn, would facilitate the pricing of private corporate debt issues in relation to those of risk-free government paper.

- The introduction of WMA is a major step towards the achievement of greater discretion. The RBI has larger flexibility in the choice of its assets which, in turn, provide it larger expertise over management of liquidity in the system.

WMA also entails important obligations. If the central government is not in a position to address its fiscal deficit suitably and if this results in a disproportionate rise in market borrowing, the rate of interest on government paper will start rising, affecting the entire interest rate structure.

WMA Limits

The RBI is required to set the limits of WMA for the Government of India. For the year 1997–98, the limit for WMA was fixed at Rs. 12,000 crore for the first half of the year (April–September) and Rs. 8,000 crore for the second half of the year (October–March). These limits were revised in the year 1998–99 and lowered to Rs. 11,000 crore and Rs. 7,000 crore respectively. Furthermore, the interest rates on WMA were delinked from the cut-off yield for 91-day treasury bills and linked to the bank rate. For 2001–02, the WMA limits were scaled down to Rs. 10,000 crore during the first half of the year and Rs. 6,000 crore during the second half of the year. When 75 per cent of the limit for WMA is utilised by the government, the RBI may trigger fresh floatation of market loans, depending on market conditions. The interest rate on WMA is the bank rate, and on overdrafts the interest rate is the bank rate plus two percentage points. The minimum balance required to be maintained by the Government of India with the RBI is not less than Rs. 100 crore on Fridays, as at the close of the government's financial year and on June 30, and not less than Rs. 10 crore on other days. Overdrafts are limited to 10 consecutive working days.

The scheme of Ways and Means Advances (WMA) to the central government was revised on April 19, 2006 in consultation with the government. As per the revised arrangement, the WMA limits would be fixed on a quarterly basis instead of the existing half-yearly basis. Accordingly, the WMA limits for 2006–07 were placed at Rs. 20,000 crore and Rs. 10,000 crore for the first and second quarters respectively, and Rs. 6,000 crore each for the third and fourth quarters of the year (Table 10.5). The RBI retains the flexibility to revise the limits in consultation with the Government of India. The interest rates on WMA and overdraft are now linked to the repo rate as against the bank rate hither to. Accordingly, the interest rate on WMA are to be at the repo rate and that of an overdraft to be at repo rate plus two percentage points.

The outstanding WMA availed by the centre from the RBI at Rs. 5,395 crore as at the end of March 2001 was the highest. The average utilisation of overdraft by the central government was higher during 2001–02 than in the previous year. The centre was in overdraft for 43 days (10 occasions) during the year 2003–04 as compared with 59 days (15 occasions) in the previous year.

The central government did not avail WMA since the second half of the year 2003–04, which was unusual. In fact, the central government maintained surplus cash balances in its current account with the RBI. According to the RBI *Annual Report*, this was on account of the debt swap scheme and increased

TABLE 10.5 WMA Limits of the Government of India

(Rs. in Crore)

Year	*Limit During April to September*	*Limit During October to March*
1997–98	12,000	8,000
1998–99	11,000	7,000
1999–00	11,000	7,000
2000–01	11,000	7,000
2001–02	10,000	6,000
2002–03	10,000	6,000
2003–04	10,000	6,000
2006–07	20,000	6,000
2007–08	20,000	6,000
2008–09	20,000	10,000

Source: RBI, Annual Report, various issues.

issuance of 91 day Treasury Bills. The central government did not avail OD during 2006–07. During 2007–08, it availed OD on 3 occasions and WMA on 91 days whereas in 2008–09, it availed OD on 65 occasions and WMA on 109 days. During 2008–09, the government resorted to WMA for higher number of days to meet its expenditure needs and disbursement of fiscal stimulus packages announced by it to overcome the liquidity crisis.

Primary and Secondary Market Segments of the Government Securities Market

Primary Market of Central Government Securities

Debt instruments are issued in the primary market where initially they are subscribed to by the various investors who may or may not trade in them subsequently in the secondary market. The RBI issues government securities on behalf of the government.

The primary market operations of the RBI are mainly driven by the objectives of the debt management policy, which is to ensure funding of fiscal deficit from the market in a cost effective manner.

The primary market instruments are treasury bills and government dated securities. The central government mobilises funds mainly through the issue of treasury bills and dated securities while state governments do so solely through dated securities.

Treasury Bills T-bills are short term obligations issued by the RBI on behalf of the Government of India through weekly and fortnightly auctions. Till 2000, there were 14-day T-bills, 91-day T-bills, 182-day Tbills, and 364-day T-bills. The 14-day and 182-day T-bills were discontinued from May 14, 2001. The 91-day auctions seek to manage the cash position of the government whose revenue collections are typically bunched towards the year end whereas revenue expenses are more evenly dispersed. Since April 1998, the practice of notifying amounts in case of all auctions including 364-day T-bills has been introduced. The RBI modifies the notified amounts keeping in view the temporary cash mismatch arising on account of certain government expenditure and prevailing liquidity conditions.

Arising on account of certain government expenditure the minimum denomination of 91-day T-bills is Rs. 25,000 while that of 364-day T-bills is Rs. 1,00,000. The 91-day auctions occur every Wednesday and the 364-day on Wednesday preceding the reporting Fridays (fortnightly). Auctions are open to all resident individuals and corporates. Settlement for the auction occurs on the following Friday for both 91-day and 364-day T-bills. In 2001–02, the dates of payment for both 91-day T-bills, and 364-day treasury bills had been synchronised so that they could provide adequate fungible stock of treasury bills of varying maturity in the secondary market.

Treasury Bills

	Notified amount (Rs. in crore)
91-day	250 till January 2003 500 from January 2003 to March 2004 2,000 from April 2004 500 from April 2007
364-day	1,000 till March 2004 200 from April 2004 1,000 from April 2007
182-day	500 crore

Government Dated Securities

The Government of India securities are medium-to long-term obligations issued by the RBI on behalf of the government to finance the latter's deficit and public sector development programme.

Government securities are predominantly coupon-bearing and the coupon is paid semi-annually on a 30/360 days basis. However, there are floating rate or zero coupon securities also. No TDS is applicable. All government securities are SLR eligible. The central government securities are eligible for ready forward (repo) facility, whereas state loans are not eligible for repos. These securities are highly liquid.

Primary Market Issuance of Government Securities

Government securities are issued either through auction, sale, or private placement with the RBI.

Auction Auction is a form of allocative mechanism whereby commodities and financial assets are allocated to individuals and firms, particularly in a market-oriented economy. The government's preference for the auction system for selling securities stems from the ability of auctions to reveal more information about price determination and improve the allocation process. Auctions are designed to generate higher volumes for meeting the target market requirement without recourse to underwriting and/or devolvement, broaden participation to ensure that bids are not concentrated or skewed, and ensure efficiency through lowering the cost of borrowing for the government. In June 1992, the government switched from the fixed price tender offer to the auction system for sale of government securities. The government, as a part of its annual budget exercise, announces the borrowing programme for the financial year. The RBI, acting in the capacity of merchant banker for the government's borrowing programme, raises money on behalf of the

- Yield-based auctions are used for new issues and price-based auctions for reissue of existing securities government by auctioning securities from time-to-time depending on the government's need for money, interest rates, and liquidity in the banking system.

The primary market for central government securities starts with an auction. A brief outline of the auction process is given below.

- The RBI announces the quantum, maturity, and date of the auction.
- On the day of the auction, all the participants submit their bid to the RBI. The bid includes the quantum and the yield at which they are bidding.
- The RBI decides the cut-off yield on the basis of the competitive bids it has received and its own view of the interest rates.

Type of Treasury Bill	*Periodicity*	*Notified Amount (Rs. Crore)*	*Day of Auction*	*Date of Payment*
91-Day	Weekly	500	Every Wednesday	Following Friday
182-Day	Fortnightly	500	Wednesday Preceding the Reporting Friday	Following Friday
364-Day	Fortnightly	1,000	Wednesday Preceding the Reporting Friday	Following Friday

Source: RBI, *Annual Report,* various issues.

- Once the cut-off yield is decided, bids below the cut-off yield are accepted and bids above the cutoff yield are rejected.
- If the amount for which the bids are received falls short of the total quantum for which the auction is conducted, the RBI devolves the shortfall on itself or on the primary dealers (to the extent of their underwriting commitments).
- The cut-off yield becomes the coupon rate of that particular security.
- Lately, in order to promote liquidity in a particular security and to reduce the number of different government securities, the RBI has started issuing further tranches of existing securities in price-based auction. Since the coupon rate and the maturity of the security are decided earlier, the bids are for the price. The auction procedure remains the same except that the bids higher than the cut-off price are accepted. Successful bidders are those that bid at a higher price, exhausting the accepted amount at the cut-off price. This multiple-price auctions are predominantly used in selling government securities. Since 1999–2000, most of the current primary issues of dated securities are through re-issues and price-based auctions, instead of yield-based auctions, to enable the consolidation of securities. Such consolidation is necessary for ensuring sufficient volumes and liquidity in any one issue, to facilitate emergence of benchmarks, and development of separately traded registered interest and principal of securities. The uniform price auction format for auctions, which was confined to the auction of 91-day treasury bills, was extended to the auction of dated securities in November 2001.

- Multiple price auction is frequently used for primary issues of dated securities while the uniform price auctions method is used when there is market uncertainty and for issuing new instruments

The government auctioned for the first time, on July 17, 2002, a bond with call and put features. The notified amount was Rs. 3,000 crore and the bond had a maturity of 10 years. On any coupon date on or after five years, the government can call the bond with two months' notice. The investor also has the right to put the bond on the same terms.

Competitive and non-competitive bidding: Government Securities are issued through bidding wherein the competitive bidders are primary dealers, financial institutions, mutual funds, and banks. The auction system was introduced in 1992 wherein the amount is notified but the coupon rate is auction determined. Since its inception, the multiple price auction method has been used. From 2001, both the multiple price and uniform price auction methods are in use.The uniform price method is used when there is market uncertainty and for issuing new instruments as well as bonds with long tenor.

Non-competitive bidding: The RBI introduced non-competitive bidding with a provision for allocation of upto 5 per cent of the notified amount in specified auctions of dated securities for allotment to retail investors on a non-competitive basis at the weighted average rate. The scheme was operationalised from January 14, 2002, with the auction of 15-year government stock. Non-competitive bids are conducted to encourage participants who do not have sufficient expertise in bidding. The non-competitive bidders are state governments, municipalities, non-government provident funds, and other central banks.

Retail investors such as individuals, firms, companies, corporate bodies, urban cooperative banks, institutions, provident funds, trusts, and any other entity as may be prescribed by the RBI are allowed to participate in auctions as non-competitive bidders. These bidders are required to submit their bids through banks and PDs. Allocation for non-competitive bidding is within the notified amount and if the amount tendered by the non-competitive bidders is less than the reserved amount, all participants receive the full amount and the shortfall is transferred to a competitive position. If the amount received is more than the reserved amount, a pro-rata allotment is made to applicants. A non-competitive bidder is permitted to submit only one bid in the auction with a minimum amount of Rs. 10,000 and a maximum of Rs. 2 crore. Non-competitive bidders are issued securities at the weighted average price determined in competitive auctions.

There does not exist a fixed calendar for auctions of dated government securities. However, the auction of a dated security is announced in advance through a public notification. The securities are issued to successful bidders in the form of stock certificates or by credit to their SGL account.

Sale Earlier, the RBI used to adopt the sale route instead of auctions. Here, the coupon rate and maturity are predetermined and the securities are sold to investors at par. This approach was used predominantly for state loans upto 2005–06. Of late, some states have tried the auction method successfully. As part of its open market operations, the RBI often sells outstanding securities (devolved or privately placed with itself earlier) through its sale window at preannounced prices.

Private Placement with the Reserve Bank There are times when there is very tight liquidity in the banking system or when investors expect very high yields on the one hand and on the other, the RBI wants to keep the borrowing costs in check. Hence, it may not be possible for the RBI to hold an auction/sale. The RBI then places the securities with itself and funds the government. These securities are later sold in the market through its sale window at an opportune time. In this way, the RBI also signals its view on the interest rate.

Market Borrowings, Ownership Pattern, Maturity Structure, and Interest Rates

The developments in the government securities market are generally influenced by the central government's actual borrowing vis-a-vis the budgeted amounts, maturity, structure of the debt issued or proposed to be issued, absorptive capacity of the market, and policies relating to domestic debt management. With a view to developing an active market for government securities, this market is being organised in such a way that the government reduces its dependence on credit from the RBI and other banks.

Tables 10.6 and 10.7 reflect an increase in the market borrowings of the central government. Since 1990–91, the borrowing programme of both the centre and the states handled by the RBI increased more than 40-fold from Rs. 11,000 crore in 1990–91 to Rs. 4.36 lakh crore in 2008–09. The major reasons for this increase were as follows:

- A significant increase in repayment obligations arising out of high levels of domestic debt. For instance, in 1998–99, repayment liabilities of the central government absorbed 33 per cent of gross debts raised from the market as against only 16 per cent in 1991–92.

TABLE 10.6(a) Market Borrowings of the Central and State Governments and Their Sponsored Institutions

Sr. No.	*Government Authority*	*1991–92*		*1992–93*		*1993–94*		*1994–95*		*1995–96*	
		Gross	*Net*	*Gross*	*Net*	*Gross*	*Net*	*Gross*	*Net*	*Gross*	*Net*
1	Central Government (a + b)	8,919	7,501	13,885	8,461	50,388	28,526	38,108	20,074	40,510	26,790
	a. Dated Securities	8,919	7,501	4,821	3,670	28,690	28,917	21,251	20,297	38,635	33,079
	b. 364-Day T-Bills	–	–	9,064	4,791	20,323	−391	16,857	−223	1,875	−6,289
2	State Governments	3,364	3,364	3,805	3,471	4,145	3,638	5,123	5,123	6,274	5,931
3	Institutions Sponsored by the Central Government	2,702	2,688	2,248	1,750	1,200	1,200	775	775	589	463
4	Institutions Sponsored by the State Government (Relate to SFCs, SCARDBs)	1,200	1,096	1,223	1,120	1,166	1,080	408	321	431	341
	Total	16,185	14,649	21,161	14,802	56,899	34,444	44,414	26,293	47,802	33,525

TABLE 10.6(b) Market Borrowings of the Central and State Governments and Their Sponsored Institutions

Sr. No.	Government Authority	1996–97		1997–98		1998–99		1999–2000		2000–2001	
		Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
1	Central Government (a + b)	36,152	26,356	59,637	40,494	93,953	62,903	99,630	73,077	1,15,183	73,787
	a. Dated Securities	27,911	19,990	43,390	32,488	83,753	68,950	86,630	70,277	1,00,183	71,787
	b. 364-Day T-Bills	8,241	6,366	16,247	8,006	10,200	−6,047	13,000	2,800	15,000	2,000
2	State Governments	6,536	6,536	7,749	7,193	12,114	10,700	13,706	12,405	13,300	12,880
3	Institutions Sponsored by Central Government	484	340	553	400	341	200	–	–	–	–
4	Institutions Sponsored by State Government (Relate to SFCs, SCARDBs)	490	388	433	350	480	322	367	350	433	350
	Total	43,662	33,570	68,372	48,437	1,06,888	74,125	1,13,703	85,832	1,28,916	87,017

- The abolition of ad hoc and tap T-bills from 1996–97. These bills constituted a resource base for the government and with their discontinuance, the government had to borrow heavily from the market.
- The fiscal deficit exceeding the target by a wide margin. As a result, a large part of the fiscal deficit is financed through market borrowing. Since 2006–07, the central government financed nearly 81 per cent of its fiscal deficit through market borrowings as against 18 per cent in 1990–91. The revenue component of fiscal deficit is rising at a faster rate than the fiscal deficit itself (Table 10.8). This means that the government is borrowing more for consumption rather than investment purposes.

Large government borrowings have an adverse effect on interest rate. The nominal interest rates rise on debt which make the debt market relatively more attractive than the equity market. Corporates find it difficult to raise funds through equity due to the depressed state of the equity market. This increases their debt–equity ratio and cost of borrowings which, in turn, affect the competitiveness of the private sector. Interest payments account for 35 per cent of government revenues. Large market borrowings when it is used to finance current expenditure, crowds out private investment, increases interest rate and imposes high debt burden on future generations. Thus, high level of government borrowings create a vicious circle.

In view of the large borrowing programme of the central government, the RBI has made efforts to soften the medium-and long-term interest rates on government securities either through direct devolvement or private placement combined with open market operations (Table 10.11). In addition, since April 1999, the RBI has been reissuing the existing stocks through price-based auctions, thereby limiting the number of outstanding stocks. This passive consolidation strategy has been adopted due to the large market borrowings of the government. The RBI has also adopted the strategy of elongating the maturity profile of securities.

Ownership Pattern of Central and State Government Securities

- Market borrowings of the central government increased substantially and had an adverse effect on interest rates. To curb an increase in interest rates, the central government needs to curtail its borrowing programme.

The subscribers to government securities are the RBI, commercial banks, insurance companies, mutual funds, provident funds, and others.

As is seen from Table 10.9, notwithstanding various reform measures to develop and widen the primary market for government securities, the market continues to be dominated by captive investors such as commercial banks and insurance companies. Banks have traditionally been the dominant investors of the government securities due to SLR requirements. The investment of commercial banks constitutes, on an average, 57 per cent of the stock of government securities even though the SLR of the banks was significantly lowered to 25 per cent in 1997. Banks have found it advantageous to invest in government securities beyond the statutory requirements due to attractive market related interest rates offered since 1992–93, zero-risk nature of these securities, and depressed commercial credit market.

This narrow ownership base has a two-fold implications for the government. First, the large magnitude of borrowing puts pressure on the absorptive capacity of the market, particularly when the commercial banks hold excess government securities. Therefore, their choice regarding further subscription to government paper depends upon the attractiveness of return on other competing assets, particularly on loans and advances. When the industrial outlook improves and the demand for credit takes off, banks may not show their willingness to subscribe to government securities. Secondly, the concentration of the debt market in a few large investors introduces an element of rigidity in the downward adjustment of interest rate on government securities, particularly in the event of fulfilling the targeted market borrowing programme of the government.

TABLE 10.6(c) Market Borrowings of the Central and State Governments and Their Sponsored Institutions

Sr. No.	Government Authority	2001–02		2002–03		2003–04		2004–05		2005–06		2006–07		2007–08		2008–09		2009–10	
		Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	(BE)	(BE)
1	Central Government (a + b)	1,33,801	92,302	1,51,126	1,04,118	1,47,636	88,816	1,06,501	46,050	1,60,018	98,237	1,79,373	1,11,275	1,88,205	1,09,504	3,18,550	2,42,317	4,91,044	3,97,957
	a. Dated Securities	1,14,213	87,714	1,25,000	97,580	1,21,500	88,807	80,350	46,034	1,31,000	95,370	1,46,000	1,06,921	1,56,000	1,10,671	2,73,000	2,28,972	4,51,093	3,97,957
	b. 364-Day T-Bills	19,588	4,588	26,126	6,538	26,136	9	26,151	16	26,857	2,867	33,373	4,354	32,205	–1,167	45,550	13,345	39,951	–
2	State Governments	18,707	17,261	30,853	29,064	50,521	46,376	39,101	33,978	23,663	15,455	20,825	14,274	67,779	56,224	1,18,138	1,03,766	1,56,238 (E)	1,40,000 (E)
3	Institutions Sponsored by the Central Government	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
4	Institutions Sponsored by the State Government (Relate to SFCs, SCARDBs)	584	400	672	400	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	Total	1,53,092	1,09,963	1,82,651	1,33,582	1,98,517	1,35,192	1,45,602	80,028	2,05,538	1,13,692	2,00,198	1,25,549	2,55,984	1,65,728	4,36,688	3,46,083	6,47,282	5,37,957

Source: RBI, *Annual Report*, various issues.

TABLE 10.7 Gross and Net Borrowings of Central and State Governments

(Rs. in Crore)

Year	Centre		State		Combined (Centre and State)		Per Cent of GFD Financed Through Market Borrowings	
	Gross	Net	Gross	Net	Gross	Net	Centre	States
1990–91	8,989	8,001	2,569	2,569	11,558	10,570	17.9	13.6
1991–92	8,919	7,501	3,364	3,364	12,284	10,865	20.7	17.5
1992–93	13,885	8,461	3,805	3,471	17,690	11,932	9.2	16.8
1993–94	50,388	28,526	4,145	3,638	54,533	32,164	48.0	17.6
1994–95	38,108	20,074	5,123	5,123	43,231	25,197	35.2	14.7
1995–96	40,509	26,790	6,274	5,931	46,783	32,721	56.4	19.1
1996–97	36,152	26,356	6,536	6,536	42,688	32,892	30.0	17.5
1997–98	59,637	40,494	7,749	7,193	67,386	47,687	36.5	16.5
1998–99	93,953	62,903	12,114	10,700	1,06,067	73,603	60.9	14.1
1999–2000	99,630	73,077	13,706	12,405	1,13,336	85,482	67.1	13.9
2000–01	1,15,183	73,787	13,300	12,880	1,28,483	86,667	61.8	14.2
2001–02	1,33,801	92,302	18,707	17,261	1,52,508	1,09,563	64.4	18.3
2002–03	1,51,126	1,04,118	30,853	29,064	1,82,651	1,33,582	71.8	28.6
2003–04	1,47,636	88,816	50,521	46,376	1,98,157	1,35,192	72.1	39.2
2004–05	1,06,501	46,050	39,101	33,978	1,45,602	80,028	40.5	32.1
2005–06	1,60,018	98,237	21,729	15,455	1,81,747	1,13,692	72.6	17.0
2006–07	1,79,373	1,11,275	20,825	14,274	2,00,198	1,25,549	80.5	16.8
2007–08	1,88,205	1,09,504	67,779	56,224	2,55,984	1,65,728	73.4	58.9
2008–09	3,18,550	2,42,317	1,18,138	1,03,766	4,36,688	3,46,083	81.6	68.5

Note: Gross and Net Market Borrowing of the centre include normal market borrowings, other medium-and long-term borrowings and 364-day treasury bills.
GFD: Gross Fiscal Deficit.
Source: RBI, *Annual Report,* various issues.

TABLE 10.8 Measures of Deficit of the Central Government

(As Percentage of GDP at Current Market Prices)

Year	Fiscal Deficit		Revenue Deficit
	Gross	Net	
1991–92	5.56	3.77	2.49
1992–93	5.37	4.04	2.48
1993–94	7.01	5.35	3.81
1994–95	5.70	3.98	3.06
1995–96	5.07	3.57	2.50
1996–97	4.88	3.39	2.39
1997–98	5.82	4.13	3.04
1998–99	6.47	4.57	3.82
1999–00	5.36	4.61	6.47
2000–01	5.65	5.13	4.05
Average (1991–92 to 2000–01)	5.01	4.85	3.12
2001–02	6.19	5.40	4.40
2002–03	5.91	5.45	4.40

(*Continued*)

Year	(As Percentage to GDP at Current Market Prices) Fiscal Deficit		Revenue Deficit
	Gross	Net	
2003–04	4.48	4.20	3.57
2004–05	3.99	4.01	2.49
2005–06	4.09	4.07	2.58
2006–07	3.45	3.65	1.94
2007–08	2.69	2.56	1.11
2008–09	6.14	6.05	4.53

Note: The gross fiscal deficit is the excess of total expenditure including loans, net of recoveries over revenue receipts (including external grants) and non-debt capital receipts. The net fiscal deficit is the difference between gross fiscal deficit and net lending. The revenue deficit is the difference between revenue receipts and revenue expenditure.
Source: RBI, *Handbook of Statistics on Indian Economy*, various issues. RBI, *Annual Report,* various issues.

TABLE 10.9 Ownership Pattern of Central and State Government Securities (Percentage to Outstanding Government Securities)

(Per Cent Per Annum)

Year	Subscribers				
	RBI	Commercial Banks	LIC (Insurence Corporate)	Provident Funds	Others
1990–91	20.3	59.4	12.3	1.7	6.3
1991–92	17.9	63.7	13.3	1.5	3.6
1992–93	8.2	66.4	14.7	1.5	9.2
1993–94	2.4	72.5	15.8	1.1	8.2
1994–95	2.0	69.6	16.2	1.0	11.2
1995–96	7.3	64.9	16.8	1.5	9.5
1996–97	2.8	67.3	18.7	1.9	9.3
1997–98	10.7	59.0	18.0	2.1	10.2
1998–99	9.1	59.5	17.8	1.8	11.8
1999–00	7.0	60.9	18.1	2.0	13.0
2000–01	9.2	61.0	18.6	2.4	–
2001–02	7.6	60.7	20.0	2.1	–
2002–03	5.5	58.6	19.4	2.6	8.5
2003–04	4.97	55.3	19.3	2.4	18.03
2004–05	6.89	53.2	20.3	2.8	16.81
2005–06	6.05	45.75	21.57	3.20	22.80
2006–07	9.25	47.90	23.02	3.70	15.69
2007–08	4.78	42.51	24.78	6.38	21.55
2008–09	9.71	38.85	23.2	6.59	21.65
2009–10	11.76	38.03	22.16	6.76	21.29

Source: RBI, *Hand Book of Statistics on Indian Economy,* various issues.

The RBI's holding of government securities declined steeply in 1994–95 to 2.0 per cent from 20.3 per cent in 1990–91. This reflects that the government securities market has developed after reforms. However, this trend reversed in 1997–98 with the surge in the RBI's holdings to 10.7 per cent as special securities in the bank's portfolio were converted to marketable lots with a view to facilitating open market operations.

- The largest investors in government securities are banks and insurance companies
- The RBI's subscription to primary issues has substantially declined

The Reserve Bank's absorption of primary issues: Table 10.10 shows that the RBI's absorption of primary issues came down drastically from 49.3 per cent in 1990–91 to 1.8 per cent in 1994–95. This was due to the higher absorptive capacity of the market. The RBI's subscription increased in the year 1998–99 due to the central government's recourse to gross market borrowings; and to contain the impact of high government borrowings, it privately placed the issues with itself. The monetary impact of the government borrowings was contained by offloading these securities in the market at a favourable time through open market operations (Table 10.11).

The Fiscal Responsibility and Budget Management (FRBM) Act, 2003 stipulates that the Reserve Bank cannot participate in the primary auctions of government securities from April 1, 2006. As seen in Table 10.10, the Reserve Bank's subscription to primary issues substantially declined during 2004–05 and during the year 2005–06, gross issues of Rs. 10,000 were privately placed with the Reserve Bank at the end of the year. The RBI did not subscribe to primary issues of the central government during 2007–08 and 2008–09.

Maturity structure of central government dated securities outstanding: With a move towards market related interest rates for meeting the borrowing requirements of the central government, there has been a significant shift in the maturity pattern of central government dated securities. A significant transformation in the maturity structure is clearly seen in Table 10.12. The maturity structure of dated securities was highly skewed at the short end. The government's heavy dependence on short-to medium-term securities for the mobilisation of market borrowing was due to uncertainty in market conditions and investor's preference for short-term maturities. Moreover, it was a conscious policy on the part of the government to minimise the cost of borrowing by placing a large part of the borrowings at the shorter end of the market. This maturity structure tilted towards short-term securities which led to significant higher gross borrowings to adhere to the repayment schedule. To avoid such high cost borrowings and redemption pressure entailing refinance risk, the government has avoided excessive maturities at the short end and the trend is towards issue of long-term securities since 1999–2000.

TABLE 10.10 The RBI's Subscription to Primary Issues of Central Government Securities

(Rs. in Crore)

Year	*Gross Issues*	*Amount Subscribed by the RBI*	*Per Cent of RBI's Subscription to Total Issues*
1990–91	8,989	4,432	49.3
1991–92	8,919	4,822	54.1
1992–93	4,821	2,214	45.9
1993–94	28,526	1,569	5.5
1994–95	20,074	362	1.8
1995–96	38,635	12,655	32.8
1996–97	27,911	3,698	13.2
1997–98	43,390	13,028	30.0
1998–99	83,753	38,205	45.6
1999–00	86,630	27,000	31.2
2000–01	1,00,183	31,151	31.1
2001–02	1,14,213	28,892	25.3
2002–03	1,25,000	36,175	28.9
2003–04	1,21,500	21,500	17.7
2004–05	80,350	1,197	1.5
2005–06	1,31,000	10,000	7.6
2006–07	1,46,000	00	00
2007–08	1,56,000	00	00

Source: RBI, *Annual Report,* various issues.

TABLE 10.11 Change in Reserve Bank's Holding of Government Securities (G-Sec) Through Private Placement, Devolvement and Open Market Operation (OMO)

(Rs. in Crore)

Year	*Gross Market Borrowings (Dated Securities)*	*Amount of Devolvement on the Reserve Bank*	*Private Placement Taken by the Reserve Bank*	*OMO Purchases by the Reserve Bank*	*Conversion of Special Securities into Dated Securities*	*Total Addition to Stock of the Reserve Bank's Investments in G-Sec (3+4+5+6)*	*Open Market Sales by the Reserve Bank*	*Net Addition to Stock of RBI in G-Sec (6–7)*	*Net Outstanding Holding by Reserve Bank*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1996–97	27,911	3,698	–	623	–	4,321	11,206	−6,885	6,666
1997–98	43,390	7,028	6,000	467	20,000	33,495	8,081	25,414	31,977
1998–99	83,753	8,205	30,000	–	–	33,205	26,348	11,857	42,212
1999–00	86,630	–	27,000	1,244	–	28,244	36,614	−8,370	35,190
2000–01	1,00,188	13,151	18,000	4,471	–	35,622	23,795	11,827	41,732
2001–02	1,14,213	679	28,213	5,084	–	33,976	35,419	−1,443	40,927
2002–03	1,25,000	5,175	31,000	–	40,000	76,175	53,780	22,395	55,438
2003–04	1,21,500	21,500	21,500	–	61,818	83,318	41,849	41,469	77,397
2004–05	80,350	847	350	–	–	1,197	2,899	−1,702	80,770
2005–06	1,31,000	–	10,000	740	–	10,740	4,653	6,087	83,205
2006–07	1,46,000	–	–	720	–	720	5,845	−5,125	75,537
2007–08	1,56,000	–	–	13,510	–	13,510	7,587	5,293	68,965
2008–09	2,73,000	10,773	–	1,04,480	–	1,15,253	9,932	1,05,321	1,65,836

Source: RBI, *Annual Report*, 2008–09.

TABLE 10.12 Maturity Profile of Central Government Dated Securities

(Per Cent)

Year	*Outstanding Stock*			*Issued During the Year*		
	Under 5 Years	*5–10 Years*	*Over 10 Years*	*Under 5 Years*	*5–10 Years*	*Over 10 Years*
1	*2*	*3*	*4*	*5*	*6*	*7*
1997–98	41	41	18	18	82	0
1998–99	41	42	16	18	68	14
1999–00	37	39	24	0	35	65
2000–01	27	47	26	6	41	53
2001–02	31	36	33	2	24	74
2002–03	26	35	39	0	36	64
2003–04	24	32	44	5	15	80
2004–05	25	31	44	11	11	78
2005–06	25	32	43	0	26	74
2006–07	26	35	39	7	47	46
2007–08	26	38	36	0	61	39
2008–09	26	40	34	6	55	39

Source: RBI, *Annual Report*, various issues.

- Securities over 10-year maturity constituted the largest share in the outstanding stock of securities as well as in new issuances

About 65 per cent of the total primary issues was raised through securities of above 10 years maturity in 1999–2000 as against 14 per cent in 1998–99. Securities over 10-year maturity constituted the largest share in the outstanding stock of securities as well as in new issuances. The market participants also found the long-term paper to be attractive due to low inflationary expectations and improvement in liquidity. As a result, the weighted average maturity of dated securities during 1999–2000 increased to 12.64 years from 7.7 years in 1998–99 and 6.6 years in 1997–98. The weighted average maturity of debt dropped from 12.64 years to 10.6 years during 2000–01. This was due to the issue of short-term securities to accommodate the market's preference for short-term paper during the phases of market uncertainty. The weighted average maturity again rose to 14.3 years in 2001–02, 13.8 years in 2002–03 and 14.9 years in 2003–04. The low inflation rate and development of the government securities market helped in the successful elongation of maturity.

The weighted average maturity of the primary issues of dated securities rose to 16.9 in 2005–06 a recent high till now (Table 10.13) as 74 per cent of the securities issued during the year were of a maturity above 10 years (Table 10.12). This was on account of higher demand for government securities from non-bank participants such as insurance companies and provident funds. However, the weighted average maturity declined in the subsequent years.

Interest rates in the primary market: The yield rates in the primary market refer to the interest cost at which the government borrows from the market. The interest rates in the primary market are influenced by the prevailing liquidity conditions, RBI's intervention by way of devolvement and private placement, and amount and frequency of issues during the year.

The weighted average interest rate of dated securities of the centre progressively rose from 11.41 per cent in 1990–91 to 13.75 per cent in 1995–96 (Table 10.13). The increased recourse to borrowing from the market and spells of tight liquidity put pressure on interest rates. Since 1996–97, the interest rates have declined; in the year 1999–2000, the interest rates were very close to the interest rates in 1991–92. Inspite of an increase in the market borrowing of the central government, the RBI was in a position to contain the interest rates. The RBI accepts the private placement of government stocks and releases them to the market when interest rate expectations become favourable. This policy of the RBI moderates the adverse impact of large borrowings by the central government. Moreover, liquidity conditions also softened in the money market which helped in containing the interest rates. The yields on primary issues of dated government securities eased during the year 2003–04. However, in the subsequent years there was a sharp increase in the weighted average interest rates of dated securities on account of hardening of interest rates and tight liquidity conditions (Figure 10.1).

- Yield curve depicts relationship among yields of securities that differ only with respect to their term of maturity

Yield curve: The shape of the yield curve reflects the relationship among yields of securities that differ only with respect to their term of maturity. The curve depicts the various rates at which the same borrower is able to borrow for different periods of time. The most closely watched yield curve in any country is that of the government securities' which is the closest approximation of a risk-free yield. Other yield curves, such as the one for corporate borrowers, are best understood in comparison with the risk-free yield.

The yield curve is drawn against two axes: the vertical showing yield and the horizontal giving the term in years. The precise shape of the yield curve varies slightly from day-to-day and can change significantly from month to month. Normally, a yield curve is upward sloping which indicates a higher yield for longer maturity security. If long-term interest rates rise relative to short-term interest rates, the curve steepens. If short-term interest rates rise relative to long-term rates, the curve flattens.

A number of studies confirm that the slope of the yield curve contains significant information about the future path of macro-economic variables in a number of countries. The yield curve is used to forecast short-term interest rates. When investors repeatedly purchase money market instruments rather than long-term instruments, and if a steeper yield curve emerges, it implies that they expect the money

Box 10.3 Yield and Bond Prices

The price of a bond in the market is dependent on forces of demand and supply, economic conditions, general money market conditions, interest rates prevalent in the market, future interest rate expectations, and credit quality of the issuer.

Yields and bond prices are inversely related. When the interest rates in the market rise, the price of outstanding bonds will fall until the yield of these bonds is high enough to match the high interest rates on the new bond issues and the effect is vice versa when interest rates fall.

After a three-year period of positive returns on the notional one-year zero-coupon bond, negative returns were experienced in 2004 as the interest rates had gone up. An increase in interest rates leads to a fall in the bond prices which results in negative returns.

TABLE 10.13 Yield and Maturity of Centre's Primary Issuances

Year	*YTMs of Primary Issues (Per Cent)*			*Weighted Average Yield*	*Weighted Average Maturity*
	Under 5 Years	*5–10 Years*	*Over 10 Years*		
1997–98	10.85–12.14	11.15–13.05	–	12.01	6.6
1998–99	11.40–11.68	11.10–12.25	12.25–12.60	11.86	7.7
1999–00	–	10.73–11.99	10.77–12.45	11.77	12.6
2000–01	9.47–10.95	9.88–11.69	10.47–11.70	10.95	10.6
2001–02	–	6.98–9.81	7.18–11.00	9.44	14.3
2002–03	–	6.65–8.14	6.84–8.62	7.34	13.8
2003–04	4.69	4.62–5.73	5.18–6.35	5.71	14.94
2004–05	5.90	5.53–7.20	4.49–8.24	6.11	14.13
2005–06	–	6.70–7.06	6.91–7.79	7.34	16.90
2006–07	7.69–7.94	7.06–8.29	7.43–8.75	7.89	14.72
2007–08	–	7.55–8.44	7.62–8.64	8.12	14.90
2008–09	6.24–6.77	5.44–9.14	6.53–10.03	7.69	13.81

Source: RBI, *Annual Report*, various issues.
–: No issues.
YTM: yield to maturity.

TABLE 10.14 Yield Spread (In Per Cent) Based on Primary Yield Rates

(Rs. in Crore)

					LAST ISSUE					
Instrument	*2001–02*	*2000–01*	*1999–2000*	*1998–99*	*1997–98*	*1996–97*	*1995–96*	*1994–95*	*1993–94*	*1992–93*
91-Day T-Bills	6.1326	8.74	9.16	8.74	7.33	7.96	12.97	11.99	7.46	10.97
364-Day T-Bills	6.1571	8.96	9.93	10.07	7.98	10.10	13.12	11.94	9.97	11.09
3-Year Paper	–	–	–	11.47	12.14	13.40	13.65	11.00	12.75	–
5-Year Paper	7.01	10.20	11.24	11.78	11.15	13.55	13.85	12.00	13.00	12.00
10-Year Paper	10.25	11.30	11.59	12.25	12.15	13.65	14.00	12.35	12.50	12.75
					YIELD DIFFERENTIAL@OVER THE PREVIOUS YEAR					
91-Day T-Bills	−2.61	−0.42	+0.42	+1.41	−0.63	−5.01	+0.98	+4.53	−3.51	–
364-Day T-Bills	−2.80	−0.97	−0.14	+2.09	−2.14	−3.02	+1.18	+1.97	−1.12	–
3-Year Paper	–	–	–	−0.67	−1.26	−0.25	+2.65	−1.75	–	–
5-Year Paper	−3.19	−1.04	−0.54	+0.63	−2.40	−0.30	+1.85	−1.00	+1.00	–
10-Year Paper	−1.05	−0.29	−0.66	+0.10	−1.50	−0.35	+1.65	−0.15	−0.25	–
					MEMO ITEMS SPREAD					
91-Day and 364-Day T-Bills	0.02	0.22	0.77	1.33	0.65	2.14	0.15	−0.05	2.51	0.12
91-Day T-Bills and 5-Year Government Paper	0.87	1.24	2.08	2.36	3.82	5.59	0.88	0.01	5.54	1.03
91-Day T-Bills and 10-Year Government Paper	4.12	2.56	2.43	3.26	4.82	5.69	1.03	0.36	5.04	1.78

Source: RBI, *Annual Report*, various issues.
RBI, *Report on Currency and Finance,* various issues.

market yield to be higher in future than it is now. An inverted yield curve emerges when short-term interest rates are higher than long-term interest rates. Such a yield curve indicates that there is credit squeeze by the central bank. This credit squeeze is based on lower inflation expectation. Hence, investors in longer term instruments willingly accept lower nominal interest rates than one available on short-term instruments. This behaviour leads to an inverted yield curve.

Varying liquidity conditions and lack of adequate trading depth in the secondary market for government securities caused frequent shifts in the term structure of interest rates in the primary market.

- The shape of the yield curve provides information about market expectations of future interest rates and inflation rates

The yield curve became inverted in 1993–94 due to spells of tight liquidity conditions. A downward shift was witnessed in 1994–95 but it shifted upward again in 1995–96 and 1996–97. Differences in the short and long-term inflationary expectations and temporary imbalances in the short-term money market and foreign exchange markets led to an inverted yield curve. The yield curve declined in 1997–98 and 1998–99 due to the RBI's policy of private placement to itself and a comfortable liquidity position in the money market. The yield curve of 2001–02 reflects a decline in both short and long-term yield rates. The yield curve flattened during 2003–04 as the long-term yields fell due to surplus liquidity. The yield curve shifted upwards during the year 2006–07 and 2007–08 with the increase in the interest rates across the maturity spectrum (Figure 10.1).

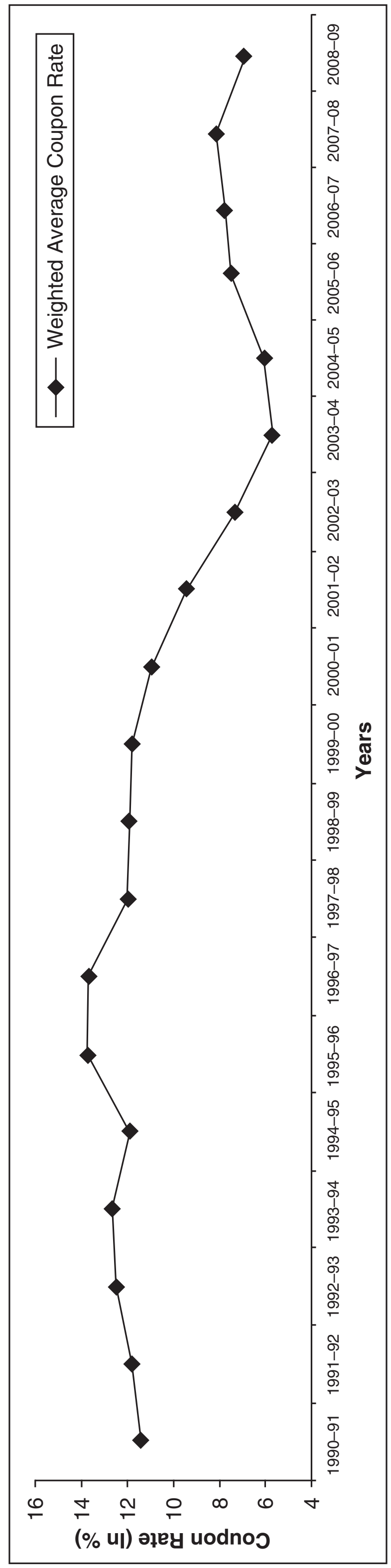


Figure 10.1 Weighted Average Coupon Rates on Government of India Dated Securities

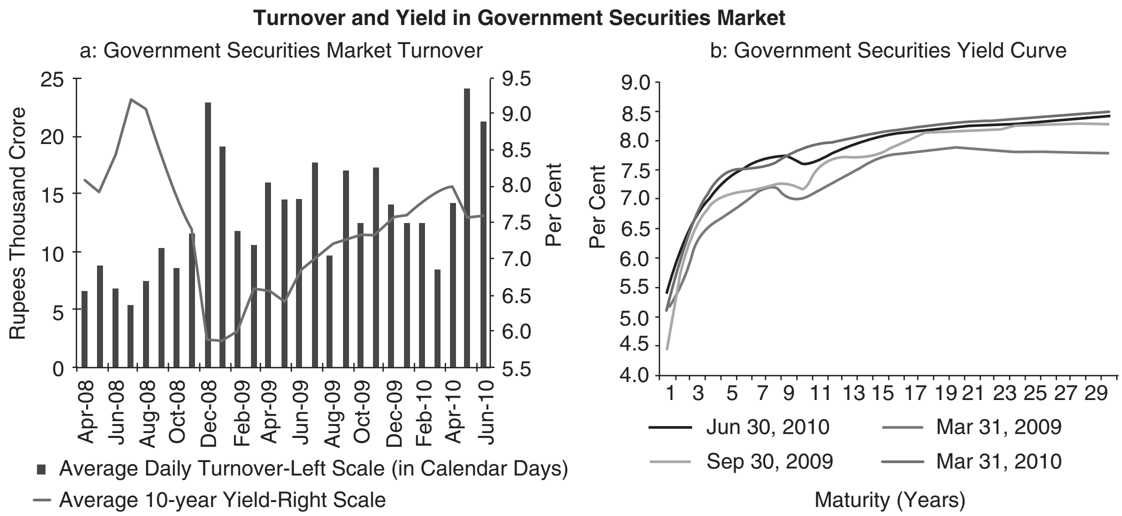
- Yield spread is the yield differential of an instrument over the previous year or yield differential in case of two instruments of differing maturities

Yield spread: Yield spread is the yield differential of an instrument over the previous year or yield differential in case of two instruments of differing maturities. The components of yield spread are term risk premia and inflation expectations. The yield spread carries important information on the stance of the monetary policy and future economic activity.

Table 10.14 presents information about yield differential over the previous year in case of the same instrument and yield differential in case of two instruments of differing maturities.

During 1994–95 and 1995–96, the yield differential was positive in case of the 91-day and 364-day treasury bills due to spells of tight liquidity conditions. Easy liquidity conditions were reflected in the softening of interest rates in securities across the maturity spectrum during 1996–97 and 1997–98. The yield spread between 91-day and 364-day treasury bills, 91-day T-bill and 5-year paper, and 91-day T-bill and 10-year paper, declined substantially by 149 basis points, 177 basis points, and 87 basis points respectively in 1997–98. This depicted declining inflationary expectations in view of reduction in inflation since 1995–96. The lower spread shows that either the short-term rates were too high or the long-term rates low which did not reflect the higher risk premium required for long-term paper.

However, the spread between 91-day and 364-day treasury bills increased in 1998–99 as the implicit yield at cut-off prices ranged on the higher side on account of a rise in the repo rate so as to contain pressure in the forex market. The yield differential and the yield spread declined in 1999–2000 and 2000–01 due to low inflationary expectations, stable call money market conditions, and improvement



Source: RBI, Macro-economic and Monetary Developments, pg 8, July 26, 2010.

Figure 10.2 Yields on Central Government Securities

in liquidity. The yield spread between 91-day and 364-day T-Bills was positive at 15 basis points in March 2006.

The yield spread between one year and 10-year yields narrowed to 65 basis points by end-March 2008 from 146 basis points as at end-March 2006. The yield spread between 10-year to 20-year segment narrowed from 45 basis points during 2005–06 to 38 basis points during 2007–08. The yield spread between 5-year government securities and AAA-rated corporate bonds widened during 2007–08 because of increase in inflationary pressures. The yield spread widened to 106 bps and 151 bps at end-March 2007 and 2008, respectively (Table 10.15), on account of higher inflationary expectations.

Government Dated Securities—Secondary Market

Secondary market in government securities can be categorised into two segments: the wholesale institutional segment and the retail segment.

- The wholesale institutional segment consists of active traders, mainly large banks, primary dealers, mutual funds, insurance companies, and others. The securities are traded in the SGL form and the market lot is Rs. 5 crore. The secondary market for government securities is wholesale in nature, with most deals negotiated over the telephone. The trade is generally closed on the telephone which are then reported on the wholesale debt market segment of the NSE. Trade is then settled through the RBI which acts as a depositing-cum-clearing house.
- The retail segment includes cooperative banks, provident funds, non-banking finance companies, and others. The securities are traded in the SGL or physical form and the lots are odd, that is, less than Rs. 1 crore. Trades are settled directly by the counter-parties and these trades may or may not be reported on the exchange. The high costs involved may not make it viable for the broker to report the transaction on the exchange.

TABLE 10.15 Yield Spread (Long-term Papers) (In Basis Points)

Yield Spread	*2005–06*	*2006–07*	*2007–08*
1. 10 Year and 91-Day T-Bill	146	115	65
2. 10 Year and 1 Year Government Papers	106	77	37
3. 20 Year and 10 Year Government Papers	36	32	30
4. 30 Year and 10 Year Government Papers	45	43	38
5. 5 Year AAA Corporate Bond and 5 Year Government Paper	48	106	151

Source: RBI, *Annual Report,* 2007–08.

With a view to promoting the retail market segment and providing greater liquidity to retail investors, banks were allowed to freely buy and sell government securities on an outright basis at prevailing market prices, without any restriction on the period between sale and purchase. Banks were permitted to undertake transactions in securities among themselves or with non-bank clients through the members of the OTCEI in addition to the NSE.

The interest income on government securities was exempted from the provisions of tax deduction at source with effect from June 1997 to facilitate quotations and trading in the secondary market. At present, the government securities market is predominantly institutional.

Trading system: Government securities do not have to be listed on an exchange. All government securities are 'deemed' listed as and when they are issued.

The NSE was the first stock exchange to introduce a transparent, screen-based trading system in the wholesale debt market including government securities, in June 1994. Prior to the commencement of trading in the WDM segment of NSE, the only trading mechanism available in the debt market was the telephone. The NSE provided, for the first time in the country, an online, automated, screen-based system known as the National Exchange for Automated Trading across a wide range of debt instruments. This system is an order-driven system which matches the best buy and sell orders on a price time priority and simultaneously protects the identity of the buyer and seller. Trading under this system leads to a risk-free, efficient price mechanism and transparency. The trades on the WDM segment could be outright trades or repo transactions with a flexibility for varying days of settlement (T + 0 to T + 1) for non-government securities and T + 1 for government securities. In case of repo transactions in government securities, first leg can be settled either on T + 0 or T + 1 basis. Order matching is carried out only between orders which carry the same conditions with respect to settlement days, trade type, and repo period, if any.

The OTCEI also started trading in government securities in July 1997. The NSE and OTCEI members are authorised to transact business on behalf of commercial banks. Non-banking clients may also trade via brokers. In order to provide another platform for trading in government securities, the RBI permitted trading in government securities at the BSE in October 2000. The trading, however, commenced in June 2001. Since 2000–01, trading in government securities is order-driven screenbased on all stock exchanges.

Settlements: Government securities can be held and transacted in two forms—dematerialised SGL form and physical form. Registration of the participant with the public debt office of the RBI is mandatory in case of holding and trading securities in the physical form. All trades in government securities are reported to RBI-SGL through the negotiated dealing system (NDS) of RBI. The Clearing Corporation of India Limited (CCIL) provides settlement guarantee for transactions in government securities.

- An SGL account is a securities account maintained by banks, primary dealers and financial institutions with the RBI
- CSGL is a secondary gilt account opened with a bank or any other entity which maintains an SGL account with the RBI

Subsidiary general ledger account: The RBI acts as a depository-cum-clearing house and settlement is through accounts maintained with the RBI called the subsidiary general ledger (SGL) accounts. The physical securities are dematerialised and the relevant holdings are in the form of book entries. Every participant in the government securities market maintains SGL and current accounts with the RBI. Those not eligible to maintain direct accounts with the RBI have the facility to open constituent SGL accounts or SGL II accounts with banks who have direct SGL accounts. The RBI has permitted the National Securities Clearing Corporation Limited, banks, insurance companies, financial institutions, and primary dealers to offer constituent SGL account facility to an investor who is interested in participating in the government securities market. Any trade among participants are settled via this facility. The parties exchange the relevant SGL instruction receipts and the mode of transaction is delivery versus payment (DVP). The DVP system ensures settlement by synchronising the transfer of securities with cash payment. In the first phase, the RBI settled the payment of securities only on DVP-I basis where both funds and securities were settled on a gross basis. For all transactions undertaken directly between SGL participants, the settlement period was of T + 0 or T + 1 days while for transactions routed through brokers of the NSE, the BSE, or the OTCEI, the settlement period was upto T + 5 days. Participants had the flexibility to decide the terms of settlement. Trades were settled by T + 3, if desired by participants. This reduced settlement risks in securities transactions also prevented diversion of funds through SGL transactions.

The RBI launched the third phase of delivery versus payments (DVP III) on April 2, 2004. DVP-III is an enhancement to the DVP-II form of settlement, as it allows netting of transactions in government securities. DVP-III has boosted trading and improved liquidity in bonds market. This new system has come as a major relief to the market for repos. Earlier, participants could not sell bonds on the same day of the maturity of the repo contract as the RBI credited the securities account, called the SGL account, a day after the trade book place. Under DVP-III, participants are able to sell bonds the same day and protect themselves against price risk. DVP-III allows short sales of bonds to the extent that the securities should be contracted for purchase (but are not credited to the SGL account), provided such a purchase is guaranteed by the Clearing Corporation of India Ltd (CCIL) or the RBI is a counterparty, to the deal. The settlement cycle of such a sale should be either the same as that of the purchase or a subsequent day, so that the delivery obligation under the sale contract is met by the bonds acquired under the purchase contract. The purchase leg of the transaction needs to precede the sell leg. If the securities are purchased on 'T+0' basis (settlement on the same day), then it can be sold either on 'T+0 or 'T+1' (settlement a day later) basis. If it is bought on "T+1, it can be sold on "T+1" on the day of purchase or 'T+0'/'T+1' on the next day. DVP-III has also enabled participants to roll over repo contracts, which are guaranteed by the CCIL. The security prices and interest rates on repos need to be renegotiated on the roll over.

SGL accounts are maintained by the public debt office. The PDO oversees the settlement of transactions through SGL and enables the transfer of securities from one participant to another. The seller fills up the SGL form, the buyer countersigns it, and the seller sends this form to the RBI. The buyer transfers funds towards payment. Inter-bank government securities trades are settled on the same business day while trades with non-bank counterparties settle either on the same day or upto five business days after the trade date. Secondary market trades in government securities between banks are carried on upto 1.00 p.m. on business days and settled on the same day. Trades after that are settled the next day.

The transfer of government securities does not attract stamp duty or transfer fee. Moreover, there is no tax deduction at source on these securities.

Trade in the physical form is settled by the parties directly. Securities are delivered in the form of a physical certificate along with the transfer deed duly executed by the authorised signatures of the transferor. The transferee has to lodge the certificates with the RBI for transfer. The settlement cycle for secondary market government securities transactions has been standardised to T+1 with effect from May 11, 2005.

Steps to develop the secondary market: With financial sector reforms, efforts have been made to develop and widen the government securities market. Of late, the government has realised that a vibrant liquid secondary market fosters the growth of the primary market and hence the emphasis has shifted to the development of a liquid and broad based secondary market.

Subsidiary general ledger transactions were introduced to foster the growth of the secondary market by imparting a greater element of transparency. The Discount and Finance House of India (DFHI) was allowed to participate in treasury bills and dated securities. The market infrastructure was strengthened by setting up of the Securities Trading Corporation of India in May 1994 to impart liquidity to government securities. The primary dealer system and the satellite dealer system were set up to strengthen the securities market infrastructure and to bring about an improvement in the secondary market trading, liquidity, and turnover.

The move to market related rates of interest has strengthened the development of the secondary market.

The RBI issued guidelines to banks for the retailing of government securities with non-bank clients on June 8, 1996. This move was a part of the measures to develop the secondary market in government securities and to make the market deep and broad based.

Box 10.4 Trading in Government Securities

Government securities are traded on the clean price (trade price) but settled on the dirty price. (trade price + accrued interest).

Trade Value = Trade price x No. of government securities. Suppose 3,000 government securities are traded at Rs. 101 each, then trade value = 101 x 3000 = Rs. 3,03,000.

Settlement value = trade value + accrued interest.

Accrued interest = coupon of bond x face value x (no. of days from interest payment date to settlement date/360).

Retail trading in government securities is settled on a T+1 rolling settlement basis with effect from May 11, 2005.

Source: BSE.

The RBI introduced the delivery versus payment mode of settlement for subsidiary general ledger transactions in government securities, electronic payment system to initiate balance inquiry and extended the MICR cheque clearing to non-metropolitan centres. It has been decided by the RBI to set up a very small aperture terminals (VSATs) which will not only provide reliable communication to the financial sector but would also improve the payments and clearing systems, facilitate funds transfer, and help in the building up of securities settlements on a centralised basis.

The RBI encouraged the setting up of mutual funds dealing exclusively in gilts for encouraging retail participation. These funds, known as gilt funds, exclusively invest in government securities and the RBI provides liquidity support to the extent of 20 per cent of their investment by way of reverse repos in central government securities outstanding at the end of the previous calendar month.

The RBI provides two-way quotes—buy and sell quotes—through its sale window to infuse liquidity in the secondary market for government securities. It offers two-way quotes on a select list of securities to improve liquidity. It continuously revises the sale/purchase prices and the list of securities.

- An outright transaction is one in which there is no intended reversal of the trade at the point of execution of the trade

The RBI has planned to adopt the true real time gross settlement (RTGS) model system for government securities clearance and settlement. In RTGS, all transactions (claims or counter-claims) are settled immediately, that is, on a gross basis and this obviates the need for any clearing arrangement. However, participants under the RTGS system have to maintain sufficient liquidity throughout the trading cycle to instantly honour every claim that is placed against them. The RBI has proposed to provide intra-day liquidity support to the participants to maintain minimum cash balances.

Secondary market transactions in government securities: The transactions in government securities have been made through the SGL since September 1994. The turnover consists of outright transactions as well as repos in eligible securities and treasury bills.

A study of Tables 10.16 and 10.17 reveal the following:

- There were no repo transactions in state government securities till September 2001 and the extent of outright transactions in them was meagre. The volume of transactions in state government securities have registered an increasing trend except in the year 2000–01 when the volume was lower by 18.4 per cent.
- In case of central government securities, repo transactions far exceeded the outright transactions till 1995–96. However, from 1996–97 to 2003–04, the outright transactions were predominant and constituted an average of 80 per cent of the total. Once again, the repo transactions have far exceeded

Box 10.5 Listing Criteria for Securities on WDM Segment

Issuer	Listing criteria: Public issue	Listing criteria: Private placement
a. Central/State Government	Deemed Listed	Deemed Listed
b. Public Sector Undertakings/Statutory Corporations		
—Minimum 51% holding by Government	Eligible	Eligible
—Less than 51% holding by Government	As applicable to corporates	As applicable to corporates
c. Financial institutions	—Eligible	—Investment grade credit rating.
d. Scheduled commercial banks	—Net worth of Rs. 50 crore or above	—Net worth of Rs. 50 crore or above —Investment grade credit rating
e. Infrastructure companies	Investment grade credit rating	Investment grade credit rating
f. Corporates	—Minimum paid up capital of Rs. 10 crore, or —Market capitalisation of Rs. 25 crore (Net worth in case of unlisted companies)	—Minimum paid-up capital of Rs. 10 crore or —Market capitalisation of Rs. 25 crore (Net worth in case of unlisted companies) —Investment grade credit rating
g. Mutual funds	SEBI registered mutual fund/scheme having an investment objective to invest predominantly in debt instruments.	SEBI registered mutual fund/scheme having an investment objective to invest predominantly in debt instruments.

Source: NSE.

TABLE 10.16 Secondary Market Transactions in Government Securities on SGL

(Rs. in Crores)

Transactions	*1994–95 (September 1994 to March 31,1995)*	*1995–96*	*1996–97*	*1997–98*	*1998–99*	*1999–00*	*2000–01*	*2001–02*	*2002–03*	*2003–04*	*2004–05*	*2005–06*	*2006–07*	*2007–08*	*2008–09*
I Outright Transactions	21,306	29,531	93,921	1,61,090	1,87,351	4,56,492	5,72,145	12,11,967	13,78,160	16,83,711	11,60,632	8,81,652	10,27,844	16,77,651	22,03,214
II Repos	29,263	97,648	29,021	24,618	39,697	82,741	1,25,976	3,61,926	5,63,515	9,55,533	15,62,990	16,98,770	25,55,492	39,49,746	40,23,223
III Total	50,569	1,27,179 (152%)	1,22,942 (−3%)	1,85,708 (51%)	2,27,228 (22%)	5,39,233 (136%)	6,98,121 (30%)	15,73,893 (125%)	19,41,675	26,39,244	27,23,622	25,80,401	35,83,336	56,27,397	62,26,437
IV Percentage of I to III	42%	23%	76.4%	86.7%	82.5%	84.7%	82%	77%	71%	64%	43%	34%	29%	30%	35%
V Percentage of II to III	58%	77%	23.6%	13.3%	17.5%	15.3%	18%	23%	29%	36%	57%	66%	71%	70%	65%

Note: Figures in parentheses indicate percentage change over the previous year.
Source: RBI, *Annual Report*, various issues.
RBI, *Report on Currency and Finance*, various issues.

TABLE 10.17 Central Government Securities Market in India

Indicator	*1991–92*	*1995–96*	*2000–01*	*2003–04*	*2004–05*	*2005–06*	*2006–07*	*2007–08*	*2008–09*
1. Outstanding Stock (End March) (Rs. Crore)	76,908	1,69,526	4,53,668	8,24,612	9,29,612	10,32,296	10,32,296	12,04,118	NA
2. Outstanding Stock as of GDP (End March) (In Per Cent)	11.8	14.3	21.6	29.8	29.7	28.9	26.1	25.6	NA
3. Turnover/GDP (In Per Cent)	–	−34.21	78.4	261.0	272.2	239	296.2	406.4	126.2
4. Average Maturity of the Securities Issued During the Year (In Years)	–	5.70	10.6	14.94	14.13	16.89	14.72	14.90	13.81
5. Weighted Average Cost of the Securities Issued During the Year (In Per Cent)	11.78	13.75	10.95	5.71	6.11	7.34	7.89	8.12	7.69
6. Primary Dealers' (PDs) Share in Government Securities Market (In Per Cent)									
a. Primary Market Issuances	–	–	48	51.47	52.88	40.36	44	46	42
b. Secondary Market Turnover	–	–	28	23.91	28.24	31.13	18	16.1	12.8

Note: NA: Not Available.
Source: RBI, *Annual Report,* 2008–09.

the outright transactions since 2004–05. The overnight repo transactions accounted for 74 per cent while 2–3 days repo accounted for 24 per cent during 2007–08.

- Both outright and repo transactions in central government dated securities exceeded those in treasury bills of all maturities.
  - Public sector banks, primary dealers, private sector banks, and foreign banks dominate the outright market. Mutual funds are the lenders and foreign banks, private sector banks and primary dealers are the major borrowers in the repo market
- The aggregate volume of secondary market transactions more than doubled to Rs. 15,73,893 crore during 2001–02 from Rs. 6,98,121 crore during 2000–01, reflecting an increase in demand for government securities.
- The turnover in central government securities (calculated by counting twice the volume of transactions in the case of outright transactions and counting four times the volume of transactions in the case of repos) during 1998–99, 1999–2000, 2000–01, 2001–02, 2007–08, and 2008–09 was Rs. 5,30,742 crore, Rs. 12,36,678 crore, Rs. 16,48,195 crore, Rs. 38,71,640 crore, Rs. 1,88,44,066 crore, and Rs. 2,04,90.084, respectively.
- The turnover ratio in dated securities, defined as the ratio of total turnover to total outstanding securities, increased to more than 15 in 2007–08 as compared to 4.13 in 2000–01, 3.82 as on March 31, 2000, 1.7 as on March 31, 1999 and 5 in 2001–02.
- The turnover of government securities to GDP was –34.21 per cent in 1996 which remarkably increased to 78.4 per cent in 2000–01, 272.2 per cent in 2004–05 but declined to 239 per cent in 2005–06 and then substantially increased to 406.4 per cent in 2007–08.
- This record volume was attributable to several cuts in bank rates which made commercial banks flush with funds and to the sluggish equity market which led to an increased interest in the debt market.
- There was a phenomenal increase in the turnover of central government securities during the years 2003–04, 2004–05, and 2005–06. The launch of the negotiated dealing system and the setting up of the Clearing Corporation of India Limited enabled a higher growth in volumes.

The steady growth in turnover and outright transactions reflects the increasing depth attained by the government securities market and the emergence of an active secondary market in government securities.

Secondary Market Turnover in the Wholesale Debt Market Segment of NSE The National Securities Clearing Corporation Limited, a wholly owned subsidiary of the NSE obtained permission from the RBI to open subsidiary general ledger accounts to offer constituent SGL facility to a wide range of investors. It has set up a common clearing and settlement framework for its SGL constituents to remove the counter-party risks. The majority of trades in government securities takes place through telephone but a large number of trades get routed through NSE brokers.

The trades in government securities on the WDM segment of NSE increased substantially during the years 2003–04 and 2004–05 (Table 10.18). Moreover, the share of the WDM segment in the total turnover of non-repo (outright) SGL transactions was 75.7 per cent in 2003–04 and 73.2 per cent in 2004–05 (Table 10.20). The transactions in dated securities account for a substantial share of transactions on the WDM segment. Banks were the dominant participants on the WDM segment, but their share in WDM trades was reduced to 18.11 per cent in 2008–09 from 42.72 per cent in 1999–2000. During 2008–09, trading members were the dominant participants in WDM trades (Table 10.19).

Total market capitalisation of the securities available for trading on WDM segment stood at Rs. 28,48,315 crore as on March 31, 2009 (Table 10.18). Central Government securities accounted for the largest share of the market capitalisation with 69.74 per cent.

There was a marked decline in the net traded value and number of trades during 2006–07 and 2007–08. The share of WDM in SGL also declined substantially during these years. However, there was an improvement in net traded volume and average trade size during 2008–09.

Tools for Managing Liquidity in the Government Securities Market

The RBI uses basically two tools to manage liquidity in the government securities market. These are: repos and open market operations. Repos have already been discussed in Chapter 4. The RBI manages short-term liquidity through repos and reverse repos and long-term liquidity through open market sales to absorb liquidity in conjunction with private placement/devolvement and open market purchases in tight liquidity conditions.

- OMOs are a tool to manage liquidity in the system through sale or purchase of goverment securities by the RBI

Open Market Operations

Open market operation is an important tool of liquidity management. OMOs are actively used to neutralise excess liquidity in the system and to contain wide fluctuations in the domestic money and foreign

TABLE 10.18 Business Growth in the WDM Segment

Year	Market Capitalisation (Rs. in Crore)	No. of Active Securities	Number of Trades (In Crore)	Net Traded Value (Rs. in Crore)	Average Daily Value (Rs. in Crore)	Average Trade Size
2008–09	28,48,315	NA	16,129	3,35,951.52	14,11.56	20.83
2007–08	21,23,346	601	16,179	2,82,317.00	11,38.00	17.45
2006–07	17,84,801	762	19,575	2,19,106.00	8,98.00	11.19
2005–06	15,67,564	897	61,891	4,75,523.00	1,755.00	7.68
2004–05	14,61,734	1,151	1,24,308	8,87,293.66	3,028.31	7.14
2003–04	12,15,864	1,078	1,89,518	13,16,096.24	4,476.52	6.94
2002–03	8,64,481	1,123	1,67,778	10,68,701.54	3,598.32	6.37
2001–02	7,56,794	3,979	1,44,851	9,47,191.22	3,277.48	6.54
2000–01	5,80,835	1,038	64,470	4,28,581.51	1,482.98	6.65
1999–2000	4,94,033	1,057	46,987	3,04,216.24	1,034.75	6.47
1998–99	4,11,470	1,071	16,092	1,05,469.13	364.95	6.55
1997–98	3,43,191	719	16,821	1,11,263.28	377.16	6.61
1996–97	2,92,772	524	7,804	42,277.59	145.28	5.42
1995–96	2,07,783	304	2,991	11,867.68	40.78	3.97
1994–95	1,58,181	183	1,021	6,781.15	30.41	6.64

Source: www.nseindia.com

TABLE 10.19 Security Wise and Participant Wise Distribution of WDM Trades (Per Cent)

Year	Security-wise Distribution				Participant-wise Distribution				
	Government Securities	T-Bills	PSU/Institutional Bonds	Others	Trading Members	FIs/MFs/ Corporates	Primary Dealers	Indian Banks	Foreign Banks
1994–95 (June–March)	44.63	38.84	12.15	4.38	57.82	6.43	0.02	14.64	21.57
1995–96	65.13	19.04	9.69	6.14	23.48	7.60	1.16	30.07	37.69
1996–97	64.70	25.92	6.55	2.84	22.95	3.81	6.10	30.01	37.13
1997–98	76.14	16.96	3.64	3.26	19.75	4.30	12.06	41.24	22.65
1998–99	82.19	10.15	4.78	4.88	15.48	4.93	14.64	42.12	22.83
1999–2000	92.99	3.62	1.60	1.79	18.63	4.18	19.42	42.72	15.05
2000–01	91.22	5.40	1.84	1.54	23.24	4.18	22.14	33.54	16.90
2001–02	95.24	2.70	1.16	0.91	23.52	4.16	22.50	36.60	13.22
2002–03	93.62	3.02	1.87	1.49	24.81	3.77	22.03	38.77	10.62
2003–04	92.60	4.23	2.06	1.11	34.80	4.56	17.03	36.36	7.25
2004–05	81.69	14.07	2.01	2.23	33.96	5.14	18.50	29.89	12.51
2005–06	72.67	22.13	2.56	2.64	32.01	3.92	21.89	28.07	14.11
2006–07	70.00	23.71	2.02	4.27	30.88	2.70	19.82	26.03	20.57
2007–08	68.84	23.40	3.27	4.49	38.15	2.34	8.64	23.78	27.09
2008–09	69.74	16.91	8.93	4.41	44.65	3.40	6.58	18.11	27.26

TABLE 10.20 Secondary Market Transactions in Government Securities (Outright Transactions)

Year	Outright Transactions		Share of WDM in SGL (Per Cent)
	On SGL	On WDM	
1994–95	21,306	5,660	26.6
1995–96	29,531	9,243	31.5
1996–97	93,921	38,101	40.6
1997–98	1,61,090	97,515	60.5
1998–99	1,87,351	90,419	48.2
1999–2000	4,56,492	2,91,592	63.9
2000–01	5,72,145	4,12,496	72.1
2001–02	12,11,967	9,26,996	76.5
2002–03	13,78,160	10,30,552	74.7
2003–04	16,83,711	12,74,119	75.7
2004–05	11,60,632	8,49,325	73.2
2005–06	8,81,652	4,50,802	51.3
2006–07	10,27,844	2,05,324	19.9
2007–08	16,77,651	2,60,409	15.5

Source: RBI, *Annual Report,* various issues NSE, Fact book 2008.

exchange markets. It is an actively used technique of monetary control in developed countries such as the UK and USA. OMOs directly affect the availability and cost of credit. Its two objectives are: to influence the reserves of commercial banks, in order to control their power of credit creation and to affect the market rates of interest.

OMOs involve the sale or purchase of government securities by the central bank. When the RBI sells government securities in the market, it withdraws a part of the deposit resources of the banks, thereby reducing the resources available with the banks for lending. The bank's capacity to create credit, that is, give fresh loans, depends upon its surplus cash, i.e., the amount of cash resources in excess of the statutory CRR stipulated by the RBI. The open market sale of securities reduces the surplus cash resources of banks as these resources are used to purchase government securities. Banks have to contract their credit supply to generate some cash resources to meet the CRR. The supply of bank credit which involves the creation of demand deposit falls and money supply contracts. The reverse happens when the RBI undertakes open market purchase of government securities. The open market purchase of securities leads to a reduction in the stock of securities of the seller bank and an expansion in the free surplus cash which augments the credit creation capacity of banks. The result is an expansion in the supply of bank credit and an increase in money supply.

OMOs do not alter the total stock of government securities but change the proportion of government securities held by the RBI and commercial and cooperative banks. Open market sales result in a fall in net RBI credit to government (NRCG) and an increase in the other banks' (cooperative and commercial) credit to government (OBCG) without affecting the budget (fiscal) deficit in anyway.

- Open market sale of securities reduces surplus cash resources of banks

The RBI resorts to private placement when market conditions for government securities are not favourable and conducts open market sales later when liquidity conditions turn favourable. Thus, the RBI influences the resource position of banks, yields on government securities, and cost of bank credit through the open market sale and purchase of government securities.

The RBI can buy or sell or hold government securities of all maturities without any restrictions. The bank purchased and sold government securities upto 1991–92 out of the surplus funds of IDBI, Exim Bank, NABARD, and other institutions under a special buy back arrangement. Till 1991–92, the market of OMOs was quite narrow as interest rates were administered and the government securities market was not broad based either. However, with the initiation of several measures to promote both primary and secondary markets in government securities, the OMO market has become active and OMOs have emerged as an important tool of debt management. Accordingly, various steps have been taken to alter the composition, maturity structure, and yield of government securities. The RBI also introduced the sale of securities from its own account on the basis of repo. Besides this, the bank offers for sale only a select number of securities which it wishes to undertake in response to market conditions, instead of maintaining a list including all dated securities in its portfolio. The RBI has also put on its purchase list a couple of securities for cash with a view to providing liquidity to at least a few securities.

- Open market purchase of securities increases surplus cash resources of banks

In a move to augment the stock of marketable securities for active OMOs, special securities of value aggregating Rs. 15,000 crore at 4.6 per cent were converted into marketable securities of 10-year, 7-year, and 8-year maturities at 13.05 per cent, 12.59 per cent, and 11.19 per cent on June 3, June 18, and August 12, 1997, respectively. The cost of additional interest on account of this conversion is fully borne by the RBI and is paid to the government as part of transfer of profits from year to year.

The RBI included treasury bills of varying maturities in the OMOs in 1998–99. The resort to OMOs epitomises the move from direct to indirect instruments of monetary control.

OMOs have been successfully used by the RBI to groom or switch operations, i.e., the sale of long-term scrips in exchange for short-term loans. This helps in lengthening the maturity structure of government securities which, in turn, becomes favourable for the working of the monetary policy.

Table 10.21 reveals that the volume of RBI net sales (sales – purchase) increased over the years except in the year 1994–95 when tight money market conditions prevailed. Since 1996–97, OMOs have come into a sharper focus. The stock of marketable securities was augmented by conversion of special securities into marketable securities for conducting active OMOs. During 1996–97, outright sale of securities came into prominence to absorb excess liquidity which was due to large capital inflows and to maintain domestic interest rate and exchange rate at reasonable levels. The RBI did not purchase any security during 1998–99 through its OMO window. The open market sale rose significantly by 290 per cent in 1998–99. An important aspect in the OMO during 1998–99 was the inclusion of treasury bills of varying maturities. In 2000–01, due to uncertain foreign exchange market conditions and unfavourable market conditions for government securities, the RBI privately placed securities with itself. The securities were subsequently sold on-tap basis and through OMO auctions.

TABLE 10.21 Reserve Bank's Open Market Operations in Central Government Securities

Year	*Purchases*	*Sales*	*Net Sales (−) Net Purchase (+)*
1990–91	2,291.2 (14,287.1)	2,238.1 (13,725.2)	+53.1 (431.8)
1991–92	3,244.8 (5321.7)	7,327.1 (9,365.6)	−4,082.3 (−4,043.9)
1992–93	6,273.4	11,792.5	−5,519.1
1993–94	967.6	10,804.6	−9,837.0
1994–95	1,560.98	2,309.03	−748.05
1995–96	1,645.24	1,130.89	+514.35
1996–97	633.95	11,097.55	−10,463.60
1997–98	466.50	8,081.49	−7,614.94
1998–99	–	26,348.3 (GDS)	−26,348.3
		3,230.0 (T-Bills)	(Govt.Securities)
			−3,230.0 (T-Bills)
1999–00	1,244.00 (GDS)	36,613.51 (GDS)	−35,369.51 (GDS)
	5,700.50 (T-Bills)	1,191.91 (T-Bills)	+4,508.59 (T-Bills)
2000–01	4,471.05 (GDS)	23,795.1 (GDS)	−19,324.05 (GDS)
	5.00 (T-Bills)	26,79.00 (T-Bills)	−2,674 (T-Bills)
2001–02	5,084 (GDS)	35,418.59 (GDS)	−30,334.59 (GDS)
2002–03	–	53,401.5 (GDS)	−53,401.50 (GDS)
2003–04	–	41,849 (GDS)	−41,849 (GDS)
2004–05	–	2,899 (GDS)	−2,899 (GDS)
2005–06	–	3,912 (GDS)	−3,912 (GDS)
2006–07	720 (GDS)	5,845 (GDS)	−5,125 (GDS)
2007–08	13,460 (GDS)	–	+13,460 (GDS)
2008–09	1,04,480 (GDS)	–	+1,04,480 (GDS)
2009–10	85,399.79 (GDS)	–	+85,399.79 (GDS)

Note: Figures shown in parantheses upto 1991–92 are inclusive of purchases/sales effected from time to time from surplus funds of IDBI, Exim Bank, NABARD, and other institutions under a special buy back arrangement. The RBI phased out the buy back arrangements in 1992–93.
Source: RBI, *Annual Report,* various issues.

The RBI conducted a series of open market purchases aggregating Rs. 5,084 crore during September 18–October 10, 2001, to support the government securities market in the face of the steep fall in the government securities prices due to adverse external developments after September 11, 2001. Subsequently, with stability in market conditions and easing of liquidity, it resorted to open market sales. These sales helped the RBI to absorb surplus liquidity on an enduring basis, stabilising the prices of government securities, and offloading the securities privately placed with it. The RBI once again purchased government securities in 2008 and 2009 to ease liquidity conditions in the market.

Infrastructure Development of the Government Securities Market

The government securities market constitutes the principal segment of the debt market. The development of any market requires the strengthening of the market infrastructure with large number of market players who have divergent perceptions about the market and who would continuously provide liquidity. One of the initiatives taken to develop the government securities market during the first stage of the reform process was the setting up of Securities Trading Corporation of India. The STCI, together with Discount and Finance House of India, had the task of developing an active secondary market in government securities.

The RBI introduced the primary dealer system and satellite dealer system to further strengthen the market infrastructure.

Primary Dealer System

The primary dealer (PD) system was first introduced in the US in 1960. In the US, there are 25 primary dealers, most of which are banking or investment banking institutions. Other countries with a successful PD system include Argentina, Brazil, Canada, France, Hungary, Italy, Korea, Mexico, Singapore, Thailand, and the UK. The obligations of PDs in these countries include participating in the primary market, serving as a market maker in the secondary market and providing market-related information to the central bank. Some advances countries such as Australia, Germany, and New Zealand have not yet established the PD system.

- Primary dealers act as market makers in the secondary market of government securities and participate in primary market auctions of government securities

A system of primary dealers was introduced in India in 1996, to further strengthen the market infrastructure and to make it more liquid and broad based. The objectives of the introduction of this system were as follows.

- To strengthen the government securities infrastructure and facilitate government's market borrowing programme.
- To bring about improvements in the secondary market trading, liquidity and turnover in government securities.
- To encourage a voluntary holding of government securities amongst a wider investor base.
- To make PDs an effective conduit of OMOs.

The major focus of PDs would be on increasing the turnover of government securities rather than becoming a mere repository of this system. Hence, their role would be to act as market makers by providing two-way quotes in the secondary market, thereby ensuring liquidity and support to the primary market operation. In the long run, this system would facilitate the transfer of market-making activities from the RBI to PDs.

PDs can be subsidiaries of scheduled commercial banks, subsidiaries of all-India financial institutions, companies under Companies Act, 1956 engaged predominantly in government securities market, and subsidiaries of foreign banks/securities firms. Every PD has to maintain minimum net owned funds of Rs. 50 crore deployed daily in the government securities market. To ensure stability of PDs in times of volatile interest rates, the minimum capital requirement has been increased from Rs.50 crore to Rs.150 crore. PDs which intend to diversify into other permissible activities need to have net owned funds of Rs. 250 crore as against Rs.100 crore earlier.

Facilities Extended to PDs

- Provision of current account and SGL facilities with RBI
- Access to LAF
- Liquidity support facility
- A scheme of underwriting and bidding commitments
- access to repo market

Banks which do not have a partly or wholly owned subsidiary can undertake PD business if they fulfill the following eligibility criteria:

1. Minimum net owned funds (NOF) of Rs.1,000 crore,
2. Minimum capital adequacy ratio (CRAR) of 9 per cent and net NPAs of less than 3 per cent and a profit making record for the last three years.

They are also required to ensure that, at any point of time, there is a minimum balance of Rs.100 crore of government securities earmarked for PD business. Bank-PDs will not have separate access to call money market and liquidity adjustment facility (LAF).

PDs as institutional entities fall in the category of non-banking finance companies. PDs are registered with and regulated by the Reserve Bank of India, irrespective of whether they accept public deposits or not.

Number of PDs DFHI and STCI were accredited as primary dealers on March 1, 1996. On June 1, 1996, four more PDs—SBI gilts, PNB gilts, Gilts Securities Trading Corporation Limited, and ICICI Securities—became operational. As on March 31, 2009, there were 19 approved PDs in the gilts market. Of these, eight were non-bank entities (stand alone PDs) and the remaining 11 were banks undertaking PD business departmentally(Bank PDs) registered as NBFCs under section 45 IA of the RBI act, 1934. The stand alone PDs are Securities Trading Corporation of India Ltd, SBI DFHI Ltd., ICICI Securities Ltd., PNB Gilts Ltd., ABN AMRO Securities (India) Pvt. Ltd., DSP Merrill Lynch Ltd., Deutsche Securities (India) Pvt Ltd., and IDBI Capital Market Services Ltd.

- From April 1, 2006 the responsibility of supporting government securities auctions has shifted to the primary dealers

Obligations Upon PDs The Fiscal Responsibility and Budget Management (FRBM) Act, 2003 stipulates that the Reserve Bank cannot participate in the primary auctions of government securities from April 1, 2006. Due to this, the responsibility of supporting government securities auctions has shifted to the primary dealers (PDs). PDs are expected to play an active role in the government securities market, both in its primary and secondary market segments. In order to enable PDs to perform their role effectively, the RBI has cast certain obligations upon PDs. The major roles and obligations of PDs are:

1. PDs are required to support primary market auctions for issue of Government dated securities and Treasury Bills as per the minimum norms for underwriting commitment, bidding commitment and success ratio as prescribed by RBI from time to time.
2. PDs should offer two-way prices (market making)in Government securities, through the Negotiated Dealing System-Order Matching (NDS-OM), over-the-counter market and recognised Stock Exchanges in India and take principal positions in the secondary market for Government securities.
3. PDs should maintain adequate physical infrastructure and skilled manpower for efficient participation in primary issues, trading in the secondary market, and to advise and educate investors.
4. A Primary Dealer shall have an efficient internal control system for fair conduct of business, settlement of trades and maintenance of accounts.
5. A Primary Dealer will provide access to RBI to all records, books, information and documents as and when required.
6. PDs' investment in Government Securities and Treasury Bills on a daily basis should be at least equal to its net call/notice/repo (including CBLO) borrowing plus net RBI borrowing (through LAF/ Intra-Day Liquidity/ Liquidity Support) plus the minimum prescribed NOF.
7. PDs should annually achieve a minimum turnover ratio of 5 times for Government dated securities and 10 times for Treasury Bills of the average month-end stocks. The turnover ratio in respect of outright transactions should not be less than 3 times in government dated securities and 6 times in Treasury Bills (Turnover ratio is computed as the ratio of total purchase and sales during the year in the secondary market to average month-end stocks).
8. A PD should submit periodic returns as prescribed by RBI from time to time.
9. PDs' operations are subject to prudential and regulatory guidelines issued by RBI from time to time.

Reforms in Primary Dealer System

- Maintain capital adequacy
- Follow prudent distribution policy
- Brought under the purview of BFS
- On-site and off-site supervision by RBI
- Allowed to short-sell securities
- Allowed to borrow foreign currency funds
- Allowed to invest in non-SLR debt
- to merge with the bank which promoted them
- A new incentive structure in the underwriting auctions put in place
- support facility revised
- Stand-alone PDs permitted to diversify their activities

Facilities Extended by the RBI to PDs To strengthen this system and to make PDs fulfill their obligations, the RBI extends to them various facilities which include:

1. Access to Current Account facility and Subsidiary General Ledger (SGL) Account facility (for Government securities) with RBI.
2. Permission to borrow and lend in the money market including call money market and to trade in all money market instruments.
3. Memberships of electronic dealing, trading and settlement systems (NDS platforms/INFINET/ RTGS/CCIL).
4. Access to the Liquidity Adjustment Facility (LAF) of RBI.
5. Access to liquidity support from RBI under a scheme separately notified for standalone PDs.
6. Favoured access to open market operations by Reserve Bank of India.

Sources and Application of Funds Call/Notice Money Market

1. PDs are permitted to borrow funds from call/notice/term money market and repo (including CBLO) market.
2. PDs are allowed to borrow from call/notice market, on an average in a reporting fortnight, up to 225 per cent of their net owned funds (NOF) as at the end March of the preceding financial year.
3. PDs may lend up to 25 per cent of their NOF in call/notice market. The limit will be determined by PDs on an average basis during a 'reporting fortnight.'
4. These limits on borrowing and lending are subject to periodic review by Reserve Bank of India.

Liquidity Support from the RBI In addition to access to the RBI's Liquidity Adjustment Facility, stand alone PDs are also provided with liquidity support by the Reserve Bank of India against eligible Government securities including State Development Loans (SDLs). The parameters based on which liquidity support will be allocated are given below:

1. Of the total liquidity support, half of the amount will be divided equally among all the stand-alone PDs. The remaining half (i.e., 50 per cent) will be divided in the ratio of 1:1 based on market performance in primary market and secondary market. Performance in primary market will be computed on the basis of bids accepted in the T-Bill auction and G-sec auction in the

proportionate weights of 1 and 3. Similarly, the secondary market performance will be judged on the basis of outright turnover in T-Bills and dated Government securities in the proportionate weights of 1 and 3.

2. The PD-wise limit of liquidity support will be revised every half-year (April-September and October-March) based on the market performance of the PDs in the preceding six months.
3. The liquidity support to PDs will be made available at the 'Repo rate' announced by the Reserve Bank.
4. The liquidity support availed by a PD will be repayable within a period of 90 days. The penal rate of interest payable by PDs if liquidity support is repaid after 90 days is Bank rate plus 5 percentage points for the period beyond 90 days.

Inter-Corporate Deposits Inter-Corporate Deposits (ICD) may be raised by Primary Dealers sparingly and should not be used as a continuous source of funds. After proper and due consideration of the risks involved, the Board of Directors of the PD should lay down the policy in this regard, which among others, should include the following general principles:

1. While the ceiling fixed on ICD borrowings should in no case exceed 50 per cent of the NOF as at the end of March of the preceding financial year, it is expected that actual dependence on ICDs would be much below this ceiling.
2. ICDs accepted by PDs should be for a minimum period of one week.
3. ICDs accepted from parent/promoter/group companies or any other related party should be on 'arms length basis' and disclosed in financial statements as 'related party transactions.'
4. Funds raised through ICDs are subject to ALM discipline.

PDs are prohibited from placing funds in ICD market.

FCNR(B) Loans/External Commercial Borrowings

1. PDs may avail of FCNR(B) loans up to a maximum of 25 per cent of the NOF as at the end of March of the preceding financial year and subject to the foreign exchange risk of such loans being hedged at all times at least to the extent of 50 per cent of the exposure.
2. PDs are **not** permitted to raise funds through External Commercial Borrowings.

Primary Dealers are now allowed to issue subordinated Tier II and Tier III bonds at coupon rates as decided by their Boards of Directors.

Role of Primary Dealers in the Primary Market

Concomitant with the objectives of PD system, the PDs are expected to support the primary issues of dated securities of Central Government and State Government and Treasury Bills of Central Government, through underwriting/bidding commitments and success ratios. The related guidelines are as under:

Underwriting of Dated Government Securities

Dated securities of central government

1. The underwriting commitment on dated securities of Central Government will be divided into two parts (i) Minimum Underwriting Commitment (MUC) and (ii) Additional Competitive Underwriting (ACU).
2. The MUC of each PD will be computed to ensure that at least 50 per cent of the notified amount of each issue is mandatorily underwritten equally by all PDs. The share under MUC will be uniform for all PDs, irrespective of their capital or balance sheet size. The remaining portion of the notified amount will be underwritten through an Additional Competitive Underwriting (ACU) auction.
3. RBI will announce the MUC of each PD and the balance amount which will be underwritten under the ACU auction. In the ACU auction, each PD would be required to bid for an amount at least equal to its share of MUC. A PD cannot bid for more than 30 per cent of the notified amount in the ACU auction.
4. The auction could be either uniform price-based or multiple price-based depending upon the market conditions and other relevant factors, which will be announced before the underwriting auction for each issue.
5. Bids will be tendered by PDs within the stipulated time, indicating both the amount of the underwriting commitment and underwriting commission rates. A PD can submit multiple bids for underwriting. Depending upon the bids submitted for underwriting, RBI will decide the cut-off rate of commission and inform the PDs.

6. Underwriting commission: All successful bidders in the ACU auction will be paid underwriting commission on the ACU segment as per the auction rules. Those PDs who succeed in the ACU for 4 per cent and above of the notified amount of the issue, will be paid commission on the MUC at the weighted average of all the accepted bids in the ACU. Others will get commission on the MUC at the weighted average rate of the three lowest bids in the ACU.
7. In the GOI securities auction, a PD should bid for an amount not less than their total underwriting obligation. If two or more issues are floated on the same day, the minimum bid amount will be applied to each issue separately.
8. Underwriting commission will be paid on the amount accepted for underwriting by the RBI, irrespective of the actual amount of devolvement, by credit to the current account of the respective PDs at the RBI, Fort, Mumbai, on the date of issue of security.
9. In case of devolvement, PDs would be allowed to set-off the accepted bids in the auction against their underwriting commitment accepted by the Reserve Bank. Devolvement of securities, if any, on PDs will take place on pro-rata basis, depending upon the amount of underwriting obligation of each PD after setting off the successful bids in the auction.
10. RBI reserves the right to accept any amount of underwriting up to 100 per cent of the notified amount or even reject all the bids tendered by PDs for underwriting, without assigning any reason.
11. An illustration pertaining to the underwriting procedure is given in Annexure III.

Dated securities of state governments

1. On announcement of an auction of dated securities of the State Governments for which auction is held, RBI may invite PDs to collectively bid to underwrite up to 100 per cent of the notified amount of State Development Loans (SDL).
2. A PD can bid to underwrite up to 30 per cent of the notified amount of the issue. If two or more issues are floated on the same day, the limit of 30 per cent is applied by taking the notified amounts separately.
3. Bids will be tendered by PDs within the stipulated time, indicating both the amount of the underwriting commitments and underwriting commission rates. A PD can submit multiple bids for underwriting.
4. Depending upon the bids submitted for underwriting, the RBI will decide the cut-off rate of commission and the underwriting amount up to which bids would be accepted and inform the PDs.
5. RBI reserves the right to accept any amount of underwriting up to 100 per cent of the notified amount or even reject all the bids tendered by PDs for underwriting, without assigning any reason.
6. In case of devolvement, PDs would be allowed to set-off the accepted bids in the auction against their underwriting commitment accepted by the Reserve Bank. Devolvement of securities, if any, on PDs will take place on pro-rata basis, depending upon the amount of underwriting obligation of each PD after setting off the successful bids in the auction.
7. Underwriting commission will be paid on the amount accepted for underwriting by the RBI, irrespective of the actual amount of devolvement, by credit to the current account of the respective PDs at the RBI, Fort, Mumbai, on the date of issue of security.

Bidding in Primary Auctions of Treasury Bills

1. Each PD will individually commit, at the beginning of the year, to submit bids for a fixed percentage of the notified amount of Treasury Bills in each auction.
2. The minimum bidding commitment amount/percentage for each PD will be determined by the Reserve Bank, in consultation with the PD. While finalising the bidding commitments, the RBI will take into account the net owned funds (NOF), the offer made by the PD, its track record, and its past adherence to the prescribed success ratio. The amount/percentage of minimum bidding commitment so determined by the Reserve Bank will remain unchanged for the entire financial year or till the conclusion of agreement on bidding commitments for the next financial year, whichever is later.
3. In any auction of Treasury Bills, if a PD fails to submit the required minimum bid or submits a bid lower than its commitment, the Reserve Bank may take appropriate action against the PD.
4. A PD would be required to achieve a minimum success ratio of 40 per cent of bidding commitment for Treasury Bills auctions which will be monitored on a half yearly basis. A PD is required to achieve the minimum level of success ratio in each half year (April to September and October to March) separately.

Primary dealers can undertake ‘When Issued’ transactions in government securities, sale of securities allotted in primary issues on the same day and short sale in Central Government dated securities.

PDs are expected to play an active role in providing liquidity to the Government securities market and promote retailing. They are allowed to make full use of the facility to distribute Government securities to all categories of investors through the process of placing and picking-up orders on the exchanges. PDs may open demat accounts with a Depository Participant (DP) of NSDL/CDSL in addition to their accounts with RBI. Value free transfer of securities between SGL/CSGL and demat accounts is enabled by PDO-Mumbai subject to guidelines issued by RBI's Department of Government and Bank Accounts (DGBA).

Diversification of Activities by Stand-alone Primary Dealers

Primary Dealers reported a loss of Rs. 700 crore during 2004–05 on account of an upturn in interest rates and yields. The Reserve Bank permitted PDs to diversify their activities in addition to their existing business of government securities from July 4, 2006 subject to certain conditions such as:

1. PDs, desirous of diversifying their activities should have a minimum net owned funds (NOF) of Rs. 250 crore as against Rs. 50 crore for a PD, which does not propose to diversify its activities.
2. The eligible PDs may bifurcate their operations into core activities and non-core activities. The core activities should involve dealing in government securities, interest rate derivatives, security receipts issued by securitisation companies/reconstruction Companies, asset backed securities (ABS), mortgage backed securities (MBS) and other fixed income securities such as commercial papers and certificates of deposit, dealing and underwriting in corporate/PSU/FI bonds/ debentures, lending in call/notice/term/repo/CBLO market and providing broking services in government securities .The non-core activities of PDs may include investment/trading in equity/units of equityoriented mutual funds/advisory services/merchant banking and other specified activities such as professional clearing services, distribution of mutual fund units, and distribution of insurance products. PDs are not allowed to undertake broking in equity, trading/broking in commodities, gold and foreign exchange. However, all PDs are required to ensure predominance of investment in government securities business by maintaining atleast 50 per cent of their total financial investments (both long-term and short-term) in government securities at any point of time.
3. The exposure to non-core activities shall be subject to risk allocation. PDs may calculate the capital charge for market risk on the stock positions/underlying stock positions/units of equity oriented mutual funds using Internal Models (VaR based) based on the prescribed Reserve Bank guidelines. The capital charge for market risk so calculated should not be more than 20 per cent of the NOF as per the last audited balancesheet.
4. PDs are not permitted to set-up step-down subsidiaries. PDs that already have step-down subsidiaries (in India and abroad) may restructure the ownership pattern of such subsidiaries. If the PD is a subsidiary of a holding company, the step-down subsidiary of the PD may become another direct subsidiary of the holding company. In case the PD itself is a holding company, then the step-down subsidiary may take up the PD activity and the holding entity may take up activities other than those permitted for PDs. The restructuring should be completed within a period of six months.

The Reserve Bank also gave primary dealers the option to merge with the bank which promoted them.

These Bank PDs have to fulfill the eligibility criteria and are subject to all obligation applicable to stand-alone PDs. They have also to adhere to the following prudential norms:

1. The capital adequacy requirement for a bank will also apply to its PD business.
2. The government securities under PD business are reckoned for the SLR requirement.
3. The investment valuation guidelines as applicable to banks with regard to 'held for trading' portfolio are also applicable to the portfolio of government securities earmarked for PD business.

Investment Guidelines

Investment in SLR Securities (Government Securities)

1. PDs should frame and implement investment and operational policy guidelines on securities transactions which should be approved by their Boards. While laying down these guidelines, the PDs should strictly adhere to Reserve Bank's instructions, issued from time to time. The effectiveness of the policy and operational guidelines should be periodically evaluated.
2. PDs should necessarily hold their investments in Government securities portfolio in SGL with RBI. They may also have a dematerialised account with depositories (NSDL/CDSL). All purchase/sale transactions in Government securities by PDs should be compulsorily through SGL/CSGL/Demat accounts.

3. PDs should hold all other investments such as commercial papers, bonds and debentures, privately placed or otherwise, and equity instruments, only in dematerialised form.
4. All problem exposures, which are not backed by any security or backed by security of doubtful value, should be fully provided for. Where a PD has filed suit against another party for recovery, such exposures should be evaluated and provisions made to the satisfaction of auditors. Any claim against the PD should also be taken note of and provisions made to the satisfaction of auditors.
5. The profit and loss account should reflect the problem exposures if any, and also the effect of valuation of portfolio, as per the instructions issued by the Reserve Bank, from time to time. The report of the statutory auditors should contain a certification to this effect.

Investment in Non-government Securities The RBI issued norms for investment by PDs in non-SLR debt in March 2004. These guidelines cover PDs' investments in non-government securities (including capital gains bonds, bonds eligible for priority sector status, bonds issued by Central or State public sector undertakings with or without Government guarantees and bonds issued by banks and financial companies) generally issued by corporates, banks, FIs and State and Central Government sponsored institutions, SPVs, etc. These guidelines will, however, not be applicable to (i) units of equity oriented mutual fund schemes where any part of the corpus can be invested in equity, (ii) venture capital funds, (iii) commercial paper, (iv) certificate of deposit, and (v) investments in equity shares. The guidelines will apply to investments both in the primary market and the secondary market. According to the norms,

1. The investment of PDs in unlisted non-SLR securities should not exceed 10 per cent of their portfolio. PDs' investment in paper issued by securitisation and reconstruction companies and securitised debt in the nature of asset backed securities (ABS) and mortgage-backed securities (MBS) will be included in the 10 per cent ceiling for unlisted debt.
2. PDs should not invest in non-SLR papers with an original maturity of less than one year, other than commercial paper and certificates of deposits. PDs are barred from investing in un-rated non-SLR bonds. The RBI has excluded investment in mutual fund schemes, which invest their entire corpus in debt securities from these norms for PDs. In addition, PDs are required to report their secondary market transactions in corporate bonds done in the OTC market on FIMMDA's reporting platform.

Supervision of PDs

PDs have been brought under the purview of the BFS in 2002–03 in view of their growing systemic importance in terms of the following attributes : (a) their large number, (b) highly leveraged portfolios with short-term funds, (c) substantial share in the government securities market, and (d) a significant position in the money market, comparable with banks. The RBI also undertakes on-site inspection of each PD besides the off-site supervision through prescribed periodic returns.

The off-site surveillance of PDs is done on the basis of three basic returns—PDR I, II, and III. PDR I is daily statement of sources and uses of funds and is used to monitor the deployment of call borrowing and the RBI liquidity support, leverage, and duration of PDs portfolio. PDR I return has been revised to capture more details on sources such as ICDs and CPs. PDR II is a monthly statement on the basis of which bidding commitments, success ratio, underwriting performance, and secondary market turnover of PDs are monitored. PDR III is a quarterly return on the basis of which the capital adequacy of PDs is monitored. Apart from these regular returns, additional details are called for as and when necessary. The ALM guidelines for NBFCs with some modifications were also made applicable to PDs. A new quarterly return—PDR IV was introduced from the quarter ended March 31, 2004. PDR IV is a quarterly return on certain balance sheet and profit and loss indicators.

Primary Dealers Association of India

PDs formed an autonomous, self-regulatory organisation (SRO),

Primary Dealers Association of India (PDAI) in 1996. The role of PDAI is as follows:

- To promote a liquid debt market and set common standards for market participants.
- To achieve a harmonious integration of different segments of markets.
- To build a healthy relationship between different segments of market participants.
- To remove some legal, procedural, and administrative bottlenecks in the efficient functioning of the market.

Banks and PDs together formed another autonomous self-regulatory body, Fixed Income Money Market and Derivatives Association of India (FIMMDAI), in 1997.

These two SROs have been proactive and are closely involved in contemporary issues relating to the development of the money market and government securities market. The credit for upgrading the technological infrastructure in these two markets goes to these two SROs. The representatives of the PDAI and FIMMDAI are members of the Technical Advisory Group on Money and Government Securities Markets of the Reserve Bank. The FIMMDAI has now taken over the responsibility of publishing the yield curve in the debt markets. The FIMMDAI prepared the guidelines for standard procedures and documentation to be followed by the participants in the commercial paper market and certificate of deposit market. Currently, the FIMMDAI is working towards the development of uniform documentation and accounting principles of the repo market.

Operations of PDs An analysis of Table 10.22 reveals that PDs bid substantially higher as against their bidding commitments in the primary market. The average success ratio was 52 per cent in case of treasury bills and 60 per cent in case of government dated securities. The amount of underwriting offered was also higher compared to the amount of underwriting accepted. Total primary purchases as a per cent to total primary issues reveals an increasing trend in case of both T-bills and dated securities. This ratio was highest in the year 2001–02 and depicts a close involvement of PDs in central government borrowings.

In the secondary market also, PDs achieved a higher turnover. This reflects that PDs have made an effort to provide liquidity to the secondary market in government securities in their existence of seven years. In a short span of time, PDs have sharpened their trading skills which has helped them in earning a greater return on assets. Besides this, factors such as a sharp decline in long-term interest rates, high liquidity, increase in investor preference for government securities, and thrust on the retailing of government securities have helped PDs in increasing the turnover in government securities.

The RBI, by way of a circular on July 26, 2002 made it mandatory for PDs to make public their performance accounts and results by way of newspaper advertisements.

The RBI divested its entire holdings in two PDs—Securities Trading Corporation of India and Discount and Finance House of India to avoid any potential conflict of interest generated by the ownership of regulated financial institutions.

Yields on government securities moved up by around 150 basis points during the year 2004–05. All PDs made losses as the soft interest rate regime ended. This resulted in low volumes, volatility in prices and low profitability. Moreover, PDs have to fulfill their bidding obligations and turnover requirements which has had an impact on their profitability. This led to a decline in the number of active PDs in the market, thus, limiting competition. In July 2006, PDs were allowed to cover their short positions in central government securities to enable them to cover their risks and give two-way quotes-leading to active trade calls.

The RBI has proposed to provide exclusivity to PDs in primary issuances through the introduction of book building for government security issues. Introduction of book building will necessitate that every player subscribing to an issue goes through the PD, who will run the book for an issue of government securities. This will enable the PD to make an effective bid as he will be aware of the quantity and price at which the demand for the issue is coming in and also provide an alternative revenue streams for PDs. Moreover, business opportunities for primary dealers are expected to decline with the reduction in the fiscal deficit, hardening of government security yields and with electronic trading of securities and auctions. Hence, the RBI is considering proposal to permit primary dealers to invest in overseas sovereign bonds, and allow setting of joint ventures/wholly owned subsidiaries abroad to enable them to diversify their balance sheets.

TABLE 10.22 Role of Primary Dealers in the Government Securities Market

Year	*Share in Primary Absorption*	*Share in Turnover (Outright)*	*Share of Government Securities in Total Assets of PDs*
2001–02	65.01	27.70	79.8
2002–03	58.49	26.99	83.9
2003–04	51.47	23.91	82.2
2004–05	52.88	28.24	71.5
2005–06	40.36	31.13	61.0
2006–07	44.33	40.0	55.0
2007–08	46.23	19.5	70.0
2008–09	42.56	18.7	70.9

Source: RBI, *Report on Trend and Progress of Banking in India,* various issues.

PDs entirely rely on trading in government and corporate bonds to earn revenues. Recently, they have urged the RBI to allow them into other areas such as equities, interest rate futures, foreign exchange, and commodities to reduce their dependence on bonds to earn revenues.

Conclusion

PDs have done a remarkable job in strengthening the government securities market infrastructure and improving the liquidity and turnover in the secondary market. PDs have emerged as dominant investors in the primary market issuances of government securities. The strengthening of the PD system enabled the RBI to successfully exit from the primary market with effect from April 1, 2006. However, there is still a long way to go for PDs. PDs together or their association, PDAI, should put in more efforts in the following areas for the healthy development of the government securities market.

- PDs or PDAI should take initiative in building awareness of government securities amongst individual investors so that a retail market for government securities is developed. Retailing of government securities is necessary to impart liquidity to the government securities market.
- One of the basic obligations of PDs is to offer two-way quotes in government securities, thereby providing continuous liquidity in the market. There is a need for greater transparency in the market-making function of PDs which, in turn, would impart credibility to PDs' operations. This will also help in retailing of government securities.
- PDs should continuously disseminate information to the RBI regarding market development. This would help the bank to know when to intervene in the market.
- PDs should strengthen their capital base to reduce their dependence on call money borrowings. This will automatically reduce any risk arising on account of market volatility.
- In Stage II of LAP, one-third of the liquidity support normally available to them at fixed rate of interest would then be available at market rates. This calls for a careful future business planning on part of PDs.
- PDs should adopt proper risk management practices to improve their returns.
- PDs should expand their branch network and spread their operations to other places to cater to the investment requirements of corporates and other large investors in government securities.

They need to be more proactive and business minded.

Satellite Dealers In order to widen the scope for organised dealing and distribution arrangement in the government securities market and to support the system of primary dealers, the RBI introduced a supporting infrastructure in the form of satellite dealers (SDs). SDs form the second tier of trading and distribution of government securities.

The guidelines for registration of satellite dealers in government securities market were announced on December 31, 1996. According to the guidelines, subsidiaries of scheduled commercial banks and all-India financial institutions (AIFIs), and companies incorporated under the Companies Act, 1956 with minimum net owned funds of Rs. 5 crore were eligible to be SDs. In pursuance of these guidelines, the RBI granted approval to 16 entities for registration as SDs in the government securities market.

Box 10.6 Comparative Position of Banks and Primary Dealers with Respect to Select Regulatory Parameters

Norm	*Bank*	*Primary Dealer*
1	*2*	*3*
CRAR	Nine Per Cent of Total Risk-weighted Assets (RWA)	Fifteen Per Cent. Tier-l and Tier-ll Capital Defined as in Case of Banks for Credit Risk. Tier-Ill Capital for Market Risk Subject to the Constraints as Per BIS Standards. Capital Adequacy for Subsidiaries not Applicable.
Investments	SLR Securities and Non-SLR Securities (i.e., Total Investment Portfolio) Classified Into Three Categories, *Namely* Held to Maturity (HTM) (up to 25.0 Per Cent of Total Investments), Available for Sale (AFS), and Held for Trading (HFT) Categories, with Progressively Regular Mark to Market Norms. However, as per the Balance Sheet Format, Investments Continue to be Disclosed as Per Six Existing Classifications.	The Government and Non-government Securities Portfolio, to the Extent of the Holding Period and Defea Sance Period Stipulations can be Satisfied, Treated as Trading and Marked to Market.

(*Continued*)

Norm 1	*Bank* 2	*Primary Dealer* 3
Disclosure Requirements	Number of Items	Net Borrowings in call (Average and Peak During the Period). Basis of Valuation at Lower of Cost and Market (LOCOM)/Mark to Market (MTM). Leverage Ratio (Average and Peak). CRAR (Quarterly Figures). Besides, PDs may Also Furnish More Information by Way of Additional Disclosures.
ALM Guidelines	Introduced in February 1999. Banks to Ensure Coverage of 60 Per Cent of their Liabilities and Assets Initially, and Subsequently Cover of 100 Per Cent of their Business by April 1, 2000. Prudential Norms Prescribed Only for Negative Liquidity Mismatches in the First Two Time Buckets Namely, 1–14 days and 15–29 Days at 20 Per Cent Each of the Cash Outflows in these Time Buckets.	ALM Guidelines to NBFCs Applicable to PDs with Necessary Modifications in Tune with their Nature of Operations from January 2002. • The Entire Government Securities Portfolio Treated as Liquid and Put in the First Time Bucket for Liquidity Risk Management. Non-Government Securities Treated as Trading Portfolio to the Extent that Holding Period and Defeasance Period Stipulations are Satisfied. • PDs have been Advised to Continue with Duration Gap, Present Value of a Basis Point (PVBP), Daily Earnings at Risk (DeaR), and Value at Risk (VaR), in Relation to Interest Rate Risk Management Measures Rather than Simple Maturity/Repricing Gap Method.
Resource Raising	Not Applicable for Banks.	PDs May Raise Resources by Means of the Following: • Call/Term Borrowing. • Borrowing from the RBI Under Normal/Back-stop/LAF Facility. • Repo Borrowings from the Market. • Borrowings Under Credit Line from Banks/ Financial Institutions. • Borrowings through ICDs/CP/Bonds. • Borrowing Under FCNR(B) Loans Scheme of Banks.

Source: RBI, *Annual Report,* 2002–03.

SDs were permitted to issue commercial papers for raising resources and could avail of liquidity support from the RBI and the facility of ready forward transactions. Some of the satellite dealers were promoted as primary dealers.

The network of satellite dealers was created to promote the retailing of government securities but the performance of the satellite dealers was not found to be satisfactory. The RBI decided to discontinue the system after obtaining the view of the Primary Dealers Association of India. Accordingly, no new SDs will be licensed and existing SDs were required to make action plans satisfactory to the RBI for termination of their operations as SDs by May 31, 2002.

Measures to Strengthen the Government Securities Market Infrastructure

For bringing about an improvement in trading and settlement in the money market and government securities market, the negotiated dealing system (NDS) and Clearing Corporation of India Limited have been set up.

- NDS provides an online electronic bidding facility in the primary auctions of government securities and an electronic dealing platform for trading in government securities

The Negotiated Dealing System

The Reserve Bank introduced the NDS with a view to reforming the secondary market in government securities and money market operations, introducing transparency, and facilitating electronic bidding in

- The goverment securities market now has deals being reported on a real-time basis

auctions. Test runs on the NDS started in November 2001 and Phase I was operationalised from February 15, 2002, with 41 participants.

The NDS provides an online electronic bidding facility in the primary auctions of central/state government securities, OMOs/LAF auctions. It enables screen-based electronic dealing and reporting of transactions in money market instruments including repo, secondary market transactions in government securities, and dissemination of information on trades with the least time lags.

The NDS is integrated with the securities settlement system (SSS) of the Public Debt Office as also with the CCIL to facilitate paperless settlement of transactions in government securities and treasury bills and bring about improvement in services to investors in government securities. Once a trade is done/reported over NDS, it can be settled either through CCIL or directly through RBI-SGL. Settlement through CCIL is on delivery versus payment (DVP-II) mechanism. DVP-II refers to settlement of securities on a gross basis (trade-by-trade basis) while funds will settle on a net basis.

Banks, PDs, and financial institutions having SGL accounts and current accounts with the RBI are eligible to participate in the NDS. It provides an electronic dealing platform for these participants in government securities. It enables the execution of deals in both the computer matching mode or a chat mode for negotiating deals on the system itself. Members are expected to report all the trades negotiated outside the system for settlement. It facilitates member participation in the primary auctions of government securities and treasury bills by submitting their bids/applications for auctions/floatation through their own terminals or pooled terminals. The pooled terminal facility is provided at all regional offices for use by SGL account holders not having member terminals. The NDS is used by the RBI for extending the liquidity adjustment facility to eligible members. All entities having SGL accounts with the RBI were advised to become members of the NDS by May 31, 2002. Till August 5, 2002, 138 SGL account holders were members of the NDS. On an average, 526 deals were reported daily on the NDS, of which 473 deals for Rs. 11,688 crore were ready for settlement during the quarter ended June 2002. These deals comprised money market deals (109 deals for Rs. 8,762 crore), outright government securities trades (344 deals for Rs. 2,080 crore) and repo transactions among member participants. The settlement of the government securities transactions through the CCIL constituted 91.3 per cent of the total government securities trades dealt/reported on the NDS.

The RBI plans to set up an electronic trading platform for repos in government securities which will function in addition to the existing voice-based system.

As the trading facilities—both negotiated and quote driven—were hardly used, a new platform was started on the NDS of the Reserve Bank—the NDS-OM (the NDS—Order Matching System) for trading in government securities on August 1, 2005. NDS-OM is an anonymous platform which allows sellers and buyers to interface by placing quotes. Transactions are executed by matching quotes. Initially banks and primary dealers were the only two participants allowed to trade using the new system. Mutual Funds which are NDS members and large pension/provident funds like the Central Board of Trustees/Seamens/Coal Miners' funds and insurance companies were later on permitted to access the NDS-OM market by opening temporary current/SGL accounts with the Reserve Bank. Primary dealers are executing trades on behalf of non-bank participants which will drive brokers out of business. The NDS-OM enables odd lot trading, trading of new securities in the when-issued market and trading of CSGL entities. It has become the preferred mode of trading in the government securities market accounting for 60 per cent of trading in this market.

The NDS has brought about significant improvements in secondary markets also. It has helped in increasing the level of transparency of the dealings in government securities, T-bills, and other instruments. The system has facilitated screen-based trading, provision of on-line trade information, and reporting through trade execution system for settlement, thereby improving market efficiency. It has also facilitated dissemination of price information on a real time basis to market participants, thus enabling them to execute trades effectively.

Clearing Corporation of India Limited

The Clearing Corporation of India Limited (CCIL) was registered on April 30, 2001 under the Companies Act, 1956. The State Bank of India is the chief promoter of the CCIL. Its other promoters are banks, financial institutions, and PDs. It has been set up as an ordinary, limited liability, non-government company under the Companies Act, 1956 with an equity capital of Rs. 50 crore. It functions like a business entity that is subject to corporate tax on its business profits.

It acts as the central counter-party in the settlement of all trades in government securities, treasury bills, money market instruments, repos, inter-bank foreign exchange deals, and derivatives of any kind where the underlying instrument is a security or money market instrument. The CCIL is the clearing and settling agency in respect of all trades by institutional players such as banks, DFIs, primary dealers, mutual funds, corporates, and NBFCs who account for more than 98 per cent of the total trades. It also supports through its fully owned subsidiary, ClearCorp Dealing Systems (India) Ltd., three trading platforms in the forex and money market segments. It launched its forex dealing platform, FX-CLEAR on August 7, 2003 to meet the requirements of the inter-bank foreign exchange market in India. It developed an anonymous trading platform, NDS-OM in August 2005 to facilitate transparent and efficient trading in the government securities market. It launched an electronic screen-based quote driven dealing system-NDS-CALL on September 18, 2006 for call, notice, and term money operations.

Clearing Corporation of India Limited

- Acts as the central counter-party in settlement of all trades in securities and forex segment
- Manages risks to avoid system failures
- Provides guarantee to non-SLR trades
- Operates a settlement guarantee fund
- Manages the NDS-OM and NDS-CALL electronic trading platforms for trading in government securities and call money
- Introduces innovative products/tools such as ZCYC, Bond and T-bill indices, and benchmarks reference rates
- Introduced CBLO and FX-CIEAR

After trade has been concluded on the negotiated dealing system (NDS), CCIL takes up the responsibility of settlement of trade via INFINET. During the settlement process, CCIL assumes certain risks, which may arise due to a default by a member to honour its obligations. For this, CCIL has designed the margining system and collects initial margin and mark to market (MTM) margin from members in respect of their outstanding trade. Initial margin covers the likely risk from future adverse movement of prices of the securities while mark to market margin covers the notional loss (i.e., the difference between the current market price and the contract price of the security covered by the trade) already incurred by any member. In addition, CCIL also collects volatility margin and operates a settlement guarantee fund (SGF) wherein each member contributes to it.

CCIL has put in place settlement arrangements on the Securities and Forex segments. In the securities segment, the settlement operation has been switched over to DVP III mode with netting of both funds and securities which has facilitated the rollover of repos. This has enabled participants to buy and sell securities on the same day subject to the stipulations of the Reserve Bank. It has also enabled members to reduce the risks from failed trades arising out of the defaults by their counter-parties. By becoming central counter party to the trades done by its members, the CCIL absorbs risks.

CCIL acts as a central counter-party for forex trading also. Every eligible foreign exchange contract entered into between members, gets novated and is replaced by two new contracts—between CCIL and each of the two parties, respectively. The rupee leg is settled through the member's current account with the Reserve Bank and the US Dollar leg through CCIL's account with the designated settlement banks at New York. The settlement through CCIL has reduced the gross dollar requirement by more than 90 per cent.

The CCIL manages various risks such as credit and market risk, liquidity risk and operational risk to avoid serious system failures.

In securities transactions, the CCIL covers the credit and market risk by making members maintain initial margins as well as mark-to-market margins to cover future adverse movements of securities and notional loss respectively. Members are required to maintain adequate balances in the settlement guarantee fund (SGF) in the form of eligible government securities/treasury bills and cash (minimum 10 per cent) to cover the margin requirements in respect of their trades.

In foreign exchange transactions, the CCIL resorts to loss allocation mechanism to manage credit and market risk and restricts the membership to authorised dealers only.

To ensure liquidity for uninterrupted settlements, CCIL has arranged rupee securities through member contributions to the SGF, rupee funds through line of credit with various banks, and US dollar funds by way of a fully collateralised line of credit with the settlement bank. It has commenced settlement of forex forward trades with guarantee from the trade date from October 20, 2008.

To deal with operational risk, CCIL is developing a fully automated system for processing trades. A disaster recovery site is being set up at the Institute for Development and Research in Banking Technology (IDRBT), Hyderabad, to ensure business continuity in case of a disaster.

The CCIL clears all transactions in government securities and repos reported on the NDS of the RBI and also rupee/USD free spot and forward deals. All repo transactions have to be necessarily put through the CCIL and all outright transactions upto Rs. 20 crore have to be settled through the CCIL. Government securities trades up to Rs. 20 crore have to be settled compulsorily through the CCIL. Since most transactions are of a value below Rs. 20 crore, more than 80 per cent of the government securities transactions are compulsorily routed through the CCIL. This move is aimed at protecting retail investors in the government securities market against counter-party risks and defaults and enable higher retail participation in the government securities market. For larger transactions, the market players have the option of settling transactions either through the CCIL or directly through the SGL account system of the RBI.

The RBI has asked banks to report all spot transactions in listed and unlisted non-SLR securities on the NDS and settle through the CCIL. This measure is expected to increase transparency in the non-SLR segment. The CCIL provides guarantee to non-SLR trades which will reduce default risks.

There were 153 active members in CCIL's securities clearing settlement as on March 31, 2009. The size of the guarantee fund was Rs. 4,380.64 crore. The CCIL's turnover in the government securities segment increased to Rs. 62,54,579 crore in 2008–09 from Rs.26,92,129 crore in 2004–05. The CCIL cleared and settled an aggregate volume of Rs. 3,20,16,852 crore in 2008–09 across its securities, forex, and CBLO segments. The caps placed by the RBI on call money borrowings by banks and PDs, the increased activity in the repo market and the general upswing in the securities market boosted the CCIL's turnover.

The CCIL proposes to launch a screen-based Repo Dealing System which would facilitate dealing in basket repos and special repos. Basket repo enables grouping of the underlying security into different baskets based on instrument category, liquidity and outstanding maturity profile. Special repo enables the borrowers/lenders to specify the security against which they want to borrow/lend. It is also developing a trading system and a system to undertake guaranteed settlement of trades in the IRS/FRA market.

The CCIL, which offers clearing and settlement facilities for inter-institutional government securities transactions and inter-bank foreign exchange transactions, has been recognised as a systemically important payment system (SIPS).

Impact of Reforms in the Government Securities Market

- The operational autonomy of the RBI has increased through measures such as the abolition of automatic monetisation through ad hoc T-bills and introduction of the system of WMAs for the central government.
- The introduction of a variety of new instruments such as floating rate bonds, capital indexed bonds, treasury bills of varying maturities, and others, and improvements in market micro-structures such as yield-based and price-based auctions, tap loans, preannounced notified amounts, non-competitive bids outside notified amounts, re-issue of dated securities, announcing calendar of treasury bills, and the DVP system have added to the breadth and width of the government securities market.
- The institutional infrastructure of the government securities market has improved through the system of PDs.
- The government is borrowing from the market at market rates; this has led to greater market absorption and low devolvement on the RBI and PDs.
- Transparency has increased since the onset of reforms. The RBI has started publishing SGL data regularly. There has been an increase in reporting of deals in government securities on the NSE's WDM screen.
- The reforms have compelled the RBI to increase focus on treasury management and interest rate risk management.
- The auction system for raising funds has contributed to the development of bidding skills among the investors.
- The trading volumes have increased in the secondary market in government securities, reflecting the increasing depth attained by the government securities market. Moreover, the repo transactions have dominated the aggregate turnover which is again a reflection of the emergence of an active secondary market in government securities.
- The RBI has made efforts in the midst of the large borrowing programme of the central government to soften the medium and long-term interest rates on government securities either through direct devolvement or private placement combined with open market operations.
- Open market operations has emerged as an important tool for liquidity management together with repos to neutralise excess liquidity in the system and to contain wide fluctuations in the domestic money and foreign exchange markets.
- The settlement system has improved significantly. Safety of the settlement has been ensured through strict monitoring of the deals by banks and primary dealers and through the delivery versus payment mechanism.
- The consolidation of the government stocks by re-issuances of existing loans has imparted liquidity to the existing stocks and limited the number of floating stocks.
- Retail participation has been encouraged through the scheme of non-competitive bidding facility.
- The RBI introduced the NDS to enhance transparency in trading practices. The CCIL has been set up to significantly improve settlement systems and market efficiency and integrity. The NDS and the CCIL, have brought about a radical transformation in the government securities market which is similar to that which the NSE brought about in the equity markets.
- The government securities market has benefitted from the emergence of self-regulatory bodies, such as, the Primary Dealers Association of India and Fixed Income Money Markets and Derivatives Association (FIMMDA).

Relative Size of Financial Markets in India

Tables 10.23 and 10.24 provide an overview of the relative size of financial markets in India. The money market constitutes the bulk of the market with an average share of 80 per cent in the total average daily

TABLE 10.23 Relative Size of Financial Markets in India

Year	Money Market		Government Securities Market		Equity Market	
	Average Daily Turnover (Rs. Crore)*	Turnover as Per Cent of GDP	Average Daily Turnover	Turnover as Per Cent of GDP	Average Daily Turnover (Rs. Crore)	Turnover as Per Cent of GDP
1999–2000	30,056	1.6	–	–	–	–
2000–2001	42,657	2.0	2,802	0.1	9,308	0.4
2001–2002	65,305	2.9	6,252	0.3	3,310	0.1
2002–2003	76,606	3.1	7,067	0.3	3,711	0.2
2003–2004	28,482	1.0	8,445	0.3	6,309	0.2
2004–2005	38,528	1.2	4,826	0.2	6,566	0.2
2005–2006	60,036	1.7	3,643	0.1	9,491	0.3
2006–2007	88,803	2.1	4,863	0.1	11,644	0.3
2007–2008	1,32,459	2.8	8,104	0.2	20,483	0.4
2008–2009	1,12,646	2.3	7,344	0.15	15,823	0.3

** Covers call money, term money, CBLO, and repo markets.*
Source: RBI, *Report on Currency and Finance,* various issues.

turnover, followed by the equity market and then the government securities market. The average daily turnover of government securities and equities to GDP is a meager 0.2 and 0.4 per cent of GDP respectively. The share of money market almost doubled from 1.6 per cent in 1999–2000 to 2.8 per cent in 2007–08. The size of all the three segments has increased in the post reform period. One of the objectives of the reforms was to foster integration of various segments of the financial markets. The reforms have helped in linking the various segments but these linkages need to get widened and deepened to facilitate linkages with the global financial markets.

TABLE 10.24 Financial Markets at a Glance

Year	Money Market Average Daily Turnover (Rs. Crore)*	Government Securities Market Average Daily Turnover (Rs. Crore)	Equity Market Average Daily Turnover		Grand Total	Percentage Share in Total		
			BSE (Rs. Crore)	NSE (Rs. Crore)		Money Market	Government Securities Market	Equity Market (BSE+NSE)
1	2	3	4	5	6	7	8	9
2000–01	42,657	2,802	3,981	5,327	54,767	77.9	5.1	17.0
2001–02	65,305	6,252	1,229	2,081	74,867	87.2	8.3	4.5
2002–03	76,606	7,067	1,250	2,461	87,384	87.7	8.1	4.2
2003–04	28,482	8,445	1,980	4,329	43,236	65.9	19.5	14.6
2004–05	38,528	4,826	2,053	4,513	49,920	77.2	9.6	13.2
2005–06	60,036	3,643	3,248	6,253	73,170	82.1	5.0	12.9
2006–07	88,803	4,863	3,832	7,812	1,05,130	84.3	4.6	11.1
2007–08	1,32,459	8,104	6,335	14,148	1,61,046	82.3	5.0	12.7
2008–09	1,12,646	10,879	6,275	11,325	1,41,125	79.8	7.7	12.5
2009–10	1,68,077	13,936	5,651	16,954	2,04,623	82.1	6.9	11.0

**Covers call money, term money, CBLO, and Repo market.*
Source: RBI, *Report on Currency and Finance.*

Conclusion

The volume of activity in the debt market has increased significantly. The growth of the government securities market in the post-reforms period is noteworthy. The RBI has done a commendable job for the development of the government securities market. The sluggish equity market conditions have shifted the investors' preference towards debt. This has led to a growth in volume of trading not only in the government securities market but in the corporate debt market also. The entire debt market is witnessing an upsurge in trading volumes.

KEY TERMS

Debt Market, Auction, STRIPS, Non-competitive Bidding, Yield Curve, Yield Spread, SGL account, Open Market Operations, Primary Dealers, Negotiated Dealing System.

SUMMARY

1. The debt market is one of the most critical components in the financial system of any economy and acts as the fulcrum of a modern financial system.
2. In the post-reforms era, a fairly well-segmented debt market has emerged comprising the private corporate debt market; the public sector undertakings bond market; and the government securities market.
3. The government securities market accounts for more than 90 per cent of the turnover in the debt market. It constitutes the principal segment of the debt market.
4. The RBI regulates the government securities market and money market while the corporate debt market comes under the purview of the Securities Exchange and Board of India (SEBI).
5. The major participants in the debt market are central and state governments, primary dealers, public sector undertakings, corporates, banks, mutual funds, foreign institutional, investors, provident funds, charitable institutions, and trusts.
6. With effect from October 31, 2001, banks, financial institutions, and primary dealers can make fresh investments in and hold bonds and debentures, privately placed or otherwise, only in demat form.
7. In the primary market, new debt issues are floated either through prospectus, rights, or private placement. The debt instruments are traded on the OTCEI, the BSE, and the WDM segment of the NSE.
8. Corporates adopt either the public offering route or the private placement route for issuing debentures/bonds. The corporate debt market constitutes a small segment of the debt market despite measures taken to promote this market during the 1990s.
9. Public sector undertaking bonds are medium-and long-term obligations issued by public sector undertakings. The majority of PSU bonds are privately placed with banks or large investors. PSUs are permitted to issue two types of bonds: tax-free and taxable bonds. PSUs are allowed to issue floating rate bonds, deep discount bonds, and a variety of other bonds. All new issues have to be listed on a stock exchange. The level of activity is quite low as most of the PSU bonds are privately placed leading to a reduction in the floating stock.
10. Government securities market not only provides resources to the government for meeting its short-and long-term needs but also acts as a benchmark for pricing corporate papers of varying maturities.
11. Government securities are issued by the central government, state governments and semi-government authorities which also include local government authorities such as city corporations and municipalities.
12. Considering the significance of a vibrant government securities market and for activating an internal debt management policy, a number of measures were announced in the middle of 1991 to reform the government securities market.
13. STRIPS is a process of stripping a conventional coupon bearing security into a number of zero coupon securities which can be traded separately.
14. The existence of a strong retail segment is a prerequisite for the development of the government securities market. The RBI has made efforts to promote retailing of government securities.
15. The system of ways and means advances (WMAs) has been evolved to accommodate temporary mismatches in government receipts and payments. WMA is not a source of financing budget deficit and is not included in the budget estimates. It is only a mechanism to cover day-to-day mismatches in receipts and payments of the government.
16. The Government of India securities are medium-to long-term obligations issued by the RBI on behalf of the government to finance the latter's deficit and public sector development programme. Government securities are issued either through auction, sale, or private placement with the RBI.
17. The RBI introduced non-competitive bidding with a provision for allocation of upto 5 per cent of the notified amount in specified auctions of dated securities for allotment to retail investors on a non-competitive basis at the weighted average rate.
18. Since 1990–91, the borrowing programme of both the centre and the states handled by the RBI increased more than 40-fold from Rs. 11,000 crore in 1990–91 to Rs. 4.36 lakh crore in 2008–09.
19. Notwithstanding various reform measures to develop and widen the primary market for government securities, the market continues to be dominated by captive investors such as commercial banks and insurance companies.
20. Secondary market in government securities can be categorised into two segments: the wholesale institutional segment and the retail segment.
21. The government securities can be held and transacted in two forms—dematerialised SGL form and physical form. Registration of the participant with the public debt office of the RBI is mandatory in case of holding and trading securities in the physical form. The RBI acts as a depository-cum-clearing house and settlement is through accounts maintained with the RBI called the Subsidiary General Ledger (SGL) accounts. The physical securities are dematerialised and the relevant holdings are in the form of book entries. Every participant in the government securities market maintains SGL and current accounts with the RBI. SGL accounts are maintained by the public debt office. The transfer of government securities does not attract stamp duty or transfer fee. Moreover, there is no tax deduction at source on these securities.
22. The steady growth in turnover and outright transactions reflects the increasing depth attained by the government securities market and the emergence of an active secondary market in government securities.
23. The National Securities Clearing Corporation Limited, a wholly owned subsidiary of NSE obtained permission from the RBI to

open SGL accounts to offer constituent SGL facility to a wide range of investors. It has set up a common clearing and settlement framework for its SGL constituents to remove the counter-party risks.

24. Open market operation (OMO) is an important tool of liquidity management. OMOs are actively used to neutralise excess liquidity in the system and to contain wide fluctuations in the domestic money and foreign exchange markets. OMOs involve the sale or purchase of government securities by the central bank.
25. A system of primary dealers (PDs) was introduced in India in 1996 to further strengthen the market infrastructure and to make it more liquid and broad based. As on March 31, 2009, there were 19 approved PDs in the gilts market.
26. The NDS provides an online electronic bidding facility in the primary auctions of central/state government securities, OMOs/LAF auctions. It enables screen-based electronic dealing and reporting of transactions in money market instruments including repo, secondary market transactions in government securities, and dissemination of information on trades with the least time lags.
27. The Clearing Corporation of India Limited (CCIL) was registered on April 30, 2001 under the Companies Act, 1956. It acts as the central counter-party in the settlement of all trades in government securities, treasury bills, money market instruments, repos, inter-bank foreign exchange deals, and derivatives of any kind where the underlying instrument is a security or money market instrument.

REVIEW QUESTIONS

1. Why is the debt market an important segment of the capital market? Who are the participants in the debt market?
2. What should be done to revive the corporate debt market and public sector undertakings bond market?
3. Discuss the role played by the RBI in the government securities market.
4. Which are the tools for managing liquidity in the government securities market?
5. State the objectives for the introduction of the primary dealer system? Discuss the role played by them in the government securities market.
6. Explain in brief the NDS and the role of the CCIL in the government securities market.
7. Explain uniform price auctions and multiple price auctions.
8. State the measures taken to promote the corporate debt market.
9. ‘The corporate debt market constitute a small segment of the debt market despite measures taken to promote this market.’ Discuss.
10. Write short notes on
    a. STRIPS in the government securities market
    b. Retailing of government securities
    c. When-issued market in government securities
    d. Open market transaction
11. What is ways and means advances? What are its advantages?
12. Describe briefly the auction process for central government securities.
13. State the steps taken to develop the secondary market for government securities.
14. What kind of reforms have been undertaken in the government securities market? Discuss the impact of reforms on the government securities market.
15. Describe the trading and settlement system of government securities.

Answer in Brief

1. What is a yield curve? State the different types of shapes of a yield curve.
2. What is a yield spread? What are the components of a yield spread?
3. State the relationship between yield and bond prices.
4. Who are the investors and issuers in the government securities market?
5. What are the objectives of reforms in the government securities market?
6. State some important reform measures undertaken in the government securities market.
7. What is competitive and non-competitive bidding?
8. What is SGL and CSGL?

Choose the Right Answer

1. The 91-day t-bills are auctioned ________
   (a) daily (c) fortnightly
   (b) weekly (d) monthly
2. ________ bids are conducted to encourage participants who do not have sufficient experience in bidding.
   (a) competitive
   (b) non-competitive
3. If short term interest rate rise relative to long term rates, the yield curve ________
   (a) steepens (c) inverts
   (b) flattens
4. The ________ provides an on-line electronic bidding facility in the primary auctions of government securities.
   (a) WDM (c) CCIL
   (b) NDS
5. The ________ provides an anonymous trading platform of government securities.
   (a) WDM (c) NDS-OM
   (b) NDS
6. The ________ is the central counterparty in the settlement of all trades in government securities.
   (a) NSCCL (c) CCIL
   (b) NDS
7. The ________ is an electronic screen based quote driven dealing system for call, money and term money operations.
   (a) NDS (c) NDS-CALL
   (b) NDS-OM
8. The ________ is the yield differential of an instrument over the previous year.
   (a) yield curve
   (b) yield spread
9. To encourage retail participation in the primary market for government securities, an allocation of upto ________ per cent has been provided to retail investors on a non-competitive basis.
   (a) 5 (c) 15
   (b) 10 (d) 20

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11

New Financial Instruments

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Meaning of new financial instrument*

2 *New financial instruments such as floating rate bonds, zero interest bonds, deep discount bonds, revolving underwriting finance facility, auction rated debentures, secured premium notes with detachable warrants, non-convertible debentures with detachable equity warrants, secured zero interest partly convertible debentures with detachable and separately tradable warrants, fully convertible debentures with interest (optional), differential shares, securitised paper, collateralised debt obligations, and inverse float bonds, perpetual bonds, and municipal bonds.*

INTRODUCTION

The Indian financial system has undergone a significant transformation in the 1990s. The deregulation of lending rates, free pricing of equity issues, entry of private sector institutional investors including foreign institutional investors, opening up of the banking sector to the private sector, allowing Indian companies to directly tap the foreign capital markets, and so on are some of the major reforms which have changed the scenario of the Indian financial system. This new found freedom has increased competition in the Indian corporate sector.

The capital market is an important source of meeting the growing long-term financial requirements of corporates, both in private and public sectors.

On the one hand, due to the colossal fund requirements of both corporates and financial institutions, the competition has become intense among the various classes of issuers to corner a share of the investors' funds, and on the other hand, investors are proving to be increasingly finicky and savvy. Hence, to cater to the differing requirements of both issuers and investors, it has become essential for issuers (borrowers) to innovate and design new financial instruments. Financial engineering has been at the back of these innovations, which have revolutionalised the business world.

What is a New Financial Instrument?

A new financial instrument may be one which has some new features in the terms of agreement, when compared with the features of presently available instruments. Very few financial instruments are completely new products. Many are just new features added to the conventional financial instruments to make them marketable. The conventional financial instruments are equity shares, preference shares, debentures—partly convertible, fully convertible, and non-convertible. When certain new features like attaching a warrant to the non-convertible portion of a debenture are added, a conventional instrument turns into a new instrument.

Reasons for Innovations in Financial Instruments

- Every product needs constant re-engineering. Moreover, it has to be tailored according to the needs of the consumers. The investment environment does not get a boost if there are repeated offerings of the same product. Hence, new designs of financial products are always needed.
- The interest rates had declined and this trend forced the corporate world to think of new financial instruments.
- Investors also prefer not to be saddled with long-term instruments. Hence, instruments with varying maturity periods and with various put and call options are preferred.
- The old trend of getting finance from financial institutions has changed. Now companies prefer the capital market as a source of finance. To successfully tap capital markets, companies are compelled to offer attractive terms even on debt securities, in order to raise funds.
- Investors have shied away from the equity market in the last few years due to various capital market scams. Attractive financial instruments are needed to lure these investors back.

In the post-reforms period, a host of innovative instruments have been introduced in the capital market. Most of these instruments are debt instruments. These instruments have not only been structured and designed properly, they have also been successfully marketed at the retail level.

Table 11.1 presented below shows the amount of capital raised with the help of these new instruments. Till 1997–98, around Rs. 23,160 crore were garnered with the help of innovative instruments.

TABLE 11.1 Amount Raised in the Capital Market Through New Capital Issues with Hybrid Features

Year	*Amount Raised Through Innovative Instruments (Rs. in Crore)*	*Per Cent to Total Capital Issues by Non-government Public Limited Companies (In Per Cent)*
1991–92	198	3
1992–93	4,703	24
1993–94	5,460	28
1994–95	3,147	12
1995–96	4,151	26
1996–97	3,525	34
1997–98	1,976	63
Total	23,160	

Source: RBI, *Report on Currency and Finance,* various issues.

NEW FINANCIAL INSTRUMENTS

Floating Rate Bonds

- Floating Rate Bonds are bonds wherein the interest rate is not fixed and is linked to an anchor/benchmark rate

The interest rate on these bonds is linked to a benchmark/anchor rate and is not fixed. It is a concept which has been introduced primarily to take care of the falling market or to provide a cushion in times of falling interest rates in the economy. It helps the issuer to hedge the loss arising due to interest rate fluctuations.

In India, the State Bank of India (SBI) was the first to introduce bonds with floating rates for retail investors. The SBI floating rate bonds were linked to the bank's term deposit rate which served as an anchor rate. The treasury bill rate can also be the anchor rate. The interest rate is linked to the anchor rate as it reflects the economic indicators. The NSE Mibor is used now-a-days as the anchor rate for floating rate bonds.

To make this bond attractive to investors, the interest rate always has a fixed mark-up price over and above the anchor rate. In case of IDBI bond issues, the fixed mark-up was 2 per cent and the anchor rate was the 364-days treasury bill rate.

Floating rate bonds ensure that neither the borrower nor the lender suffer due to volatile interest rates. If the interest rate rises, the lender (investor) benefits, as he earns a higher interest and if the interest rate falls, it is advantageous to the borrower, as he can raise funds at a low cost.

Borrower companies issue floating rate bonds with a cap or a floor. The cap is the maximum interest that the issuer can pay while the floor is the minimum interest that a subscriber earns, leading to an advantage, both to the issuer and the subscriber.

Most of the outstanding government market loans are in the form of plain vanilla fixed rate bonds. The government issued, in November/December 2001, two floating rate bonds with maturity periods of 5 years and 8 years for a total amount of Rs. 5,000 crore in view of the asset-liability management (ALM) and risk-weight needs of the major investors such as banks. FRBs serve as diversifying instruments in debt management as they take advantage of the term premium while minimising the refinancing risk. However, FRBs are vulnerable to interest rate risk.

FRB is an innovative instrument in a falling interest rate regime but it requires an active secondary debt market.

Zero Interest Bonds

- Zero interest bonds carry no periodic interest payment and are sold at a huge discount to face value

As the name suggests, there is no periodic interest payment and they are sold at a huge discount to the face value. These bonds benefit both the issuers and the investors by limiting funding cost when interest rates are volatile for the issuer and by reducing the reinvestment risk for the investor. Zero coupon bonds are sometimes convertible into equity on maturity which entails no outflow for the issuer, or into a regular interest bearing bond after a particular period of time.

Companies such as Mahindra and Mahindra, HB Leasing and Finance have been pioneers in introducing these bonds in the Indian market.

These bonds are the best options for individuals and institutional investors who look for safe and good returns and are ready to hold them till the bond matures. Moreover, these bonds do not carry any interest, which is otherwise taxable.

These bonds are attractive for issuer companies with projects having a long gestation period as there is no immediate interest commitment and, on maturity, the bonds can be converted into equity shares or non-convertible debentures depending on the capital structure requirements of the company.

Zero interest bonds require an active secondary debt market for attracting investors.

Deep Discount Bonds (DDBs)

A deep discount bond is a zero coupon bond whose maturity is very high, say 15 years onwards and is offered at a discount to the face value. The Industrial Development Bank of India (IDBI) was the first financial institution to offer DDBs in 1992.

- Deep discount bonds are zero coupon bonds with high maturity

The issuers have successfully marketed these bonds by luring the investor to become a 'lakhpati' in 25 years. Moreover, these instruments are embedded with 'call' and 'put' options, providing an early redemption facility both to the issuer and the investor at a predetermined price and date. The issuer becomes free from intermittent cash flow problems and the funds can be deployed in infrastructure projects which involve long gestation periods.

Many variations of DDBs and zero interest bonds have come into the market. Some of them are as follows.

Zero Interest Secured Premium Convertible Bond The investor can convert his bond into an equity share at 30 per cent discount on average price at the end of one year. If the conversion price is lower than the face value, the issuer will redeem the difference. A similar option of conversion into two equity shares is available on the maturity of the bond. The bond may also have a warrant attached.

Zero Interest Fully Convertible Debenture The investors in these debentures are not paid any interest. However, there is a notified period after which, fully paid, fully convertible debentures (FCDs) will be automatically and compulsorily converted into shares. In the event of a company going for rights issue prior to the allotment of equity, resulting from the conversion of equity shares into FCDs, FCD holders shall be offered securities as may be determined by the company.

Revolving Underwriting Finance Facility (RUFF)

It is a 91-day debenture with two important, distinct features.

- RUFF is a 91-day debenture which is rolled over after its maturity

- There is an underwriter (a banker or financial institution) who will be prepared to pick up the lot if it is not fully sold.
- After 91 days, the stock will be rolled over, i.e., the debentures will be redeemed and reauctioned. Through this roll over, the debentures can be kept in the market for upto five years. If, at some stage, the money markets are tight and there are not enough takers for the issue, the underwriters step in and pick up the lot at a previously agreed rate.

The treasury bill rate is the benchmark rate and a premium is added to it to attract the investors. The premium depends on the demand and supply of the 91-day instrument. The overall rate never exceeds the prime lending rate (PLR). This instrument is rated by a credit rating agency.

RUFF is beneficial to the issuers, underwriters, and investors. The issuer gets long-term funds at short-term rates, the underwriter gets a regular fee, and the investor gets a liquid debt instrument.

Auction Rated Debentures (ARDs)

It is a secured, redeemable (after 90 days), non-convertible instrument with interest determined by the market and placed privately with bids. ARDs are a hybrid of commercial papers and debentures. ANZ Grindlays designed this new instrument for Ashok Leyland Finance (ALF). This was a three-year instrument which had a zero coupon rate and was sold at a discount. The company repurchased the ARDs after three months of the issue and then re-issued them through fresh auctions. The interest rates were negotiated at quarterly auctions; this continued for three years. ALF raised Rs. 30 crore through this unique zero coupon instrument. ARD is technically a short-term instrument but it provides long-term finance for the company.

Secured Premium Notes (SPNs) with Detachable Warrants

This instrument is redeemable after a notified period, of say four to seven years. There is a lock-in period during which no interest is paid. The attached warrants ensure that the holder has the right to apply for and to be allotted equity shares, provided the SPN is fully paid. This conversion is done within the time limit notified by the company.

The SPN holder has an option to sell back the SPN to the company at par value after the lock-in period. If the holder exercises this option, no interest/premium will be paid on redemption. In case the SPN holder holds it further, he will be repaid the principal amount along with the additional amount of interest/premium on redemption in instalments as decided by the company. SPNs free the firm from the debt-serving costs in the initial years. TISCO and Bombay Dyeing were among the early issuers of SPNs.

Non-convertible Debentures (NCDs) with Detachable Equity Warrants

The holder of this instrument is given an option to buy a specific number of shares from the company at a pre-determined price and time frame. The warrants attached to the NCDs are issued, subject to full payment of the NCDs value. There is a specific lock-in period after which the detachable warrant holders have to exercise their option to apply for equities. If the option to apply for equities is not exercised, the unapplied portion of shares would be disposed of by the company at its liberty.

Escorts, Bombay Dyeing, and Indian Rayon were among the early issuers of NCDs with warrants attached.

Secured Zero Interest Partly Convertible Debentures with Detachable and Separately Tradable Warrants

This instrument has two parts. Part A is convertible into equity shares at a fixed amount on the date of allotment. Part B is non-convertible, to be redeemed at par at the end of a specific period from the date of allotment. Part B carries a detachable and a separate tradable warrant which will provide an option to the warrant holder to receive an equity share for every warrant held at a price determined by the company.

Fully Convertible Debentures (FCDs) with Interest (Optional)

This instrument will not yield any interest for a specified short time period. After this period, FCD holders have the option to apply for equities at a ‘premium’ for which no additional amount is payable. This option needs to be indicated in the application form itself. However, interest on FCDs is payable at a determined rate from the date of conversion to the second/final conversion and equity shares are issued in lieu of the interest.

Domestic Convertible Bonds

These are hybrid securities that allow investors to separate the embedded equity portion from the bond and trade it separately. Because of the option to convert debt into equity, issuers can raise debt at a lower interest rate. These bonds were proposed by the Finance Minister in his 2008–09 budget speech to deepen the corporate bond market. However, this would require policy changes in different regulations and hence, the SEBI proposed an alternative instrument—Non-convertible debentures with detachable warrants. This instrument would help companies raise low-cost debt. It also allows the investors to detach the equity component from the instrument and trade on it.

Differential Shares

- Differential Shares are a class of shares with differential rights to voting or dividend

Differential shares are shares with differential rights to voting and dividends. They are a class of shares which carry voting rights with varying rates of dividend. In fact, differential shares can be issued with no voting rights but high dividends or, with varying rights and dividends. If the voting right of the shareholder is taken away, the shareholder is compensated by higher returns. This concept originated in Canada and was highly successful. This concept was introduced in India through the Companies (Second Amendment) Act, 2000. According to this law, a company can issue shares with differential rights ‘as to voting or dividend or otherwise.’

Companies are now allowed to issue shares with differential voting rights including non-voting shares, to the extent of 25 per cent of the total share capital, provided, they had profits that could be distributed, in the preceding three years. However, companies will not be allowed to convert their equity capital, with regular voting rights. into shares with differential voting rights and vice-versa.

Differential shares are positioned between ordinary equity shares and preference shares. The preference shareholders are entitled to certain assured dividends but no voting rights while ordinary equity shareholders have voting rights in proportion to the number of shares held but are not entitled to any assured return.

Rules for Issue of Differential Shares The issue of differential voting rights shares has to be approved by shareholders in a general meeting. Further, listed companies are required to obtain the shareholders' approval also through a postal ballot. The issue of such shares has to be authorised by the articles of association of the company.

The companies proposing to issue shares with differential rights should not have been convicted of any offence under the Securities and Exchange Board of India Act, 1992, Securities Contract (Regulation) Act, 1956, and Foreign Exchange Management Act (FEMA), 1999. The companies which have defaulted in filing annual returns in the preceding three years or have failed to repay deposits or interests thereon or, redeem debentures or pay dividends on the due date, will not be eligible to issue shares with differential rights. Additionally, the companies should not have defaulted in addressing investors' grievances.

A company issuing differential shares should not fail to give dividends for three consecutive years. Otherwise these shares will be converted into equity shares. If the company fails to give dividends for three consecutive years, the investors will not be able to exercise their voting powers during the period and will also not receive any return.

The companies planning to issue such shares will have to append in their notice to the shareholders, an explanatory statement detailing the differences in the rights they will carry, and the scale or in proportion to which the voting rights of such shares or types of shares will differ. Also, the entitlements on rights and/or bonus issues among different classes of shareholders will have to be predetermined and mentioned upfront.

Benefits of Differential Shares The differential shares provide varied benefits to both investors and issuers. The majority of the shareholders in India do not bother about the voting rights. Hence, a large section of investors would favour shares without voting rights but with higher dividend entitlements.

The issue of shares with differential rights imparts flexibility to promoters to raise funds without diluting their stakes. The differential shares can be effectively used as an anti-takeover tool. This instrument reduces dependence on outside funds and hence is a good cash management tool for new business firms. The differential shares help in leveraging the capital structure of the issuing company.

Differential shares are more beneficial to the issuers than investors. Investors lose control over the affairs of the company. Moreover, international experience shows that there is a problem of low liquidity with this instrument. Hence, both, the government and the issuer should take initiatives for increasing the liquidity of this instrument.

Securitised Paper

- In a securitisation transaction, the originator transfers future receivables to a special purpose vehicle (SPV), which in turn, issues securitised instruments called pass through certificates (PTCs) to investors. Pass through certificates are instruments which pass on the cash flows from the underlying loans on a pro-rata basis

It is a popular fund-raising technique in the developed markets such as the US and the UK. Asset securitisation began in the US in the 1960s with the pooling of residential mortgages. Now, this concept extends to a whole range of financial assets such as receivables and mortgages held by businesses and financial firms.

Securitisation is a process by which a company raises money by selling off its receivables. These receivables are sold off to cash-rich investors by converting them into securities. The receivables are sold at a discount to the investors which represents the yield.

Put in simple terms, securitisation is a process through which illiquid assets are packaged and converted into tradable securities known as pass-through certificates (PTCs). These securities are also referred to as asset-backed securities (ABSs). If the instrument securitised is a housing loan, the resultant instrument is referred to as mortgage backed securities (MBSs). In case of bond receivables, they are known as collateralised bond obligations (CBOs) and in case of industrial loan receivables, they are referred to as collateralised loan obligations (CLOs).

In securitisation, the assets to be securitised are identified on the basis of their creditworthiness. Then, the security is rated by a specialised credit rating agency. The pool is sold to a special purpose vehicle (SPV) which acts as a trustee. SPV is the entity that owns the assets once they are securitised. The assets are held by the SPV to ensure that the investors' interest is secure even if the originator goes bankrupt. The SPV is usually in the form of a trust. The SPV issues the asset backed security and the task of collecting the interest due on the underlying asset is left either to the seller or a third party.

An asset backed security can be of four types: pass-through, asset-backed bond, pay-through, and real estate mortgage investment conduit (REMIC). A pass through security represent a pro-rata share of assets in a pool wherein principal and interest payments are passed through to investors on a schedule similar to the assets. These assets do not remain on the issuer's balance sheet. An asset backed bond is a debt obligation wherein the schedule of the payment of interest and the principal differs from that of the asset. The assets remain on the issuer's balance sheet. Pay-through assets are similar to the asset-backed bonds except that they do not remain on the issuer's balance sheet. In real estate mortgage investment conduit, the principal and interest payments are passed through to one or more regular classes of securities and one residual class. Assets are transferred to the REMIC in a non-taxable manner. In India, PTCs are issued and are more popular.

The securities can then be listed on the NSE. As the securities are negotiable instruments and listed, they can be traded in the secondary market.

Since the securities are assets for the seller, the process is called asset securitisation. However, once it is listed on a stock exchange, it becomes a debt product for the investor and hence, the process is called 'debt' securitisation.

The key drivers of securitisation are raising low cost funds through new sources in an off the balance sheet manner. For the issuer, once an asset is securitised, it goes off the balance sheet. It offers a higher yield to the investor and adds value to his investment portfolio.

Securitisation is far superior to bills discounting or factoring. Bills discounting is a short-term source, while securitisation is a medium to long-term source. The quantum of paper work is higher in bills discounting than in securitisation. Factoring is quite similar to securitisation as the factor buys the receivables of a company at a discount. However, there is no rating or creation of a secondary market in factoring. Moreover, factoring has evolved as a trade financing tool rather than for medium-or long-term financing.

Securitisation Deals The first securisation relating to auto financing took place between Citi Bank and ICICI Bank in 1990–91.

It is more than a decade since this concept was introduced in India but the level of activity was quite low. Only a few corporates and some state electricity boards securitised their assets. Since the onset of the twenty-first century, volumes in securitisation have surged up.

ICICI successfully offloaded loan assets worth Rs. 7,000 crore in 2001 to raise funds for the merger with ICICI Bank. This boosted the activity in securitisation. In the first quarter of 2002–03, ICICI Bank securitised corporate loans worth Rs. 2,250 crore and housing loans worth Rs. 50 crore to meet its statutory liquidity requirements after the merger. The securitisation activity got a further boost with the introduction of the 'Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Ordinance 2002' which was promulgated in June 2002. This ordinance has given a legal status to securitisation as an activity.

In February 2000, Housing and Urban Development Corporation (HUDCO), securitised assets worth Rs. 1,500 crores from its infrastructure portfolio. The municipal corporations across the country have raised more than Rs. 600 crores through securitisation or structured obligations.

The current trend among banks and financial institutions is to issue PTCs to off-load illiquid assets from their balance sheets by converting them into marketable securities. This enables the issuers to realise up-front cash which in turn could be utilised for more efficient asset–liability management (ALM) and maintain the capital adequacy ratio.

The increasing popularity of securitisation can be known from the number of securitised transactions rated by credit rating agencies. Crisil has rated 14 securitised transaction worth Rs. 363 crore during April–June 2002–03 as compared to only two transactions worth Rs. 52.7 crore in April–June 2001–02. Icra too has rated higher transactions in 2002–03.

Securitisation is witnessed more in auto-financing than in housing receivables as yield levels are higher in the former. But now the issuers are coming out with a variety of securitisation deals. Citibank has securitised bank's personal loan portfolio of Rs. 284.1 crore. Citibank has also launched an on-tap securitisation programme called, Citi SPOT which is a master set of terms and conditions under which companies can undertake a series of multiple securitisation issuances in a year. ICICI has introduced 'securitised notes' structure instead of the traditional PTCs. The securitised notes are quite similar to PTCs but they give more flexibility to structure the underlying cash flows to meet the investors' needs. Securitised deals are now being tailor-made for the investors in terms of structure, tenor and coupon rate.

Domestic mutual funds, invested heavily into securitised papers such as asset backed securities (ABS) for trading profits as returns, were diminishing from other fixed income products as well as trading opportunities.

In October 2004, ICICI Bank offloaded 12 per cent of its retail auto loan portfolio through a Rs. 823.5 crore securitisation deal—the largest of its kind in India. The issue consisted of four senior tranches (strips), namely A1, A2, A3, and P strips. Strips A1, A2, and A3 had an average tenor of 7 months, 18 months, and 27 months respectively, while the size of strips A1, A2, A3, and P were Rs. 268 crore, Rs. 248 crore, Rs. 111 crore, and Rs. 198 crore, respectively. ICICI Bank acted as the sole originator, structure, and arranger for private placement.

Private sector banks like ICICI Bank and HDFC Bank securitised retail loans to foreign banks and public sector banks in 2006. Through such sales, they earned liquidity and got additional capital to reinvest in assets further. Increase in the asset base led to a reduction in their operating costs. Moreover, such asset sales enable banks to transact more business without augmenting their regulatory capital.

Securitisation Law The Ordinance on Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest was promulgated on June 24 2000. The ordinance will help banks and financial institutions to turn their assets in to tradeable securities, in setting up asset reconstruction companies (ARCs) to recover their bad assets, and clean their balance sheets to a great extent. This law will also provide for statutory recognition for hypothecation.

To create a market in securitised debt, the government has floated a company called the Asset Reconstruction Company India Ltd. (ARCIL), wherein, the government holds a 49 per cent stake, ICICI a 24.5 per cent stake, and the rest is held by financial institutions.

Factors Inhibiting the Growth of this Market Inspite of the recent surge in securitisation, the size of the market of this instrument is quite small. There have been many constraints in the pace of growth of this product.

- Lack of liquidity in the secondary market. The secondary market, which provides an exit route to investors, is non-existent.
- Lack of clarity on a number of legal issues relating to issuers. For instance, there is no clarity on reporting requirements, securitisation accounting, and process.
- Lack of regulatory framework for SPVs.
- A narrow investor base confined to mutual funds, private banks and foreign banks.
- Lack of awareness and participation from public sector banks.
- Most of the securitised paper is sold on a private placement basis, thereby, limiting its growth potential.
- Certain provisions of the income tax law inhibit the process.
- Even after the introduction of the ordinance on Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest, it is not clear to which authority the originator should report before the launch of the issue.
- At present, there are no laws governing the recognition of the income of various entities engaged in the securitisation deals.
- The securitisation process becomes expensive because of the stamp duty. This stamp duty varies across states. Stamp duty structures on industrial loans across states is a major impediment for the securitisation of these loans. Public sector banks' portfolio is dominated more by industrial loans as opposed to retail loans.
- The Securities Contract Regulation Act (SCRA) does not include securitised debt in the definition of 'securities' nor does it recognise special purpose vehicles, which issue securitised debt known as pass through certificates. This impedes the listing and trading of securitised paper. Listing of securitised paper improves transparency and leads to better price discovery.

For securitisation to grow at a rapid pace, there is a need to increase the investor base by persuading public sector banks, provident funds, trusts, and foreign institutional investors to invest in this market, develop standard procedures and accounting standards, introduce changes in tax laws, and develop an active secondary market. The dealings in securitised instruments need to be transparent. A formal regulatory framework for securitisation is needed. The RBI has set up a working group to suggest modalities for widening the investor base, improving the quality of assets, creating liquidity for trading in such assets, and related issues.

- The Securities Contract Regulation ACT (SCRA) does not include securitised debt in the definition of 'securities' nor does it recognise special purpose vehicles which issue securitised debt known as pass through certificates. This impedes the listing and trading of securitised paper

The Reserve Bank issued draft guidelines on assets securitisation in February 2006, to protect interests of investors in securitised debt. The regulations provide for a liquidity facility, which helps borrowers to tide over temporary cash shortages and may result due to timing differences faced by special purpose vehicles, between the receipt of cash flows from the underlying assets and the payments to be made to investors.

According to the guidelines:

- Liquidity facility should be drawn only where there is a sufficient level of non-default assets to cover the drawings.
- Liquidity facility to meet temporary mismatches in receivables should not be drawn for the purposes of providing credit enhancement, covering losses of SPVs, serving as a permanent revolving funding and covering any losses incurred in the underlying pool of exposures.
- Liquidity facility should not be available for meeting recurring expenses of securitisation, funding acquisition of additional assets by SPV, funding the final scheduled repayment of investors and funding breach of warranties.
- Securities–issued SPVs would be in the nature of non-SLR securities. The counter party for investors will not be SPV, but the underlying assets, of which, the cash flow, are expected from the borrowers. Therefore, such investments will be included to reckon overall exposures to any individual or group borrower, industry or geographic area wherever the obligators in the pool constitute 5 per cent or more of the receivables or Rs. 5 crore, whichever is lower.
- The profits from securitisation should be amortised over the life of the securitised asset. Hence, banks will not be able to use securitisation to show good results in a bad year.
- Banks have to bring in the required capital for the credit enhancement facility provided by the originator. Credit enhancement is the support provided, including through cash collaterals, to enhance the credit rating of the securitised assets.

Collateralised Debt Obligations (CDO)

- Collateralised debt obligation is securitisation of corporate obligations such as corporate loans, bonds, and asset-backed securities

Collateralised debt obligation is securitisation of corporate obligations such as corporate loans, corporate bonds, and asset-backed securities. Collectively, CDO consists of collateralised bond obligations, collateralised loan obligations, and credit linked notes that emanate from the same financial family. Banks and financial institutions use this instrument to meet regulatory obligations and to increase their revenues. Under the Basel Accord formulated in 1988 by the Basel Committee on Banking and Supervision, banks in most of the developed countries are required to maintain a risk-based capital of 8 per cent of the outstanding balance of commercial loans. These high risk-based capital requirements make the holding of commercial loans unattractive as the margins on these loans are also low. By securitising loan portfolios, banks are not only in a position to trim their balance sheets but they are able to generate funds from these portfolios.

The structure of a CDO consists of multiple layers called tranches which are formed by pooling underlying assets. Each tranch will have a pool of assets from corporate loans and bonds of similar seniority and maturity. These tranches are then rated by a credit rating agency and marketed.

These instruments offer higher yield to investors but the risk of default is high. Off-balance sheet financing has earned disrepute globally after the Enron fiasco. Many CDOs had Enron credit as part of their underlying exposure and these were defaults. This instrument is being increasingly used by European banks and the Bank of Japan besides American banks.

The ICICI Bank's first CDO issue failed to takeoff in March 2002 and was recalled because of unfavourable market conditions and lack of regulatory guidelines. In February 2004, the bank altered the product structure by bringing down the average maturity of the issue to around two years. The Rs. 100 crore CDO issue was mopped up by institutional investors. The ICICI bank sold corporate loans, given to 15 borrowers of varying sizes across 11 industries, through this issue to raise new assets as well as enhance exposure management in terms of specific sectors.

CDOs are new in the Indian market and new products take time to gain market acceptance. However, with an increase in investor awareness and setting up of a regulatory framework, this instrument will be preferred by Indian banks and financial institutions in times to come.

Inverse Float Bonds

These bonds are the latest entrants in the Indian capital market. Inverse float bonds are bonds carrying a floating rate of interest that is inversely related to short-term interest rates. The floating rate could be the

Mibor (Mumbai inter-bank offer rate) or some other rate. If the Mibor falls, the return for the investor rises and vice versa. The actual rate payable on these bonds is arrived at by subtracting the floating rate from a fixed benchmark rate. Suppose the fixed benchmark rate is 12 per cent and the six-month Mibor is 6 per cent, then the interest rate payable on these bonds is 6 per cent (12–6).

- Inverse float bonds carry a floating rate of interest that is inversely related to short-term interest rates

These bonds enable investors to earn high returns in a low interest rate environment. As interest rates are highly volatile, the investor has to observe the interest rate behaviour carefully over the entire bond period, else he could end up getting a poor return. Thus, both the investor and the issuer have to hedge the interest rate risk. If the interest rates go up, the issuer benefits as the coupon rate of his bonds will decline inspite of higher interest rates.

Inverse float bonds were introduced in the US market in 1990. In India, the Aditya Birla Group, Grasim, and Hindalco issued inverse float bonds in August 2002. The Cholamandalam Investment and Finance Company Limited (CIFCL) were the first non-banking finance company to raise funds through the issue of inverse floaters.

Perpetual Bonds

They are debt instruments which do not have a maturity date. The investors receive a stream of interest payments for perpetuity. The bonds can be issued to retail investors with market making to ensure liquidity. The oldest perpetual bonds that continue to be in existence are those issued by the British Government in 1814 to fund the Napoleonic wars.

- Perpetual bonds are bonds with no maturity date and carry interest payments for perpetuity

In case of liquidation, holders of perpetual bonds are paid second last, after all other depositors and creditors but before equity shareholders. Being permanent in nature, they qualify as Tier I capital (i.e., equity and free reserves) of banks.

Another hybrid instrument similar to perpetual bonds is perpetual preference shares.

Municipal Bonds

They are debt securities issued by the municipal corporation of a city to raise funds for financing their growing investment needs for a host of infrastructure projects. The Indian municipalities need a sum of Rs. 28,500 crore to finance a number of basic projects. The financial health of municipalities is in a poor state. Till now, only the large municipalities were able to tap the market through issuance of such municipal bonds. Large municipalities issued bonds worth Rs. 1,500 crores. These bonds had limited appeal because the annual cumulative ceiling on municipal bond issues was a measly Rs. 150–200 crore and the tax-free status was available only for select issues. At times, these bonds were made saleable through government guarantee.

- Municipal bonds are issued by municipal corporations to finance infrastructure projects

The Ahmedabad Municipal Corporation was the first urban local body to raise funds through municipal bonds. It was the first urban local body to receive a general obligation rating for its municipal bonds in February 1996 and raise funds through municipal bonds without a state government guarantee. The Bangalore Mahanagar Pallike (BMP) was the first to issue municipal bonds for Rs. 125 crore, with seven-year maturity and a coupon of 13 per cent per annum in December 1997.

Under the new proposal approved by the Central Government in June 2006, the bonds would have a coupon rate of interest of 8 per cent and be tax-free. All urban local bodies in a state will form a State Pooled Finance Entity (SPFE) which will enter the bond market on a regular basis. In turn, the SPFE will provide a secure flow of debt to the projects proposed by the municipalities. This will hedge risks against longer spectrum of activities than an individual urban legal body (ULB). The municipal bonds to be issued by the SPFE will be rated by a credit rating agency so as to improve its marketability. To ensure that there is absolutely no default risk, the funds raised by the SPFE will be invested in triple A rated papers only, till they are deployed in projects. The centre will also deploy a sum of Rs. 400 crore as seed capital to finance the SPFEs. This will limit the extent of the financial exposure of the centre to these bonds.

The Indian municipal bond market constitutes a mere 0.1 per cent of the total corporate bonds traded in India in contrast to the US municipal bond market which accounts for about 12 per cent of the total corporate bond market. The preference of Indian investors, including insurance companies and banks, to invest in securities with shorter maturity, regulatory restrictions on investment allocation, and a fewer number of tax-free bonds acts as constraints on the development of this market.

Globally, municipal bonds constitute a huge market. In the US, investors hold about $1.7 trillion worth of municipal bonds. The investors of these long tenure and tax-free bonds are households and mutual funds. The daily trading in these bonds is about $11 billion.

Conclusion

All the above new instruments have a potential large market. To market them effectively, the issuers and the government agencies need to increase investors' awareness, make legal amendments wherever necessary, and list them on the NSE to increase liquidity and depth of the Indian financial markets.

KEY TERMS

Floating Rate Bonds, Zero Interest Bonds, Deep Discount Bonds, Auction Rated Debentures, Differential Shares, Securitised Papers, Pass Through Certificates, Collateralised Debt Obligations.

SUMMARY

1. A new financial instrument may be one which has some new features in the terms of agreement when compared with the features of presently available instruments.
2. In the post-reforms period, a host of innovative instruments have been introduced in the capital market. Most of these instruments are debt instruments. These instruments have not only been structured and designed properly, they have also been successfully marketed at the retail level.
3. Floating rate bonds are those bonds wherein the interest rate is linked to a benchmark/anchor rate and is not fixed. It is a concept which has been introduced primarily to take care of the falling market or to provide a cushion in times of falling interest rates in the economy.
4. Zero interest bonds are those bonds wherein there is no periodic interest payment and they are sold at a huge discount to face value.
5. Deep discount bond is a zero coupon bond whose maturity is very high, say 15 years onwards and is offered at a discount to the face value.
6. Revolving underwriting finance facility is a 91-day debenture which is rolled over after its maturity with a facility of an underwriter who is prepared to pick-up the lot if it is not fully sold.
7. Auction rated debenture is a secured, redeemable (after 90 days), non-convertible instrument with interest determined by the market and placed privately with bids.
8. Secured premium notes with detachable warrants is redeemable after a notified period, of say four to seven years. There is a lock-in period during which no interest is paid. The attached warrants ensure that the holder has the right to apply and be allotted equity shares provided the secured premium note is fully paid.
9. Non-convertible debenture with detachable equity warrants is an instrument wherein the holder is given an option to buy a specific number of shares from the company at a pre-determined price and time frame.
10. Secured zero interest partly convertible debentures with detachable and separately tradable warrants consists of two parts: Part A is convertible into equity shares at a fixed amount on the date of allotment, while Part B is non-convertible, to be redeemed at par at the end of a specific period from the date of allotment and carries detachable and separate tradable warrants.
11. Differential shares are a class of shares which carry voting rights with varying rates of dividend. They can be issued with no voting right but high dividends or, with varying voting rights and dividends.
12. Securitisation is a process by which a company raises money by selling off its receivables. These receivables are sold off to cash-rich investors by converting them into securities. The receivables are sold at a discount to the investors which represents the yield.
13. Collateralised debt obligation is securitisation of corporate obligations such as corporate loans, corporate bonds, and asset backed securities. Collectively, CDO consists of collateralised bond obligations, collateralised loan obligations, and credit linked notes that emanate from the same financial family.
14. Inverse float bonds are the latest entrants in the Indian capital market. Inverse float bonds are bonds carrying a floating rate of interest that is inversely related to short-term interest rates.
15. Perpetual bonds are debt instruments with no maturity date.
16. Municipal bonds are debt seuirities issued by the municipal corporation of a city to finance infrastructure projects.

REVIEW QUESTIONS

1. What are new instruments? What are the reasons for innovations in financial instruments.
2. What are deep discount bonds? How do they differ from zero interest bonds?
3. 'Floating rate bonds are gaining popularity in India.' Discuss.
4. What is a securitised paper? What are the reasons for its growing popularity in India? What are the problems hindering the growth of securitisation?
5. What are the distinctive features of revolving underwriting finance facility?
6. What are differential shares? How are they beneficial?
7. What are municipal bonds? Describe the process of issuance of municipal bonds.
8. Answer the following in brief:
   - i. What are perpetual bonds and inverse float bonds?
   - ii. What is a collateralised debt obligation?
   - iii. How do deep discount bonds differ from zero-interest bonds?
   - iv. What is a pass through certificate?
9. Choose the right answer
   - i. Municipal bonds are debt securities issued by the ____________to raise funds.
     - (a) Central Government
     - (b) State Government
     - (c) Municipal Corporation of a city
     - (d) Local body of a village
   - ii. ___________ bonds do not have a maturity date.
     - (a) Zero-interest
     - (b) Convertible bonds
     - (c) Non-convertible bonds
     - (d) Perpetual

iii. In deep discount bonds, there is
   (a) no periodic interest payment and low maturity.
   (b) periodic interest payments and high maturity.
   (c) no periodic interest payments, high maturity, and offered at a discount to its face value.
   (d) periodic interest payments, high maturity, and offered at a discount to its face value.

iv. Inverse float bonds enable investors to earn high returns in a _________ interest rate environment
   (a) high (c) stable
   (b) low (d) volatile

v. __________ debentures are a hybrid of commercial papers and debentures
   (a) Non-convertible
   (b) Convertible
   (c) Auction rated

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Part III

Financial Institutions

12

Development Financial Institutions

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Meaning and objectives of development financial institutions*
2 *Evolution of development banks*
3 *Development Financial Institutions in India*
4 *Changing role of development financial institutions*
5 *Universal banking*
6 *Policy measures relating to development financial institutions*
7 *Industrial Finance Corporation of India*
8 *Small Industries Development Bank of India*
9 *Infrastructure Development Finance Company Limited*
10 *The Export Import Bank of India*
11 *National Bank for Agricultural and Rural Development*

INTRODUCTION

The economic development of any country depends on the extent to which its financial system efficiently and effectively mobilises and allocates resources. There are a number of banks and financial institutions that perform this function; one of them is the development bank. Development banks are unique financial institutions that perform the special task of fostering the development of a nation, generally not undertaken by other banks.

Development banks are financial agencies that provide medium and long-term financial assistance and act as catalytic agents in promoting balanced development of the country. They are engaged in promotion and development of industry, agriculture, and other key sectors. They also provide development services that can aid in the accelerated growth of an economy.

The objectives of development banks are as follows.

1. To serve as an agent of development in various sectors, namely, industry, agriculture, and international trade.
2. To accelerate the growth of the economy.
3. To allocate resources to high priority areas.
4. To foster rapid industrialisation, particularly in the private sector, so as to provide employment opportunities as well as higher production.
5. To develop entrepreneurial skills.
6. To promote the development of rural areas.
7. To finance housing, small scale industries, infrastructure, and social utilities.

In addition, they are assigned a special role in the following.

1. Planning, promoting, and developing industries to fill the gaps in industrial sector.
2. Coordinating the working of institutions engaged in financing, promoting or developing industries, agriculture, or trade.
3. Rendering promotional services such as discovering project ideas, undertaking feasibility studies, and providing technical, financial, and managerial assistance for the implementation of projects.

EVOLUTION OF DEVELOPMENT BANKS

The concept of development banking originated during the post Second World War period. Many countries of Europe were in the stage of industrial development and special financial institutions known as development banks were set up to foster industrial growth. In the US, development finance institutions came into existence for special purposes such as economic rehabilitation and filling gaps in the traditional financing pattern. Not only developed countries, but several underdeveloped countries in Asia, Africa, and Latin America established special financial institutions to hasten the pace of industrialisation and growth.

The International Bank for Reconstruction and Development (IBRD) known as the World Bank and the International Monetary Fund (IMF) are examples of development banks at the international level. The major objective of the World Bank is to promote world development and perform the task of transfer of enormous financial and technical resources from the

• Development banks are unique financial institutions that act as catalytic agents in promoting balanced development of the country and thereby aid in the economic growth of the country

developed to developing nations. The IMF performs a special function of providing financial assistance to private sector projects in developing countries.

Development Financial Institutions in India

The need for development financial institutions was felt very strongly immediately after India attained independence. The country needed a strong capital goods sector to support and accelerate the pace of industrialisation. The existing industries required long-term funds for their reconstruction, modernisation, expansion, and diversification programmes while the new industries required enormous investment for setting up gigantic projects in the capital goods sector. However, there were gaps in the banking system and capital markets which needed to be filled to meet this enormous requirement of funds. Some of them are listed below.

1. Commercial banks had traditionally confined themselves to financing working capital requirements of trade and industry and abstained from supplying long-term finance.
2. The managing agency houses, which had served as important adjuncts to the capital market, showed their apathy to investment in risky ventures.
3. Several malpractices, such as misuse of funds, excess speculation, and manipulations were unearthed. Owing to this, the investors were not interested in investing in the capital market.
4. There were a limited number of issue houses and underwriting firms that sponsored security issues.

Hence, to fill these gaps, a new institutional machinery was devised—the setting up of special financial institutions, which would provide the necessary financial resources and know-how so as to foster the industrial growth of the country.

The first step towards building up a structure of development financial institutions was taken in 1948 by establishing the Industrial Finance Corporation of India Limited (IFCI). This institution was set up by an act of parliament with a view to providing medium-and long-term credit to units in the corporate sector and industrial concerns.

In view of the immensity of the task and vast size of the country, it was not possible for a single institution to cater to the financial needs of small industries spread in different states. Hence, the necessity for setting up regional development banks to cater to the needs of small and medium enterprises was recognised. Accordingly, the State Financial Corporations Act was passed in 1951 for setting up state financial corporations (SFCs) in different states. By 1955–56, 12 SFCs were set up and by 1967–68, all the 18 SFCs now in operation came into existence. SFCs extend financial assistance to small enterprises.

Even as the SFCs were being set up, a new corporation was established in 1955 at the all-India level known as the National Small Industries Corporation (NSIC) to extend support to small industries. The NSIC is a fully government-owned corporation and is not primarily a financing institution. It helps small-scale industries (SSIs) through various promotional activities, such as assistance in securing orders, marketing the products of SSIs, arranging for the supply of machinery, and training of industrial workers.

The above institutions had kept themselves away from the underwriting and investment business as these were considered to be risky. Due to the absence of underwriting facilities, new entrepreneurs and small units could not raise equity capital nor could they get loan assistance owing to this weak financial position. To fill this gap, the Industrial Credit and Investment Corporation of India Limited (ICICI) was set up in January 1955 as a joint stock company with support from the Government of India, the World Bank, the Commonwealth Development Finance Corporation and other foreign institutions. The ICICI was organised as a wholly privately-owned institution; it started its operation as an issuing-cum-lending institution. It provides term loans and takes an active part in the underwriting of and direct investments in the shares of industrial units.

In 1958, another institution, known as the Refinance Corporation for Industry (RCI) was set up by the RBI, the Life Insurance Corporation of India (LIC), and commercial banks with a view to providing refinance to commercial banks and subsequently to SFCs against term loans granted by them to industrial concerns in the private sector. When the Industrial Development Bank of India (IDBI) was set up in 1964 as the central coordinating agency in the field of industrial finance, the RCI was merged with it.

At the state level, another type of institution, namely, the State Industrial Development Corporation (SIDC) was established in the 1960s to promote medium-and large-scale industrial units in the respective states. The SIDCs promoted a number of projects in the joint sector and assisted in setting up industrial units. In recognition of the crucial role played by them in the promotion of industries in different states, the SIDCs were made eligible for IDBI refinance facilities in 1976. Thus, they became an integral part of the development banking system of the country.

State Small Industries Development Corporations (SSIDCs) were also established to cater to the requirements of the industry at the state level. They helped in setting up and managing industrial estates, supplying of raw materials, running common service facilities, and supplying machinery on hire—purchase basis.

By the early 1960s, a plethora of financial corporations catering to the financial needs of a variety of industries had come into existence. However, the need for an effective mechanism to coordinate and integrate the activities of the different financial institutions was increasingly felt. Furthermore, many gigantic projects of national importance were held up as these financial institutions were not able to supply the necessary capital in view of their own limited resources. Hence, the establishment of a financial institution with a substantially large amount of capital resource and capable of functioning independently, unhindered by statutory rigidities, became inevitable.

The Industrial Development Bank of India (IDBI) was set up in 1964 as an apex institution to establish an appropriate working relationship among financial institutions, coordinate their activities, and build a pattern of inter-institutional cooperation to effectively meet the changing needs of the industrial structure. IDBI was set up as a wholly owned subsidiary of the RBI. The IFCI became a subsidiary of the IDBI so that it might play an enlarged role. In February 1976, the IDBI was restructured and separated from the control of the RBI.

An important feature of industrial finance in the country is the participation of major investment institutions in consortium with other all-India financial institutions. The Unit Trust of India (UTI), established in 1964, the Life Insurance Corporation of India (LIC), established in 1956, and the General Insurance Corporation of India (GIC), established in 1973, work closely with other all-India financial institutions to meet the financial requirements of the industrial sector.

Specialised institutions were also created to cater to the needs of the rehabilitation of sick industrial units, export finance, and agriculture and rural development. In 1971, the Industrial Reconstruction Corporation of India Limited (IRCI) was set up for the rehabilitation of sick units. In January 1982, the Export-Import Bank of India (EXIM Bank) was set up. The export finance operations of the IDBI were transferred to the EXIM Bank with effect from March 1, 1982. With a view to strengthening the institutional network catering to the credit needs of the agricultural and rural sectors, the National Bank for Agriculture and Rural Development (NABARD) was set up in July 1982.

These financial institutions have a network of branches and are supported by technical consultancy organisations. Their strategies, policies, and industrial promotional efforts subserve the national objectives of rapid industrial growth, balanced regional development, creation of a new class of entrepreneurs, and providing self-employment opportunities. They have not only provided medium-to long-term financial assistance to industry in the form of project finance, but have also rendered a wide range of services including providing risk capital, underwriting of issues, preparing and evaluating project reports, disseminating technical advice, and refinancing.

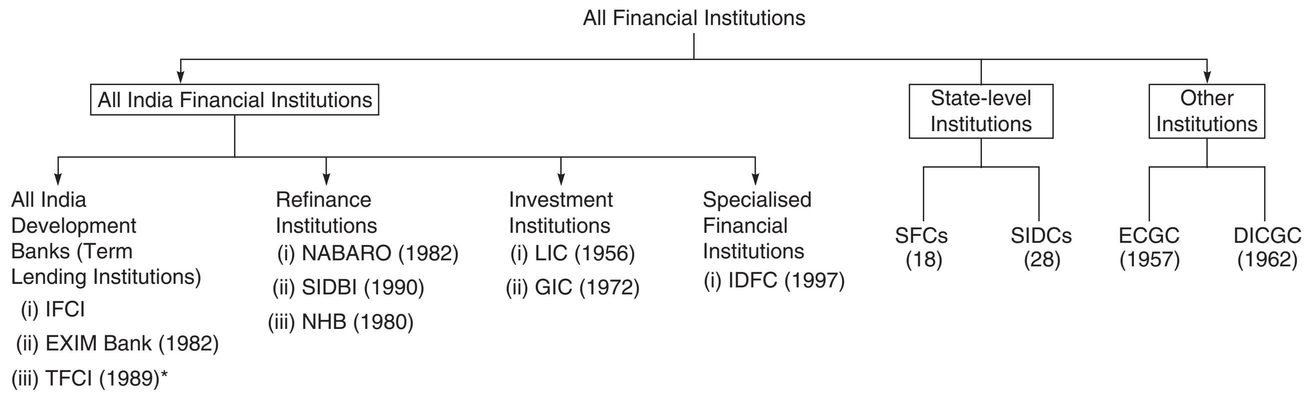
The national-level institutions, known as All India Financial Institutions (AIFIs), comprise two All India Development Banks (AIDBs), also known as term-lending institutions three refinance institutions, two investment institutions and one specialised financial institutions. The term-lending institutions are Industrial Finance Corporation of India Limited (IFCI), Export-Import Bank of India (EXIM Bank) and Tourism Finance Corporation of India Limited (TFCI).

At the state level, there are 18 state financial corporations (SFCs) and 28 state industrial development corporations (SIDCs).

The Specialised Financial Institutions comprise Infrastructure Development Finance Company Limited (IDFC).

The investment institutions are the Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC).

The refinance institutions are National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India (SIDBI), and National Housing Bank (NHB). These institutions extend refinance to banks as well as non-banking financial intermediaries for lending to agriculture, small scale industries, and housing finance companies (refer Figure 12.1).



* Tourism Finance Corporation of India Ltd.

Note:

1. Figures in brackets under respective institutions indicate the year of establishment or incorporation.
2. Figures in the brackets under state financial corporations (SFCs)/state industrial development corporations (SIDCs) indicate the number of institutions in that category.
3. ECGC: Export Credit Guarantee Corporation of India; DICGC: Deposit Insurance and Credit Guarantee Corporation.
4. ICICI and UTI were part of the AIFIs till 2002–03. IDBI became a commercial bank from October 1, 2004.

Source: RBI, *Report on Trend and Progress of Banking in India,* various issues.

Figure 12.1 All-India Financial Institutions

CHANGING ROLE OF DEVELOPMENT FINANCIAL INSTITUTIONS

Financial institutions were functioning in a highly regulated regime upto 1991. DFIs were mostly engaged in consortium lending and they offered similar services at uniform prices. In the administered interest rate regime, the cost of borrowings of DFIs was substantially lower than the return on financing (lending). Long-term lending involves uncertainties and to handle this, the DFIs used to get concessional funds upto the 1990s. The RBI and the central government used to finance these institutions by subscribing to the share capital, allowing them to issue government guaranteed bonds and extending long-term loans at concessional rates. However, this concessional lending was phased out in the 1990s with the initiation of financial sector reforms. Interest rates were deregulated and the facility of issuing bonds eligible for SLR investments was withdrawn. At present, these financial institutions have to rely on equity and debt markets for financing their needs. DFIs have resorted to market-based financing by floating a number of innovative debt and equity issues. They also raise resources by way of term deposits, certificates of deposits and borrowings from the term money market within the umbrella limit fixed by the RBI in terms of net owned funds. More stringent provisioning norms have come into operation. Many of the DFIs including IDBI have lost their tax-exempt status.

Moreover, with deregulation, the distinction between different segments of financial intermediaries has blurred. The commercial banks and NBFCs are now financing the medium-and long-term capital needs of the corporate sector and DFIs have started extending short-term/working capital finance. This has led to a stiff competition between banks and DFIs. Commercial banks have a competitive edge over DFIs in terms of their branch network, infrastructure, client base and flexibility in operations. These have provided them the benefit of economies of scale and backed by low-cost deposits, they deliver low cost services to clients which DFIs cannot. Moreover, DFIs are saddled with huge amount of non-performing assets (NPAs) which are a result of large amount of disbursements in certain old economy sectors and greenfield projects with a lack of concern on quality and recovery of funds. As a result, the focus of DFIs has shifted from the purpose for which they were set up.

With globalisation and liberalisation, the financing requirements of the corporate sector has undergone a tremendous change. Many foreign players have entered into strategic alliances with Indian firms. There was an increase in research and development activities as well as the diversification plans of firms. Investment in technology and infrastructure became crucial. With a view to taking advantage of new opportunities, the financial institutions started offering a wide range of new products and services. DFIs set up several subsidiaries/associate institutions which offer various services such as commercial banking, consumer finance, investor and custodial services, broking, venture capital finance, infrastructure financing, registrar and transfer services, and e-commerce.

Corporates are now eyeing domestic and international stock markets to raise medium-and long-term funds for large projects as it has become not only easy to raise funds through these markets but it is costeffective also. Moreover, these markets are offering a wide range of innovative products and riskhedging mechanisms. Competition has made the traditional business model of DFIs redundant.

DFIs are in the process of converting themselves into universal banks. ICICI has become a universal bank by a reverse merger with its subsidiary ICICI Bank. IDBI has also transformed itself into a universal bank. IDBI was merged with its private banking arm IDBI Bank, in 2003–04. The new entity repositioned itself as a bank that focuses on development financing as mandated in legislation, while offering retail banking services. The name of 'Industrial Development Bank of India' has been changed to 'IDBI Bank Limited' with effect from May 7, 2008.

The RBI has issued guidelines for DFIs to become commercial banks. These guidelines are the same as for commercial banks under the Banking Regulation Act. It is envisaged that there will be only two types of financial intermediaries in future, i.e., commercial banks and non-banking finance companies (NBFCs).

Universal Banking

Universal banking is a one-stop shop of financial products and services. Universal banks provide a complete range of corporate financial solutions under one roof—everything from term finance, working capital, project advisory services, and treasury consultancy. Universal banking encompasses commercial banking and investment banking, including investment in equities and project finance. It refers to a bank undertaking all types of business—retail, wholesale, merchant, private, and others under one organisational roof. It means a complete breakdown of barriers between different categories of financial intermediaries such as commercial banks, FIs, and NBFCs.

- Universal bank refers to a bank providing various financial products and services under one organisational roof

Universal banking helps the service provider to build up long-term relationships with the client by catering to his different needs. The client also benefits as he gets a whole range of services at a low cost under one roof. Globally, banks such as Deutsche Bank, Citibank, and ING Bank are universal banks.

In India, the trend towards universal banking began when financial institutions were allowed to finance working capital requirements and banks started term financing. This trend got a momentum with the report of Narasimham Committee II, suggesting that development finance institutions should convert ultimately into commercial banks or non-bank finance companies (NBFCs). The Khan Committee, which was set up by the RBI to examine the harmonisation of business of banks and development financial institutions, endorsed this conversion. It was of the view that DFIs should be allowed to become banks at the earliest. The committee recommended a gradual move towards universal banking and an enabling framework for this purpose should be evolved. In January 1999, the RBI released a discussion paper for wider public debate on universal banking. The feedback indicated the desirability of universal banking from the point of view of efficiency of resource use. In the mid-term review of monetary and credit policy (1999–2000), the RBI acknowledged that the principle of universal banking 'is a desirable goal.' In April 2001, it set out the operational and regulatory aspects of conversion of DFIs into universal banks.

ICICI was the first financial institution to convert itself into a truly universal bank. The concept of universal banking provides the financial institutions an access to the retail market wherein high margins are involved. This concept is slowly gaining popularity among banks as the interest spread has squeezed in the past few years and non-performing assets (NPAs) have increased in banking activity. A foray into universal banking would help the banks to diversify beyond the traditional portfolio of loans and investment and extend to treasury, capital market operations, infrastructure finance, retail lending, and advisory services.

POLICY MEASURES RELATING TO DEVELOPMENT FINANCIAL INSTITUTIONS

The change in the role of DFIs, the South-East Asian crisis, and the general economic slowdown necessitated introduction of policy measures and regulation. In November 1994, the Board for Financial Supervision (BFS) was constituted under the aegis of the RBI for comprehensive and integrated regulation and supervision over commercial banks. FIs and NBFCs have been brought under the purview of the board. The scope and coverage of the FIs inspection are very limited, unlike that of NBFCs, and are not as rigorous as that of banks.

Select FIs such as IDBI, ICICI Ltd, IFCI Ltd, IIBI Ltd, NABARD, NHB, EXIM Bank, TFCI, SIDBI, and IDFC have been brought under the supervisory purview of the RBI to enhance the transparency in their performance and maintain systemic stability.

Policy Measures

- Financial institutions were permitted to include the 'general provision on standard assets' in their supplementary (tier II) capital with a stipulation that the provisions on standard assets along with other 'general provisions and loss reserves' should not exceed 1.25 per cent of the total risk-weighted assets.
- An asset would be treated as non-performing, if interest and/or instalment of principal remain overdue for more than 180 days with effect from the year ending March 31, 2002. A non-performing asset is that part of a financial institution's asset that is currently yielding no return and on which none is expected.
- FIs have to assign a 100 per cent risk weight only on those state government guaranteed securities which were issued by the defaulting entities.
- FIs are required to assign a risk weight of 2.5 per cent for market risk in respect of investments in all securities from March 31, 2001. This risk weight would be in addition to the 20 per cent/100 per cent risk weight already assigned for credit risk in non-government/non-approved securities.
- In order to bring about uniformity in the disclosure practices adopted by the FIs and with a view to improving the transparency in their affairs, FIs were advised to disclose certain important financial ratios/data with effect from the financial year 2000–01. These disclosures pertain to capital-to-risk weighted assets ratio (CRAR), Core CRAR, supplementary CRAR, amount of subordinated debt raised/outstanding as tier II capital, risk-weighted assets, shareholding pattern, asset quality and credit concentration, maturity pattern of rupee and foreign currency assets and liabilities, and details on operating results. Besides, separate details on loan assets and substandard assets which have been subject to restructuring, and so on, would also need to be disclosed.
- Capital to risk-weighted asset ratio (CRAR) should be 9 per cent of risk-weighted assets (RWA) on an ongoing basis. CRAR represents the amount of capital maintained in consonance with the risk-adjusted aggregate of funded and non-funded assets of an FI. The risk-adjusted asset is arrived at by multiplying each asset with its corresponding risk weight in the case of funded assets. Conversion factors are assigned in case of non-funded assets apart from weights. CRAR includes core capital (tier I) and supplementary capital (tier II). Tier I capital includes paid up capital, statutory reserves, and other disclosed free reserves, if any. Certain Government of India grants and reserves held under Section 36(1)(viii) of the Income Tax Act, 1961 are treated as capital. Besides capital reserves, equity investment in subsidiaries, intangible assets, gaps in provisioning, and losses in the current period and those brought forward from the previous period will be deducted from tier I capital. The core CRAR should not be less than 50 per cent of CRAR at any point of time. Supplementary CRAR, or tier II capital, includes undisclosed reserves and cumulative preference shares, revaluation reserves, general provisions and reserves, hybrid debt capital instruments, and subordinated debt. The supplementary capital is limited to a maximum of 100 per cent of tier I capital.
- Since June 2000, FIs need not seek the RBI issuewise prior approval/registration for raising resources through either public issue or private placement if (a) the minimum maturity period is three years; (b) where bonds have call/put or both options, the same is not exercisable before expiry of one year from date of issue; (c) yield to maturity (YTM) offered at the time of issue of bonds, including instruments having call/put options, does not exceed 200 basis points over that on government securities of equal residual maturities; and (d) 'exit' option is not offered prior to expiry of one year, from date of issue. The outstanding total resources mobilised at any point of time by an individual FI including funds mobilised under the 'umbrella limit' as prescribed by the RBI should not exceed 10 times its net owned funds as per the latest audited balance sheet.

  The rating for the term deposits accepted by FIs was made mandatory effective November 1, 2000.
- FIs are required to classify entire investment portfolio from March 31, 2001, under three categories, namely, (a) held to maturity, (b) available for sale, and (c) held for trading. Investments under (b) and (c) are to be marked-to-market as prescribed or at more frequent intervals, while those under (a) need not be marked-to-market and should not exceed 25 per cent of total investments.
- Looking to the deteriorating financial position of FIs, it was decided that the inspection of all the FIs would be undertaken by the RBI on an annual basis with effect from March 31, 2001.
- The RBI introduced a CAMELS based supervisory rating model for the FIs effective March 31, 2002.

The above mentioned policy initiatives were undertaken by the RBI for strengthening the regulation and supervision of select all India financial institutions in the context of their financial performance, the market conditions for resource mobilisation and increasing competition from banks.

The Reserve Bank initiated several regulatory measures for these financial institutions during 2005–06. The financial institutions are subject to same provisioning norms as the banking sector. The guidelines relating to schemes for recovery of NPAs and securitisation are also applicable to the financial institutions. The Reserve Bank constituted an Internal working group in December 2005 to examine and suggest the future role of refinance institutions.

INDUSTRIAL FINANCE CORPORATION OF INDIA LIMITED

The Industrial Finance Corporation of India Limited (IFCI), India's first DFI, was established on July 1, 1948, under the Industrial Finance Corporation Act as a statutory corporation. It was set up to provide institutional credit to medium and large industries.

With a view to imparting greater operational flexibility and enhancing its ability to respond to the needs of the changing financial system, the IFCI was converted from a statutory corporation to a public limited company. It was the first institution in the financial sector to be converted into a public limited company on July 1, 1993. IFCI is a board-run company and its directors are elected by shareholders.

IFCI's principal activities can be categorised into financing and promotional activities.

Financing Activities

IFCI's financing operations include project financing, financial services, and corporate advisory services. These are outlined below.

- **Project financing:** Project financing is the core business of IFCI. The main objective behind the incorporation of the DFI was to fund green-field projects. Financial assistance is provided by way of medium or long-term credit for setting up new projects, expansion/diversification schemes, modernisation/balancing schemes of existing projects.

  Financial assistance is provided by way of rupee loans, loans in foreign currencies, underwriting of/direct subscription to shares and debentures, providing guarantee for deferred payments and loans.
- **Financial services:** IFCI provides tailor-made assistance to meet specific needs of corporates through specifically designed schemes. The various fund-based products offered are equipment finance, equipment credit, equipment leasing, supplier's/buyer's credit, leasing and hire purchase concerns, working capital term loans, short-term loans, equipment procurement, instalment credit, and others. The fee-based services offered by it are guarantees and letters of credit.
- **Corporate advisory services:** IFCI provides advisory services in the areas of projects, infrastructure, corporate finance, investment banking, and corporate restructuring. It provides customised services in areas of investment appraisals, corporatisation, disinvestment, business restructuring, bid-process management, and formation of joint ventures. It also acts as a catalyst in channelising foreign direct investments (FDIs) and provides a range of services to prospective foreign investors. IFCI also provides consultancy services on certain policy-related technical and financial matters to regulatory agencies in different infrastructure sectors, namely, electricity, telecom, oil and gas, insurance, and education.
- **Corporate advisory services to foreign investors:** IFCI provides a whole range of services to prospective foreign investors, namely, facilitating the foreign business entities through information services; necessary office infrastructure for the start-up operations of the organisation; coordination for obtaining the required approvals/clearances from the government departments/regulators/statutory agencies; inputs on markets, materials, and manpower available in the country; inputs on available manufacturing facilities; syndication services for obtaining the required capital; research inputs and information regarding tax incentives; tariff protections, and opportunities available for acquisitions, mergers, and amalgamations.

Developmental and Promotional Activities of IFCI

IFCI has been instrumental in translating the government's development priorities into a reality by contributing to the development of industry exports infrastructure and generation of employment. It has played a pivotal role in removing the regional imbalances by sanctioning 47 per cent of its total assistance to 2,172 units located in backward areas. It has played a key role in the development of cooperatives in the sugar and textiles sectors. It has promoted technical consultancy organisations (TCOs), primarily in less-developed states, to provide necessary services to the promoters of small-and medium-sized industries in collaboration with other banks and institutions. It has founded and developed institutions such as the Management Development Institute (MDI), the Investment and Credit Rating Agency (ICRA), the Tourism Finance Corporation of India (TFCI) and the Rashtriya Gramin Vikas Nidhi (RGVN). It, along with other institutions has also promoted the Stock Holding Corporation of India Limited (SHCIL), the Discount and Finance House of India Limited (DFHI), the National Stock Exchange (NSE), the Over the Counter Exchange of India (OTCEI), the Securities Trading Corporation of India (STCI), LIC Housing Finance Limited, GIC Grih Vitta Ltd, and Bio-tech Consortium Limited (BCL).

Since 1998–99, the assistance sanctioned and disbursed by IFCI has declined. During 2000–01, sanctions and disbursements under direct finance constituting 99.4 per cent and 99.5 per cent of overall sanctions and disbursement declined by 10.8 per cent and 35.3 per cent, respectively. Sanctions and disbursements under project finance accounting for 97.5 per cent and 94.7 per cent of the total sanctions and disbursements declined by 8.3 per cent and 30 per cent, respectively in 2000–01. The decline was recorded across all the products under project finance. The assistance sanctioned and disbursed during 2003–04 was largely by way of restructuring assistance and they were Rs. 1391.6 crore and Rs. 278.2 crore respectively.

IFCI started reporting losses from 1999. In 1999, it reported a loss of Rs. 267.70 crore which increased to Rs. 884.7 crore in 2001–02. Spreads (the difference between interest income and expense) have begun to narrow across the financial sector due to stiff competition. This has had an impact on the profitability of IFCI. The non-performing assets (NPAs) of the company at Rs. 3,937.2 crore had touched 46 per cent of its total assets of Rs. 8,183.2 crore. Its capital adequacy ratio was just 3 per cent, way below the stipulated 12 per cent.

The income from operations during the subsequent financial years further declined due to the reduction in interest earning assets and non-recognition of income on non-performing assets.

IFCI's financial health had deteriorated and the state of affairs displayed a dismal picture of the company. The reasons attributable to this dismal state of affairs of the company are as follows:

- **Operational inefficiency:** The cost of borrowing had exceeded the income from operations.
- **Political interference:** IFCI was used as a handmaiden of politicians and most of the loans have been sanctioned under political pressures.
- **Traditional sector financing:** IFCI had sanctioned majority of the loans in traditional sectors such as iron and steel, textiles, synthetic fibres, cement, synthetic resins, plastics, and so on. These traditional sectors were facing rough times due to demand recession, price fluctuations, abolition of import controls, gradual reduction of tariffs, among others. Hence, this led to a rise in NPAs of IFCI.
- **Higher provisioning for non-performing assets:** Project financing is the major activity of IFCI and revenue arising from this activity constitutes a substantial portion of its revenues. These projects have a long gestation period. The RBI has tightened the provisioning norms for NPAs and stipulated that loans related to projects under implementation have to be classified as NPAs. Hence, the company had to make larger provision at the end of the year, dampening the net profit level.

These huge NPAs made IFCI terminally ill. IFCI had raised Rs. 1,237 crore through public issue and Rs. 13,689 crore in private placements for lending operations. This amount had to be paid back to public sector banks, mutual funds, trusts, and provident funds that invested in these tax-free instruments. IFCI had a Rs. 900 crore redemption obligation on bonds, guarantee commitments of Rs. 800 crore, foreign currency loan of USD 100 million and rupee loans of Rs. 300 crore. Any default could cause systemic risks and could weaken confidence in the system. IFCI's rating had plummeted to default category, which means it could not raise funds to lend profitably.

The Government of India, based on the recommendations of the Basu Committee appointed for suggesting a restructuring plan for IFCI, declared a Rs. 1,000 crore package for IFCI in late 2001. This package consisted of two parts: Rs. 400 crore was given by the government by way of subscription to long-term convertible debentures and the remaining Rs. 600 crore was contributed by the government-controlled institutional shareholders of IFCI on a pro-rata basis. IDBI is the principal shareholder of IFCI with a 31.71 per cent shareholding and it had to make the largest contribution among the FIs. But the IDBI itself was in trouble and the government was drawing out a bailout package for it also. In this situation, the State Bank of India (SBI) lent a helping hand by contributing towards IDBI's share. But this package also could not save IFCI from the burgeoning NPAs and declining capital adequacy ratio.

The government appointed the international consulting giant McKinsey to suggest the amount of funds needed to revive IFCI and a course of action to get the company back into the profit zone. McKinsey suggested that IFCI should be divided into two companies: one with good assets and the other with bad assets. The company with good assets would provide financing to mid-sized companies and undertake fee-based services. The business model for the good bank entailed merger with a potential universal bank. An asset reconstruction company should be set up with a capital of Rs. 200 crore to take care of the bad loans worth Rs. 4,000 crore. The bailing out would cost the government around Rs. 5.26 billion to Rs. 88 billion and the cost of liquidation would be between Rs. 88–122 billion. The one-time cost to the government for bailing out the institution was pegged at Rs. 11,200 crore. The government approved a package of Rs. 5,525 crore in 2002 to turnaround the country's oldest DFI. It was proposed to merge IFCI with IDBI Limited. The attempts to merge IFCI with IDBI failed.

Steps Taken for Revival

IFCI constituted an expert committee in 2001 to formulate a medium-to long-term strategic plan for IFCI in the emerging new business environment. The committee laid down the road map/action plan for the next five years. The committee made recommendations covering a wide range of structural and operational areas.

IFCI is concentrating on its core competence and is focusing on lending to established clients with a sound track record. It has strengthened its risk management techniques and is putting in efforts to bring down the NPAs to a manageable level, through corporate debt structuring.

The company has initiated the process of restructuring of liabilities and has initiated action against defaulters and has filed suits against defaulter companies.

It has repositioned itself as a mid-corporate specialist targeting small and medium enterprises (SMEs) and offering them services relating to asset financing, IPO management, loan syndication, project finance, receivables financing, mergers and acquisitions, and corporate and project advisory services.

Inspite of all these efforts, the financial state of affairs of the company has not improved.

Conclusion

IFCI reported a net profit of Rs. 229.59 crore for the first time in the nine-month period ending December 31, 2006. The profit before tax of over Rs.1,200 crore during FY 2007 was the highest ever in the history of IFCI. From a serious liquidity and solvency crisis, IFCI, within a short span of time, today, has a comfortable liquidity position and strong financial fundamentals with zero NPA—a record in the banking industry. IFCI is now looking for a strategic tie-up. IFCI Ltd is now being regulated as a systemically important non-deposit taking NBFC.

THE SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA

The Small Industries Development Bank of India (SIDBI) was set up in 1990 under an act of parliament—the SIDBI Act, 1989. The charter establishing SIDBI envisaged SIDBI to be 'the principal financial institution for the promotion, financing and development of industries in the small scale sector and to coordinate the functions of other institutions engaged in similar activities'.

SIDBI commenced its operations on April 2, 1990, by taking over the outstanding portfolio and activities of IDBI pertaining to the small scale sector. In pursuance of the SIDBI (Amendment) Act, 2000, and as approved by the Government of India, 51.1 per cent equity shares of SIDBI held by IDBI have been transferred to public sector banks, LIC, GIC, and other institutions owned and controlled by the central government. Presently SIDBI has 35 banks, insurance companies, investment and financial institutions as its shareholders in addition to IDBI, which continues to hold 49 per cent share in SIDBI.

Four basic objectives are set out in the SIDBI charter. They are:

1. Financing
2. Promotion
3. Development
4. Coordination for orderly growth of the small scale industrial sector

Small-scale industries are the industrial units in which the investment in plant and machinery does not exceed Rs. 10 million. The small-scale sector, consisting of 3.1 million units, forms the backbone of the Indian economy, contributing to around 40 per cent of India's total manufacturing sector output, around 35 per cent of total exports and providing employment to nearly 19 million persons. The major issues hindering the growth of small-scale industries are technology obsolescence, managing inadequacies, delayed payments, poor quality, incidence of sickness, lack of appropriate infrastructure, and lack of marketing network. This sector needs to be nurtured and provided strong support services for its long-term profitable growth. SIDBI tries to strike a balance between financing and providing support services for the development of the small-scale sector.

As an apex institution, SIDBI makes use of the network of the banks and state financial institutions, which have retail outlets for coordinating the development of the small scale sector. It has initiated a system of dialogue and obtaining feedback from the representatives of institutions of small scale industries who are on the SIDBI's National Advisory Committee and Regional Advisory Committees. SIDBI has entered into Memorandums of Understanding (MOUs) with 18 banks, government agencies, international agencies, development institutions, and industry associations to facilitate a coordinated approach for the development of the small scale sector.

Financial Products Offered by SIDBI

SIDBI offers a chain of financial products covering micro-finance, business, incubation, venture capital, project finance, assistance for technology development and marketing of small-scale industries products, export finance, bills finance, factoring, guarantees for loans, and so on. SIDBI also provides support services such as training, market information, and advice for enhancing the inherent strength of small-scale units.

Products and Services

- Direct finance schemes
- Bills finance schemes
- Refinance schemes
- International finance schemes
- Marketing finance and development schemes (Marketing schemes)
- SIDBI Foundation for Micro Credit
- Other schemes
- Promotional and development activities (P&D Activities)
- Fixed deposit/bonds

Direct Finance Schemes

- Credit linked capital subsidy (CLC)
- Scheme for development of industrial infrastructure for SSI sector (IID)
- Equipment Finance Scheme (EPS)
- Fast Track Financing Scheme (FTPS)
- Scheme of Integrated Infrastructural Development (IID)
- ISO 9000 scheme (ISO 9000)
- Project Finance Scheme (PFS)
- Tannery modernisation
- Technology Development and Modernisation Fund Scheme (TDMFS)
- Technology Upgradation Fund Scheme for Textile Industries (TUFS)
- Vendor Development Scheme (VDS)
- Working Capital Term Loan (WCTL)

Bills Finance Schemes

- Bills Rediscounting Scheme—Equipment (BRS-E)
- Bills Rediscounting Scheme—Inland Supply Bill
- Direct Discounting Scheme—Components (DDS-C)
- Direct Discounting Scheme—Equipment (DDS-E)

Refinance Schemes

- Refinance Scheme for Acquisition of ISO Series Certification, by SSI Unit (RISO 9000)
- Composite Loan Scheme (CLS)
- Credit Linked Capital Subsidy Scheme for Technology Upgradation of Small Scale Industries (CLCSS)
- For Term Loan—Non-SSI
- General Refinance Scheme (GRS)
- Mahila Udyam Nidhi (MUN)
- National Equity Fund scheme (NEF)
- Refinance Scheme for Rehabilitation of Sick Industrial Units (RSR)

- Self Employment for Ex-Servicemen Scheme (SEMFEX)
- Single Window Scheme (SWS)
- Refinance for Small Road Transport Operators (SRTOs)
- Refinance Scheme for Tannery Modernisation (RTM)
- Refinance Scheme for Technology Development and Modernisation (RTDM)
- Refinance Scheme for Textile Industry under Technology Upgradation Fund (RTUF)

International Finance Schemes
- Booking of forward contract
- Foreign Currency Term Loan Scheme (FCTL)
- Line of Credit Foreign Currency (LOCFC)
- Opening of Foreign Letters of Credit (FLC)
- Post-shipment credit in rupees
- Pre-shipment Credit in Foreign Currency (PCFC)

Marketing Schemes
- Marketing fund for women
- Marketing of SSI products

SIDBI Foundation for Micro Credit
- SIDBI Foundation for Micro Credit

Other Schemes
- Scheme for Domestic Factoring (FAC)
- Scheme for Invoice Discounting (IDS)

Promotional and Development Activities
- Mahila Vikas Nidhi
- Rural Industries Programme
- Entrepreneurship Development Programme
- Management Development Programmes
- Technology Upgradation Development Programmes
- Quality and Environment Management

Fixed Deposits/Bonds
- Fixed Deposit Scheme
- Capital Gains Bond

SIDBI's financial assistance to the small-scale sector is channelised through

1. indirect assistance to primary lending institutions (PLIs); and
2. direct assistance to small units

Indirect assistance is extended by way of refinance, granting of line of credit (LOC) in lieu of refinance to and rediscounting of bills of exchange to eligible PLIs including banks, state financial corporations, and state industrial development corporations having over 65,000 branches all over the country. The total number of eligible PLIs as at the end of March 2001 stood at 910.

SIDBI refinances loans sanctioned and disbursed by PLIs to set up new SSI projects and for expansion, technology, upgradation, modernisation, quality promotion, diversification by existing units, and rehabilitation of sick SSI units. This refinance assistance flows to the transport, health, and tourism sectors and also to professional and self-employed persons setting up small-sized professional ventures.

SIDBI extends short-term loans to scheduled banks in respect of their outstanding portfolio relating to SSI sector against which no financial support has been availed from other institutions.

SIDBI rediscounts bills of SSI suppliers and bills arising out of sale/purchase of machinery discounted by scheduled commercial banks.

SIDBI is designated as a nodal agency of the Government of India's Small and Medium Enterprises (SME) Fund of Rs. 10,000 crore which it launched from April 1, 2004. Under this fund, the borrower will receive credit at 2 per cent below the prime lending rate. It is negotiating lines of credit from World Bank, Kreditstalt fur Wiederaufbau (KfW) and Asian Development Bank (ADB) to meet the requirements under this fund.

SIDBI has created a Growth Fund (Venture Fund) with an initial corpus of Rs. 100 crore for supporting all SME activities.

Subsidiaries

To facilitate the creation of an environment for self-sustaining and growing SSI units and to provide a completed range of services, SIDBI has set up (i) Credit Guarantee Fund Trust for Small Industries; (ii) SIDBI Venture Capital Limited; (iii) Technology Bureau for Small Enterprises; and (iv) SIDBI Foundation for Micro credit.

The Credit Guarantee Fund Trust for Small Industries (CGTSI) has implemented a credit guarantee fund scheme for small industries to facilitate collateral free and third party guarantee-free credit facilities (both long-term and working capital) from scheduled commercial banks and select regional rural banks to new and existing units in the SSI sector, including units in the information technology and software industry. CGTSI, which guarantees collateral-free/third party guarantee-free loans upto Rs. 25 lakh per SSI borrower is an important credit facilitating initiative.

SIDBI's Venture Capital Limited provides venture funds for various activities such as software services and education, product development, and internet services.

The Technology Bureau for Small Enterprises has been set up in association with United Nations, and Asia Pacific Centre for Transfer of Technology (APCTT). The bureau assists small enterprises in accessing the latest technologies in diverse industrial fields, both from within and outside India.

SIDBI Foundation for Micro Credit (SFMC) was launched in January 1999. In 2004, SFMC introduced the Concept of Score Chart for pricing of loans wherein interest rate on loans to MFIs are priced based on internal scoring done on various parameters. In 2006, it introduced an innovative product—Corpus Support for Transformation—to target the lowest segment of NGOs / MFIs to facilitate their scale-up and eventual transformation. In 2006, it created a Risk Fund to cover loans to MFIs in underserved States. In 2007, it set up SIDBI Growth Fund for MFIs (SGF-MFIs) with a fund size of Rs. 50 crore for providing equity and quasi-equity support to MFIs. The fund has since been increased to Rs. 500 crore. In 2009, it introduced Micro Enterprise Loan product for dispensing small loans ranging from Rs. 50,000 to Rs. 5 lakh. Loans are covered under CGTMSE scheme. SFMC is creating a national network of strong, viable, and sustainable micro-finance institutions from the informal and formal financial sectors to provide micro-finance services to the poor, especially women, for setting up micro-enterprises.

SIDBI Foundation for Risk Capital was set up in 2009 with an objective to develop and operationalise appropriate risk capital products for micro, small, and medium enterprises (MSMEs) of different size, constitution and in different industry segments. Some of the products introduced are equity/equity-like instruments and mezzanine instruments like optionally convertible debt and sub-ordinate debt for MSMEs. Apart from direct funding by SIDBI, various delivery channels like Banks, VC Funds, etc. are used for providing risk capital to MSMEs.

Besides these, SIDBI is the co-promoter of IDBI Bank Ltd, North-Eastern Development Financial Institutions (NEDFIs), SBI Factors, and Canbank factors.

Consequent upon amendments to the State Financial Corporations (SFCs) Act, state financial corporations have been brought under the ambit of SIDBI.

SIDBI is among top 30 development banks of the world. As per the May 2001 issue of *The Banker,* London, SIDBI ranked 25th both in terms of capital and assets.

SIDBI, in association with CIBIL and select public sector banks has setup a specialised rating agency 'SMERA' for the SME sector. SIDBI launched software tool—Credit Appraisal and Rating Tool (CART) for SME Financing by Banks and Institutions on December 7, 2006. It also launched SME Growth Fund, a new venture capital fund with a corpus of Rs. 500 crore in participation with major commercial banks. It also entered into a Memorandum of Understanding (MoU) with IDBI Ltd in January 2006 for cofinancing of projects relating to SME, service sector infrustructure projects and micro credit in industrial clusters in the country.

Resources Raised by SIDBI

SIDBI has been raising resources through international and domestic markets. It has raised borrowings from Japan Bank for International Cooperation and KfW Germany. It also raises taxable priority sector bonds from domestic markets as also deposits from foreign banks. As per the provisions of Union Budget 2002–03, SIDBI has been allowed to raise capital gains bonds. The Government of India converted SIDBI's borrowings from the RBI into bonds of 20 years tenure issued to GOI. These bonds are eligible for inclusion in tier I capital. This increased the capital adequacy ratio of the bank from

TABLE 12.1 Trends in Assistance Sanctioned and Disbursed—SIDBI

(Rs. in Crore)

Year	Sanctions (Approvals)	Disbursements (Payments)
1990–91	2,410.1	1,838.8
1991–92	2,847.0	2,028.0
1992–93	2,909.2	2,146.3
1993–94	3,356.3	2,672.7
1994–95	4,706.3	3,389.8
1995–96	6,065.6	4,800.8
1996–97	6,485.3	4,584.7
1997–98	7,484.2	5,240.7
1998–99	8,879.8	6,285.2
1999–00	10,264.7	6,963.5
2000–01	10,820.6	6,441.4
2001–02	9,025.5	5,919.3
2002–03	10,903.6	6,789.4
2003–04	8,246.2	4,414.1
2004–05	9,191.0	6,196.0
2006–07	11,102.28	10,025.28
2007–08	16,164.38	15,087.27
2008–09	–	28,000

Source: SIDBI, *Annual Report*, various issues.

28 per cent in 2000–01 to 45 per cent in 2001–02. It has raised higher amount of resources through fixed deposits in 2009.

Conclusion

SIDBI's overall operations have registered an increasing trend. Its disbursements were the highest in 2009—over Rs. 28,000 crore (Table 12.1). The micro-finance activities registered a significant growth. Micro-credit outstanding crossed Rs. 2,000 crore. It initiated the first ever loan syndication for an MFI.

SIDBI's growth is directly linked to the growth of SSI sector. And this sector stands at the cross roads and no more in a safe zone due to lack of number of concessions and liberalisation and progressive internationalisation of trade, deregulation, growing access of foreign capital, and dereservation. To further compound problems, despite government and SIDBI initiatives to come forward to offer guarantees against loans to small and tiny enterprises, banks have stayed away from financing them.

Small and medium enterprises were the hardest hit on account of the global liquidity crisis. The government announced stimulus packages to provide support to this sector. The SIDBI was provided a special facility of Rs. 7,000 crore to refinance banks, state financial corporations, NBFCs, and MFIs for lending to SMEs. The SIDBI has also introduced supportive measures like additional 15 per cent credit assistance to all existing borrowers, special scheme under receivable finance scheme, ensuring timely payment for receivables of MSMEs, reduction in PLR, and restructuring of advances.

After making a beginning as essentially a refinance institution, SIDBI has grown into a multi-faceted organisation. It has served the small sector well by providing a wide range of products and resource support services in its 12 years of existence. SIDBI should endeavour to contain non-performing assets and build quality long-term assets and thereby become a strong and vibrant financial institution.

INFRASTRUCTURE DEVELOPMENT FINANCE COMPANY LIMITED

Infrastructure Development Finance Company Limited (IDFC) was set up on the recommendations of the Expert Group on Commercialisation of Infrastructure Projects under the chairmanship of Dr Rakesh Mohan. The group identified the need for a specialised financial intermediary for infrastructure to professionalise the process of infrastructure development in the country. IDFC was incorporated on January 30, 1997, with an initial paid up capital of Rs. 1,000 crore. The Government of India and the RBI have contributed Rs. 650 crore by way of subordinated debt, raising its total capitalisation to Rs. 1,650 crore. During the year 2005–06, IDFC made an IPO of 40,36,00,000 shares of Rs. 10 each (offer for sale of 28,36,00,000 shares and fresh issue of 12,00,00,000 shares) through book building process in August 2005. The issue was priced at Rs. 34 per share. The issue was oversubscribed 36.7 times. Total fresh capital raised was Rs. 408 crore.

Domestic financial institutions such as HDFC, ICICI Ltd, IFCI Ltd, SBI, and UTI have contributed 15.1 per cent of the share capital; mutual funds have contributed 7.71 per cent of the share capital, corporate bodies 4.3 per cent of the share capital, foreign shareholding is 39.5 per cent; government shareholding constitutes 20.2 per cent of the total capital and retail shareholding constitutes 13.3 per cent. The major foreign equity investors are Asian Development Bank, International Finance Corporation, Commonwealth Development Corporation, Government of Singapore Investment Corporation, American International Group Inc., and Deutsche Morgan Grenfell.

Capitalisation of IDFC

Infrastructure projects are projects with long gestation periods, with each project going through different phases of implementation. In the first stage, the project is conceptualised and the full project plan is developed, followed by financial closure. Next comes the execution phase, where the underlying physical infrastructure is actually created. Finally, the project moves to revenue generation, when the underlying asset starts getting utilised and generates actual income streams. Each of the phases has unique risk-return profiles.

IDFC was set up to facilitate the flow of private finance to commercially viable infrastructure projects. The traditional sources of finance could not meet the financing needs of such projects as the risk profile of infrastructure projects is unique. IDFC has designed innovative products and services to address the specific needs of infrastructure financing. The mission of IDFC is leading private capital to commercially viable infrastructure projects by advocating solutions that deliver efficient services to consumers. IDFC's business is mobilising domestic as well as international capital. Like other businesses, it has to deal with demand and supply side issues. While the demand side issues relate largely to the appetite for private investment especially in the Infrastructure sector, the supply side issues are more global. These include factors like cost of capital, liquidity, and investor confidence that are intrinsic to international capital flows.

Initially, IDFC focused on power, roads, ports, and telecommunications. Now it has broadened this focus to the framework of energy, telecommunications and information technology, integrated transportation, urban infrastructure, and food and agri-business infrastructure.

IDFC has been assigned lead manager mandates and key advisory assignments. In its role as policy advisor, IDFC provides leadership in rationalising policy and regulatory frameworks and removes impediments to the movement of capital to infrastructure sectors. To facilitate the role of policy advisor, IDFC identifies best products, draws on the expertise of policy advisory boards, and promotes policy dialogue amongst key players in the various infrastructure projects. IDFC also provides finance by way of equity and debt support. It also strengthens links between financial institutions and infrastructure projects by encouraging financial institutions to participate in infrastructure projects. It has also been involved in devising policy framework for attracting private capital to infrastructure development.

Business Organisation IDFC has organised its business on four broad platforms:

1. Project finance: This is the core financing business of IDFC. It comprises the capital intensive balance sheet business that includes the loan book. The IDFC provides different financial instruments to its clients. These include corporate loans, project loans, and loans against shares, sub debt, mezzanine finance and equity. This business generates interest income-the company's base income stream. It is also relatively more stable but is contingent upon loan growth, asset quality and spreads. IDFC's project finance business is focused primarily on four infrastructure sectors—energy, transportation, telecom and IT, and industrial and commercial infrastructure.

2. Principal investments and treasury: Principal investments are made directly from the IDFC's own balance sheet, which form part of proprietary investments. There are broadly three types of investments in this portfolio:

a. Infrastructure investments: They are generally made to build longer term relationships with sponsors by supplementing project finance with some direct equity stake in projects and companies and supporting them by sharing risks. Here, a clear exit route based on appreciation of the equity value is available to IDFC and exit becomes easier when capital markets are buoyant.
b. Financial investments: They include investments in NSE, STCI and ARCIL to generate returns.
c. Investment in venture capital units: They are investments in the various third party funds which are launched and managed by IDFC.

Income from principal investments includes dividends and capital appreciation (gains).

Treasury has a dual responsibility of providing liquidity to the various businesses that need capital and also generating returns on the proprietary book that it manages. It invests in fixed income securities to generate profits.

3. Investment banking and institutional brokerage: This business is driven through IDFC-SSKI. Its primary business of investment banking involves taking companies public and advising on corporate capital raising and structuring deals. Although returns in this business are high, it is subject to the volatility of capital markets and the consequent demand for investment banking and institutional brokerage services.

4. Asset management: This is one of IDFC's non capital intensive businesses. Here the Company raises third party funds of different kinds and manages them. IDFC's group of alternative third party funds includes private equity (focused on capital appreciation), project equity (more focused on long terms yield than on capital appreciation), and fund of funds. Private equity business is undertaken through its wholly-owned subsidiary, IDFC Private Equity Company Limited ('IDFC Private Equity') which acts as investment manager for funds dedicated to private equity investments in the infrastructure space. IDFC's project equity is focused on investing in operating assets of mid-size projects. Many of these investments are in the post-construction stage, and hence have lower risk-return profiles compared to pure private equity investments.

IDFC has been raising the India Infrastructure Fund for such investments, along with Citi group.

In addition, it includes IDFC Asset Management Company, a mutual fund which was acquired from Standard Chartered Bank in May 2008 and the company has been rebranded as IDFC AMC.

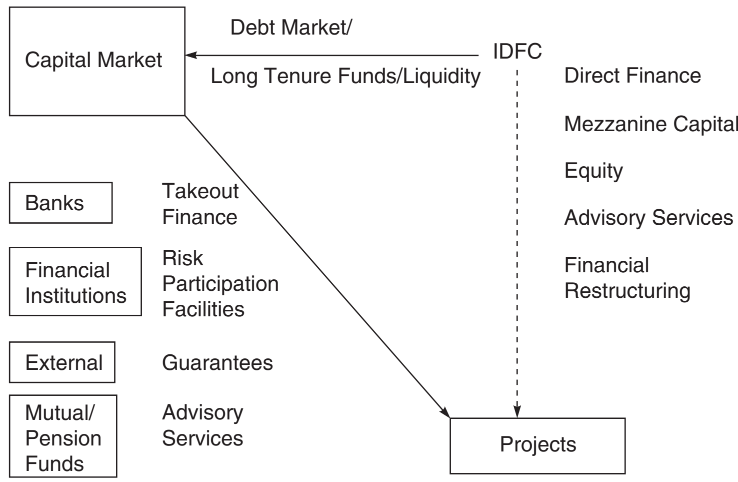
SUBSIDIARY COMPANIES

IDFC has ten direct subsidiary companies—IDFC Private Equity Company Limited, IDFC Trustee Company Limited, IDFC Investment Advisors Limited, IDFC—SSKI Securities Limited, IDFC Project Equity Company Limited, IDFC PPP Trusteeship Company Limited, IDFC Capital Company Limited, IDFC Finance Limited (formerly, Feedback First Urban Infrastructure Development Company Limited), IDFC Asset Management Company Limited (earlier known as Standard Chartered Asset Management Company Private Limited), and IDFC AMC Trustee Company Private Limited (earlier known as Standard Chartered Trustee Company Private Limited). In addition IDFC - SSKI Securities Limited has two wholly owned subsidiary companies namely, IDFC—SSKI Limited and IDFC—SSKI Stock Broking Limited. IDFC Finance Limited has a subsidiary called IDFC Projects Limited, which is a stand-alone infrastructure developer. IDFC—SSKI Limited has further floated a subsidiary called IDFC Capital (Singapore) Pte Limited.

Institutional Positioning of IDFC

One of the principal objectives of IDFC is to link projects to a sustainable flow from the capital market. In order to strengthen project structures and develop greater confidence in projects appraised and found bankable, IDFC offers variety of services which include funding, mezzanine structures and advisory services (Figure 12.2). IDFCI also encourages non-traditional lenders to participate in financing projects. Commercial banks willing to finance infrastructure projects face maturity mismatches as they typically have a shorter time preference. Through take out financing, IDFC is inviting banks and FIs to participate is infrastructure project for specific term and with preferred risk profit with IDFC standing behind the structure.

Further, IDFC through guarantee structures plays a key role in external commercial borrowings of projects from international markets.



Source: *www.idfc.com*

Figure 12.2 Institutional Positioning of IDFC

Mutual funds and pension funds are potential sources of long-term funds for infrastructure projects. IDFC intends offering advisory services to funds to facilitate and strengthen their connectivity with infrastructure projects.

IDFC's Operations

Energy IDFC provides consultancy and advisory services to state governments for formulating a power sector strategy. It prepares road maps for reform initiatives in respect of the policy framework governing the power sector with a belief that its multi-pronged and focused approach to reforming the power sector would ultimately translate into desired investment opportunities. It also acts as a lead arranger and financier for power projects.

IDFC played a pivotal role in the preparation of the report of the Government of Karnataka's High Level Committee on Escrow cover to Independent Power Projects. IDFC is part of the consortium acting as a privatisation consultant to Karnataka Power Transmission Company Limited, the monopoly state public sector company engaged in transmission and distribution of power. IDFC has provided financial advisory services and prepared a detailed fuel study for the Torrent Group's proposed power generation plant. It also interacts with and responds to documents released by the Central Electricity Regulatory Commission (CERC) and various State Electricity Regulatory Commissions. It has also been involved in the privatisation of the state electricity boards in Delhi and Karnataka.

Food and Agriculture Business Infrastructure This initiative was launched in August 2000. IDFC entered this sector with a belief that this sector has immense growth potential and the private sector has an important role to play to complement initiatives of the government. It has entered into a strategic alliance with Rabobank, the Netherlands, a pioneer in the food and agriculture business, to provide the F&A industry in India with unique solutions for the development of its infrastructure.

Integrated Transportation IDFC views integrated transportation as an integrated logistics chain with parts not only complementing each other but also competing with each other. Hence roads, railways, pipelines, waterways, ports, and airports are links of a chain and not stand alone, independent entities.

Telecommunications and IT Infrastructure IDFC has provided financial assistance to various telecom services projects in the areas of cellular mobile, basic national long distance, cable and broad band, and satellite services provision. IDFC's major clients are private sector telecommunication service players. It has provided assistance on a non-or limited-recourse basis, with project sizes ranging from Rs. 20 crore to Rs. 5,000 crore and loan periods varying from one to ten years.

IDFC has consolidated its operations in cellular industry with 60 per cent of assistance provided to cellular mobile telephony service providers. It has played a key role in the two initial public offers by the new telecom companies as underwriter and anchor investor. It also provides performance and financial guarantees.

Urban Infrastructure IDFC provides financing and project advisory services for the development of urban infrastructure. It helps the state governments to prepare a road map for private sector participation in the development of urban infrastructure. IDFC played a key role in the Committee for Operation and Maintenance of Rural and Urban Water Supply Schemes constituted by the Government of Maharashtra. It has also entered into an agreement with the Asian Development Bank for a line of credit amounting to USD 30 million for financing urban and environmental infrastructure projects. It is also a member of the steering committee for financing bankable solutions for waste to energy projects in Mumbai.

Environment Management IDFC recognised the importance of environment risk management for infrastructure project financing and set up a separate Environmental Management Group (EMG) to help projects address environment risks.

Tourism: Tourism is a new area of intervention for IDFC. IDFC involves

- Central and State Government organisations as well as private service providers and stakeholders.
- Investors interested in commercially viable projects.
- Organisations offering competencies including project planning, technical knowhow, and related skill sets to enhance the visitor experience.

Education As social sectors constitute a key index of development, IDFC took a conscious decision to expand its business to include infrastructure development in areas of health, education, and tourism. IDFC intends to identify and develop social infrastructure in education, in a manner that would have a significant developmental impact, while being commercially viable. The opportunity for IDFC is to enable public–private partnerships by leveraging the extensive education infrastructure that exists in the government sector, through select private initiatives and joint ventures, rather than merely adding to existing basic infrastructure for education. It has set up 3i Network comprising of university network including IIT, Kanpur, and IIM, Ahmedabad, to harness the best academic expertise for developing and strengthening the infrastructure framework in the country.

Health IDFC believes that sectors like health also provide ample opportunities to try and apply the principles of PFPI (private financing on public infrastructure) since and extensive net work public health care institutions provide an ideal platform for such investments.

An increasing trend has been witnested in IDFC's sanctions and disbursements to various sectors except for the year 2008–09 when there was an economic slowdown on account of global recession (Tables 12.2 and 12.3).

TABLE 12.2 IDFC's Sanctions and Disbursements

Year	*Sanctions (Rs. in Crore)*	*Disbursement (Rs. in Crore)*
1997–98	295.00	–
1998–99	1,764.80	279.0
1999–00	1,820.80	672.8
2000–01	3,267.00	766.5
2001–02	3,008.10	1,506.1
2002–03	2,304.1	949.3
2003–04	5,726.9	2,704.1
2004–05	6,432	3,723
2005–06	10,631	6,045
2006–07	13,203	7,357
2007–08	20,309	12,006
2008–09	10,317	8,085

Source: IDFC, *Annual Report*, various issues.

TABLE 12.3 IDFC's Exposure to Various Sectors (In Per Cent)

	2006–07	*2007–08*	*2008–09*
Telecommunications & IT	17.1	15.8	10.9
Energy	38.2	36.9	40.6
Transportation	26.7	23.3	23.8
Industrial-Commercial Infrastructure	11.5	11.2	11.0
Tourism	5.5	6.2	5.4
Cement and Steel	0.0	2.6	1.7
Others	1.0	4.1	6.6

Source: IDFC, *Annual Report*, 2008–09.

Conclusion

IDFC has evolved a vision for core sectors such as power, ports, roads, and telecom where cost-effective services to the end user is the ultimate goal of infrastructure provision. This vision is based on its belief that the key to reform in infrastructure is in introducing competition. It has successfully financed innovative projects in its twelve years of existence.

THE EXPORT-IMPORT BANK OF INDIA

The Export-Import Bank of India (Exim Bank) is a public sector financial institution created by an act of parliament—the Export-Import Bank of India Act, 1981. It commenced its business operations in March 1982. It is wholly owned by the Government of India and was set up for the purpose of financing, facilitating, and promoting foreign trade in India. During the years 2004–05, and 2008–09, the Government of India subscribed to the share capital of the bank to the tune of Rs. 200 crore and Rs. 300 crore, respectively. As at March 31, 2009, the Bank's total resources including paid-up capital of Rs. 1,400 crore and reserves of Rs. 2,468 crore, aggregated to Rs. 4,107 crore. Exim Bank's resource base includes bonds, certificates of deposit, commercial paper, term deposits, term loans, and foreign currency/bonds/notes/ borrowings.

Exim Bank is the principal financial institution in the country for coordinating working of institutions engaged in financing exports and imports. Exim Bank is an apex institution which promotes foreign trade. Its head office is in Mumbai. It has a network of 15 offices in India and overseas.

Objectives

1. Financing, facilitating, and promoting India's foreign trade.
2. Creating export capability by arranging competitive financing at various stages of the export cycle.
3. Developing commercially viable relationships with a target set of externally oriented companies by offering them a comprehensive range of products and services, aimed at enhancing their internationalisation efforts.

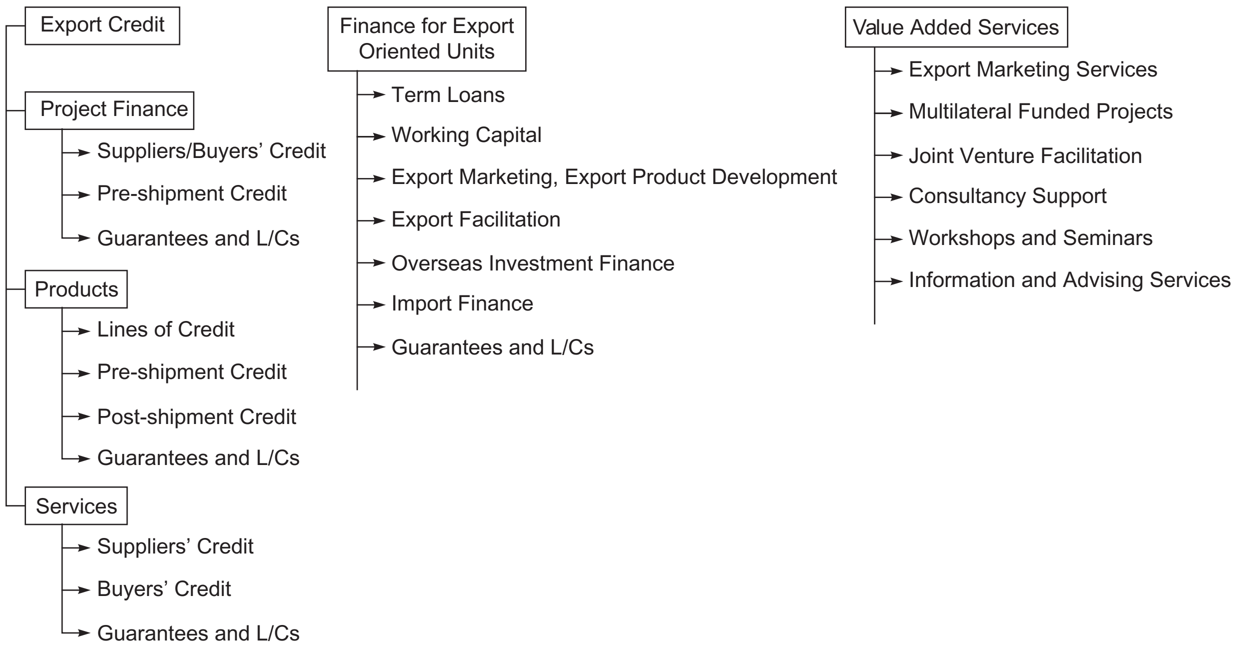
Vision statement of Exim Bank: 'To offer best-in-class services to our customers in their globalisation efforts through the creation of an environment for our people that rewards excellence, initiative and innovation.'

Exim Bank—Business Profile

Figure 12.3 provides an overview of EXIM Bank's major programmes.
The operations of the bank are grouped as follows:

Export Credit

- The bank provides export credit on deferred payment terms on exports of Indian machinery, manufactured goods, consultancy and technology services on deferred payment terms.
- Lines of credit/buyer's credits are extended to overseas entities, i.e., sovereign governments, central banks, commercial banks, development finance institutions, regional development banks for



Source: *www. eximbankindia.com*

Figure 12.3 EXIM Bank's Major Programmes at a Glance

enabling buyers in those countries to import developmental and infrastructural projects, equipment, goods and services from India, on deferred credit terms. The Indian exporters can obtain payment of eligible value from EXIM Bank, without recourse to them, against negotiation of shipping documents. LOC is a financing mechanism that provides a safe mode of nonrecourse financing option to Indian exporters, especially to small and medium sized enterprises and serves as an effective marketing entry tool. The Government of India in its Budget (2003–04) announced its decision to route GOI export lines of credit through EXIM Bank. Buyers' Credit is a unique programme of Exim Bank under which the Bank facilitates Indian exports by way of extending credit facility to the overseas buyers for financing their imports from India. Under Buyers' Credit programme, Exim Bank makes payment of eligible value to Indian exporters, without recourse to them.

- The bank also provides project finance and trade finance.

Export Capability Creation

- Export product development.
- Export marketing finance.
- Export oriented units.
  - Project finance
  - Working capital
  - Production equipment finance
- European Community Investment Partners (ECIP)
- Asian Country Investment Partners (ACIP)
- Overseas Investment Finance
- Export facilitation programmes
  - Software training institutes
  - Minor ports development

Export Services

- In addition to finance, the bank provides a range of information and advisory services to Indian companies to supplement their efforts aimed at globalisation of Indian business.

Supporting Groups

- Planning and research
- Accounts/MIS/EDP
- Legal
- Coordination
- HRD
- Establishment

Exim Bank provides a range of programmes which can be classified into

- financing programmes and
- export services and export promotion programmes.

Financing Programmes Exim Bank provides financial assistance to Indian companies by way of a variety of lending programmes, namely, non-funded and funded lending programmes. Non-funded lending programmes include bid bond, advance payment guarantee, performance guarantee, guarantee for release of retention money, guarantee for raising borrowings overseas, and other guarantees. Funded lending programmes include preshipment rupee credit, postshipment rupee credit, foreign currency loan, overseas buyers credit, lines of credit, loan under FREPEC Programme, and refinance of export loans.

Exim Bank also provides financial assistance to Indian companies for export capability creation by way of a lending programme for export oriented units, production equipment finance programme, import finance, export marketing finance programme, software training institutes, financing, research and development, and programme for export facilitation. The programme for export facilitation includes port development, export vendor development lending programme, foreign currency preshipment credit, and working capital term loan programme for export oriented units.

EXIM Bank has an arrangement for sponsoring and part financing Indian consultants for providing consultancy services to private sector small and medium enterprises in developing countries under the Technical Assistance Programme of IFC Washington D.C. and other international agencies. The facilities in operation include Africa, CIS, China, and South Asia.

The bank provides a wide range of information, advisory and support services which complement its financing programmes. These services are provided on a fee basis to Indian companies and overseas entities. The scope of services include market-related information, sector and feasibility services, technology supplier identification, partner search, investment facilitation and development of joint ventures both in India and abroad.

Export Services and Export Promotion Programmes Exim Bank provides a range of export-related services. The bank's fee-based services help identify new business propositions, source trade, and investment-related information, create and enhance presence through joint network of institutional links across the globe, and assist externally oriented companies in their quest for excellence and globalisation. It also provides services such as search for overseas partners, identification of technology suppliers, negotiating alliances, and development of joint ventures in India and abroad. The bank also supports Indian project exporters and consultants to participate in projects funded by multilateral funding agencies such as World Bank, Asian Development Bank, African Development Bank, and European Bank for Reconstruction and Development.

It also extends assistance to Indian promoter companies in setting up of joint ventures through the Overseas Investment Finance Programme (OIF) and the Asian Countries Investment Partners (ACIP) programme.

Exim Bank plays the role of an intermediary for facilitating the forfaiting transaction between the Indian exporter and the overseas forfaiting agency. It also set up a new company, the Global Trade and Finance Private Limited in association with West LB, Germany, and IFC Washington to offer export factoring and forfaiting to Indian exporters.

The bank undertook new initiatives during 2000–01. It launched a new programme in association with EBRD, London, to support Indian exports to 26 countries. It also entered new businesses like venture capital finance and brand promotion in Europe.

EXIM Bank has made an entry into financing of the entertainment industry and healthcare services sectors. It has provided loan for import of state-of-the art medical equipment for a super specialty hospital project.

Besides, the bank has signed an MoU with the Ministry of Food Processing Industries (MFPI) to synergise efforts in developing the food processing industry with its expertise. Seven projects financed by the bank have been referred to MFPI also for assistance and these projects are expected to result in incremental exports of around Rs. 1,000 crore in the first five years of operation.

The bank is focusing on support to the food processing industry which includes finance to units engaged in manufacture and processing of various produces. The units financed included a seabuck thorn fruit juice, pulp and oil unit setup in the Ladakh region, and a fruit juice unit in Manipur. The bank also entered into an MOU with the Central Food Technological Research Institute (CFTRI) to leverage complementing strengths, and promote research undertaken by the institutional and its commercial applications as relevant to exports.

Performance and Contribution

The Exim Bank has, over the years, supported 241 ventures set up by over 193 companies in 63 countries, in both industrial countries as also developing and emerging markets.

The Bank provides a wide range of information, advisory and support services, which complement its financing programmes. These services are provided on a fee basis to Indian companies and overseas entities. The scope of services includes market-related information, sector and feasibility studies, technology supplier identification, partner search, investment facilitation, and development of joint ventures both in India and abroad The Exim Bank supports globalisation of rural industries through its Rural Grassroots Business Initiative. It is one of the nodal agencies appointed by the Government of India, Ministry of Textiles, to establish and approve the eligibility of projects under Technology Upgradation Fund Scheme (TUFS) and release subsidy directly to the approved projects.

The Exim Bank holds a digital certificate to deal through the Negotiated Dealing System—Order Matching segment (NDS-OM) of RBI—which provides the electronic dealing platform for trading in GOI securities. The securities/foreign exchange transactions of the Bank are routed through the Guaranteed Settlement Facility provided by the Clearing Corporation of India Ltd. (CCIL). The Exim Bank is an active member of Collateralised Borrowing & Lending Obligation (CBLO) segment of CCIL. During FY 2008–09, it became a member of CROMS (Clearcorp Order Matching System), the Repo Dealing System of CCIL. CROMS is a Straight Through Processing (STP) enabled anonymous Order Matching Platform launched by CCIL during the year for facilitating dealing in market repos in all kinds of Government Securities on T + 0/ T + 1 basis. CCIL acts as a central counterparty to all CROMS trades and settlements guaranteed by CCIL.

The Capital to Risk Assets Ratio (CRAR) was 16.77 per cent as on March 31, 2009, against a minimum 9.0 per cent norm stipulated by RBI (Table 12.4).

The Exim Bank's gross NPAs stood at Rs. 4.28 billion and were1.24 per cent of the total loans and advances as at March 31, 2009. Its NPAs (net of provisions) at Rs. 0.79 billion worked out to 0.23 per cent of its loans and advances (net of provisions) as at March 31, 2009, as compared to 0.29 per cent as at March 31, 2008

The bank was conferred with the 'Trade Development Award' during the years 2002, 2004, 2005, 2006, and 2009 by the Association of Development Financing Institutions in Asia and the Pacific (ADFIAP).

These awards were in recognition of the Bank's innovative export marketing services and support to village and rural industries which enabled them and other Indian firms explore newer geographies.

Conclusion

Exim Bank has reoriented its strategies looking to the changing dynamics of international trade and global environment. It caters not only to the financing needs of exporters and importers but also supports Indian companies in their effort to globalise their business. These new initiatives have helped the exporters and importers to secure more business which, in turn, has led to an increase in the bank's assets and profits.

NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT

The National Bank for Agriculture and Rural Development (NABARD), a development bank, came into existence on July 12, 1982, under an act of parliament with an initial capital of Rs. 100 crore. It is an apex institution set up for providing and regulating credit and other facilities for the promotion and

TABLE 12.4 Performance Highlights of EXIM Bank

(Rs. in Million)

	1999–00	*2000–01*	*2001–02*	*2002–03*	*2003–04*	*2004–05*	*2005–06*	*2006–07*	*2007–08*	*2008–09*	*Cumulative (1999–2009)*	*Growth (CAGR)*
LOANS												
Approvals	28,318	21,743	42,407	78,283	92,657	1,58,535	2,04,887	2,67,622	3,28,045	3,36,285	15,58,781	32%
Disbursements	17,296	18,964	34,529	53,203	69,575	1,14,352	1,50,389	2,20,760	2,71,587	2,89,327	12,39,982	37%
Loan Assets	50,833	56,443	68,260	87,736	1,07,751	1,29,104	1,75,931	2,28,862	2,87,767	3,41,564	–	24%
GUARANTEES												
Approvals	4,404	2,118	5,450	9,328	10,792	15,887	43,264	49,978	21,994	16,184	1,79,399	16%
Issuance	3,017	1,741	4,164	7,275	5,743	16,602	21,959	16,972	20,386	10,315	1,08,174	15%
Guarantee Portfolio	11,147	10,740	11,273	16,133	15,769	23,727	34,023	35,360	34,556	35,401	–	14%
PERFORMANCE												
Profit Before Tax	2,273	2,047	2,212	2,686	3,042	3,144	3,769	3,909	5,334	6,101	34,517	
Profit After Tax	1,651	1,541	1,712	2,066	2,292	2,579	2,707	2,994	3,330	4,774	25,646	
RATIOS												
Capital to Risk Assets Ratio (%)	24.4	23.8	33.1	26.9	23.5	21.6	18.4	16.4	15.1	16.8		
PBT to Capital (%)	43.3	37.2	36.9	41.3	46.8	41.9	41.9	40.1	50.8	48.8		
PBT to Net Worth (%)	16.0	13.1	12.8	14.1	14.2	13.5	14.4	14.0	17.5	17.2		
PBT to Assets (%)	3.6	2.8	2.8	2.6	2.2	2.0	2.1	1.7	1.7	1.5		

Source: EXIM Bank, *Annual Report*, 2008–09.

development of agriculture, small-scale industries, cottage and village industries, handicrafts and other rural crafts, and other allied economic activities in rural areas with a view to promoting integrated rural development and securing prosperity of rural areas and for matters connected therewith or incidental thereto.

NABARD took over the functions of the erstwhile Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of the RBI and Agricultural Refinance and Development Corporation (ARDC). Its subscribed and paid-up capital was Rs. 100 crore which was enhanced to Rs. 500 crore, contributed by the Government of India (GOI) and the RBI in equal proportions. The capital has now been enhanced to Rs. 2,000 crore—Rs .550 crore subscribed by Government of India and Rs. 1,450 crore by the RBI.

The management of NABARD vests in a board of directors, representatives from the RBI, the Government of India, state governments and directors nominated by the Government of India.

NABARD's Mission

Promote sustainable and equitable agriculture and rural prosperity through effective credit support, related services, institution development and other innovative initiatives.

Functions of NABARD

- It serves as an apex refinancing agency for the institutions providing investment and production credit for promoting the various developmental activities in rural areas.
- It takes measures towards institution building for improving absorptive capacity of the credit delivery system, including monitoring, formulation of rehabilitation schemes, restructuring of credit institutions, and training of personnel.
- It coordinates and supervises the rural financing activities of all institutions engaged in developmental work at the field level and maintains liaison with the Government of India, state governments, RBI, and other national level institutions concerned with policy formulation,
- It undertakes monitoring and evaluation of projects refinanced by it.
- It promotes research in the fields of rural banking, agriculture, and rural development.
- It prepares annual rural credit plans for all districts in the country which form the base for annual credit plans of all rural financial institutions.

In a nutshell, the functions of NABARD are to facilitate credit flow for agriculture and rural development, promote and support policies, practices and innovations conducive to rural development, strengthen rural credit delivery system through institutional development and supervise rural financial institutions such as cooperative banks and regional rural banks.

NABARD operates throughout the country through its 28 regional offices and one sub office; located in the capital of all the states/union territories and one sub-office at Port Blair. It has 330 district offices across the country and one special cell at Srinagar. It has also set up five training centres.

Promotion and Development

NABARD is actively involved in institutional development of client organisations, capacity building in partner institutions, supporting experimentation with new models and practices in development and credit delivery, dissemination of innovative products and ideas, supporting research and development, assisting the RBI/the GOI in formulation of policies relating to rural credit, promotion of rural non-farm sector, promotion of Kisan Credit Card (KCC) scheme, promotion of micro-credit innovations and consultancy services.

Refinance

NABARD's mission is accelerated capital formation to promote sustainable and equitable agriculture and rural prosperity with refinance as a lever.

The institutions eligible for refinance are state cooperative agricultural and rural development banks (SCARBs), regional rural banks (RRBs), state cooperative banks (SCBs), commercial banks (CBs) state agricultural development finance companies (ADFCs), and primary urban cooperative banks.

NABARD extends refinance for both the farm and the non-farm sector. Long-term investment for the farm sector includes investment on agriculture and allied activities such as minor irrigation, farm mechanisation, land development, soil conservation, dairy, sheep rearing, poultry, piggery, plantation/horticulture, forestry, fishery, storage and market yards, biogas and other alternate sources of energy, and soon. Non-farm sector includes investment activities of artisans, small-scale industries tiny sector, village and cottage industries, handicrafts, handlooms, and others. NABARD extends automatic refinance facility for refinance limit upto Rs. 20 lakh. NABARD's special focus is on the removal of regional/sectoral imbalance and hence if gives preference to the needs of north-eastern states in terms of allocation of resources, quantity of refinances, and so on. Besides this, its focus is on hi-tech and export-oriented projects. It has issued guidelines for formation of hi-tech and export-oriented projects in farm and non-farm sectors. It also undertakes consultancy work for projects. It has set up ADFCs in Andhra Pradesh, Tamil Nadu, and Karnataka for financing hi-tech/commercial ventures. NABARD is the chief promoter of these ADFCs with a holding of 26 per cent equity.

Types of Refinance Facilities

Agency	*Credit Facilities*
Commercial Banks	• Long-term Credit for Investment Purposes. • Financing the Working Capital Requirements of Weavers' Cooperative Societies (WCS) and State Handloom Development Corporations.
Short-term Cooperative Structure (State Cooperative Banks. District Central Cooperative Banks, Primary Agricultural Credit Societies)	• Short-term (Crop and Other Loans). • Medium-term (Conversion) Loans. • Term Loans for Investment Purposes. • Financing WCS for Production and Marketing Purposes. • Financing State Handloom Development Corporations for Working Capital by State Cooperative Banks.
Long-term Cooperative Structure (State Cooperative Agriculture and Rural Development Banks, Primary Cooperative Agriculture and Rural Development Banks)	• Term Loans for Investment Purposes.
Regional Rural Banks (RRBs)	• Short Term (Crop and Other Loans) • Term Loans for Investment Purposes
State Governments	• Long-term Loans for Equity Participation in Cooperatives. • Rural Infrastructure Development Fund (RIDF) Loans for Infrastructure Projects
Non-governmental Organisations (NGOs) and Informal Credit Delivery System	• Revolving Fund Assistance for Various Micro-credit Delivery Innovations and Promotional Projects Under 'Credit and Financial Services Fund' (CFSF) and 'Rural Promotion Corpus Fund' (RPCF) Respectively.

NABARD provides short-term refinance for various types of production/marketing/procurement activities. NABARD provides refinance facilities to the following parties:

- SCBs and RRBs for financing seasonal agricultural operations (SAOs), which include ploughing and preparing land for sowing and weeding, and labour for all operations in the fields for raising and harvesting the crops.
- SCBs and CBs for financing the requirements of Primary Weavers' Cooperative Societies (PWCS), Apex Regional Weavers Societies, and State Handloom Development Corporations (SHDCs) to benefit the weavers outside the cooperative fold.
- RRBs for financing artisans and village/cottage/tiny sector industries as also for financing persons, belonging to the weaker sections and engaged in trade/business/service.
- SCBs on behalf of District Central Cooperative Banks (DCCBs) for (a) financing farmers to hold on to their produce till they get remuneration price of their produce (b) procurement, stocking, and wholesale distribution by apex societies and retail distribution of fertilisers to farmers.

Other refinance facilities include conversion assistance in case of natural calamity, long-term loans to state governments, financing of state handicrafts development corporations, and financing of industrial cooperative societies and forest labour cooperative societies and forest labour cooperative societies.

NABARD also extends refinance to banks for financing government-sponsored programmes such as Swarnajayanti Gram Swarozgar Yojana, Prime Minister's Rozgar Yojana, action plans of SC/ST development corporations, and for development of non-conventional energy sources.

Credit

Credit is a crucial factor in the development of the agricultural and rural sector. NABARD provides short-term, medium-term investment and direct credit. It grants medium-term conversion loans (on account of crop loss due to natural calamities) to cooperatives and RRBs to enable them to convert the short-term loans of farmers into medium-term loans. It also provides medium-term (non-schematic) loans for agriculture and allied activities to cooperatives and RRBs. Investment credit helps in asset creation. Capital formation through investment enables technological upgradation resulting in increased productivity and profitability. NABARD provides refinance support to SCARDBs/SCBs/RRBs/CBs/schedule primary urban cooperative banks/non-banking financial companies/North East Development Finance Corporation Limited (NEDFI) against their investment credit in the rural sector. The major areas for refinance are farm mechanisation, minor irrigation, plantation, horticulture, animal husbandry, storage/market yards, fisheries, post, harvest management, food/agro processing, non-farm sector including rural industries, microfinance, purchase of land for small and marginal farmers, and rural housing and disbursements under poverty alleviation programmes. Hi-tech projects and agri export zones are identified as a thrust area and NABARD helps in techno-financial appraisal of such projects besides refinancing.

Direct Credit

- Loans to state governments under Section 27 of the NABARD Act, 1981, for share capital contribution to cooperative credit institutions which would increase their capacity to leverage larger resources.
- Loans under the Rural Infrastructure Development Fund (RIDF) for completion of incomplete and new rural infrastructure projects to state Governments and panchayati raj institutions.
- Co-financing of hi-tech/export export-oriented agriculture projects involving large outlays/innovative projects with commercial banks thereby sharing the credit risks with them.
- Bulk lending/Revolving Fund Assistance (RFA) for micro-finance activities and promotional projects to non-governmental organisations (NGOs), self-help group (SHG) federations and credit unions which undertake financial intermediation for on-lending to SHGs or poor individuals.

NABARD, in order to facilitate credit flow, undertakes credit planning which involves preparation of district-wise credit plans and state focus paper for every state annually which indicate exploitable potential under agriculture and allied activities available for development through bank credit, monitoring the flow of ground level credit, and issuing policy and operational guidelines to rural financial institutions (RFIs). Further, it renders financial services such as refinancing RFIs for their financing for investment and production in rural areas, granting loans to state governments for strengthening cooperatives, supporting micro-credit innovations of NGOs, and monitoring and evaluation of financed projects.

Rural Infrastructure Development Fund

The development of a strong rural infrastructure is a prerequisite for increasing productivity of land, capital, and labour, improving the quality of life, and reducing vulnerability of rural power. Rural infrastructure includes irrigation structures, rural lands, bridges, water supply, sanitation, rural energy, rural market yards, education, health, communication, and information technology. Investment in rural infrastructure creates new economic opportunities and activities, generates additional employment and income, and facilitates and improves delivery of other rural services.

Investment in rural infrastructure declined in the eighth five-year plan period. The state governments failed to develop and maintain rural infrastructure due to resource crunch. Moreover, the commercial banks which were to channelise at least 18 per cent of their total lending to agriculture were unable to fulfill the commitment. To provide loans to state governments for the creation of rural infrastructure at reasonable rates, RIDF was set up in 1995–96 under the initiative of the central government. The scheme was operationalised by NABARD.

Under the scheme, the central government through budgetary outlays/contribute and commercial banks by way of deposits in relation to their shortfall in agriculture/priority lending to the corpus fund of RIDF.

RIDF was set up with an initial amount of Rs. 2,000 crore, (RIDF I). The Tranche-I was made up of contributions by way of deposits from scheduled commercial banks operating in India to the extent of shortfall in their agriculture lending, subject to a maximum of 1.5 per cent of the net bank credit. In the years 1996–97 and 1997–98, the union budgets allocated Rs. 2,500 crore. In the subsequent tranches, this amount was raised to Rs. 3,000 crore in 1998–99, Rs. 3,500 crore 1999–2000, Rs. 4,500 crore in 2000–01, Rs. 5,000 crore in 2001–02, Rs. 5,500 crore in 2002–03 and 2003–04, Rs. 8,000 crore in 2004–05 and 2005– 06, Rs.10,000 crore in 2006–07, Rs.12,000 crore in 2007–08, and Rs.14,000 crore in 2008–09. ln order to encourage commercial banks to directly lend to priority sector, interest rates earned by commercial banks on RIDF deposits are kept inversely related to the shortfall in lending to agriculture. Further, credit risk weights for both direct priority sector lending and RIDF deposits had been fixed at 100 per cent.

RIDF is used to finance incomplete or ongoing projects in minor, medium, and major irrigation along with flood protection, watershed management, and soil conservation. It also includes activities such as construction of rural roads and bridges, harvesting of rain water and construction of terminal rural markets, fish jetties and cold storage, primary school buildings, primary health centres, village *haats, anganwadi* centres, *shishushiksha kendras,* forest management, mini hydel and system improvement projects under power sector, rural drinking water supply, and citizens' information centres under the IT sector.

The corpus amount sanctioned, phased, and disbursed under RIDF are given in Table 12.5.

As on March 31, 2009, the cumulative number of projects sanctioned was 3,65,003 and amount sanctioned was Rs. 88,359 crore (Table 12.5). Of the total amount sanctioned till 2008–09, rural roads and bridges accounted for 46 per cent and irrigation projects accounted for 28 per cent. (Table 12.6)

TABLE 12.5 Cumulative Sanctions and Disbursements Under Different Tranches

(As on March 31, 2009)

RIDF Tranche	*Corpus*	*No. of Projects*	*Amount (Rs. Crore)*			*% of Disbursement**
			Sanctioned	*Phased*	*Disbursed*	
Closed Tranches						
I	2,000	4,168	1,906.21	1,906.21	1,760.87	92.4
II	2,500	8,193	2,636.08	2,636.08	2,397.95	91.0
III	2,500	14,345	2,732.69	2,732.69	2,453.53	89.8
IV	3,000	6,171	2,902.55	2,902.55	2,482.00	85.5
V	3,500	12,106	3,434.52	3,434.52	3,054.96	88.9
VI	4,500	43,168	4,488.51	4,488.51	4,070.85	90.7
VII	5,000	24,598	4,582.32	4,582.32	4,052.59	88.5
Total	**23,000**	**1,12,749**	**22,682.88**	**22,682.88**	**20,272.75**	**89.4**
Ongoing Tranches						
VIII	5,500	20,887	5,950.19	5,950.19	5,141.75	86.4
IX	5,500	19,548	5,638.51	5,638.51	4,870.36	86.4
X	8,000	17,190	7,717.47	7,717.47	6,198.38	80.3
XI	8,000	29,875	8,300.59	8,300.59	5,727.50	69.0
XII	10,000	42,279	10,600.95	10,600.95	5,770.84	54.4
XIII	12,000	36,948	12,749.09	9,600.83	5,057.14	52.7
XIV	14,000	85,527	14,719.42	3,242.22	3,013.48	92.9
Total	**63,000**	**2,52,254**	**65,676.22**	**51,050.76**	**35,779.45**	**70.1**
Grand Total	**86,000**	**3,65,003**	**88,359.10**	**73,733.64**	**56,052.20**	**76.0**

*: With phased amount.

Source: NABARD, *Annual Report*, 2008–09.

TABLE 12.6 Sector-wise Projects and Amount Sanctioned

(As on March 31, 2009)

(Rs. Crore)

Purpose	*RIDF XIV (2008–09)*	*Share (%)*	*RIDF I to XIII (Total)*	*Share (%)*
Irrigation				
Number	67,105	78.5	1,31,934	47.2
Amount	4,145.11	28.2	25,020.85	34.0
Rural Bridge				
Number	986	1.10	11,360	4.1
Amount	2,129.33	14.4	7,018.47	9.5
Rural Roads				
Number	6,991	8.2	61,321	21.9
Amount	4,616.38	31.4	24,548.93	33.3
Social Sector*				
Number	8,095	9.5	50,406	18.0
Amount	2,667.48	18.1	8,383.57	11.4
Power Sector**				
Number	12	0.01	729	0.3
Amount	231.74	1.6	1,613.05	2.2
Others***				
Number	2,338	2.7	23,726	8.5
Amount	929.38	6.3	7,054.80	9.6
Total				
Number	**85,527**	**100.0**	**2,79,476**	**100.0**
Amount	**14,719.42**	**100.0**	**73,639.67**	**100.0**

*: Includes projects relating to Rural Drinking Water Supply, Primary/ Secondary Schools, Public Health Institution, Pay & Use Toilets, and Anganwadi Centres.

**: Power includes projects relating to System Improvement in Power Sector and Mini/Small Hydel projects.

***: Includes soil conservation, watershed development, rain water harvesting, flood protection, CADA, drainage, cold storages, fishing harbour/jetties, riverine fisheries, animal husbandry, forest development, inland waterways, rubber plantations, seed/agri./ horti. farms, citizen information centres, food park, rural libraries, rural market/ yard/ godown, meat processing, rural knowledge centres, rural industrial estates/centre, etc.

Source: NABARD, *Annual Report*, 2008–09.

The scope of RIDF was progressively widened to allow lending to gram panchayats, SHGs and other eligible organisations for implementing village level infrastructure projects.

The implementation of sanctioned projects is closely monitored by NABARD. The period of loan is seven years with a moratorium of two years. The interest rates are linked to the bank rate, i.e., at 0.5 per cent above the rate prevailing at the time of sanction of loan since RIDF X.

NABARD anticipates that the projects sanctioned upto March 31, 2009 under RIDF would result in creation of additional irrigation potential in 144.97 lakh ha, addition of 2,73,000 KM long rural road network and 5,06,000 meter bridge length, generation of recurring employment of 70.56 lakh jobs and non-recurring employment of 22,568 lakh persons days from irrigation projects and generation of non-recurring employment of 42,785 lakh person days from non-irrigation projects.

Thrust Areas of NABARD

1. Farm Sector

- **Watershed development fund:** Watershed development programme includes the improvement of productivity of land, ground water recharge and conservation of soil and moisture. The Government of India set up the Watershed Development Fund (WDF) with NABARD in 1999–2000 with a corpus of Rs. 200 crore contributed equally by the Government of India and NABARD. This fund is utilised to implement participatory watershed projects in 100 districts of 14 states. The corpus of the fund was augmented to Rs. 1,125.21 crore as on March 31, 2009. The projects are implemented in two phases, viz., Capacity Building Phase (CBP) and Full Implementation Phase (FIP). Till 2008–09, 454 projects spread over 94 districts in 14 states were sanctioned and 169 projects entered the full implementation phase.

- **Tribal Development Fund (TDF):** It was created in 2004 with an initial corpus of Rs. 50 crore, for developing the tribal dominated areas through the wadi concept. It also includes taking-up micro-enterprises by the landless, women empowerment, community health, training and capacity building, and building people's organisations.
- **Farm Innovation and Promotion Fund (FIPF):** It was set up with a corpus of Rs. 5 crore in 2005 to promote innovative and feasible concepts/ projects in agriculture and allied activities, development of marketable prototypes, technology patenting, extension support, marketing, etc. During 2008–09, 14 projects financed include commodity exchange, rainfed rabi cropping, ultra-high density, orcharding in guava, village farm development, protected vegetable cultivation in villages, and efficient use of carbon and plant nutrients under dryland agriculture.
- **Pilot Project for Integrated Development (PPID) of backward blocks:** It was launched in 2003 and the project aimed at enabling integrated development through credit and convergence of development programmes in these blocks. The duration of PPID I was restricted to three years only.
- **Capacity Building for Adoption of Technology (CAT) scheme:** NABARD undertakes sensitisation of farmers to facilitate them in adopting new/innovative methods of farming through exposure visits and training.
- **Village Development Programme (VDP):** It was introduced in 2007 and envisages developing five villages in each of the PPID blocks. A village development committee comprising mainly of progressive villagers takes care of plan preparation, implementation, monitoring, etc.
- **Farmers Technology Transfer Fund (FTTF):** It was operationalised from April 1, 2008 with a corpus of Rs. 25 crore with the aim of promoting technology transfer for enhancing production and productivity in agriculture and farm-related activities.
- **Farmers' Club (FC):** This programme aims to organise farmers around a common agenda to facilitate access to credit, technology, markets, and extension services. NABARD extends uniform support of Rs.10,000 for three years to commercial banks, RRBs, co-operative banks, and grassroot level organisations (NGOs, PRIs, KVKs, Post Offices, etc.) for promoting and nurturing of FCs. The promoting agency takes steps to make the clubs self-sustaining over a period of three to five years, when funding support by institutional agencies will be withdrawn.
- **Commodity futures trading:** In order to enable the farming community to reap the benefits of commodity futures trading, NABARD in collaboration with the Forward Market Commission (FMC) has undertaken the responsibility of organising exposure workshops for skill upgradation of farmers to ensure their participation in the market.
- **Government projects:** NABARD also discharges the functions of implementing/project coordinating agency for various area specific projects of the government of India.
  a. *Kutch drought proofing project* NABARD has been implementing this project since 2005 through community-based organisations and NGOs.
  b. *Cattle development projects* NABARD is the co-ordinating agency and facilitator for channelising funds, ensuring its utilisation, project supervision, and monitoring.
  c. *Special project on livelihood based development* under implementation since 2006–07. The project aims to cover 11,500 BPL families in each district at an approved cost of Rs. 14.97 crore for Sultanpur and Rs.14.90 crore for Rae Bareli. NABARD is the project holder on behalf of MoRD while BAIF and Dr. Reddy Foundation (DRF) are implementing it.
  d. *Dairy and poultry venture capital fund* The programme is under implementation since 2005–06. Assistance is extended as interest free loan upto 50 per cent of the outlay for identified components under dairy and poultry sectors. NABARD is the nodal agency for operationalising the scheme and administering the Fund.
- **Externally aided projects:** NABARD receives assistance from KfW, Germany and disburses assistance under the KfW-supported externally aided projects, which are in various stages of implementation. The following are the on-going projects.
  a. *The KFW-NABARD-V-Adivasi development programme in Gujarat*. This programme has been under implementation since 1994–95 in Valsad and Dangs districts through BAIF Development Research Foundation, Pune. The in-built credit programme is being implemented through Gram Vikas Mandals (GVM) since 1998–99.

b. *The KfW-NABARD-IX-Adivasi development programme in Maharashtra*. The successful wadi model of Gujarat is being replicated in Nasik and Thane districts of Maharshtra. The programme with a project period of 10 years (2000–2010) aims to support 13,000 tribal families by developing wadis on their marginally productive lands.
c. *Indo-German Watershed Development Programme (IGWDP)*. This programme is being implemented since 1992 in Maharashtra through NGOs and village-level community-based organisations with an objective to develop micro-watersheds for achieving sustainable production system through people's participation. This programme has two phases: Phase I—capacity building phase and Phase II—full implementation phase. Phase I is complete and Phase II is in progress. Phase II is an integrated programme for the regeneration of natural resources through the rehabilitation of watersheds to be implemented by Village Watershed Committees (VWCs) in association with NGOs. In all, 118 watershed projects are being implemented in 24 districts with the involvement of 65 NGOs, of which 64 have been completed.

Impact of the Programme

- Improvement in availability of drinking water.
- Rise in groundwater recharge, leading to increased irrigation, production, and productivity.
- Improved local employment reducing distress migration.
- Indirect impact: Improved quality of life, housing, and health.

This programme has now commenced in Andhra Pradesh with an objective of treatment of 30 watersheds to stabilise and increase the agricultural and forestry production in a sustainable and equitable manner.

KfW, Germany has committed to provide grant assistance of Rs. 51.52 crore to selected projects executed by NGOs, exclusively towards investment financing and consultation costs for the rehabilitation of watersheds in Gujarat. It has also committed grant assistance of Rs. 61.60 crore under the Indo-German Watershed Development Programme in Rajasthan for watershed development in five districts (Banswara, Chittorgarh, Dungarpur, Pratapgarh, and Udaipur).

- **Umbrella Programme on Natural Resource Management (UPNRM):** It is the new loan-cum-grant based programme being piloted by NABARD from 2007–08 under Indo-German collaboration. It envisages a shift from (i) project-based to programmebased funding and (ii) grant-based to loan-based funding in the NRM sector.

2. Non-farm Sector

The non-farm sector includes investment activities of artisans, small-scale industries, village and tiny industries, handicrafts, handlooms, and others. The rural non farm sector (RNFS) has a lot of employment generation potential in rural areas. NABARD provides refinance as well as promotional support for the development of this sector. Promotional support is provided to establish replicable models for generating/enhancing opportunities for employment and income generation in a sustainable, demonstrative and cost effective manner by providing grant/revolving fund assistance, etc. to NGOs, voluntary associations, trusts and other promotional organisations.

- **Rural Innovation Fund (RIF):** This fund was constituted in 2005 to provide support for innovative projects in farm, non-farm, and micro-finance sectors with potential to generate employment opportunities.
- **Swarojgar credit card scheme:** NABARD, in consultation with the GOI and the RBI, formulated in August 2003 the Swarojgar Credit Card (SCC) scheme for the benefit of small borrowers to take care of their investment and working capital requirements. As on March 31, 2009, the banking sector had issued 9.84 lakh SCC involving an aggregate credit limit of Rs. 4,007 crore.
- **District Rural Industries Project (DRIP):** This project was introduced in 1993–94 in five select districts with the objective of creating sustainable employment opportunities in rural areas through enhanced credit flow to RNFS with promotional measures in a coordinated manner. Encouraged by the success of this project, NABARD extended the project to 80 districts across the country. The emphasis of NABARD is on credit intensification efforts through credit plus approach, cluster development, credit delivery innovation, development of emerging and high growth sub-sectors, and credit related promotional programmes. Training of officers of primary lending institutions (PLIs) and other partner agencies has been a thrust area under DRIP.
- **Scheme for strengthening of rural haats:** It was introduced in 1999 in DRIP districts, and was extended to all districts, village bazaar boards, SHG, NGO and to PRI/PACS, The ceiling under the scheme was increased from Rs. 3 lakh to Rs. 5 lakh and coverage extended to include permanent structure/s as per local requirements.

- **Cluster programme for rural industries:** The Government of India has launched the National programme for Rural Industrialisation (NPRI) for development of rural clusters. NABARD has approved development of 81 rural clusters in a phased manner during the 5-year period (2006–10). NABARD's role is that of a facilitator coordinating with participating agencies and preparing action plans with active involvement of the government, development agencies, banks, and artisans. The broad sectors identified for development on priority basis under the programme are agriculture and allied activities, cashew processing, food processing, rural SME, handicrafts and handlooms, marketing and trading, and adequate supply of quality raw material, agri/rural touism, and rural community.
- **Rural Entrepreneurship Development Programme (REDP) and Skill Development Programme (SDP):** This programme was introduced in the early 1990s to support rural unemployed youth in setting up their own business. NABARD extends grant assistance to agencies with professional competence for conducting entrepreneurship development programmes for unemployed rural youth. Till March 2009, 11,905 REDPs/SDPs were supported benefiting over 3 lakh youth.

3. Other Schemes

- **Kisan Credit Card (KCC) scheme:** This scheme was started in August 1998 to grant credit to farmers. The scheme aims at provision of adequate and timely support from the banking system to the farmers for their cultivation needs including purchase of inputs in a flexible and cost effective manner. In addition to short-term loans for agriculture purposes, loans for consumption needs are also granted. Since inception upto the end of March 2009, 8.29 crore cards were issued (Table 12.7).

  Loans disbursed under KCCs have been brought under Rashtriya Krishi Bima Yojana of the General Insurance Corporation. KCC holders are also being provided personal accident insurance cover of Rs. 50,000 for death and Rs. 25,000 for disability. Banks extend crop loans only through KCC.

  Cooperative banks accounted for the largest share of cards (44 per cent) followed by commercial banks (42 per cent) and RRBs (14 per cent).
- **Agricultural debt waiver and debt relief scheme, 2008:** This scheme was announced in the Union Budget 2008–09 to restructure the indebtedness of farmers and remove difficulties faced by farming communities, especially small and marginal farmers. NABARD implemented the scheme as nodal agency for co-operative banks and RRBs. About 193 lakh farmer-borrowers of cooperative banks and RRBs are estimated to have benefitted under the Scheme.
- **Capital investment subsidy schemes:** Since 2000–01, NABARD is the nodal agency to oversee implementation of the various Capital Investment Subsidy (CIS) schemes of the government of India through administering subsidy and monitoring the progress with bankers and GoI. During 2008–09, four CIS schemes, viz., (i) construction of cold storages, onion godowns and rural godowns,

TABLE 12.7 Agency-wise, Year-wise Kisan Credit Cards Issued

(In Lakhs)

Year	*Co-operative Bank*	*RRBs*	*Commercial Banks*	*Total*
2001–02	54.36	8.34	30.71	93.41
2002–03	45.79	9.64	27.00	82.43
2003–04	48.78	12.74	30.94	92.46
2004–05	35.56	17.29	43.95	96.80
2005–06	25.98	12.49	41.65	80.12
2004–05	35.56	17.29	43.95	96.80
2005–06	25.98	12.49	41.65	80.12
2006–07	22.97	14.06	48.08	85.11
2007–08	20.91	17.73	46.06	84.70
2008–09	13.44	14.14	40.37*	67.95
Cumulative	361.45	114.71	352.54	828.70

*: Upto December 31, 2008

Source: NABARD, *Annual Report*, 2008–09.

(ii) development/strengthening of agriculture marketing infrastructure, grading and standardisation, (iii) establishing Agri-Clinic and Agri-Business Centres (ACABC) by agriculture graduates, and (iv) supporting bankable projects for commercial production of organic inputs like bio-fertiliser, vermiculture hatchery and composting units of fruit and vegetable wastes, etc., under National Project on Organic Farming (NPOF) were implemented.

- **Women empowerment:** NABARD has formulated different programmes for development of women and credit flow to women.
- **Gender sensitisation programmes:** NABARD has been conducting gender sensitisation meets/workshops for various levels of bankers at the district and state level. These programmes create awareness among bankers regarding gender concerns in credit and thereby help to accelerate banking facilities and credit flow to women.
- **Women development cells:** NABARD set up, in 1995, a scheme providing grant support for setting up of Women Development Cells (WDCs) in RRBs and cooperative banks. The objective of the scheme is to strengthen the institutional capabilities in addressing gender issues in credit and supportiveness.
- **Assistance to Rural Women in Rural Non-Farm Development (ARWIND):** This scheme has been formulated with the objective of entrepreneurial development among rural women. Under this scheme, assistance is available for setting up of units for rural women entrepreneurs, common facility centres, setting up of mother units, and organising women. NABARD provides 100 per cent refinance to banks under this scheme.
- **Assistance for Marketing of Non-Farm Products of Rural Women (MAHIMA):** This scheme was introduced in 1997 for supporting various initiatives for promoting marketing of items produced by women. Women are given assistance relating to marketing activities such as market survey, technology upgradation, branding, labelling, packaging, publicity, setting up of showrooms/sale outlets in NABARD provides 100 per cent refinance to banks under this scheme.
- **Development of Women through Area Programme (DEWTA):** This programme aims to address various needs of women, identified by women themselves in respect of skill, upgradation, and capacity building.
- **Other development initiatives:** NABARD has taken various initiatives to develop the north-eastern region, provide environmental promotional assistance to NGOs and other research organisations, promote cultivation of medicinal and aromatic plants, finance agriculture graduates for setting up agriclinics and agribusiness centres, develop backward blocks, and extend refinance for rural housing.

Participation in New Ventures

Agriculture Insurance Company of India Limited (AICI): A well designed institutional arrangement such as insurance has to be put in place to avoid risks in agriculture covering all farmers and crops. AICI was set up on December 20, 2002 under the Companies Act, 1956 with an authorised and paid-up capital of Rs. 1500 crore and Rs. 200 crore respectively. NABARD's contribution in the equity is 30 per cent while the contribution from GIC is 35 per cent and the four public sector insurance companies have contributed 8.75 per cent each.

The pilot scheme on Seed Crop Insurance, which was implemented through GIC, is now transferred to AICI.

Amendments to the NABARD Act, 1981

Comprehensive amendments to the NABARD Act, 1981, were made to provide operational flexibility to the bank in meeting the changing requirements of the rural sector. These amendments were made effective from February 1, 2001. The amendments relate to explicit reference to NABARD as a development bank, enhancement of capital limit from Rs. 500 crore to Rs. 5,000 crore, allowing holding of private equity upto 49 per cent with a minimum of 51 per cent by the Government of India and the RBI, flexibility in resource mobilisation and credit-delivery by the bank, introduction of new products, and setting up of subsidiaries.

NABARD as a Consultant

NABARD has recently (2003) set up its own consulting wing called NABCON for loan seekers. The new wing is established to provide information, technical guidance, critical ideas and consultancy services to entrepreneurs, banks, cooperatives, government and non-government organisations. The bank's wing in

India as well as in the international level has on date projects worth about USD 200 million under consultancy, or in active consideration.

NABARD as a Supervisor

NABARD was set up under the aegis of the RBI for supervision and refinance of rural cooperatives. It has constituted a board of supervision as an advisory committee to the board of directors of NABARD. NABARD inspects State Cooperative Banks (StCBs)and District Central Cooperative Banks (DCCBs) in terms of the powers vested under Section 35 (6) of the Banking. Regulation Act, 1949 (AACS) and Regional rural banks (RRBs) under Section 35 (6) of the B. R. Act, 1949. NABARD also conducts voluntary inspection of State Co-operative Agriculture and Rural Development Banks (SCARDBs) and Apex Co-operative Societies and Federations having borrowings outstanding from it. NABARD's supervisory role is comprehensive and holistic, encompassing inspections (on-site and off-site), portfolio studies, monitoring, guiding, and facilitating functions, besides the basic objective of ensuring conformity with banking regulations and prudential norms. Statutory inspections of all StCBs, DCCBs, and RRBs not complying with minimum capital requirements of Banking Regulation Act, 1949 (AACS)/RBI Act, 1934 and voluntary inspections of all SCARDBs continue are conducted annually. Statutory inspections of DCCBs and RRBs with positive net worth and voluntary inspections of Apex Co-operative Societies/ Federations are conducted once in two years.

Institutional Development

- NABARD has identified strengthening of rural financial institutions (RFIs), which deliver credit to the agriculture and rural sector, as a thrust area so that adequate and timely credit is made available. NABARD helps RFIs to prepare development action plans and also monitor the implementation of these plans. It has helped in implementing the recapitalisation plan of the GOI for RRBs. It has setup the Cooperative Development Fund to support various development activities such as computerisation and human resistance development.
- National Commodity and Derivatives Exchange Limited (NCDEX): NCDEX, jointly floated by NABARD, LIC, NSE, ICICI Bank, PNB, and CRISIL, commenced trading on December 15, 2003. The authorised share capital of the company is Rs. 30 crore and issued share capital is Rs. 22 crore. NABARD has contributed Rs. 4.39 crore to the equity. This company provides a platform for price discovery, information regarding price trends, and hedging risk for various agricultural products thus enabling farmers to plan their production and appropriately market their products.
- Agric export zones: NABARD extends refinance facility to all banking institutions for financing farmers in agric export zones. It also organises state level meets of different stakeholders of AEZs and district level workshops for facilitating better interface among entrepreneurs and farmers at the grassroot level.

Conclusion

NABARD has played a key role as an apex-level development finance institution committed to rural prosperity. Its performance has been satisfactory in all areas of its operations. It has introduced new schemes and chalked out new strategies for better achievements in future.

KEY TERMS

Development Banks, Universal Banking and Micro-finance.

SUMMARY

1. Development banks are financial agencies that provide medium- and long-term financial assistance and act as catalytic agents in promoting balanced development of the country. They are engaged in promotion and development of industry, agriculture, and other key sectors. They also provide development services that can aid in the accelerated growth of an economy.
2. The concept of development banking originated during the post Second World War period. The International Bank for Reconstruction and Development (IBRD) known as the World Bank and the International Monetary Fund (IMF) are examples of development banks at the international level.
3. To fill in the gaps in the banking system and capital markets, a new institutional machinery was devised—the setting up of specialised financial institutions.

4. The country is being served by 57 financial institutions, comprising 11 institutions at the national level and 46 institutions at the state level. These financial institutions have a wide network of branches.
5. DFIs are in the process of converting themselves into universal banks. ICICI has become a universal bank by a reverse merger with its subsidiary ICICI Bank. IDBI has transformed itself into a universal bank.
6. Universal banking is a one-stop shop of financial products and services. Universal banks provide a complete range of corporate financial solutions under one roof—everything from term finance, working capital, project advisory services, and treasury consultancy.
7. Industrial Finance Corporation of India Limited (IFCI), India's first DFI, was established on July 1, 1948, under the Industrial Finance Corporation Act as a statutory corporation. It was set up to provide institutional credit to medium and large industries. Since 1998–99, the assistance sanctioned and disbursed by IFCI has declined. IFCI started reporting losses from 1999. IFCI was the worst hit by the NPA problem. IFCI has been turned around into a profit-making company and is now looking for a strategic tie-up. IFCI Ltd is now being regulated as a systemically important non-deposit taking NBFC.
8. The Industrial Development Bank of India (IDBI) was established in 1964 by parliament as a wholly owned subsidiary of the RBI. In 1976, the bank's ownership was transferred to the Government of India. It was accorded the status of the principal financial institution for coordinating the working of institutions at national and state levels engaged in financing, promoting, and developing industries. IDBI was merged with its private banking arm, IDBI Bank, in 2003–04.
9. The Small Industries Development Bank of India (SIDBI) was set up in 1990 under an act of parliament—the SIDBI Act, 1989. The charter establishing SIDBI envisaged SIDBI to be 'the principal financial institution for the promotion, financing and development of industries in the small-scale sector and to coordinate the functions of other institutions engaged in similar activities.' SIDBI offers a chain of financial products covering micro-finance, business, incubation, venture capital, project finance, assistance for technology development and marketing of small scale industries products, export finance, bills finance, factoring, and guarantees for loans. SIDBI also provides support services such as training, market information, and advice for enhancing the inherent strength of small scale units. SIDBI is among top 30 development banks of the world.
10. Infrastructure Development Finance Company Limited (IDFC) was set up on the recommendations of the Expert Group on Commercialisation of Infrastructure Projects. IDFC was set up to facilitate the flow of private finance to commercially viable infrastructure projects. Initially, IDFC focused on power, roads, ports, and telecommunications. Now it has broadened this focus to the framework of energy, telecommunications and information technology, integrated transportation, urban infrastructure, and food and agribusiness infrastructure.
11. The Export Import Bank of India is wholly owned by the Government of India and was set up for the purpose of financing, facilitating, and promoting foreign trade in India. Exim Bank is the principal financial institution in the country for coordinating working of institutions engaged in financing exports and imports.
12. NABARD is an apex institution set up for providing and regulating credit and other facilities for the promotion and development of agriculture, small scale industries, cottage and village industries, handicrafts and other rural crafts, and other allied economic activities in rural areas with a view to promoting integrated rural development and securing prosperity of rural areas and for matters connected therewith or incidental thereto. The functions of NABARD are to facilitate credit flow for agriculture and rural development, promote and support policies, practices and innovations conducive to rural development, strengthen rural credit delivery system through institutional development, and supervise rural financial institutions such as cooperative banks and regional rural banks. NABARD extends refinance for both farm and non-farm sector. To provide loans to state governments for the creation of rural infrastructure at reasonable rates, RIDF was set up in 1995–96 under the initiative of the central government. The scheme is operationalised by NABARD. NABARD promoted the idea of organising thrift and credit groups among the NGOs as an add-on activity and encouraged linking them with banks. Micro-finance is defined as the provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semiurban or urban areas for enabling them to raise their income levels and improve living standards. Self help Group–Bank Programme was launched by NABARD in February 1992 with the support of the RBI. The programme aimed at promoting and financing 500 SHGs across the entire country. It also operates various schemes such as Kisan Credit Card, Watershed Development Scheme, Scheme for Financing Farmers, Women Empowerment, and Rural Entrepreneurship Development Programme (REDP).

REVIEW QUESTIONS

1. State the objectives of development financial institutions.
2. What is universal banking? How has ICICI transformed into a universal bank?
3. What are the different products and services offered by EXIM Bank?
4. 'IDFC has emerged as a company supporting infrastructure projects.' How?
5. Give a brief profile of IFCI and SIDBI.
6. What is the role of NABARD in rural credit?

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13

Banking and Non-Banking Institutions

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *Banking Institutions: Functions and Regulation*
2. *Development of banking in India*
3. *Scheduled commercial banks*
4. *Mobilisation, lending, and investment of funds*
5. *Reforms in the banking sector*
6. *Payment and settlement system*
7. *Diversification in banking operations*
8. *Consolidation in banking*
9. *Equity capital raised by public sector banks*
10. *Risk management in banks*
11. *Prudential regulation*
12. *Regional Rural Banks*
13. *Cooperative banking—urban cooperative banks and rural cooperative banks*
14. *Non-banking financial companies*

BANKING INSTITUTIONS

The banking sector is the lifeline of any modern economy. It is one of the important financial pillars of the financial system which plays a vital role in the success/failure of an economy. Banks are one of the oldest financial intermediaries in the financial system. They play an important role in the mobilisation of deposits and disbursement of credit to various sectors of the economy. The banking system is the fuel injection system which spurs economic efficiency by mobilising savings and allocating them to high return investment. Research confirms that countries with a well-developed banking system grow faster than those with a weaker one. The banking system reflects the economic health of the country. The strength of economy of any country basically hinges on the strength and efficiency of the financial system, which, in turn, depends on a sound and solvent banking system. A sound banking system efficiently deploys mobilised savings in productive sectors and a solvent banking system ensures that the bank is capable of meeting its obligation to the depositors. The banking sector is dominant in India as it accounts for more than half the assets of the financial sector.

Section 5(l)(b) of the Banking Regulation Act defines banking as 'the accepting, for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise and withdrawable by cheque, draft, order or otherwise.' Section 5(l)(c) defines banking company as 'any company which transacts the business of banking in India'. However, the acceptance of deposits by companies for the purpose of financing their own business is not regarded as banking within the meaning of the act. The essential characteristics of the banking business as defined in Section 5(b) of the Banking Regulation Act are as follows.

- Acceptance of deposits from the public
- For the purpose of lending or investment
- Repayable on demand or otherwise
- Withdrawable by means of any instrument whether a cheque or otherwise

From the definition, two important functions of commercial banks emerge: acceptance of deposits and lending of funds. For centuries, banks have borrowed and lent money to business, trade, and people, charging interest on loans and paying interest on deposits. These two functions are the core activities of banking.

FUNCTIONS OF BANK

Deposits

Deposits are the main source of funds for commercial banks. The amount mobilised as deposits is then lent in the form of advances. The higher the amount of deposits mobilised, the higher is the amount of funds lent. The growth of deposits depends on savings. Savings held in the form of currency or gold and jewellery are unproductive. For economic growth to take place, it is essential that these savings are mobilised and channelised for capital formation which, in turn, accelerates economic growth. Banks are important financial intermediaries between savers and borrowers. Banks mobilise savings by accepting deposits. Deposits may be categorised into (i) demand deposits and (ii) time deposits.

• Demand deposits are deposits which can be withdrawn without notice and can be repaid on demand.
Time deposits are deposits which are repayable after a fixed date or after a period of notice.

Demand deposits are deposits which can be withdrawn without notice and can be repaid on demand. Current accounts and savings accounts are classified as demand deposits.

Time deposits are deposits which are repayable after a fixed date or after a period of notice. Fixed deposits, recurring/cumulative deposits, miscellaneous deposits, and cash certificates are classified as time deposits.

A significant proportion of funds is contributed by deposits which account for more than 80 per cent liabilities of scheduled commercial banks (SCBs).

Credit Creation

Banks are a special type of financial intermediaries which not only accept and deploy large amounts of uncollateralised deposits in a fiduciary capacity, but also leverage such funds through credit creation.

Banks are creators of credit. The creation of credit is an important function of a bank and this function distinguishes banks from the non-banking institutions. Banks create deposits in the process of their lending operations. When the bank mobilises savings, it lends the amount that remains after providing for reserves. The amount lent is either deposited in the same bank or in some other bank. For instance, when a bank extends overdraft facility or discounts a bill of exchange, the bank first of all credits this amount in the account of the customer, who creates a deposit. The bank, after keeping aside a certain portion of this deposit in the form of reserves, lends this amount. This process continues and repeats in all the banks or in the banking system as a whole. This leads to the creation of credit, which, in turn, increases the liabilities and assets in the banking system.

For instance, a bank receives Rs. 1,000 in the form of deposits. The bank after keeping aside, say, 10 per cent in the form of reserves, lends the remaining amount, i.e., Rs. 900. The amount lent is either deposited in the same bank or in some other bank. The bank again, after keeping aside reserves of 10 per cent, lends the remaining amount, i.e., Rs. 810. This process continues and repeats in all banks simultaneously leading to creation of credit. Credit creation leads to an increase in the total amount of money for circulation.

Lending of Funds

Commercial banks mobilise savings from the surplus-spending sector and lend these funds to the deficit-spending sector. They facilitate not only flow of funds but also flow of goods and services from producers to consumers through this function of lending. Commercial banks facilitate the financial activities of not only the private sector but also of the government. Funds are lent in the form of cash credit, overdraft, and loan system. Banks discount bills of exchange, give venture capital, and guarantees. Loans and advances form around 50 per cent of the aggregate deposits of SCBs.

Ancilliary Functions

Besides the primary functions of mobilising deposits and lending funds, banks provide a range of ancillary services, including transfer of funds, collection, foreign exchange, safe deposit locker, gift cheques, and merchant banking. Thus, banks provide a wide variety of banking and ancillary services.

Banks are distinct entities as they have fiduciary responsibility, are highly leveraged and the future of any one bank can threaten the integrity of the payments system which is the backbone of any modern economy.

Regulation of Banks in India

Currently, the Banking Companies (Acquisition) Act, 1970 which is popularly known as the Bank Nationalisation Act, and the Banking Regulation Act, 1949, govern nationalised banks while the State Bank of India is governed by the State Bank of India Act, 1955, and the seven associate banks of the State Bank of India are governed by the State Bank of India (Subsidiary Banks) Act, 1959. Private banks are covered under the Banking Regulation Act, 1949.

DEVELOPMENT OF BANKING IN INDIA

The history of banking dates back to the thirteenth century when the first bill of exchange was used as money in medieval trade.

Banking in India has its origin in Vedic times, i.e., 2000 to 1400 BC. Indigenous bankers and money lenders have played a vital role for centuries. Modern banking in India emerged between the eighteenth and the beginning of the nineteenth centuries when European agency houses erected a structure of European controlled banks with limited liability. In 1683, the first bank was set up in Madras by the officers of East India Company. The first joint stock bank was Bank of Bombay, established in 1720 in Bombay, followed by Bank of Hindustan in Calcutta, which was established in 1770 by an agency house. The principle of limited liability, which was first applied to joint stock companies in 1860, was a landmark in Indian banking.

The first 'Presidency bank'—the Bank of Bengal—was established in Calcutta on June 2, 1806 with a capital of Rs. 50 lakh to cater to the requirement for modern banking services, uniform currency to finance foreign trade and remittances by British army personnel and civil servants. The Government subscribed to 20 per cent of its share capital. The Bank of Bombay was the second Presidency bank set up in 1840 followed by the Bank of Madras in July 1843. As these banks were set up in the three Presidencies that were the units of administrative jurisdiction in the country for the East India Company, they were known as Presidency banks and were governed by Royal Charters.

Three presidency banks—the Bank of Bombay, the Bank of Madras, and the Bank of Bengal—which were set up between 1809 and 1843, were amalgamated into the Imperial Bank of India in 1921. The role of the Imperial bank was that of a commercial bank, a banker's bank and a banker to the government. The Imperial Bank of India eventually became the State Bank of India.

The cooperative banking movement had already evolved in India in the last decade of the nineteenth Century. The late Shri Vithal L Kavthekar pioneered the urban cooperative credit movement in the year 1889 in the then princely State of Baroda. The second urban cooperative bank was the Peoples' Cooperative Society in 1905 in Bangalore city in the princely State of Mysore. These banks catered to the requirements of urban lower income group population.

The *Swadeshi* Movement of 1906 provided a great thrust to set up joint stock banks of Indian ownership. The first Indian owned bank was the Allahabad Bank set up in Allahabad in 1865 followed by Punjab National Bank which was set up in 1895 in Lahore. Between 1906 and 1913, many Indian owned banks such as Bank of India, Central Bank of India, Bank of Baroda, Canara Bank, Indian Bank, and Bank of Mysore were set up. The major function of these banks was to finance foreign trade while domestic trade was largely handled by the Multani shroffs and moneylenders.

In 1930, there were 1,258 banking institutions registered under the Indian Companies Act, 1913.

Between 1928 to 1934, the period of Great Depression, a large number of small banks failed due to their loans going bad. To check the bank failures and to cater to the requirements of agriculture, the Reserve Bank of India Act, 1934 was enacted and the Reserve Bank of India was set up in 1935. There was an increase in the number of reporting banks with low capital base, after the Reserve Bank was set up. However, the Reserve Bank did not have adequate powers of control or regulation. Commercial banks were governed by the Company Law and the permission of the Reserve Bank was not required even for setting up of a new bank.

Between 1941 and 1945, the number of banks rapidly increased from 473 to 737 but these banks suffered from certain limitations such as inadequate capital structure and unsound methods of operations and management. Between 1947 and 1969, banks were under private ownership of the maharajas, or kings, of the princely states of India. These banks used to serve rich families and industrial houses and this narrowed the growth of banking system. To overcome these limitations, the government, in consultation with the RBI, enacted the Banking Companies Act in 1949 (later renamed as the Banking Regulation Act). The Banking Companies Act of 1949, the first regulatory step by the Government of independent India, gave extensive powers to the Reserve Bank for banking supervision as the central banking authority of the country. It included various powers such as protecting the interests of depositors, organisation, management, audit and liquidation of the banking companies, control over opening of new banks and branch offices, powers to inspect books of accounts of the banking companies, and preventing voluntary winding up of licensed banking companies. Through elimination and mergers, the number of banking institutes was reduced. The RBI accelerated the task of consolidation in 1960, when the scope of the Banking Companies Act was widened. Between 1954 and 1966, 217 weak banks were either amalgamated or liquidated or their liabilities and assets transferred to other banks.

In order to enlarge the reach of banking services, the Government nationalised the Imperial Bank of India by converting it into the State Bank of India in 1955. The objective of nationalisation was 'extension of banking facilities on a large scale, more particularly in the rural and semi-urban areas, and for diverse other public purposes'. The ownership of SBI was vested with the Reserve Bank which has now been transferred to the Government of India.

In order to ensure the safety of deposits of small depositors in banks in India, the Deposit Insurance Corporation Act, 1961 was enacted and the Deposit Insurance Corporation of India was set up in January 1962. The deposit insurance increased the trust of the depositors in the banking system which enabled higher deposit mobilisation.

The number of bank branches rose significantly between 1951 and 1967, as a result of which the average population per branch fell from 1,36,000 in 1951 to 65,000 in 1969. Inspite of increase in number of branches, the rural population could not avail banking services on account of concentration of branches in urban areas, and a higher credit flow directed to industrial houses. To break the nexus between industrial houses and banks and improve the flow of credit to agriculture, the government once again used the tool of nationalisation of major banks in the country.

In 1969, 14 banks were nationalised to promote macro-economic objectives such as economic growth, better regional balance of economic activities, and the diffusion of economic power. The nationalisation was effected by an ordinance, which was later replaced by an act of parliament known as the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970. The banking sector was identified as the key instrument for economic development. Fourteen erstwhile private sector banks were nationalised on July 19, 1969, and another six, viz, Andhra Bank, Corporation Bank, New Bank of India, Oriental Bank of Commerce, Punjab and Sind Bank, and Vijaya Bank, with deposit liabilities of Rs. 200 crore and above in 1980. One of the objectives of nationalisation was to extend the reach of organised banking services to rural areas and to the neglected sections/sectors of society. With a view to achieving these objectives, the policy makers imposed a strict credit rationing approach, prescribed formula-based lending and high-directed credit obligations.

The Reserve Bank also launched the Lead Bank Scheme (LBS) in December 1969, to mobilse deposits and to step up lending to weaker sections of the economy. Under this scheme, a 'lead bank' designated for the district was responsible for taking lead role in surveying the credit needs of the population, development of banking and of credit facilities in the district allotted to it.

- Commercial banks together with cooperative banks account for nearly 70 per cent of the total assets of Indian financial institutions

Inspite of these measures, the commercial banks failed to cater the needs of rural people, especially the small and marginal farmers. The cooperatives also lacked resources to meet the requirements of small and marginal farmers. Hence, a separate banking structure known as the Regional Rural Banks was set up on February 9, 1976.

Between 1969 and 1992, there was a rapid expansion of branch network. The number of bank branches increased from 8,262 to 60,570, deposits rose from Rs. 4,646 crore to Rs. 2,37,566 crore, advances from Rs. 3,599 crore to Rs. 1,31,520 crore in 1991 reflecting a rapid growth of banking activity. The banking system spread to rural areas. Small-scale, tiny, and cottage industries, and small entrepreneurs benefited from the spread of the banking system. The significance of the informal (unorganised) sector declined with the spread of the banking system. The share of priority sector in the total banking grew. In 1969, 14 per cent of bank credit was apportioned to priority sectors whereas by 1990, this share had gone up to 43 per cent. Banking density improved from 64,000 people per branch in 1969 to just 14,000 people per branch in 1991. India's gross domestic savings (GDS) rose from 15.7 per cent in 1970 to 24.20 per cent in 1991 and banking deposits grew at a rapid 19 per cent compounded annual growth rate. However, the government also had easy access and control over public funds. As banks were merely tools in the hands of the government, banks had no incentive to make profits and improve the financial health. Nationalisation killed competition and stifled innovations in banking. Trade unions became strong in banks with political patronage and they resisted any form of change in the banking system.

Banks functioned in a regulated environment with administered interest rate structure, quantitative restrictions on credit flows, fairly high reserve requirements, and pre-emption of significant proportion of lendable resources for the priority and the government sectors. These resulted in sub-optimal use of credit, low levels of investment and growth, decline in productivity, and erosion of profitability of the banking sector in general. The government realised the need to upgrade the operating standards, health, and financial soundness of banks to internationally accepted levels.

Although a series of reforms were undertaken from 1985 onwards, the first phase of comprehensive reforms in the banking sector was undertaken in June 1992 by implementing the recommendations of the Narasimham Committee I (1991) on the financial system. The recommendations of the committee were a fundamental departure from the then existing banking sector regulations. The major objective of the reforms was to create a viable and efficient banking system, which would thereby improve the productivity and efficiency of the financial sector. The major policy changes brought about emphasised deregulation and liberalisation. The first phase of reforms focused on cleaning up bank balance sheets and bringing about greater disclosure and transparency in accounting. The RBI laid down clear policies for asset classification, income recognition, loan-loss provisioning, and investment valuation with mandatory compliance of the Bank for International Settlements (BIS) capital adequacy standards.

Box 13.1 Households Availing Banking Services

Households	*Rural*		*Urban*	
	Total (Crore)	*%*	*Total (Crore)*	*%*
Total Numbers	13.80	–	5.40	–
Numbers Availing Banking Services	4.20	30.10	2.70	49.50

Source: Table H-13 Census of India 2001.

The initial years of these reforms were very painful for banks. Twelve of the 27 public sector banks reported losses. The government had to infuse capital aggregating Rs. 20,466 crore over the period 1992–93 to 1998–99 to enable the banks to meet the prescribed capital adequacy standards. To overcome the crisis, the financially weak New Bank of India was merged with the large profitable Punjab National Bank in the early nineties. As a group, public sector banks turned around from a net loss position of 0.99 per cent of total assets in the fiscal year 1993 to a net profit position of 0.25 per cent of total assets in 1995. Two public sector banks, the State Bank of India and the Oriental Bank of Commerce, came out with their maiden initial public offerings (IPOs) which led to a dilution of government ownership in banks for the first time.

Competition was infused in the banking system for the first time in 1993 when the RBI granted permission to set up private sector banks and foreign banks were allowed to open branches (Table 13.1). Despite competition, banks were in a position to post higher profits due to volume expansion and fewer poor quality loans.

TABLE 13.1 Branches and ATMs of Scheduled Commercial Banks

(As at End-March 2009)

Bank Group	*Number of Bank/Branches*				
	Rural	*Semi-urban*	*Urban*	*Metropolitan*	*Total*
1	*2*	*3*	*4*	*5*	*6*
(i) Nationalised Banks	13,381	8,664	8,951	8,375	39,376
(ii) State Bank Group	5,560	4,835	3,043	2,624	16,062
(iii) Old Private Sector Banks	842	1,554	1,344	933	4,673
(iv) New Private Sector Banks	271	1,084	1,371	1,478	4,204
(v) Foreign Banks	4	4	52	233	293
Total (i to v)	**20,058**	**16,146**	**14,761**	**13,643**	**64,608**

Source: RBI, *Report on Trend and Progress of Banking in India*, 2008.

The second phase of banking reforms is underway. The reforms aim to strengthen the banking sector through rigorous operational, prudential, and accounting norms, improvement in the credit delivery system and gradual narrowing of the divergences in regulatory framework of different types of institutions. It is expected that the Indian banking system will emerge as strong and efficient in the new millennium.

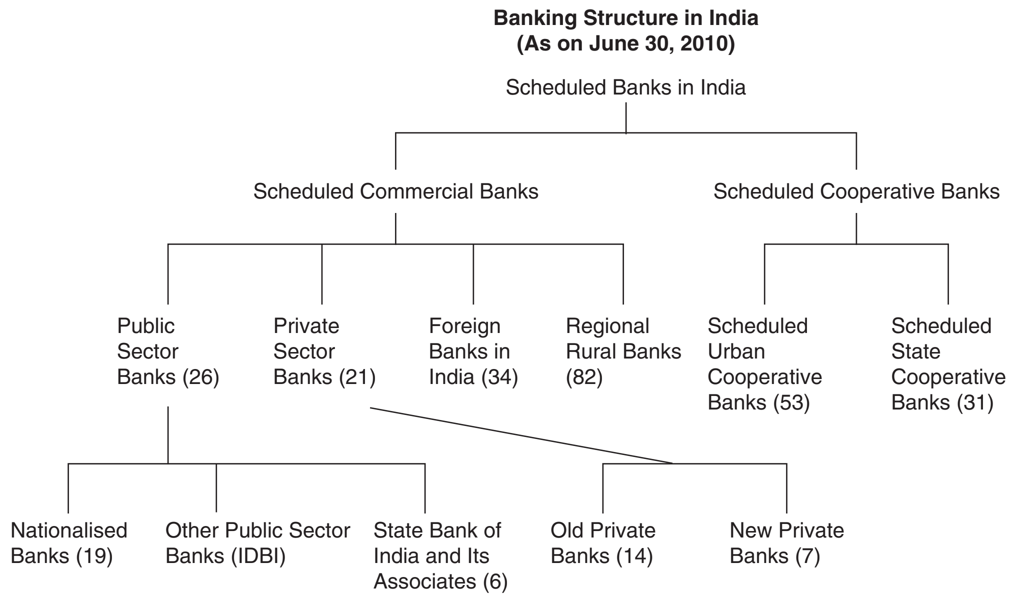
SCHEDULED COMMERCIAL BANKS

Scheduled commercial banks are those included in the second schedule of the Reserve Bank of India Act, 1934. In terms of ownership and function, commercial banks can be classified into four categories: public sector banks, private sector banks, foreign banks in India, and regional rural banks. There are 81 scheduled commercial banks—26 public sector banks, 21 in the private sector, and 34 foreign banks (Figure 13.1).

Public Sector Banks

Public sector banks are banks in which the government has a major holding. These can be classified into two groups: (i) the State Bank of India and its associates and (ii) nationalised banks.

State Bank of India The State Bank of India was initially known as the Imperial Bank. Imperial Bank was formed in 1921 by the amalgamation of three presidency banks—the Bank of Bengal, the Bank of Bombay, and the Bank of Madras. These presidency banks were created as a charter to deal in bills of exchange payable in India and were an integral part of the Indian treasury. They were taken over by the Imperial Bank of India as going concerns under a special legislation in 1920. The Imperial Bank acted as



Note: Figures in parenthesis indicate number of banks in each group.

Figure 13.1 Scheduled Banks in India

a banker to the government until the establishment of the RBI in 1935. Later on, it was authorised to act as the sole agent of the RBI in places where the latter did not have its own branches. The Imperial Bank was nationalised under the State Bank of India Act, 1955, which was passed on May 8, 1955.

The State Bank of India came into existence on July 1, 1955. This marked the beginning of the first phase of nationalisation of banks. The main objective of nationalisation was extending banking facilities on a large scale, particularly in the rural and semi-urban areas. The other objectives for which the bank was established were as follows.

- To promote agricultural finance and to remedy the defects in the system of agricultural finance.
- To help the Reserve Bank in its credit policies.
- To help the government to pursue the broad economic policies.

The State Bank of India has five subsidiaries:

- The State Bank of Bikaner and Jaipur
- The State Bank of Hyderabad
- The State Bank of Mysore
- The State Bank of Patiala
- The State Bank of Travancore

The 107-year old State Bank of Saurashtra with 460 branches across the country was merged with the State Bank of India on September 15, 2008 and the State Bank of Indore was merged with the SBI on August 26, 2010.

The six associate banks have a combined network of 4,502 branches in India which are fully computerised and 2,410 ATMs networked with SBI ATMs.

The State Bank of India holds the dominant market position among all Indian banks. It is the world's largest commercial bank in terms of branch network with a staggering 16,055 branches including 4,607 branches of its associate banks and 131 foreign offices in 32 countries.

SBI has a 17 per cent market share and an asset base of Rs. 5,42,503 crore It is the country's largest bank with 100 million accounts and a work force of 2,14,845. It is a banker to India's top 250 companies. As on March 31, 2009, State Bank of India has sponsored 17 RRBs (listed), which operate in 122 districts of 17 States with a network of 2,557 branches. The SBI has five non-banking subsidiaries: SBI Capital Markets, SBI Funds Management Pvt. Ltd, SBI Factors and Commercial Services Pvt. Ltd., SBI DFHI Ltd., and SBI Pension Fund Pvt. Ltd. It has formed three joint ventures—one with BNP Paribus Insurance for undertaking life insurance business under the name SBI Life Insurance Ltd, another with Insurance Australia Group for general insurance, and recently with Societe Generale Securities Services fpr providing custodial services. It has already received all regulatory approvals for establishing a USD 3 Billion

Private Equity Fund jointly with Macquarie Capital Group of Australia and IFC, Washington. The Fund will be investing primarily in infrastructure assets in India.

In October 1993, an ordinance leading to an amendment of the State Bank of India Act, 1955 was issued to enable the bank to access the capital market for funds. With a view to meeting capital adequacy norms, the State Bank of India raised funds through equity-cum-bond issue in 1993. The shareholding of the RBI in the equity of the bank came down from 98.2 per cent to 68.9 per cent after the issue. The State Bank of India raised funds from the capital market again in 1996 and the government ownership is now 59.41 per cent.

SBI is now planning to position itself as 'universal bank' catering to the diverse needs of the society, by converting its branches into 'super shoppe' selling all its products—banking, insurance, mutual fund, and credit cards.

SBI has three foreign subsidiaries: SBI International (Mauritius) Limited, SBI (California), SBI (Canada), and INMB Bank Ltd. (Lagos). SBI is also planning to substantially increase its international operations by entering into Bangladesh, Middle East, Israel, and Moscow markets. SBI has set its sights on overseas acquisitions—one based in Mauritius and the other in Indonesia and Africa with an aim to expand its foot print in the global market. It has 131 offices in 32 countries. Its international business operations is in the region of USD 17 billion.

Nationalised Banks

In 1969, fourteen big Indian joint stock banks in the private sector were nationalised. The nationalisation was effected by an ordinance which was later replaced by an act of parliament, known as the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970. This was the second phase of nationalisation. Six commercial banks in the private sector with deposits over Rs. 200 crore were nationalised on August 15, 1980—the third phase of nationalisation. In all, 28 banks were nationalised from 1955–1980. At present, there are 27 nationalised banks: the State Bank of India and its six associates and 19 nationalised banks (New India Bank was merged with Punjab National Bank) and IDBI which is classified as other public sector bank. The major objectives of nationalisation were to widen the branch network of banks particularly in the rural and semi-urban areas which, in turn, would help in greater mobilisation of savings and flow of credit to neglected sectors such as agriculture, and small-scale industries.

With the amendment to the Banking Companies Act, public sector banks are now allowed to access the capital market to raise funds. This has led to a dilution of the shareholding of the government. In case of a nationalised bank, a ceiling of 20 per cent on all types of foreign investment in the paid-up capital has been stipulated in terms of the provisions of Banking Companies (Acquisition and Transfer of Undertakings) Acts, 1970–80.

Public sector banks have an edge over private sector banks in terms of size, geographical reach and access to low-cost deposits. Huge size enables them to cater to the large credit needs of corporates. Geographical reach through a large number of branches increases their access to low-cost deposits and lowers the portfolio risk through diversification. The access to low-cost deposits enables them to lend to the corporates at competitive rates. Low-cost deposits are current account and savings account deposits. Current account deposits earn no interest and hence are the cheapest and the most volatile source of funds for a bank. Savings account deposits are more stable than current account deposits but carry a higher interest rate of 3.5 per cent. But the effective cost of these deposits is about 3 per cent as interest is paid on the lowest balance between the 10th and 20th of each month and not the average balance mentioned. About 70 per cent of public sector bank branches are located in rural areas as against 25 per cent for new private sector banks.

The nationalised banks are a dominant segment in commercial banking. The bulk of the banking business in the country is in the public sector. Public sector banks have expanded their branch network and catered to the socio-economic needs of a large mass of the population, especially the weaker section and in the rural areas. Public sector banks dominate with 75 per cent of deposits and 71 per cent of advances in the industry.

- The RBI has defined internationally active banks as those banks which have cross-border business exceeding 20 per cent or 25 per cent of their total business

Nationalised Banks

- Allahabad Bank
- Andhra Bank
- Bank of Baroda
- Bank of India
- Bank of Maharastitra
- Canara Bank
- Central Bank of India
- Corporation Bank
- Dena Bank
- Indian Bank
- Indian Overseas Bank
- Oriental Bank of Commerce
- Punjab and Sind Bank
- Punjab National Bank
- Syndicate Bank
- UCO Bank
- Union Bank of India
- United Bank of India
- Vijaya Bank

Private Sector Banks

For over two decades, after the nationalisation of 14 larger banks in 1969, no banks were allowed to be set up in the private sector. In the pre-reforms period, there were only 24 banks in the private sector. The Narasimham Committee, in its first report, recommended the freedom of entry into the financial system. It stated that the RBI should permit the establishment of new banks in the private sector provided they conform to the minimum start-up capital and other requirements. The committee also recommended that there should not be any difference in treatment between the public sector and private sector and any restrictions in operation in this regard should be removed. The RBI considered the above recommendations and allowed banks to be set up in the private sector. The banks which have been setup in the 1990s taking into consideration the guidelines of the Narasimham Committee are referred to as new private sector banks. The RBI guidelines on entry of new private sector banks observed that while recognising the importance and role of the public sector, there is increasing recognition of the need to introduce greater competition, which can lead to higher productivity and efficiency of the banking system.

- The banks which have been setup in the 1990s under the guidelines of the Narasimham Committee are referred to as new private sector banks

Today, there are 21 private sector banks in the banking sector: 14 old private sector banks and 7 new private sector banks. These new banks have brought in state-of-the-art technology and aggressively marketed their products. These banks reported profits in the very first year of their existence. The public sector banks are facing a stiff competition from the new private sector banks. Pursuant to the guidelines issued in January 1993 the old private sector banks having networth of less than Rs. 50 crore were advised to attain the level of Rs. 50 crore by March 31, 2001, and prepare action plans for augmenting capital funds to the level of Rs. 100 crore.

The guidelines for entry of new banks in the private sector were revised in January 2001. The guidelines prescribed an increase in initial minimum paid-up capital from Rs. 100 crore to Rs. 200 crore. Moreover, the initial minimum paid up capital shall be increased to Rs. 300 crore in subsequent three years after commencement of business. The guidelines also enable a non-banking finance company (NBFC) to convert into a commercial bank, if it satisfies the prescribed criteria of (a) minimum net worth of Rs. 200 crore (b) a credit rating of not less than AAA (or its equivalent) in the previous year (c) capital adequacy of not less than 12 per cent and (d) net NPAs not more than 5 per cent. The guidelines do not permit a large industrial house to promote any new bank. Individual companies, directly or indirectly connected with large industrial houses, are permitted to participate in the equity of a new private sector bank upto a maximum of 10 per cent, but would not have controlling interest in the bank. The guidelines also stipulate that preference would be given to promoters with expertise of financing priority areas and in setting up banks specialising in the financing of rural and agro-based industries. There are at present eight new private sector banks—the latest entrants are Kotak Mahindra Bank in 2003 and Yes Bank in 2004.

Norms for issue and pricing of shares were revised in 2001–02. Banks are free to price subsequent issues once their shares are listed on the stock exchanges but the RBI's prior approval would be necessary for initial public offerings (IPOs) and preferential shares. Bonus issues are now delinked from the rights issue. In case of issue of bonds and shares, banks will have to adhere to SEBI's guidelines. The level of foreign participation in private sector banks has been enhanced to strengthen the corporate governance, risk management, and technological competence of these banks. Some private sector banks have been successful enough to attract foreign capital.

Foreign investment in private sector banks is now permissible upto a composite ceiling of 74 per cent of the paid-up capital of the bank. This would include FDI, investments under Portfolio Investment Scheme (PIS) by FIIs, NRIs and shares acquired prior to September 16, 2003 by overseas corporate bodies (OCBs), IPOs, private placements, GDRs/ADRs and acquisition of shares from existing shareholders. However, the FII investment limit cannot exceed 49 per cent, within the aggregate foreign investment ceiling of 74 per cent of the paid-up capital and at all times, atleast 26 per cent of the paid-up capital would have to be held by residents.

New Private Sector Banks

- Superior Financial Services
- Designed Innovative Products
- Tapped new markets
- Accessed lowcost NRI funds
- Greater efficiency

New private sector banks to withstand the competition from public sector banks came up with innovative products and superior service. They tapped new markets such as retailing, capital markets, bancassurance and tie-ups with automobile dealers for vehicle finance. They accessed low-cost NRI funds and managed the associated forex risk for them. HDFC Bank, a private sector bank, had the lowest cost of deposits in 2003–04. It is the only bank with deposit cost less than 4 per cent. Not only do the new private sector banks have lower cost of deposits as compared with the PSU banks, but they also have been able to decrease their interest outgo on deposits by a higher margin in 2003–04.

Given the greater efficiency of private banks, public sector banks started loosing market share and have been doing so at about one per cent per annum.

In its recent draft guidelines on ownership in private banks, the RBI has proposed that no individual entity can hold more than 10 per cent stake in a private sector bank. The cross-holding among private sector banks (including foreign banks operating in India) is capped at 5 per cent. Together with the 10 per cent cap on voting rights, irrespective of the size of the holding, these limits would mean a premature end to foreign investment in India's private banks.

The RBI norms propose dispersing ownership of private sector banks for the following reasons.

- To cap private and foreign bank holdings at 5 per cent.
- To restrict banks and FIs from acquiring over 5 per cent in another bank's equity.
- To reduce the holding of banks and FI holdings over the stipulated limit to prudential limits.

- To restrict the investment of corporate entities, individual investors or a group of investors to 10 per cent.
- To restrict FDI by a single entity to 10 per cent.
- To ensure a minimum networth of Rs. 300 crore.
- The investment of 10 per cent of banks' capital funds in other banks to include equity shares, preference shares, hybrid debt capital investment and other approved instrument besides tier-II capital.

Holdings above this level would be subject to approval by the RBI. This restriction or stringent limits on ownership by one entity are proposed in the draft guidelines because banks are highly leveraged entities. With a relatively small amount of equity capital, private parties gain access to large amount of public funds. The temptation to take undue risk and to do so to benefit connected industrial entities is great when most of the risk is being borne by somebody else. As banks are central to the payment system, the entire system is exposed to risk.

The government is pressing ahead with its move to remove a major obstacle to enhancing foreign investment in private Indian banks—the restriction on voting rights to 10 per cent, whatever the scale of ownership. Many banks such as Citibank, Standard Chartered, HSBC, and ABN Amro can acquire upto a 74 per cent stake in Indian private banks and set up wholly-owned subsidiaries in India—this will facilitate inflow of FDI and expertise in the banking sector.

New Private Sector Banks

- Axis Bank Ltd
- Development Credit Bank Ltd
- HDFC Bank Ltd
- ICICI Bank Ltd
- IndusInd Bank Ltd
- Kotak Mahindra Ltd
- Yes Bank Ltd

Foreign Banks in India

As on April 30, 2010, there were 34 foreign banks operating in India with 311 branches. In addition, 45 foreign banks were operating in India through representative offices. The Standard Chartered Bank leads the pack with 92 branches in India.

Foreign banks have been operating in India since decades. A few foreign banks have been operating in India for over a century. ANZ Grindlays had been in India for more than hundred years, while Standard Chartered Bank has been around since 1858. Many foreign banks from different countries set up their branches in India during the 1990s—the liberalisation period. A total of 27 new foreign banks opened branches in India following the reforms of 1991, in addition to the 18 which were already operating in India.

Some of the foreign banks have set up different entities which are operating in India as subsidiaries in the form of either non-banking financing companies or limited companies in the non-financial sector in India that undertake diverse businesses such as dealing in securities, leasing and finance, and information and technology. Also, foreign banks have wholly-owned subsidiaries to run their global business process outsourcing jobs.

A foreign bank can set up a wholly-owned non-banking subsidiary if it brings in USD 50 million. Unlike the banks there is no regulation on these NBFCs for setting up branch networks. Moreover, there are no exposure norms for NBFCs. As per the existing norms, a bank's exposure to a single corporate entity is restricted at 15 per cent of its capital while for a group it is at 40 per cent. Foreign banks in India have a strong retail presence.

The presence of foreign banks in India has benefitted the financial system by enhancing competition, transfer of technology and specialised skills resulting in higher efficiency and greater customer satisfaction. They have also enabled large Indian companies to access foreign currency resources from their overseas branches in times of foreign currency constraint. They are active players in the money market and foreign exchange market which has contributed to enhancing the liquidity and deepening of these markets in terms of both volumes and products.

In terms of the Press Note No.2 (2004 series) issued by the Ministry of Commerce and Industry on March 5, 2004, the FDI limit in private sector banks was raised to 74 per cent under the automatic route including the investments made by foreign institutional investors. Foreign banks will be permitted to have either branches or subsidiaries not both. They may operate in India through any one of the three channels namely, (i) branch/es; (ii) a wholly owned subsidiary; or (iii) a subsidiary with aggregate foreign investment upto a maximum of 74 per cent in a private bank. If foreign banks convert their branch operations into subsidiaries they will be in a position to increase their reach through branch expansion but they will have to pay dividend tax and adhere to a higher priority lending requirement of 40 per cent of advances against the existing 32 per cent.

The RBI has prepared a road map for the presence of Foreign Banks in India. Under the road map, during the first phase, between March 2005 and March 2009, foreign banks satisfying the eligibility criteria prescribed by the Reserve Bank will be permitted to establish presence by way of setting up a wholly-owned banking subsidiary or converting the existing branches into a subsidiary. The whollyowned banking subsidiary should have a minimum capital of Rs. 300 crore and sound corporate governance. The

Foreign Banks in India

- Enhanced competition
- State-of-the art technology
- Strong retail presence
- Active players in money market and foreign exchange market

Some Foreign Banks in India

- ABN-Amro Bank
- American Express Banking Corp
- Bank International Indonesia
- Bank of America
- Bank of Bahrain and Kuwait
- BNP Paribas
- Calyon Bank
- City Bank NA
- HSBC Ltd
- JP Morgan Chase Bank
- Standard Chartered Bank
- State Bank of Mauritius Ltd
- UBS AG

second phase will commence in April 2009 after the RBI undertakes a review of the experience gained and after due consultation with all the stakeholders in the banking sector.

New foreign banks are allowed to conduct business in India after taking into consideration the financial soundness of the bank, international and home country ranking, rating, international presence, and economic and political relations between the two countries.

For a foreign bank to operate in India, the minimum capital requirement of USD 25 million, spread over 3 branches, i.e., USD 10 million for the first branch, additional USD 10 million for the second branch and further USD 5 million for the third branch has been stipulated. Additional branches are permitted after monitoring the performance of existing branches of the banks, their financial results, inspection findings, and other criteria. The number of licenses fixed is 12 per year both for new and expansion by existing banks. This number excludes offsite ATMs which also require licenses. This number is fixed in conformity with India's commitment made to the World Trade Organisation.

Foreign banks in India have to mandatorily lend 32 per cent of their adjusted net bank credit (net bank credit plus investments made by banks in non-SLR bonds held in held-to-maturity category) or credit equivalent of the off-balance sheet exposures, whichever is higher, as on March 31, of the previous year to the priority sector. The off-balance sheet items include guarantees, letters of credit, derivative and forex exposures. Foreign banks having shortfall in lending to the stipulated priority sector target and sub-targets will be required to contribute to the Small Enterprises Development Fund (SEDF), to be set up by Small Industries Development Bank of India (SIDBI). Foreign banks having a shortfall in lending to priority sector target of 32 per cent on a pro-rata basis will contribute 50 per cent of the corpus. The remaining 50 per cent will be contributed by foreign banks having an aggregate shortfall in lending to the small scale industries (SSI) sector and exports sector of 10 per cent and 12 per cent respectively.

A foreign bank which does not have a branch presence, can pick up a maximum of 10 per cent stake in a private bank. If the bank already has a presence in India, the maximum permissible stake is 5 per cent.

Foreign banks need to park 20 per cent of their profits from India operations with the RBI. These profits are kept as cash, as unencumbered approved securities or a combination of the two. The 30 foreign banks remitted Rs. 297.47 crore in 2004–05, Rs. 901.67 crore in 2003–04 and Rs. 390.37 crore in 2002–03 to their heads offices abroad.

The Reserve Bank is said to be considering a 10 per cent cap on the extent of voting control that a foreign bank can enjoy in a domestic bank that it buys. If implemented, this will equate foreign owners of Indian banks with existing domestic investors (who already have such a voting cap). Parity is also sought to be introduced into ownership stipulations by increasing the extent of equity that a controlling Indian group can hold, from 49 per cent now to the 74 per cent.

The foreign banks are keen on acquiring Indian banks but the cap of 10 per cent on voting rights imposed on private sector banks has hampered their plans. Moreover, present norms do not allow foreign banks to hold more than 15 per cent of the banking sectors' assets.

Foreign banks compete with new private banks rather than with public sector banks. While foreign banks have increased their business volumes, their growth has not kept pace with the rapid expansion by private Indian banks which have been giving them a run for their money. The foreign banks' share in the country's banking assets is 10.1 per cent. Their business figures do not include off-balance sheet items such as guarantees to corporates and interest rate and foreign currency derivatives which are a significant source of revenue for these banks. Their share in the aggregate off-balance sheet business of the Indian banking system was 63.8 per cent as on June 30, 2008.

Standard Chartered Bank is the undisputed leader among the foreign banks with assets of over Rs. 30,000 crore followed by Citibank which is a distant second. Stanchart has a network of about 80 branches which is fairly big compared to other foreign banks. Stanchart acquired Grindlays business in West Asia and South Asia in 2000. In India, ANZ Grindlays had 29 branches in 15 cities while StanChart had 19 branches in eight cities. The takeover of the business in India helped StanChart jump from the fifth place among foreign banks operating in India to the top of the chart, displacing Citibank. The deal helped StanChart becoming the leading bank in India, Pakistan, Bangladesh, Sri Lanka and second in the U.A.E. Despite its British origins, the bank has evolved more as an Asian-oriented bank.

Foreign banks will compete not on size but ability under Basel II, to lower their requirements of regulatory capital by using sophisticated risk management practices.

Foreign banks such as Standard Chartered, Citibank and ABN Amro have a strong presence in the metros and most big cities of India.

Many foreign banks such as the Commonwealth Bank of Australia, the Royal Bank of Scotland, and UBS are planning to start their operations in India.

Branches of Indian Banks Abroad

As on June 30, 2009, 20 Indian banks had overseas operations spread over 52 countries with a network of 141 branches (including offshore units), 7 joint ventures, 21 subsidiaries, and 50 representative offices. Out of these 20 banks, 14 are public sector banks and 6 are private sector banks. Bank of Baroda had the highest overseas presence with 46 branches, 8 subsidiaries, 1 joint venture bank, and 5 representative offices in 20 countries followed by the State Bank of India and Bank of India.

As against 293 branches of foreign banks present in India, Indian banks have only 141 branches overseas. Competition will make it imperative for banks to go global and enhance their systems and procedures to international standards. With Indian corporates going overseas and acquiring firms in developed markets, going global is not just an opportunity but a necessity for Indian banks as they will lose their customers to foreign banks if they do not follow them.

Setting up of Off-shore Banking Units

The phenomenal advances in telecommunications and the convergence of information technology have changed the structure of the banking system. Indian banks have increased exposure to international banking practices by setting up overseas branches. This cross-border diversification of assets and liabilities has increased the volume and nature of risks. Moreover, the international liabilities of banks in India have far exceeded their international assets making them vulnerable to external shocks.

- Off-shore banking refers to banking operations that cover only nonresidents and excludes domestic banking

Indian banks have been allowed to set up off-shore (overseas) banking units (OBUs) in special economic zones (SEZs). These OBUs operate virtually as foreign branches in India. Off-shore banking refers to banking operations that cover only non-residents and excludes domestic banking. These OBUs offer concessions in the form of lower taxes and levies. These OBUs are exempt from CRR and SLR requirements. The Reserve Bank has stipulated certain licensing conditions on OBUs. They can deal only in foreign currencies and certain restrictions on dealing with the Indian rupee and access to the domestic money market have been imposed on them. However, these OBUs are free from control of interest rates. They offer to the exporters the benefits of fine margins on loans and better forex rates. Some of them offer innovative products such as multi-currency fixed deposits, short-term forex loans and ECBs at internationally competitive rates.

The State Bank of India opened up the first off-shore banking unit at the SEERZ, Andheri, Mumbai in July 2003 and is planning to set up more units at Kochi, Kandla and Surat. During 2003–04, ten banks were given ‘in principle’ approval to open 14 overseas banking units (OBUs) in special economic zones (SEZs). Upto September 2006, seven OBUs have become operational out of which five are located in SEEPZ, Mumbai and one each in SEEPZ, Noida and Kochi. Of these, six banks including ICICI Bank, Punjab National Bank, Bank of Baroda and Union Bank have begun operations in different special economic zones.

Mobilisation, Lending and Investment of Funds

Mobilisation of Funds Banks depend on deposits and non-deposits to meet their resource requirements (Table 13.2). Deposits constitute the largest source of funds for the banks. Banks mobilise deposits from the household sector, corporate sector, financial institutions, rest of world-non-resident (NRI) and foreign consulates and embassies-deposits, and government. Bank deposits from the government sector include deposits held by the local authorities, quasi government bodies including state electricity boards, and public sector corporations and commercial undertakings apart from the Central and State Governments (Table 13.3).

- The ratio of total deposits-to-GDP which was 44% in 2000 increased to 74% in 2009.
- Retail deposits form a sizeable chunk of gross domestic savings

Banks raise deposits in the form of time and demand deposits. Time deposits can be categorised into short, medium and long-term deposits. Demand deposits can be categorised into current deposits and savings deposits. The treatment of apportionment of savings deposits into two components—demand and time—was revised in March 1978. Scheduled commercial banks are required to treat the average of the monthly minimum balances in savings accounts eligible for interest payments as ‘time’ liability, while the remaining portion is to be treated as the ‘demand’ liability of the savings account. Banks calculate the proportions between ‘demand’ and ‘time’ liabilities twice a year as at end-June and end-December. Because of tax benefits on long term deposits, higher interest rates on deposit schemes for senior citizens, and strong deposit mobilisation efforts by banks due to higher credit demand, banks have been in a position to mobilise higher amount of time deposits.

Certificate of deposits (CDs) are short-term time deposits, issued by banks during periods of tight liquidity at relatively higher discount rates as compared with term deposit rates. CDs provide greater flexibility to investors such as corporates, and financial institutions for investing their short-term surplus funds.

TABLE 13.2 Growth in Bank Deposits

(Annual Average)

(Per Cent)

Period 1	Averages 2	Demand 3	Time Aggregate 4
1951–52 to 1968–69	7.1	13.1	9.5
1969–70 to 1983–84	13.3	22.7	19.2
1984–85 to 1994–95	19.5	18.2	18.4
1995–96 to 2004–05	12.6	16.4	15.7
2005–06 to 2007–08	22.5	21.3	21.4

Source: RBI, *Handbook of Statistics on the Indian Economy*, 2007–08.

TABLE 13.3 Share in Total Deposits of Scheduled Commercial Banks: Sector-wise

(Per Cent)

End-March (Non-financial) 1	Government Sector (Financial) 2	Corporate Sector 3	Corporate Sector 4	Household Sector 5	Foreign Sector 6	Total Deposits 7
1995	9.2	4.2	6.7	69.2	10.7	100.0
1996	9.2	3.6	6.1	69.2	11.9	100.0
1997	8.6	4.0	7.7	67.4	12.4	100.0
1998	9.9	4.1	7.4	66.6	12.0	100.0
1999	10.2	4.1	8.8	65.3	11.5	100.0
2000	10.1	3.8	7.7	67.6	10.8	100.0
2001	10.0	4.6	7.3	67.2	11.0	100.0
2002	10.6	5.7	6.9	66.7	10.2	100.0
2003	11.8	5.1	6.7	65.4	11.0	100.0
2004	14.5	7.9	8.5	58.4	10.8	100.0
2005	14.6	8.7	7.8	60.7	8.3	100.0
2006	14.4	10.1	9.7	58.5	7.3	100.0

Note: Foreign sector represents the deposits of non-residents, foreign consulates, embassies, trade missions, information services, *etc.* and others.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2008.

Foreign deposits are mobilised through special deposit schemes designed for nonresidents by banks, in both foreign currency and local currency. Non-Resident External Rupee Account [NR(E)RA] was introduced for the first time in February 1970 which was followed by Foreign Currency Non-Resident (Account) [FCNR(A)] in November 1975 to tap the savings of Non-resident Indians (NRIs) employed in oil-rich countries. The FCNR(A) scheme, where foreign exchange risk was borne initially by the Reserve Bank and subsequently by the Government, was withdrawn in August 1994. A new scheme known as Foreign Currency Non-Resident (Bank) [FCNR(B)], in which the foreign exchange risk was borne by banks, was introduced. The FCNR(B) account can be opened by depositing foreign currency specified by the RBI in the form of term deposits only and is on a repatriable basis. The period of fixed deposit is minimum one year and maximum five years. In April 2002, a new NRE scheme known as the Non-resident External Rupee Account NR(E)RA scheme was introduced. The account is denominated in Indian rupees and is repatriable. Under this scheme, Savings, Current, Recurring, Fixed Deposit accounts can be opened. Ceilings on interest rates on NR(E)RA deposits and FCNR (B) deposits are linked to the LIBOR/SWAP rates and are reviewed from time to time, depending on monetary and macroeconomic developments. Another new scheme, Non-Resident Ordinary (NRO) Rupee Deposits account, similar to NR(E)RA, was introduced. In case of this scheme, banks are free to determine interest rates for term deposits. Since November 17, 2005, the interest rates on NRE saving deposits are the same as applicable to domestic savings deposits.

Banks raise non-deposit resources through public issues-both debt and equity-in the domestic capital market and borrowings both at home and abroad. Banks have raised large amount of funds from the capital market on account of sharp expansion of balance sheets, tightening of capital adequacy norms and increase in risks weights on certain categories of advances as a prudential measure to protect the balance sheets of banks during phases of rapid credit expansion. They have also raised long-term funds from the foreign capital markets in the form of ADRs/GDRs.

Banks raise short-term funds by borrowing in the call/notice money market, repo market, and CBLO market. Banks borrow from the Reserve Bank in the form of export credit refinance facility, financial institutions such as NABARD, EXIM Bank, and erstwhile IDBI by way of call/term funding and the rest of the world sector to tide over temporary mismatch between sources and uses of funds. Financial institutions constitute the main source of funds in the form of borrowings for banks.

Banks also resort to external commercial borrowings (ECBs) and inter-bank borrowings in India and abroad to raise funds. Banks are allowed to tap foreign currency borrowings for granting pre-shipment credit in foreign currency (PCFC)/export bills rediscounting (EBR) to exporters and use funds generated through buy-sell swaps in the domestic foreign exchange markets for granting such loans, subject to aggregate gap limit approved by the Reserve Bank. Banks have to put in place a system of appropriate risk management as borrowings are exposed to interest rate and exchange rate risks.

Non-deposit Resources of Bank

- Through public issues in the capital market
- By borrowing in the call/notice money market, repo market & CBLO market
- Through private placement
- Through ECBs & inter bank borrowings

Lending of Funds Lending or the extension of credit is the major activity of a commercial bank. Banks in India have traditionally been the main source of credit for small borrowers and various sectors of the economy such as agriculture, industry, infrastructure, services and government (Table 13.4). Prior to the early 1990s, the lending by banks was directed according to plan priorities. In the post-reforms period, bank lending is determined by both supply and demand factors. Banks now strive to earn highest return on their portfolio with minimum risk. Their portfolio consists of four categories of assets, *viz.,* cash in hand and balances with the central bank; assets with the banking system; investments in Government and other approved securities; and loans and advances. Among these, loans and investments are the two most important assets which can earn higher rates of return.

TABLE 13.4 Sectoral Deployment of Gross Bank Credit: Flows

(Amount in Rs. Crore)

Sector	*2006–07*		*2007–08*		*2008–09*	
	Absolute	*Per Cent*	*Absolute*	*Per Cent*	*Absolute*	*Per Cent*
1	*2*	*3*	*4*	*5*	*6*	*7*
1. Agriculture and Allied Activities	**56,426**	**32.4**	**44,966**	**19.5**	**63,313**	**23.0**
2. Industry (Small, Medium and Large)	**1,46,890**	**26.7**	**1,69,536**	**24.3**	**1,87,515**	**21.6**
Of which: Small	25,888	28.4	27,924	32.1	–	–
3. Personal Loans	**96,486**	**26.8**	**54,730**	**12.1**	**54,991**	**10.8**
Of which: Housing	45,791	24.7	26,802	11.6	19,165	7.4
4. Other Services	**96,596**	**30.2**	**1,32,419**	**31.5**	**93,580**	**16.9**
Of which:						
(i) Wholesale Trade (Other Than Food Procurement)	10,422	26.3	5,559	11.1	11,723	21.0
(ii) Real Estate Loans	18,483	69.2	19,235	43.6	28,261	44.6
(iii) Non-Banking Financial Companies	14,722	42.9	30,094	61.5	19,835	25.1
Total Non-food Gross Bank Credit (1 to 4)	**3,96,399**	**28.2**	**4,01,650**	**22.3**	**3,99,400**	**18.1**
Of which, Priority Sector	1,23,404	24.2	1,14,414	17.5	1,68,506	22.5

Notes: 1. Data are provisional and relate to select scheduled commercial banks which account for more than 90 per cent of bank credit of all scheduled commercial banks. Data include the figures of Bharat Overseas Bank, which was merged with Indian Overseas Bank on March 31, 2007.
2. Gross bank credit data include bills rediscounted with Reserve Bank, Exim Bank, other financial institutions and inter-bank participations.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2008.

Lending of Funds by Banks

- Lending to Agriculture
- Lending to Priority Sector
- Lending to industry
- Infrastructure financing
- Lending to household sector
- Lending to sensitive sectors
- Financing of NBFCs
- Financing to factoring companies

Lending to Agriculture Banks provide short-term credit for seasonal agricultural operations such as crop cultivation and long-term credit for creation of assets such as, purchase or replacement of tractors and farm equipment, installing diesel pump sets or electric motors, laying cement pipelines/field channels and drip/sprinkler irrigation system, construction of farm sheds, purchase of produce transport vehicles, dairy animals and so on. Banks provide both direct and indirect finance for agriculture. Direct finance is agricultural credit advanced directly to the beneficiary/borrower by institutions such as cooperatives, scheduled commercial banks (including regional rural banks) and State Governments. Indirect finance comprises loans advanced for storage and market yards and for setting up of other agricultural allied activities and is routed through some other agency.

The credit flow to agriculture was high between 1950 and 1980 but it declined during 1990s. However, there was an upward trend in credit flow to agriculture since 2003–04 on account of policy initiatives undertaken by the Reserve Bank and the Government to increase the flow of credit to agriculture. The credit flow has been below the priority sector target of 18 per cent for agriculture since early 1990s. Banks perceive high risks in lending to agriculture sector on account of various factors such as dependency of agriculture on vagaries of monsoon, lack of clear and secure land titles for mortgage, lack of knowledge of instruments for managing systemic risks such as crop insurance, irrigation or price risk.

The public sector banks are required to formulate special agricultural credit plans (SACP) to enhance flow of credit to the agriculture sector. Under SACP, banks fix targets for achievement during the financial year. Banks also issue Kisan Credit Cards to farmers which enable them to purchase agricultural inputs and draw cash for their production needs.

Lending to Priority Sector In order to ensure that the bank credit flowed to the vital sectors of the economy and according to national priorities, the concept of priority sector lending was developed. Based on the report submitted by the Informal Study Group on Statistics Relating to *A*dvances to the Priority Sectors, three sectors-agriculture, exports and small industries were identified as priority sectors. The Reserve Bank prescribed a modified return for reporting priority sector advances and certain descriptive guidelines without stipulating any ceilings in February 1972. The scope and extent of priority sector has been modified since then with several new areas and sectors being brought within the purview of this sector taking into account the structural changes in the economy.

The priority sector norms were revised in April 2007. The priority sector definition was streamlined to include only those sectors that impact large and weaker sections of the population and which are employment-intensive such as agriculture, and tiny and small enterprises. The broad sectors under the revised norms include agriculture (both direct and indirect), small enterprises (direct and indirect), retail trade in essential commodities and consumer cooperatives stores, micro credit, education loans, and housing loans.

(i) **Agriculture (direct and indirect finance):** Direct finance to agriculture shall include short, medium, and long-term loans given for agriculture and allied activities (such as dairy, fishery, piggery, poultry, beekeeping) directly to individual farmers, self-help groups (SHGs) or joint liability groups (JLGs) of individual farmers without limit and to others (such as corporates, partnership firms and institutions) up to the specified limits for taking up agriculture/allied activities. Indirect finance to agriculture shall include loans given for specified entities in the areas of agriculture and allied activities. Direct institutional credit to the agriculture sector includes loans sanctioned for small and marginal farmers for purchase of land for agricultural purposes. Distressed farmers indebted to non-institutional lenders can obtain loans against appropriate collateral and group security.

- There are around 1.3 crore micro and small enterprises (MSEs) which employ nearly 3 crore people. The MSEs account for about 39% of the manufacturing output and 33% of the total experts of the country

(ii) **Small enterprises (direct and indirect finance):** Direct finance to small enterprises shall include all loans given to micro and small enterprises, engaged in both manufacturing (production, processing or preservation of goods) and services activities, and whose investment in plant and machinery and equipment does not exceed the specified amounts. The micro and small (service) enterprises will include small road and water transport operators, small business, professional and self-employed persons, and certain other service enterprises. Indirect finance to small enterprises shall include finance to any person providing inputs to or marketing the output of artisans, village and cottage industries, handlooms and to cooperatives of producers in this sector. Existing investments as on March 31, 2007, made by banks in special bonds issued by NABARD with the objective of financing exclusively non-farm sector may be classified as indirect finance to small enterprises sector till the date of maturity of such bonds or March 2010, whichever is earlier. Investments in such special bonds made subsequent to March 31, 2007 will, however, not be eligible for such classification. Deposits placed with SIDBI by foreign banks, having offices in India, on account of non-achievement of priority sector lending targets/subtargets and outstanding as on April 30, 2007 would be eligible for classification as indirect finance to Small Enterprises sector till the date of maturity of such deposits or March 31, 2010, whichever is earlier. However, fresh deposits placed by banks' on or after April 30, 2007 with SIDBI on account of non-achievement of priority sector lending targets/ sub-targets would not be eligible for classification as indirect finance to Small Enterprises Sector. Indirect finance would also include loans granted by banks to NBFCs for on-lending to small and micro enterprises (manufacturing as well as service)

(iii) Retail trade: shall include retail traders/private retail traders dealing in essential commodities (fair price shops), and consumer cooperative stores.

(iv) Micro credit: shall include provision of credit and other financial services and products of very small amounts not exceeding Rs. 50,000 per borrower, either directly or indirectly through a SHG/ JLG mechanism or to NBFC/MFI for on-lending up to Rs. 50,000 per borrower.

(v) Education loans: shall include loans and advances granted to individuals (but not to institutions) up to Rs. 10 lakh for studies in India and Rs. 20 lakh for studies abroad.

(vi) Housing loans: shall include loans up to Rs. 20 lakh to individuals for purchase/construction of one dwelling unit per family (excluding loans granted by banks to their own employees) and loans given for repairs to the damaged dwelling units of families up to Rs. 1 lakh in rural and semi-urban areas and up to Rs. 2 lakh in urban and metropolitan areas.

Broad Sectors for Priority Sector Lending

- Agriculture
- Small Enterprises
- Retail Trade
- Micro Trade
- Education Loans
- Housing Loans

The RBI has stipulated a target of 40 per cent of adjusted net bank credit (ANBC) or credit equivalent amount of off-balance sheet exposures (OBE), whichever is higher, for lending to the priority sector by both public and private sector scheduled banks. Within this, sub-targets of 18 per cent and 10 per cent of adjusted net bank credit or credit equivalent amount of off-balance sheet exposures (OBE), whichever is higher, respectively, have been stipulated for lending to agriculture and weaker sections of the population. A target of 32 per cent of adjusted net bank credit has been stipulated for lending to the priority sector by foreign banks. Of this, the aggregate credit to small-scale industries (SSI) sector should not be less than 10 per cent of adjusted net bank credit (ANBC) or credit equivalent amount of off-balance sheet exposures (OBE), whichever is higher, and that to the export sector should not be less than 12 per cent of the adjusted net bank credit or credit equivalent amount of off-balance sheet exposures (OBE), whichever is higher. ANBC includes net bank credit (NBC) plus investments made by banks in non-SLR bonds held in HTM category.

Individual farmers, under priority sector advances, can avail of up to Rs. 10 lakh against pledge/ hypothecation of agricultural produce (including warehouse receipts) for a period not exceeding 12 months, irrespective of whether the farmers were given crop loans for raising the produce or not. Out of the overall 40 per cent target for domestic banks, a sub-target of 18 per cent of adjusted net bank credit or credit equivalent amount of off-balance sheet exposure, whichever is higher, has been set for lending to the agricultural sector. The 18 per cent lending target to agriculture is inclusive of finance provided by banks to farmers indirectly, *i.e.*, through other agencies or indirect finance. However, indirect credit to agriculture should not exceed 4.5 per cent of adjusted net bank credit or 25 per cent of overall credit to agriculture (which is used for computing the performance by the banks under the sub-target of 18 per cent).

In case of lending to micro enterprises, (i) 40 per cent of total advances to small enterprises sector should go to micro (manufacturing) enterprises having investment in plant and machinery up to Rs. 5 lakh and micro (service) enterprises having investment in equipment up to Rs. 2 lakh; and ii) 20 per cent of total advances to small enterprises sector should go to micro (manufacturing) enterprises with investment in plant and machinery above Rs. 5 lakh and up to Rs. 25 lakh, and micro (service) enterprises with investment in equipment above Rs. 2 lakh and up to Rs. 10 lakh. (Thus, 60 per cent of small enterprises advances should go to the micro enterprises).

Investments by banks in securitised assets, representing loans to various categories of priority sector, shall be eligible for classification under respective categories of priority sector (direct or indirect) depending on the underlying assets, provided the securitised assets are originated by banks and financial institutions and fulfil the Reserve Bank of India guidelines on securitisation.

Investments by banks in Inter Bank Participation Certificates (IBPCs), on a risk sharing basis, shall be eligible for classification under respective categories of priority sector, provided the underlying assets are eligible to be categorised under the respective categories of priority sector and are held for at least 180 days from the date of investment.

In case, the domestic scheduled commercial banks are unable to meet the priority sector lending targets (40 per cent of ANBC or credit equivalent amount of off-balance sheet exposure, whichever is higher) and/or agriculture target (18 per cent of ANBC or credit equivalent amount of off-balance sheet exposure, whichever is higher), they would be allocated amounts for contribution to the Rural Infrastructure Development Fund (RIDF) established with NABARD or funds with other financial institutions, as specified by the Reserve Bank, Foreign banks are required to make good the shortfall in priority sector targets and sub-targets by depositing an equivalent amount to Small Enterprises Development Fund (SEDF) with the Small Industries Development Bank of India (SIDBI).

Total priority sector advances by private sector banks, public sector banks and foreign banks, as on the last reporting Friday of March 2009, constituted 42.5, 46.8, and 34.3 per cent respectively of ANBC or CEOBSE. At individual bank-level, 12 banks achieved the overall target of lending to the priority sector and sub-targets of lending to agriculture and weaker sections (Tables 13.5 and 13.6).

Lending to Industry Banks finance both short-term working capital and long-term requirements of industry. Banks lend to both large and small enterprises. An "enterprise" means an industrial undertaking or a business concern or any other establishment, by whatever name called, engaged in the manufacture or production of goods, in any manner, pertaining to any industry specified in the First Schedule to the Industries (Development and Regulation) Act, 1951 or engaged in providing or rendering of any service or services. Large corporates rely on both internal such as retained earnings and external sources of funds such as equity and borrowings to finance their short-term and long-term capital requirements. Within external sources, bank credit is the preferred source of finance.

TABLE 13.5 Priority Sector Lending by Public and Private Sector Banks

(As on the Last Reporting Friday of March)

(Amount in Rs. Crore)

Item	*Public Sector Banks*			*Private Sector Banks*		
	2007	*2008*	*2009@*	*2007*	*2008*	*2009@*
1	2	3	4	5	6	7
Priority Sector Advances	**5,21,376 (39.7)**	**6,10,450 (44.7)**	**7,20,083 (42.5)**	**1,44,549 (42.9)**	**1,64,068 (42.5)**	**1,90,207 (46.8)**
Of which: Agriculture	2,02,614 (15.4)	2,49,397 (18.3)	2,98,211 (17.2)	52,034 (12.7)	58,566 (17.1)	76,062 (15.9)
Micro and Small Enterprises*	1,02,550 (7.8)	1,51,137 (11.1)	1,91,307 (11.3)	13,136 (3.9)	46,912 (13.7)	47,916 (12.0)
Other Priority Sector #	2,06,661 (15.7)	2,11,627 (15.5)	–	76,919 (22.9)	59,452 (17.3)	–

@ : Provisional.
* : The revised guidelines on priority sector advances issued on April 30, 2007 take into account the revised definition of small and micro enterprises as per the Micro, Small and Medium Enterprises Development Act, 2006.
# : Includes retail trade, micro-credit, education and housing.
^ : Indirect agriculture is reckoned up to 4.5 per cent of ANBC for calculation of percentage.

Note: Figures in parentheses represent percentages to net bank credit/ANBC/CEOBSE.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2009.

TABLE 13.6 Priority Sector Lending by Foreign Banks

(As on the Last Reporting Friday of March)

(Amount in Rs. Crore)

Sector	*2006*		*2007*		*2008*		*2009@*	
	Amount	*Percentage to ANBC/ CEOBSE*	*Amount*	*Percentage to ANBC/ CEOBSE*	*Amount*	*Percentage to ANBC/ CEOBSE*	*Amount*	*Percentange to ANBCI CEOBSE*
1	2	3	4	5	6	7	8	9
Priority Sector Advances	**30,439**	**34.4**	**37,831**	**33.4**	**50,254**	**39.5**	**55,483**	**34.3**
Of which: Export Credit	17,326	19.6	20,711	18.3	28,954	22.8	31,511	19.4
Micro and Small Enterprises*	8,430	9.5	11,637	10.3	15,489	12.2	18,138	11.2

@: Provisional.

ANBC: Adjusted Net Bank Credit; CEOBSE: Credit Equivalent Amount of Off-Balance Sheet Exposures
*: The revised guidelines on priority sector advances issued on April 30, 2007 take into account the revised definition of small and micro enterprises as per the Micro, Small and Medium Enterprises Development Act, 2006.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2009.

The Micro, Small and Medium Enterprises Development Act, 2006 has defined micro, small, and medium enterprises. (a) In the case of the enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the Industries (Development and Regulation) Act, 1951, (i) a micro enterprise is an enterprise, where the investment in plant and machinery does not exceed Rs. 25 lakh; (ii) a small enterprise is an enterprise, where the investment in plant and machinery is more than Rs. 25 lakh but does not exceed Rs. 5 crore; or (iii) a medium enterprise is an enterprise, where the investment in plant and machinery is more than Rs. 5 crore but does not exceed Rs. 10 crore; (b) In the case of the enterprises engaged in providing or rendering of services, (i) a micro enterprise is an enterprise, where the investment in equipment does not exceed Rs. 10 lakh; (ii) a small enterprise is an enterprise, where the investment in equipment is more than Rs. 10 lakh but does not exceed Rs. 2 crore; or (iii) a medium enterprise is an enterprise, where the investment in equipment is more than Rs. 2 crore but does not exceed Rs. 5 crore.

Banks have conventionally lended to large enterprises. It is sometimes assumed that large firms constitute the main drivers of economic activity. Small is not only beautiful but is also indispensable. The importance of small and medium enterprises (SMEs) to Indian economy is indisputable. The share of SMEs was over 40 per cent of total value added in the economy and about 33 per cent of total exports. With the economy booming, the number of SMEs are growing by leaps and bounds. In order to grow big, SMEs need to build economies of scale to achieve cost competitiveness. A large number of SMEs lack financial muscle. They require financial support to truly become 'agents of change'. The credit extended to SMEs has gone down in relation to credit to industry and other sectors. These enterprises are varied and large in number which requires different lending and risk management techniques, processes, and skills. Moreover, lack of reliable information about them, inability to provide adequate collateral, and lack of credit history have made it difficult for banks to lend funds to them. Recognising the importance of SMEs, many banks have taken initiatives such as setting up a special cell for SMEs and simplified loan products for improving credit flow to SMEs. The Small Industries Development Bank of India (SIDBI) has floated a rating agency SMERA for the SME segment.

Infrastructure Financing Banks also finance infrastructure projects by way of term loans, bonds and guarantees. Prior to 2002–03, DFIs were the major source of finance for infrastructure projects. Since 2002–03, with an increase in public-private-partnerships (PPPs) in infrastructure, banks have been the preferred source of finance. In order to facilitate financing of infrastructure projects, banks are allowed to exceed exposure norm of 40 per cent of the bank's capital funds by an additional 10 per cent (*i.e.,* up to 50 per) in case of credit exposure of borrowers belonging to a group and the exposure norm of 15 per cent of the bank's capital funds by an additional 5 per cent (*i.e.* up to 20 per cent) in case of credit exposure to single borrower. Banks are also allowed to assign a concessional risk weight of 50 per cent for capital adequacy purposes, on investment in securitised paper relating to an infrastructure facility provided it generates income/cash flows which would ensure servicing/repayment of the securitised paper.

For funding large infrastructure projects, banks also syndicate loans-in which different banks come forward to share the loan amount. Banks also lend to special purpose vehicles (SPVs) in the private sector, registered under Companies Act for directly undertaking infrastructure projects. Banks extend credit facility by way of working capital finance, term loan, project loan, subscription to bonds and debentures/preference shares/equity shares acquired as a part of the project finance package which is treated as 'deemed advance' and any other form of funded or non-funded finance facility. Banks are permitted to issue guarantees favouring other lending institutions in respect of infrastructure projects, provided the bank issuing the guarantee takes a funded share in the project at least to the extent of 5 per cent of the project cost and undertakes normal credit appraisal, monitoring and follow up of the project. Credit exposure of banks is the highest in power and telecommunication sectors.

Lending to the Household Sector Banks lend funds to the household sector in the form of housing loans, auto loans, advances to individuals against fixed deposits, credit card, educational loans and loans for purchase of consumer durables. These are categorised as retail loans as the average size of loans is very small and loans are widely distributed over a large number of borrowers. During the first phase of banking reforms, banks were given freedom to decide the quantum, rate of interest, margin requirement, repayment period and other related conditions of retail loans which enabled banks to aggressively market retail loans. Increased job opportunities, rising income levels, higher tax incentives to salaried class, boom in the real estate sector, and technological innovations such as ATMs led to a higher demand for consumer durables and housing which, in turn, led to a sharp growth of retail loans. Because of low risk, adequate collaterals, and higher returns, banks expanded their retail portfolio. Retail loans are the prime drivers of credit growth (Table 13.7).

TABLE 13.7 Retail Portfolio of Banks

(Amount in Rs. Crore)

Item	*Outstanding as at End-March*			*Percentage Variation*		
	2007	*2008*	*2009*	*2006–07*	*2007–08*	*2008–09*
1	*2*	*3*	*4*	*5*	*6*	*7*
1. Housing Loans	2,24,481	2,52,932	2,63,235	25.4	12.7	4.1
2. Consumer Durables	7,296	4,802	5,431	63.3	–34.2	13.1
3. Credit Card Receivables	18,317	27,437	29,941	47.4	49.8	9.1
4. Auto Loans	82,562	87,998	83,915	34.5	6.6	–4.6
5. Other Personal Loans	1,55,204	1,97,607	2,11,294	31.1	27.5	6.9
Total Retail Loans (1 to 5)	**4,87,860 (25.8)**	**5,70,776 (24.5)**	**5,93,815 (21.3)**	**29.9**	**17.1**	**4.0**
Total Loans and Advances of SCBs	**18,93,775**	**23,32,490**	**27,93,572**	**28.5**	**23.2**	**19.8**

Note: Figures in parentheses represent percentage share in total loans and advances.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2008.

- Banks exposure to capital market includes loan against shares, direct investment in equity and mutual funds, and advances and guarantees to brokers

Lending to the Sensitive Sectors Scheduled commercial banks have exposure to sensitive sectors such as real estate, capital market, and commodities. Banks' exposures to commercial real estates include shopping malls, office buildings, warehouses, hotels and land acquisition, development, and construction. Banks' exposure to capital market includes loan against shares, direct investment in equity and equity mutual funds, advances against shares/bonds/debentures or other securities or on clean basis to individuals for investment in shares (including IPOs/ESOPs), convertible bonds, convertible debentures, and units of equity-oriented mutual funds etc., advances for any other purposes where shares or convertible bonds or convertible debentures or units of equity oriented mutual funds are taken as primary or collateral security, secured and unsecured advances to stockbrokers and guarantees issued on behalf of stockbrokers and market makers, loans sanctioned to corporates against the security of shares/bonds/debentures or other securities or on clean basis for meeting promoter's contribution to the equity of new companies in anticipation of raising resources, bridge loans to companies against expected equity flows/issues, underwriting commitments taken up by the banks in respect of primary issue of shares or convertible bonds or convertible debentures or units of equity oriented mutual funds, financing to stockbrokers for margin trading, all exposures to Venture Capital Funds (both registered and unregistered) and intra-day exposures.

Exposure Limits The RBI has prescribed regulatory limits on banks' exposure to individual and group borrowers in India to avoid concentration of credit. The exposure limits for single borrowers, at present, stands at 15 per cent of capital funds and that for group borrowers at 40 per cent of capital funds; the latter is extendible by an additional 10 per cent in case of financing infrastructure projects. The capital funds for the purpose will comprise of Tier I and Tier II capital as defined under capital adequacy standards The RBI has also advised the banks to fix limits on their exposure to specific industries or sensitive sectors such as real estate, capital market and commodities.

On July 26, 2005, the RBI raised the risk weightage on banks' exposure to commercial real estates, from 100 per cent to 125 per cent and further to 150 per cent in April 2006. This means from now on banks will have to set aside more capital to lend to such projects. Similarly, banks' exposure to capital market, will also carry a higher risk weightage of 125 per cent against 100 per cent.

The scheduled commercial banks exposure to sensitive sectors is much below the stipulated overall cap of 5 per cent. The banks' exposure to real estate sector has increased on account of buoyancy in the housing segment (Table 13.8).

Financing of NBFCs Banks extend need based working capital facilities as well as term loans to all NBFCs registered with RBI and engaged in equipment leasing, hire-purchase, loan, factoring and investment activities. Banks also extend finance to NBFCs against second hand assets financed by them. Bills discounted/rediscounted by NBFCs (which is deemed to include any other mode of financing of receivables of the borrowers), except those arising from sale of certain types of vehicles, are not eligible for bank finance. Further, the unsecured loans extended by the NBFCs to other companies are also ineligible for bank finance.

TABLE 13.8 Banks' Exposure to Sensitive Sectors*

(Rs. in Crore)

Bank Group	*2004–05*			*2005–06*			*2006–07*			*2007–08*			*2008–09*		
	CM	*RE*	*Com.*	*CM*	*RE*	*Com.*	*CM*	*RE*	*Com.*	*CM*	*RE*	*Com.*	*CM*	*RE*	*Com.*
Public Sector Banks	1.1	9.1	0.1	(1.2)	14.2	0.1	1.4	15.3	0.0	1.7	15.8	0.0	1.5	14.8	0.0
Old Private Banks	1.1	12.7	0.1	(1.3)	14.5	0.2	1.8	16.8	0.5	2.3	16.7	0.7	1.8	17.3	0.7
New Private Banks	2.2	28.4	0.7	(2.3)	28.8	1.3	2.8	32.8	0.0	5.6	28.9	0.0	3.1	27.6	0.0
Foreign Banks	3.1	21.5	0.0	(2.3)	25.6	0.0	3.0	26.5	0.0	3.3	23.2	0.1	3.6	26.8	0.0

CM: Capital market
RE: Real estate
Com.: Commodities
* Advances to the sensitive sector as percentage of the loans and advances of the concerned bank group.

Source: RBI, *Report on Currency and Finance, 2003–04.*

Finance to Factoring Companies Banks can extend financial assistance to support the factoring business of Factoring Companies which comply with the following criteria:

1. The companies carry out all the components of a standard factoring activity, viz., financing of receivables, sale-ledger management and collection of receivables.
2. They derive at least 80 per cent of their income from factoring activity.
3. The receivables purchased/financed, irrespective of whether on 'with recourse' or 'without recourse' basis, form at least 80 per cent of the assets of the Factoring Company.
4. The assets/income referred to above would not include the assets/income relating to any bill discounting facility extended by the Factoring Company.
5. The financial assistance extended by the Factoring Companies is secured by hypothecation or assignment of receivables in their favour.

INVESTMENTS OF BANKS

Investments in SLR Securities

Investments of Banks

- Investment in SLR securities
- Investment in non-SLR securities

Commercial banks invest in two types of securities: SLR securities and non-SLR securities. **Investment in SLR securities**: Investment of banks in government securities and other approved securities is categorised as SLR investments. Banks are required to invest a prescribed minimum of their net demand and time liabilities in Government and other approved securities under the BR Act, 1949.

Scheduled commercial banks were holding SLR securities of around 42 per cent of their net demand and time liabilities (NDTL) during 2003–04 as compared to the required 25 per cent. The RBI in its Report on Currency and Finance, 2004, has identified various factors which explain this excess holding. They are as follows:

- Demand for private credit moderated following the slow down of the Indian economy from 1997–98 onwards.
- Capital flows from abroad have been quite strong since 1993–94. This increased the availability of funds with the banks and in view of weak credit demand, banks preferred to invest these surplus funds in government securities.
- A key factor appears to be the fiscal deficit of the government which has continued to remain high. Market borrowings of the central government have been increasing. Weak credit demand coupled with increased funds due to capital inflows enabled banks to invest in the government paper.

- The Banking Regulation Act 1949, has been amended whereby the floor rate of 25 per cent for SLR has been removed

- The phased tightening of prudential norms on capital adequacy, asset classification and income recognition to international standards could have increased risk aversion on the part of the banks to private sector lending. The credit risk-free government paper requires zero provisioning and hence a higher investment in government securities.
- In an environment of softening interest rates, which prevailed for an extended period of time—from around 1998 onwards till early 2004—investment in government securities also turned out to be relatively attractive. In fact, the treasury operations of banks have been a significant source of their profitability in the past few years. Softening of interest rates led to a substantial fall in yield to maturity (YTM) of government securities. Since YTM and security price are inversely related, a fall in YTM leads to an increase in security price and vice versa. This increased the opportunity of gains on account of securities trading, resulting in an increase in net profits These profits strengthened banks balance sheets and enabled them to provide resources for NPA provisioning.
- The loan officers worry about the possibility of being falsely accused of corruption leading to risk aversion to lending to the private sector. The prescribed SLR which was 25 per cent of NDTL was revised to 24 per cent of NDTL with effect from November 21, 2008. The banking sector held excess SLR investment of Rs. 1,30,736 crore on November 21, 2008.

Credit growth has outpaced deposit growth since 2003–04. To meet the high credit growth, banks liquidated their investment in government and other securities. Banks SLR investments have gradually came down from a peak of 42.7 per cent of NDTL on April 16, 2004 to 27.8 per cent in 2007–08. Banks are now exposed to market risks on their debt investment portfolio held in excess of regulatory requirement. Strategies to minimise this risk include reducing the excess investment portfolio and increase their lending, lowering the portfolio duration and using interest rate derivatives.

The entire investment portfolio of banks (including SLR securities and non-SLR securities) is classified under the three categories of 'Held to maturity', 'Available for sale' and 'Held for trading'. Indian banks are permitted to classify a maximum of 25 per cent of their investments portfolio in the category held to maturity (HTM) which is carried at book value and is not required to be valued on marked-to-market (MTM) basis. Bonds in HTM are not marked-to-market and therefore no provision has to be made on HTM securities following a fall in prices (or rise in interest rates). However, bonds in the available for sale (AFS) category and the held for trading (HFT) category have to be marked-tomarket. Thus, a bank can avert a higher provisioning and a possible loss by transferring more gilts to the HTM category. Banks have to classify their investment securities into this category in the first quarter of the financial year and subsequent changes to the classification are not allowed during the year. Bonds in the 'Available for sale' category will be marked-to-market at the year-end or at more frequent intervals. The bonds in the `Held for trading' will be revalued at monthly or at more frequent intervals. The market value for the purpose of periodical valuation of investments included in the 'Available for sale' and 'Held for trading' would be the market price of the scrip as available from the trades/quotes on the stock exchanges, price of SGL transact ions and price list of RBI.

In a special dispensation, the RBI on September 2, 2004, permitted an additional, one-time transfer of government securities, upto the minimum SLR limit (entire 25 per cent of the SLR requirement) into the HTM category at market value during the financial year 2004–05. Any additional holdings of government securities over and above the SLR limit would have to be classified under the AFS or HFT categories and marked-to-market. This move insulated banks from making MTM provisions arising out of investments made in pursuance of regulatory requirements. The banks had to incur a one-time hit while transferring securities to the HTM category, but were 'protected' (from an accounting perspective) by any future increase in interest rates on a large majority of their government security investments.

- SLR investments in relation to NDTL were 28.1 per cent at end-March 2009 and 30.4 per cent on September 25, 2009

As a one-timemeasure, banks were allowed to shift SLR securities to the HTM category any time, once more during the accounting year 2004–05. This could be done at either cost price or book value or market value on the date of transfer, whichever is the least. Any depreciation on such transfer should be fully provided for. Let us understand how this works. Say a bank has bought a particular bond at Rs. 112. Due to bearish conditions, its price comes down to Rs. 106. Now, if the price of bonds goes up to Rs. 109 due to aggressive buying by large banks, the bank will shift these bonds from available for sale (AFS) or held for trading (HFT) categories to the HTM category. Since the bonds in HTM need to book at the lower of the purchase price or market value (at the time of transfer), the bank benefits as it has to provide for lower depreciation of Rs. 3, as against Rs. 6 before the transfer.

The RBI had earlier advised banks to gradually build up on their investment fluctuation reserve (IFR) of upto 5 per cent of their HFT and AFS investment portfolio to help manage interest rate risks. At end March 2004, most banks built up an IFR of atleast 3 per cent of their investment portfolio. IFR is treated as tier I capital, and banks have transferred their entire IFR balances to General Statutory Reserve.

Indian Banks need a large amount of capital over the next five years to maintain regulatory capital commensurate with the expected 25–30 per cent credit growth in this period. The stronger banks can use their investment fluctuation reserve (IFR) or reduce their excessive provisioning of the past few years to remain adequately capitalised. But the weaker banks need to raise capital by offering equity shares as they do not have the options enjoyed by the stronger banks.

TABLE 13.9 Growth in Investments and Deposits of SCBs

(Per Cent)

Year	*SLR Investments as Per Cent of NDTL (End-March)*	*SLR Investments*	*Total Investments*	*Deposits*	*Loans*
1	*2*	*3*	*4*	*5*	*6*
2002–03	38.8	24.9	17.9	12.7	14.5
2003–04	41.3	23.8	15.8	16.2	16.8
2004–05	38.2	9.1	8.3	16.6	33.3
2005–06	31.3	–2.9	–0.4	17.8	31.8
2006–07	27.9	10.3	9.7	24.6	30.6
2007–08	27.8	22.8	23.7	23.1	25.0
2008–09	28.1	20.0	23.1	22.4	21.2

Source: RBI, *Report on Trend and Progress of Banking in India*, 2009.

Investments in Non-SLR Securities

In1985, the domain of eligible investments of SCBs was enlarged to cover commercial paper (CP), units of mutual funds, shares and debentures of public sector undertakings (PSUs) and private corporate sector, which are all known as non-SLR investments.

The RBI also issued guidelines in November 2003 relating to banks' investment in non-SLR securities to contain the risk arising out of non-SLR investment portfolio. These guidelines cover banks' investment in non-SLR securities issued by corporates, banks, FIs and State and central government sponsored institutions, and SPVs. The guidelines apply to investments both in the primary as well as secondary market.

According to the guidelines, banks' investment in unlisted non-SLR securities should not exceed 10 per cent of its total investment in non-SLR securities as on March 31, of the previous year. The unlisted non-SLR securities in which banks may invest up to the limits specified above, should comply with the disclosure requirements as prescribed by the Sebi for listed companies. Furthermore, banks' investment in unlisted non-SLR securities may exceed the limit of 10 per cent, by an additional 10 per cent, provided the investment is on account of investment in securities issued by special purpose vehicles for mortgage-backed securities (MBS), securitisation papers issued for infrastructure projects and bonds, debentures, security receipts, pass-through certificates issued by securitisation companies and reconstruction companies set up under the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act (2002) and registered with RBI.

The majority of the banks' non-SLR investments are in bonds and debentures but investment in these components declined during the year 2003–04 on account of the issue of guidelines by the RBI. The share of bank's investments in mutual funds almost doubled during the year 2003–04. The banks' investments in equity of private corporate sector and public sector undertakings increased steadily. The banks' investment in mutual funds and commercial paper also registered an increase. However, the banks' non-SLR investments declined by 9.4 per cent and 5.1 per cent during 2005–06 and 2006–07 respectively as the funds were diverted to meet credit growth. During 2007–08, banks' investments in non-SLR securities increased by 14.3 per cent but it decreased to 10.5 per cent during 2008–2009 (Table 13.10).

The SCBs' non-SLR investments constitute a small percentage of 5.5 per cent of their total assets.

TABLE 13.10 Scheduled Commercial Banks' Select Non-SLR Investments

(Rs. in Crore)

Sr. No. 1	*Instrument* 2	*March 2006* 3	*March 2007* 4	*March 2008* 5	*March 2009* 6
1.	Commercial Paper	4,821	8,973	13,045	19,688
2.	Units of UTI and Other Mutual Funds	10,345	11,659	18,692	36,781
3.	Investment in Shares Issued by				
	(a) Public Sector Undertakings	2,274	2,127	3,023	2,767
	(b) Private Corporate Sector	10,501	16,225	23,387	25,043
	(c) Public Financial Institutions	2,270	1,825	2,044	2,943
4.	Investments in Bonds/Debentures Issued by				
	(a) Public Sector Undertakings	32,345	28,595	27,382	24,182
	(b) Private Corporate Sector	29,523	27,620	28,669	33,093
	(c) Public Financial Institutions	26,402	24,362	23,511	28,103
	(d) Others	14,899	17,623	29,230	31,030
	Total (1+2+3)	**1,33,380**	**1,39,016**	**1,68,983**	**2,03,630**

Notes:

1. Data excludes RRBs. Data are based on statutory Section 42 (2) returns submitted by scheduled commercial banks.

Source: RBI, *Annual Report*, various issues.

REFORMS IN THE BANKING SECTOR

Banking sector reforms were initiated to upgrade the operating standards, health, and financial soundness of banks to internationally accepted levels in an increasingly globalised market. The Government of India set up the Narasimham Committee (1991) to examine all aspects relating to structure, organisation, and functioning of the Indian banking system. The recommendations of the committee aimed at creating a competitive and efficient banking system. Measures like capital adequacy, income recognition, asset classification, norms for investment, entry of private sector banks, gradual reduction of SLR and CRR were recommended and implemented to strengthen the banking system. These recommendations changed the face of Indian Banking. Public sector banks faced a stiff competition with the entry of private sector banks.

Another committee which deserves mention is the Khan Committee, which was constituted by the RBI in December 1997 to examine the harmonisation of the role and operations of development financial institutions (DFIs) and banks. It submitted its report in April 1998. The major recommendations of the committee were a gradual move towards universal banking; exploring the possibility of gainful mergers between banks; banks and financial institutions; encompassing both strong and weak entities or two strong ones; developing a function-specific regulatory framework and a risk-based supervisory framework; establishment of a super-regulator to supervise and coordinate the activities of multiple regulators; speedy implementation of legal reforms to hasten debt recovery; reducing CRR to the international standards; and phasing out SLR.

The Verma Committee, which had been the most controversial of committees, recommended the need for greater use of information technology (IT) even in the weak public sector banks; restructuring of weak banks but not merging them with strong banks; market-driven mergers ; sale of foreign branches; closure of subsidiaries of weak public sector banks, and voluntary retirement scheme (VRS) for at least 25 per cent of the staff.

The banking sector reforms aimed at improving the policy framework, financial health, and institutional infrastructure. Improvement in the policy framework has been undertaken by reducing the reserve requirements, changing the administered structure of lending rates, enlarging the scope of priority sector lending and linking the lending rates with the size of advances. Efforts have been made to improve the financial health of the banking sector by prescribing prudential norms. Improvement in the institutional framework has been sought through recapitalisation, infusing competition, and strengthening of supervisory system.

The chief merit of the reform process is that the reform measures were undertaken and implemented gradually and cautiously. The first phase of the banking reforms is complete and the second generation reforms are under way. The second generation reforms are those that did not form part of the first generation reforms but needed to be prioritised in the agenda for the next decade. Many of the important recommendations of Narasimham Committee II have been accepted and are under implementation. The second generation banking reforms concentrate on strengthening the foundation of the banking system by structure, technological upgradation, and human resource development.

The second phase of reforms aims to further strengthen the banking sector and to move towards international best practices in areas relating to banking policy, institutional, supervisory, and legislation.

Banking Sector Reforms

Phase I Recommendations of the Committee on Banking Sector Reforms, 1991 (Narasimham Committee I)

- Deregulation of the interest rate structure.
- Progressive reduction in pre-emptive reserves.
- Liberalisation of the branch expansion policy.
- Introduction of prudential norms to ensure capital adequacy, proper income recognition classification of assets based on their quality and provisioning against bad and doubtful debts.
- Decreasing the emphasis laid on directed credit and phasing out the concessional rate of interest to priority sector.
- Deregulation of the entry norms for private sector banks and foreign banks.
- Permitting public and private sector banks to access the capital market.
- Setting up of the Asset Reconstruction Fund.
- Constituting the special debt recovery tribunals.
- Freedom to appoint chief executive and officers of the banks.
- Changes in the constitutions of the board.
- Bringing NBFCs under the ambit of regulatory framework.

Phase II Recommendations of the Committee on Banking Sector Reforms, April 1998 (Narasimham Committee II).

Capital Adequacy

- The banking industry has grown at a compounded annual growth rate (CAGR) of 20% during 2000–2009

Capital adequacy ratio to be raised from 8 per cent to 10 per cent by 2002.

- Hundred per cent of fixed income portfolio marked-to-market by 2001 (up from 70 per cent).
- Five per cent market risk weight for fixed income securities and open foreign exchange position limits (no market risk weights previously).
- Commercial risk weight (100 per cent) to government-guaranteed advances (previously treated as risk-free).

Asset Quality

- Banks should aim to reduce gross non-performing assets to three per cent and net NPAs to zero per cent by 2002.
- Ninety-day overdue norm to be applied for cash-based income recognition (down from 180 days).
- Government-guaranteed irregular accounts to be classified as NPAs and provided for.
- Asset reconstruction company to take on NPAs of weak banks against issue of risk-free bonds.
- Directed credit obligations to be reduced from 40 per cent to 10 per cent.
- Mandatory general provisions of one per cent of standard assets and specific provisions to be made tax-deductible.

Systems and Methods

Growth of Indian Banking During 2000–09

- Growth in total deposits by 4.8 times, assets by 6.6 times, interest income by 9.5 times, and networth by 4.5 times
- Increase in return on assets (ROA) from 0.87 per cent in 2000 to 1.0% in 2009
- Decline in NPA ratio from 6% in 2000 to 1.4% in 2009

- Banks to start recruitment of skilled, specialised manpower from the market.
- Overstaffing to be dealt with by redeployment and right-sizing via voluntary retirement schemes.
- Public sector banks to be given flexibility in remuneration structure.
- Rapid introduction of computerisation and technology.

Industry Structure

- Only two categories of financial sector players to emerge: banks and non-bank finance companies; DFIs to convert to banks or remain non-bank companies.
- Mergers to be driven by market and business considerations, not imposed by regulators.
- Weak banks to convert to 'narrow banks', restructure, or close down if proven unviable.
- Entry of new private sector banks and foreign banks to continue.
- Banks to be given greater functional autonomy, and minimum government shareholding to be reduced to 33 per cent from 55 per cent for the State Bank of India and 51 per cent for other public sector banks.

Regulation and Supervision

- Banking regulation and supervision to be progressively delinked from monetary policy.
- Board for Financial Regulation and Supervision to be constituted with statutory powers; board members should be professionals.
- Greater emphasis on public disclosure as opposed to disclosure to regulators.

Legal Amendments

- Broad range of legal reforms to facilitate recovery of problem loans.
- Introduction of laws governing electronic funds transfer.
- Amendments in the Banking Regulation Act, the Nationalisation Act and the State Bank of India

Act to allow greater autonomy, higher private sector shareholding, and so on.

Technology in Banking

Private sector banks brought the state-of-the-art technology into the banking system. With increasing competition, public sector banks also adopted the new technology. The Central Vigilance Commission issued a directive on the need to computerise 70 per cent of the banking business by public sector banks before January 1, 2001. Basic computerisation by public sector banks was started in 1993. The foreign banks and private sector banks have successfully transited from physical cash to anytime and anywhere money. ‘Click banking’ has replaced ‘queue banking’.

Both the RBI and public sector banks have realised the importance of technology to survive and thrive. Technology has made the banking business truly international and efficient. Technology will act not only as the facilitator but a catalyst to reach out and meet expectations of demanding customers. More than 95 per cent of the branches have been fully computerised and 79.4 per cent of these branches have core-banking solutions (CBS), which is automation of banks across multiple-delivery channels. It helps banks achieve a centralised processing mechanism and, in turn, provide an any time any where services to their customers. The CBS enables the customers of banks to undertake their transactions from any branch of a bank instead of being attached to a particular branch, thereby resulting in better delivery of various customer services by the banks.

- The total number of branches providing core banking solution (CBS) was 44,304 on March 31, 2009

Banks have introduced innovative products such as e-banking and e-payments. Electronic banking (e-banking) is banking with the use of electronic tools and facilities and through electronic delivery channels. Most banks offer electronic banking through automatic teller machines, telephone transactions, and the Internet. Electronic banking enables banks to provide efficient services at lower costs and expand their geographical reach. Internet banking is the predominant mode of e-banking. It has made banking personalised and customised. It enables providing general purpose information to customers through banks’ websites, electronic information transfer through passwords, and fully electronic transactional system, which allows bi-directional transactional capabilities and requires a high degree of security and control.

ICICI Bank and HDFC Bank have already rolled out mobile banking services. There is a cap of Rs. 10,000 for purchases per day and Rs. 5000 for utility bill payments through the mobile. Internet and mobile banking have brought about a revolution in banking services.

The growth in banking technology and automation of banking processes has enabled extension of reach and low costs transactions. Automated teller machines (ATMs) have emerged as an alternative banking channel which facilitates low cost transactions vis-a-vis traditional branches. The increased use of ATMs by foreign banks and private sector banks has helped these banks to compete with public sector banks. Technology has enabled both foreign banks and private sector banks to expand their reach and provide improved customer service. The high cost of ATM cards and machines and poor telecommunication infrastructure inhibit the rapid growth of the ATMs.

- ATMs across 44,000 locations in India

Networking of branches and automating systems will help in increasing fee-based income. For instance, Corporation Bank migrated its cash management product—Collection and Payments Service (CAPS)—to the Internet, making it accessible to corporate customers on their desk tops. Cash management covers collections and disbursements of operating flows and specialised cash flow streams such as equity issue collections, dividends, interest and principal repayments, and excise and sales tax paid. Customers are now demanding value-added services and hence, banks have to speed up IT implementation.

Leading private, public and foreign bamks are offering a variety of instant any time-any where banking feature such as viewing of transation details, bill payment services, linking of bank accounts to other financial services such as demat and equity trading accounts and loan and credit accounts.

Technology can substantially bring down the menace of non-performing assets plaguing the banking system. Currently, software packages are available for improving the credit management about banks. These packages allow bankers to track details for each borrower such as principal and interest payable, business cycle of clients and end-use of funds.

Payment and Settlement System

A payments system comprises of a set of rules, institutions, and technology for transfer of funds from one entity to another. It constitutes the core of a well-functioning financial system as the failure of a payment system may result in a systemic risk thereby triggering bank runs. It also plays an important role in the implementation of monetary policy as it provides the means through which monetary policy signals are transmitted. A well-functioning payment system is a prerequisite for proper conduct of monetary policy, efficient delivery of financial services, and minimising transaction costs.

The Payment and Settlement System Act, 2007 came into effect on August 12, 2008. It has designated the Reserve Bank of India as the authority to regulate and supervise the payment systems in the country, including those operated by non-banks such as the CCIL, card companies, other payment system providers and all prospective organisations for payments. Under the Act, the RBI has the powers to authorise an entity to operate a payment system, lay down operational and technical standards for the various payment systems, call for information and returns/documents from the service providers and imposing fines on failure to do so or on providing false information. The RBI is also empowered to issue directions and guidelines to the system providers, prescribe the duties to be performed by them and audit and inspect their systems/premises

The RBI has initiated payment and settlement reforms, focusing on commercially important centres which account for 65 per cent of the banking business in terms of values. The RBI has emphasised developing an institutional framework to oversee payment system information technology applications and institution of satellite-based and terrestrial-based communications infrastructure.

There are two kinds of payment system in operation-retail and large value payment systems.

Retail Payment System Comprises of

- Paper based system
- Electronic system
  - ECS
  - NEFT
  - Cards—credit & debit including ATM network

Paper Based Clearing System Comprises of Cheque Clearing

- MICR clearing
- Non-MICR clearing
- Speed clearing of outstation cheques
- Cheque Truncation

(i) Retail Payment System It comprises of paper-based payment system, and electronic payment systems like the electronic clearing services (ECS), NEFT and card payment system.

As cheques play an important role in the retail payment system, clearing houses have been computerised to increase efficiency in the cheque clearing system. Magnetic Ink Character Recognition (MICR) technology for large clearing houses and Magnetic Media Based Clearing System (MMBCS) technology in smaller clearing houses whose low volumes make the use of MICR technology unviable have been introduced. The RBI implemented Cheque Truncation System (CTS) in February 2008 in the National Capital Region. In this system, the physical movement of cheques to all payee bank branches has been truncated or shortened. The choice of the point of truncation, whether at the collecting branch or at its service branch, is left to the individual banks who are the members of the New Delhi Bankers' Clearing House to decide. Clearing takes place based on the validation of cheque images.

Electronic payment systems are becoming more popular. Electronic payments (e-payments) is effecting payments through electronic means such as electronic clearing service (ECS)—both debit and credit, national electronic funds transfer system (NEFT), and card based payment credit and debit). To encourage the use of electronic mode of payments, the Reserve Bank waived the processing charges for all electronic payment systems operated by it till March 2009. All large value payments of Rs. 1 crore and above, migrated to the electronic mode successfully and the threshold limit was brought down to Rs. 10 lakh with effect from August 1, 2008.

ECS (credit) is used for direct credit such as salary and pension payments, and refund of initial public offering (IPOs). and the ECS (debit) for direct debit such as collection of bills, insurance premia and equated monthly installment payments of loans. The NEFT, launched by the RBI in November 2005, enables transfer of funds within and across cities and between branches of a bank and across banks. While the transfer of funds is electronically, it is not actually instant-it takes a day for transfer of funds. Generally, banks do not charge customers who avail of this facility. Private sector banks and foreign banks are the most active users of this product.

With the rapid growth in the usage of mobile phones and their wider geographical coverage, banks have been exploring the use of mobile banking as an alternative channel of delivery of banking services. The service is presently available on GSM handsets only and users conduct their transactions using their m-PIN. According to the RBI, the long-term goal of the mobile payment framework in India would be to enable fund transfer from an account in one bank to any other account in any bank on a real time basis irrespective of the mobile network the customer has subscribed to.

The use of Automated Teller Machines (ATMs) for cash withdrawal and balance enquiry is steadily increasing. The National Financial Switch (NFS) network, which started its operations on August 27, 2004 and is operated by Institute for Development and Research in Banking Technology (IDRBT), Hyderabad, enables inter-operability of the ATM cards issued by any bank across the entire network. All cash withdrawals from all ATMs would be free with effect from April 1, 2009.

Large Value Payment Systems Include

- RTGS
- Government securities clearing
- Forex clearing

(ii) Large Value Payment Systems They consist of the real time gross settlement system (RTGS), government securities clearing and foreign exchange clearing. The RTGS was operationalised in March 2004. The RBI has mandated the use of electronic mode of payment between entities regulated by it. Banks, primary dealers, the RBI and the Deposit Insurance and Credit Guarantee Corporation are members of the RTGS system The RTGS provides for continuous (i.e., in real time) processing and settlement of funds transfers. It settles inter-bank transactions and time-critical transactions on behalf of customers and also facilitates settlement of all retail paper-based and electronic clearings taking place in Mumbai. Under RTGS, money is actually transferred instantly (with a marginal time lag) to the beneficiary account. The RTGS transaction can be undertaken during banking hours on working days. Both the bank and the beneficiary bank branch should be enabled for RTGS transaction. To avail of this facility, a customer is required to transfer at least Rs. 1 lakh. The reach and utilisation of the RTGS for funds transfer is consistently increasing. The RTGS system has been integrated with the RBI's internal accounting system (IAS) has enabled straight through processing (STP). The integration of RTGS-IAS and the securities settlement system has made automatic intraday liquidity available.

Members of the RTGS System

- 96 Banks
- 8 Primary Dealers
- RBI
- Deposit Insurance
- Credit Guarantee Corporation
- Clearing Corporation of India

The Clearing Corporation Of India Limited (CCIL) clears and settles inter-bank trades in Government securities, secondary market outright sales and repo transactions in government securities, OTC trades reported on the NDS platform, trades which are contracted on the online anonymous, trading platform NDS–OM, collateralised borrowing and lending obligations (CBLOs), and foreign exchange. These trades are settled on a D*v*P III basis, *i.e.,* the funds leg as well as the securities leg is settled on a net basis. The CCIL also provides guaranteed settlement facility for all dollar-rupee, inter-bank cash, Spot and Forward transactions by becoming the central counterparty to every trade accepted for settlement, through the process of novation. The rupee legs of the transactions are settled through the members' current accounts with the Reserve Bank and the dollar leg through the CCIL's account with the Settlement Bank at New York. The CCIL also provides continuous linked settlement services for banks in India by availing third party services of a settlement bank.

The RBI implemented the Centralised Funds Management System (CFMS), as an intermediate service facility, which provides backoffice support and funds transfer. The CFMS enables the funds and treasury managers of commercial banks to obtain the consolidated accountwise, centrewise position of their balances with all the 17 deposit accounts departments (DAD) of the RBI. It also enables transfer of funds from one RBI office to another.

In order to bring down transaction costs, the Indian Banks Association (IBA) has proposed to set up a new entity-National Payments Corporation of India (NPCI), which will be jointly owned by banks. It will be a section 25 company, which will not distribute its profits as dividend, but will plough it back for the improvement and expanding the reach of the retail payment systems. It will carry out all sorts of financial settlements apart from RTGS settlement which will continue to be under the purview of the RBI. The setting up of this organisation would bring about uniformity and standardisation in retail payments, expand its reach and bring innovative products to augment customer convenience.

Diversification in Bank Operations

In the post-liberalisation era, public sector banks have diversified to non-traditional activities such as mutual funds, merchant banking, venture capital funding, and other para-banking activities such as leasing, hire purchase, and factoring. Earlier banks could undertake these activities only through their subsidiaries. Now banks can undertake these activities either through subsidiaries or in-house or both. The need for earning profits, maximising economies of scale, an enlarging customer base, and becoming a one-stop financial services shop led banks to diversify in these new areas.

Most of the banks undertake merchant banking activities through their subsidiaries. The first merchant banking subsidiary set up in 1987 by the State Bank of India was known as SBI capital market. Merchant bankers offer a range of services relating to issue management, loan syndication, project counselling, working capital financing, foreign currency loans, and portfolio management. Public sector subsidiaries dominate this area of financial services.

Banks have also set up subsidiaries for acting as primary dealers for government securities. SBI Gilts, PNB Gilts, Gilts Securities Trading Corporation are some of the active primary dealers in government securities market.

Subsidiaries, such as SBI Factors and Canbank Factors, are leaders in factoring industry. Banks, through their subsidiaries also provide services such as securitisation of loans, stock broking, and financial guarantee for infrastructure projects. Banks have plunged into the area of venture capital trading wherein they have contributed towards equity of venture capital funds floated by the Technology Development and Investment Corporation of India (TDICI).

Banks are now into retail banking, which encompasses deposit-and asset-linked products as well as other financial services offered to individuals for personal consumption. Banks are offering retail products such as housing loans for purchases of durables, auto loans, credit loans, educational loans, and credit cards. Retail banking is the new buzzword for all banks. Retail loan growth has been strong in India, growing at 37 per cent CAGR over the last three years. In fact, retail loans as a per cent of GDP has increased from about 3 per cent in financial year 2001 to almost 7 per cent at 2005. Retail loans as a percentage of gross advances of SCBs increased from 22 per cent in March 2004 to 25.5 per cent in March 2006. Retail loans have been the prime drivers of credit growth. The components of retail loans comprise of housing loans, consumer durables, credit card receivables, auto loans, and other personal loans. Housing loans growth was 50 per cent in 2004–05 and 34 per cent in 2005–06.

- Retail banking comprises of loans for housing, consumer durables, auto loans, credit card receivables, and other personal loans

Banks have been permitted to enter into the insurance business through a Government of India notification, which was issued on August 3, 2000. The RBI issued detailed guidelines on August 9, 2000. The SBI has set up a life insurance subsidiary on risk participation basis with a 74 per cent equity. Many domestic and foreign banks have been given 'in-principle' approval to act as corporate agents of insurance companies for distribution of insurance products on fee basis and to contribute to equity of insurance joint ventures on risk participation basis.

The SBI and co-promoters such as the Bank of Baroda, HDFC Bank, ICICI, IDBI, and LIC have set up a clearing corporation known as Clearing Corporation of India Limited (CCIL) in April 2001. CCIL has been set up for clearing and settlement of government securities and foreign exchange transactions. The SBI (chief promoter) and other co-promoters have contributed 51 per cent of the equity of the corporation while the balance 49 per cent has been contributed by other banks, financial institutions, primary dealers, and mutual funds. CCIL also acts as an intermediary for the RBI in the fixed income and forex markets. Any two banks undertaking a forex transaction have to route the trade through CCIL which guarantees the transaction. Thus banks are saved the trouble of sending instructions to correspondent branches across the world to take their transactions further.

- Loan syndication is an arrangement where a group of banks participate to provide funds for a single loan

Banks are now into loan syndications and consortium financing. Syndication is an arrangement where a group of banks, which may not have any other business relationship with the borrower, participate for a single loan. Corporates are now interested in raising funds for long-term financing for capital investment through loan syndication. Loan syndication has helped corporates to bring down their financial costs but has increased competition amongst banks. In a loan syndication, a group of banks comprising 10 to 30 banks participate to provide funds wherein one of the banks is the lead manager. This lead bank is decided by the corporate, depending on confidence on the lead manager, underwriting skills. Lead banks charge fees ranging from 0.25 per cent to 2 per cent. This loan arrangement may have a tenure of around 10 years and offer many options to corporates like draw-down after around two years, linking of loans to project milestones being achieved and no commitment charges to be paid to the banks. These options help corporates to save atleast 30 to 40 basis points while raising money through a loan syndication, against a bond issuance as the corporates have to prepare one set of documentation. A loan syndication also helps corporates get a better pricing. Banks can offload these loans to other players in the market. Foreign banks such as StanChart, HSBC, ABN Amro, and Deutsche Bank, private banks like UTI Bank, ICICI Bank, and HDFC Bank and public sector banks like IDBI and SBI are prominent players in this market. Consortium lending is similar to loan syndication. In a consortium arrangement, the corporate gives a presentation to the banks for raising funds which leads to a continuous interaction between the consortium and the company. In this arrangement, the member banks offer a range of services from loan and letter of credit, to working capital and guarantees to the company.

The RBI has allowed individuals to remit upto $ 2,00,000 a year. Foreign and private, sector banks have already launched foreign deposits and international mutual fund products. They are offering high net worth individuals an array of products such as equity brokerage where investors can buy and sell equities from any major global exchange, premium deposit which pays principal and interest in one or two currencies at a prearranged exchange rate upon maturity, dollar-denominated Indian corporate bonds which are listed overseas and investment in US Treasury Bond.

Consolidation in Banking

Consolidation in Banking to

- Exploit synergies
- Cost cutting
- Increase capital base
- Acquire new markets
- Increase risk ability

In India, both small and big, strong and weak, rural and urban, public and private banks coexist. The distribution of banks in terms of profitability is skewed. Some banks earn high returns but are operating inefficiently and some banks are competing fiercely for a small segment of the market. Private sector banks have already put in place the latest technology while some public sector banks are still struggling to maintain their capital adequacy and other requirements. Hence, there is a need to restructure the banking industry. Moreover, reforms have ushered in new changes and new competition which has forced banks to improve their competitiveness. Restructuring and consolidation is one of the major routes through which the Indian banking system could bring in competitiveness.

Globally, bank mergers have increased for improving the structure and efficiency of the banking industry. A well-planned merger can be a boon as it reduces the cost of operation, expands the business profile, enhances growth, increases the capital base, which, in turn, increases the risk ability of the bank. This phenomenon of bank mergers is a relatively recent one in India. Mergers have gained importance on account of globalisation, increasing competition, technological changes, and redefinition of takeovers. The Narasimham Committee on Reforms in Banking Sector (1998) recommended formation of three to four large banks with an international presence, eight to ten banks with a national presence, local banks with a regional presence, and presence of rural banks. The committee suggested mergers among strong banks, both in the public and private sectors and even with financial institutions and nonbanking finance companies (NBFCs).

In the early 1990s, New Bank of India merged with Punjab National Bank. It was a merger of a weak bank with a strong bank. In 1998, 20th Century Finance merged with Centurion Bank. In 1999, there were two mergers—Bareilly Corporation Bank merged with Bank of Baroda and Sikkim Bank merged with the Union Bank of India. In February 2000, Times Bank merged with HDFC Bank and in March 2001, Bank of Madura merged with ICICI Bank.

ICICI Limited merged with ICICI Bank on March 31, 2000, and converted itself into a universal bank. The Benares State Bank Limited (BSBL) was merged with Bank of Baroda (BOB) on June 20, 2002, and all the branches of BSBL have started functioning as branches of BOB from July 19, 2002. The Global Trust Bank was merged with Oriental Bank of Commerce (OBC) with effect from August 14, 2004 under the powers vested with the RBI under the Banking Regulations Act, 1949 through a scheme sanctioned by the Government of India.

Punjab National Bank took over New Bank of India in 1993 and acquired Nedungadi Bank in 2005. During 2005–06, the Ganesh Bank of Kurundwad Ltd was amalgamated with the Federal Bank Ltd as its networth had turned negative. There was a voluntary amalgamation between Bank of Punjab Ltd and the Centurion Bank Ltd. The Centurion Bank subsequently changed its name to Centurion Bank of Punjab Ltd and then it was merged with HDFC Bank on May 23, 2008. On September 2, 2006, the United Western Bank Ltd (UWB) was placed under moratorium by the Central Government and later amalgamated with Industrial Development Bank Ltd on October 3, 2006. The Sangli Bank and The Bank of Rajasthan were merged with ICICI Bank on April 19, 2007 and May 2010. In all, there have been 22 deals involving mergers and acquisitions in the post reforms era.

Consolidation is required among old private sector banks and cooperative banks.

PSU are saddled with unwieldy branch network. Moreover, weaker banks are faced with paucity of resources to adopt technology. Mergers and consolidations should be encouraged to exploit synergies, cost cutting and acquiring new markets. Merger of two regional banks is desirable. Moreover, the banks should close unviable branches and reduce staff strength.

At present, Section 44 A of the Banking Regulation Act allows a private bank to acquire another private bank (like the merger of Bank of Madura with ICICI Bank). However, the provisions of the Banking Regulation Act does not clearly spell out mergers and acquisitions among the public sector banks without the intervention of the RBI. Like, for instance, Section 45 of the Banking Regulation Act gives the RBI powers to apply to the government to place banks under a moratorium and prepare a scheme for amalgamation (like in case of Oriental Bank of Commerce acquiring GTB). The provisions of the Banking Regulation Act need to be changed as the present trend is moving from a regime of a large number of small banks to consolidation—a small number of large banks.

Equity Capital Raised by Public Sector Banks

Public sector banks were allowed to raise capital from the capital market to strengthen their capital adequacy ratios and reduce the holdings of the government/RBI. The Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970/1980 and the State Bank of India Act, 1955 were amended to allow banks to raise capital not exceeding 49 per cent of their equity.

The State Bank of India was the first public sector bank to tap the equity market in December 1993. In October 1996, it once again tapped the capital market through a GDR issue of Rs. 1,270 crore. With these two issues, the holding of the RBI came down to 59.7 per cent in State Bank of India. Over the years 1993 to 2008, 16 PSBs raised capital through 37 public issues to the tune of Rs. 34,679 crore. The market responded favourably to public sector banks' ventures to raise capital. Since 1995–96, private sector banks have raised capital through 34 equity issues to the tune of Rs. 23,330 crore Some public and private sector banks have also raised funds by way of ADRs/GDRs issues in the international capital market. Banks also raised capital through discounted subordinated debt which is classified as Tier II.

Both the public and private sector banks raised Rs. 30,151 crore through private placements. As public sector banks accessed the capital market to raise funds, the equity held by the Government got diluted and the share of the public holding increased. The government holding was more than 90 per cent in two public sector banks only, while in three public sector banks, the government holding was close to 51 per cent.

The number of banks listed and traded on the NSE are 31—12 PSBs and 19 private sector banks. The government has also injected funds for strengthening the capital base of nationalised banks in three phases. The first phase covering the period 1984–85 to 1992–93 when the government recapitalised public sector banks without any preset norms. The second phase was initiated during the period 1993–1995, the

• Share of turnover of bank stocks in total turnover was 12.3% and share of capitalisation of bank stocks in total market capitalisation was 7.7% during 2008–09

beginning of the financial sector reforms wherein the public sector banks were given a higher priority to improve their financial health. The government injected Rs. 10,987 crore in public sector banks during this phase. In the third phase beginning 1996, the government decided to recapitalise the banks on a case to case basis with a condition to return the amount recapitalised to the government. recapitalisation continued up to 1998–99. The total amount injected by the Government for strengthening the capital base of nationalised banks amounted to Rs. 22,092 crore. The total amount returned by public sector banks to the government amounted to Rs. 1,789 crore. Both the public and private sector banks raised Rs. 11,067 crore, Rs. 1,066 crore and Rs. 30,455 from the primary capital market during 2005–06, 2006–07 & 2007–08 respectively. However, they did not tap the primary market during 2008–09.

Risk Management in Banks

Banks are unique financial intermediaries as they are highly leveraged(more than ten to one) which puts them in control of very large volume of public funds. They also administer the payment and settlement system which is the backbone of any economy. A loss of public confidence in a bank can lead to a run on the bank causing systemic failure, thereby, destabilising the financial system.

Banking is the business of money where high risks are involved. Deregulation and globalisation have introduced new types of risks. Risk may be defined as an exposure to a transaction with loss, which occurs with some probability and which can be expected, measured and minimised. An element of risk is inherent in the banking operations. Banks have to manage and balance risk. Banks are now involved in a variety of activities from basic lending to trading complex instruments, engaging in off-balance sheet transactions, and have ventured in new markets, which have increased the risk management challenges. Risk management system is important for Indian banks in the reforms era. Volatility has increased and margins have squeezed and hence, if banks do not have a cushion against losses, they may face a problem of survival. Thus, risk management is necessary to ensure sound, stable and efficient banking system. It is a continuous process which helps identify the amount and type of risks that the bank is willing to take, mobilise enough capital to cover such risks and allocate capital to profitable business units. Risk management involves identification, measurement, monitoring and controlling risks to optimise risk-reward trade-off.

Steps in Risk Management Process

Steps in Risk Management Process

- Risk Analysis
- Risk Identification
- Risk Measurement
- Risk Control
- Risk Monitoring

Risk Analysis It implies a backroom exercise of looking at the entire gamut of risks. Risk analysis is defining the risk, which, in turn requires understanding the nature of risks to which the bank is exposed to and then try to quantify their impact on the bank. Thus, risk analysis includes risk identification and risk measurement.

Risk Identification This is in effect an attempt at listing out the risks to which the bank is exposed. Identifying risks attached to the assets, liabilities and the process of the bank requires a clear understanding of the operations, organisation structure, form of the organisation, process flow, geographical concentration of risk, etc.

Since a bank operates in a specific economic environment, it is also necessary to understand the external factors like economy, regulatory environment, investor behavior and competition. A bank cannot manage its risks if it does not know what they are. A sound information system is a pre-requisite for risk management.

The banking system faces different types of risks such as credit risk, market risk, technological risk, liquidity risk, and contingent risk.

- *Credit risk:* This arises due to default in payment or delayed payment. In other words, it is the risk of not getting back the money that is lent. Credit risks include counterparty default risk-the possibility that the other party in an agreement will default and concentration risk—probability that any single exposure or group of exposures may have the potential to produce losses large enough to threaten a bank's health or ability to maintain its core operations.
- *Interest rate risk (IRR)*: This arises from adverse movements in interest rates which bring about changes in a bank's portfolio value both in trading book (*i.e.*, assets that are regularly traded and are liquid in nature) and in banking book (*i.e.*, assets that are usually held till maturity and rarely traded). Changes in market interest rates might adversely affect a bank's financial condition. The immediate impact of changes in interest rates is on bank's earnings through changes in its Net Interest Income (NII), known as 'earnings perspective'. A long-term impact of changes in interest rates is on bank's Market Value of Equity (MVE) or Net worth through changes in the economic value of its assets,

liabilities and off-balance sheet positions, known as 'economic value' perspective. Economic value of the bank is the present value of future cash flows. The economic value is arrived at by discounting the future cash flows by using an appropriate discount rate. Thus, economic value is affected both by changes in future cash flows and discount rate

Types of Risks

- Credit Risk
- Interest Rate Risk
- Market Risk
- Foreign Exchange Risk
- Operational Risk
- Liquidity Risk

The deregulation of interest rates and the flexibility given to banks in pricing most of the assets and liabilities have exposed the banking system to Interest Rate Risk.

IRR can arise on account of (i) differences between the timing of rate changes and the timing of cash flows fluctuations in interest rate levels that have differing impacts on bank assets and liabilities known as the repricing risk, (ii) changes in portfolio values caused by unanticipated shifts in the slope and shape of yield curve known as the yield curve risk, (iii) imperfect correlation between interest rates across different interest rate markets for similar maturities known as the basis risk, and (iv) risks arising from interest rate options embedded in a bank asset, liabilities and off-balance-sheet positions known as the options risk.

- *Market risk:* This risk arises due to fluctuations in market prices of equity due to general market-related factors. A bank generally invests funds in securities including equity market. The changes in the value of a bank's investment portfolio as a result of securities market behavior is called market risk.
- *Foreign exchange risk*: This risk arises from adverse movements in currency exchange rates. Moreover, banks may suffer losses due to interest rate risk, which arises from the maturity mis-matching of foreign currency. Banks undertake operations in foreign exchange like accepting deposits, making loans and advances, quoting prices for foreign exchange transactions and some-times undertaking trading positions. The increased capital flows across the globe coupled with volatility has made the banks balance sheets vulnerable to exchange rate movements. Mismatched currency position also exposes it to country risk and settlement risk. Change in exchange rate has an impact on the bank's foreign exchange open positions and consequently its capital requirements. A depreciation in the rupee leads to a loss on oversold positions and a gain on the overbought positions.
- *Operational risk:* This risk emanates from inadequate or failed internal processes, people, sys-tem and procedures and controls or from external events. Operations comprise of the day-to-day activities of the bank in terms of processes and procedures in accordance with its strategy, channel and culture. Disruptions in operational flow due to failure of internal system results in financial losses. Operational risk events include internal and external frauds, workplace safety, system failures, etc. Operational risks also include: (i) Legal risk-bank's failure to enact appropriate policies, procedures, or controls to ensure it conforms to laws, regulations, contrac-tual arrangements, and other legally binding agreements and requirements, (ii) Documentation risk-risk arising out of improper or insufficient documentation which gives rise to ambiguity regarding the characteristics of the financial contract (iii) Technological risk: Technological changes—especially in the fields of computers and communication—give rise to technologi-cal risk. The banks should properly assess technological risk and adopt suitable strategies and measures to manage this risk.
- *Liquidity risk:* This risk arises from a bank's inability to meet its obligations when they become due, and refers to situations in which a a tradeable financial instrument or an asset may not be realised in cash Liquidity risk may be classified into: (i) Term Liquidity Risk which arises due to an unexpected delays in repayments of the capital in lending transactions, (ii) Withdrawal/Call Risk, a primary liquidity risk, which arises on account of excess withdrawal of deposits than expected thus creating constraints for bank to meet its payment obligations-deposit run-offs in a bank-specific event. (iii) Structural Liquidity Risk which arises when the necessary funding transactions cannot be carried out (or can be carried only on less favorable terms), (iv) Contingent liquidity risk which is the risk associated with finding additional funds or replacing maturing liabilities under potential, future stressed market conditions and (v) Market liquidity risk which arises when positions can-not be sold within a desired time period or can be sold only at a discount (market impact). This is especially the case with securities/derivatives in illiquid markets. Sharp and unanticipated market movements or defaults could cause demand for additional collateral calls from exchanges/settle-ment platforms in connection with foreign exchange and securities transactions; As liquidity risk emanates from maturity mismatch of assets and liabilities, the gap in mismatch may be narrowed by raising funds from the money market. Of all the financial risks, liquidity risk is more important and it has to be kept within acceptable limits, otherwise banks dependence on the money market would increase.

Banks with large off-balance sheet exposures or major deposit chunk from corporates or higher growth in assets have relatively high level of liquidity risk. Recent liquidity crisis has revealed that liquidity problems have the potential to affect bank balance sheets and bank capital adequacy.

- *Strategic Risk*: This risk arises on account of poor implementation of business decisions a failure to adapt to changes in the economic environment which has an adverse effects on capital and earnings.
- *Contingent risk:* This is also referred to as off-balance sheet risk as it is associated with off balance sheet activities of banks such as lines of credit, and forward contracts. Off-balance sheet products that can give rise to unexpected demands for liquidity at banks include committed lending facilities to customers, committed backstop facilities, and committed back-up lines to special purpose vehicles.

Risk Measurement After the identified risks are documented, they have to be quantified in terms of the financial impact they are likely to have on the bank, if they strike. Banks utilise traditional tools such as ratio analysis and cash flow projections to quantify liquidity. Banks have gradually started using quantitative techniques and models to manage risk.

Statistical models are used to measure and manage the financial risks to which banks are exposed. These models provide a framework for identifying, analysing, measuring, communicating and managing these risks. Some popular statistical models used by banks are: ***Gap analysis model:*** which calculates the repricing gap between the interest revenue earned on the bank's assets and the interest paid on its liabilities over a particular period of time. Interest rate risk in the Fixed Income portfolio of Bank's investments is managed through Duration analysis.; ***Value at Risk:*** which measures market risk inherent in trading portfolios. It is the maximum expected loss that a bank can suffer over a target horizon, given a certain confidence interval; Banks also carry out *Duration Gap* analysis to estimate the impact of change in interest rates on economic value of Bank's assets and liabilities and thus arrive at changes in Market Value of Equity (MVE). Duration Gap model recognises the changes in the value of assets and liabilities by a given change in the market interest rate. The change in value of equity (including reserves) with 1 per cent parallel shift in interest rates for both assets and liabilities needs to be estimated. *Credit Risk Assessment (CRA) Mod*els to assess the counterparty Risk, by taking into account the various risks categorised broadly into financial, business, industrial and management Risks, each of which is scored separately. Banks have also set up exposure limits to achieve a well-diversified portfolio across dimensions such as companies, group companies, industries, collateral type, and geography. For avoidance of concentration of credit risks, internal guidelines on prudential exposure norms in respect of individual companies, group companies, banks, individual borrowers, non-corporate entities, sensitive sectors such as capital market, real estate, sensitive commodities, etc. have been put in place by banks.

Risk Control Banks have put processes and controls in place in regard to various aspects of Credit Risk Management such as appraisal, pricing, credit approval authority, documentation, reporting and monitoring, review and renewal of credit facilities, managing of problem loans, credit monitoring, etc. Banks have laid down trading and investment policies with defined market risk management parameters for each asset class and have got these policies approved by their boards.

To control and mitigate operational risks, banks have issued detailed procedural guidelines for processing various banking transactions and necessary instructions to all offices regarding delegation of financial powers, which detail sanctioning powers of various levels of officials for different types of financial transactions. Banks have started training programmes for their staff to create an awareness of the different types of risks. Banks have put in place a system of prompt submission of reports on frauds and a comprehensive system of preventive vigilance. Banks have also set up an Inspection & Management Audit Department to periodically conduct risk based audits and evaluate adequacy and effectiveness of the control systems and the functioning of various control procedures. It also conducts review of the systems established to ensure compliance with legal and regulatory requirements, codes of conduct and the implementation of policies and procedures. Some banks have obtained insurance cover for potential operational risks. Banks have started building a comprehensive database of losses due to Operational Risks to graduate to Advanced Measurement Approaches for Operational Risk Management.

Risk Monitoring Risk monitoring is evaluating the performance of bank's risk management strategies in achieving overall objectives. For effective monitoring, risk measures should be reported regularly and clearly compare current exposures to policy limits. Further past risk estimates should be compared with actual outcomes to identify any shortcomings in risk measurement techniques. Regular monitoring activities can help in quickly detecting and correcting deficiencies in the policies, processes and procedures for managing risk, which, in turn, reduce the potential frequency and/or severity of a loss. The risk management strategy also has to change in accordance with the changed risk climate. This will be possible only if a concrete monitoring system is in place right from the beginning.

Risk Management Tools

Tools of Risk Management

- Asset Liability Management
- Stress Testing

Risk management in Indian banks was undertaken to comply with the RBI guidelines. The RBI issued detailed guidelines for risk management system in banks in October 1999, encompassing credit, market, and operational risks. The guidelines required banks to put in place loan policies approved by their board of directors, covering the methodologies for measurement, monitoring, and control of credit risk. The guidelines also required banks to evaluate their portfolios on an on-going basis, rather than at a time close to the balance sheet date and also to measure the current and potential credit exposures in case of off-balance sheet exposures, on a daily basis. Banks were also asked to fix a definite time frame for moving over to the value at risk (VaR) and duration-a measure of the per cent change in the economic value of a position that will occur given a small change in the level of interest rates-approaches for the measurement of interest rate risk. Now banks look at their risk management system as a means of optimising their risk-reward trade-off.

Banks use a variety of tools to manage their risks which include hedging the credit risks by resorting to restricting fresh exposures, outright sale of an existing fund based exposure, obtaining credit guarantee cover, and more recently securitisation.

Banks have adopted asset-liability management and stress testing as tools of risk management.

Asset Liability Management (ALM)

- Asset liability management is a process of planning, organising and controlling asset and liability volume maturities, rates and yields so as to match the structure of liabilities with structure of assets

Asset liability management (ALM) is a tool of liquidity management. Asset liability management is a process of planning, organising, and controlling asset and liability volume maturities, rates and yields so as to match the structure of liabilities with structure of assets. The objective of ALM is to avoid mismatch of assets and liabilities and to enable banks to measure and monitor risk, and provide suitable strategies for their management.

Information systems and organisation structure play a key role in asset liability management. Banks need information regarding the behavior of asset and liability products in different branches. It is easier to collect reliable information in respect of foreign exchange, investment portfolio and money market operations as these functions are centralised.

The RBI advised banks in February 1999 to put in place an ALM system and set up internal asset liability management committees at the top management level to oversee its implementation To effectively manage asset-liability mismatches, the Board should have overall responsibility for management of risks and should decide the risk management policy of the bank and set limits for liquidity, interest rate, foreign exchange and equity price risks. An Asset-Liability Committee (ALCO) should be set up consisting of the bank's senior management including CEO who should be responsible for ensuring adherence to the limits set by the Board as well as for deciding the business strategy of the bank (on the assets and liabilities sides) in line with the bank's budget and from risk-return perspective including the strategic management of interest rate and liquidity risks. Each bank will have to decide on the role of its ALCO, its responsibility as also the decisions to be taken by it. The functions of ALCO are: (i) Product pricing for both deposits and advances and desired maturity profile of the incremental assets and liabilities, (ii) monitoring the risk levels of the bank, (iii) review the results of and progress in implementation of the decisions made in the previous meetings, (iv) articulate the current interest rate view of the bank and base its decisions for future business stragtegy on this view, (v) decide on source and mix of liabilities or sale of assets and a funding mix between fixed vs floating rate funds, wholesale vs retail deposits, money market vs capital market funding, domestic vs foreign currency funding, etc.

The ALCO would be supported by an ALM desk consisting of operating staff which would be responsible for analysing, monitoring and reporting the risk profiles to. The staff would also prepare forecasts (simulations) showing the effects of various possible changes in market conditions related to the balance sheet and recommend the action needed to adhere to bank's internal limits.

The ALCO would be headed by the top management, the CEO/CMD or ED The Chiefs of Investment, Credit, Funds Management/Treasury (forex and domestic), International banking and Economic Research can be members of the Committee. In addition. the Head of the Information Technology Division should also be an invitee for building up of MIS and related computerisation.

Banks should also constitute a professional managerial and Supervisory Committee consisting of three to four directors which will oversee the implementation of the system and review its functioning periodically.

ALM Guidelines

The guidelines mainly address Liquidity, Currency, and Interest Rate risks.

Liquidity Risk Management

Liquidity management is the core activity of bank as it not only helps bank to meet its liabilities when they become but also reduces the probability of an adverse situation developing. The importance of liquidity rises above individual institutions, as liquidity shortfall in one institution can have repercussions on the entire system. Bank management should measure not only the liquidity positions of banks on an ongoing basis but also examine how liquidity requirements are likely to evolve under crisis scenarios. Experience shows that assets commonly considered as liquid like Government securities and other money market instruments could also become illiquid when the market and players are unidirectional. Therefore liquidity has to be tracked through maturity or cash flow mismatches. For measuring and managing net funding requirements, the use of a maturity ladder and calculation of cumulative surplus or deficit of funds at selected maturity dates is adopted as a standard tool.

The Maturity Profile could be used for measuring the future cash flows of banks in different time buckets. The time buckets given the Statutory Reserve cycle of 14 days may be distributed as under:

1. Next day
2. 2–7 days
3. 8–14 days
4. 15–28 days
5. 29 days and upto 3 months
6. Over 3 months and upto 6 months
7. Over 6 months and upto 12 months
8. Over 1 year and upto 2 years
9. Over 2 years and upto 5 years
10. Over 5 years

Within each time bucket there could be mismatches depending on cash inflows and outflows. While the mismatches upto one year would be relevant since these provide early warning signals of impending liquidity problems, the main focus should be on the short-term mismatches viz., 1–14 days and 15–28 days. Banks, however, are expected to monitor their cumulative mismatches (running total) across all time buckets by establishing internal prudential limits with the approval of the Board/Management Committee. The mismatch during 1–14 days and 15–28 days should not in any case exced 20 per cent of the cash outflows in each time bucket. The net cumulative negative mismatches during the next day, 2–7 days, 8–14 days and 15–28 days buckets should not exceed 5 per cent, 10 per cent, 15 per cent and 20 per cent of the cumulative cash outflows in the respective time buckets. If a bank in view of its asset—liability profile needs higher tolerance level, it could operate with higher limit sanctioned by its Board/Management Committee giving reasons on the need for such higher limit. A copy of the note approved by Board/Management Committee may be forwarded to the Department of Banking Supervision, RBI. The discretion to allow a higher tolerance level is intended for a temporary period, till the system stabilises and the bank is able to restructure its asset-liability pattern.

The Statement of Structural Liquidity may be prepared by a placing all cash inflows and outflows in the maturity ladder according to the expected timing of cash flows. A maturing liability will be a cash outflow while a maturing asset will be a cash inflow. In case the net cumulative negative mismatches during the Day 1, 2–7 days, 8–14 days and 15–28 days buckets exceed the prudential limit of 5, 10, 15, and 20 per cent of the cumulative cash outflows in the respective time buckets the bank may show by way of a foot note as to how it proposes to finance the gap to bring the mismatch within the prescribed limits. The gap can be financed from market borrowings (call/term), Bills Rediscounting, Repos and deployment of foreign currency resources after conversion into rupees (unswapped foreign currency funds), etc.

An Illustrative Statement of Structural Liquidity

Residual Maturity

Day 1	2–7 Days	8–14 Days	15–28 Days	29 days and Upto 3 Months	Over 3 Months and Upto 6 Months	Over 6 Months and Upto 1 Year	Over 1 Year and Upto 3 Years	Over 3 Years and Upto 5 Years	Over 5 Years	Total

OUTFLOWS

1. Capital
2. Reserves & Surplus
3. Deposits
4. Borrowings
5. Other Liabilities & Provisions
6. Others (specify)

A. TOTAL OUTFLOWS
B. CUMULATIVE OUTFLOWS INFLOWS

1. Cash
2. Balances with RBI
3. Balances with other Banks
4. Investments
5. Advances (Performing)
6. NPAs (Advances and Investments)
7. Fixed Assets
8. Other Assets
9. Others (specify)

C. TOTAL INFLOWS
D. MISMATCH (C-A)
E. MISMATCH as % to OUTFLOWS (D as % to A)
F. CUMULATIVE MISMATCH
G. CUMULATIVE MISMATCH as a % to CUMULATIVE OUTFLOWS (F as a % to B)

Currency Risk

Managing Currency risk is one more dimension of Asset—Liability Management. Mismatched currency position besides exposing the balance sheet to movements in exchange rate also exposes it to country risk and settlement risk. Ever since the RBI (Exchange Control Department) introduced the concept of end of the day near square position in 1978, banks have been setting up overnight limits and selectively undertaking active day time trading. Following the introduction of 'Guidelines for Internal Control over Foreign Exchange Business' in 1981, maturity mismatches (gaps) are also subject to control. Following the recommendations of Expert Group on Foreign Exchange Markets in India (Sodhani Committee) the calculation of exchange position has been redefined and banks have been given the discretion to set up overnight limits linked to maintenance of additional Tier I capital to the extent of 5 per cent of open position limit. Presently, the banks are also free to set gap limits with RBI's approval but are required to adopt Value at Risk (VaR) approach to measure the risk associated with forward exposures. Thus the open position limits together with the gap limits form the risk management approach to forex operations.

Interest Rate Risk (IRR)

In the context of poor MIS, slow pace of computerisation in banks and the absence of total deregulation, the traditional Gap analysis is considered as a suitable method to measure the Interest Rate Risk. It is the intention of RBI to move over to modern techniques of Interest Rate Risk measurement like Duration

Gap Analysis, simulation and Value at Risk at a later date when banks acquire sufficient expertise and sophistication in MIS. The Gap or Mismatch risk can be measured by calculating Gaps over different time intervals as at a given date. Gap analysis measures mismatches between rate sensitive liabilities and rate sensitive assets (including off-balance sheet positons). Rate sensitive assets and liabilities are those whose prices can be moved upwards or downwards with a change in the interest rates. Where all assets and liabilities are linked to floating interest rates or prime lending rates (PLR) of banks, any change in the interest rates would normally impact the interest rates pertaining to those assets and liabilities which are due for maturity/re-pricing.

1. Over one month and upto 3 months
2. Over 3 months and upto 6 months
3. Over 6 months and upto 12 months
4. Over 1 year and upto 3 years
5. Over 3 years and upto 5 years
6. Over 5 years
7. Non-sensitive

The Gap is the difference between Rate Sensitive Assets (RSA) and Rate Sensitive Liabilities (RSL) for each time bucket. The positive Gap indicates that it has more RSAs than RSLs whereas the negative Gap indicates that it has more RSLs. The Gap reports indicate whether the institution is in a position to benefit from rising interest rates by having a positive Gap (RSA > RSL) or whether it is in a position to benefit from declining interest rates by a negative Gap (RSL > RSA). The Gap can, therefore, be used as a measure of interest rate sensitivity.

Each bank should set prudential limits on individual Gaps with the approval of the Board/Management Committee. The prudential limits should have a bearing on the total assets, earning assets, or equity. The banks may work out earnings at risk, based on their views on interest rate movements and fix a prudent level with the approval of the Board/Management Committee.

STRESS TESTING

Banks use statistical models to measure risks but these models fail to incorporate all possible risk outcomes. Moreover, some events are unlikely but plausible and may be sudden which are not captured by the models. Hence, there is a need for banks to have robust stress testing process. Stress tests would enable banks to assess the risk more accurately and, thereby, help estimate financial resources. They also supplement the internal capital models where lack of historical data limits the predictive power of the models. The RBI issued guidelines on stress testing in 2007. These guidelines cover all major risk areas viz. market risks, credit risks, operational risks and liquidity funding risk.

There are broadly two categories of stress tests used in banks viz. sensitivity tests and scenario tests. These may be used either separately or in conjunction with each other.

Categories of Stress Tests

- Sensitivity tests
- Scenario tests

Sensitivity tests are normally used to assess the impact of change in *one variable* (for example, a high magnitude parallel shift in the yield curve, a significant movement in the foreign exchange rates, a large movement in the equity index etc.) on the bank's financial position.

Scenario tests include simultaneous moves in a *number of variables* (for example, equity prices, oil prices, foreign exchange rates, interest rates, liquidity etc.) based on a single event experienced in the past (i.e., *historical scenario*—for example, natural disasters, stock market crash, depletion of a country's foreign exchange reserves) or a plausible market event that has not yet happened (i.e., *hypothetical scenario*—for example, collapse of communication systems across the entire region/country, sudden or prolonged severe economic downturn) and the assessment of their impact on the bank's financial position

Guidelines for Stress Testing

Framework Requirements

Banks shall put in place a Board approved 'Stress Testing framework' to suit their individual requirements which would integrate into their risk management systems. The framework should satisfy the following essential requirements:

1. The Board approved 'stress testing policy' should detail (a) the frequency and procedure for identifying the principal risk factors which affect the bank's portfolio and should be stressed; (b) the methodology for constructing appropriate and plausible single factor and multi factor stress tests;

(c) the procedure for setting the stress tolerance limits; (d) the process for monitoring the stress loss limits; (e) the remedial actions required to be taken at the relevant stages; (f) the authorities designated to activate the remedial actions; (g) the need for identification of the responsibilities assigned to various levels/functional units; and (h) the need for specification of reporting lines.

2. The senior management should be actively involved in identifying the principal risk factors; designing appropriate single factor/multi factor stress tests; setting the stress tolerance limits; reviewing the stress test results and monitoring the stress loss limits; activating the appropriate remedial actions; periodically communicating the stress test results and the actions taken, if any, to the Board; reviewing the need to modify the stress testing framework with reference to certain elements like the risk factors, stress scenarios, levels of stress to be applied, the underlying assumptions, stress tolerance levels, remedial actions etc.; designing an appropriate MIS to support the stress tests to be conducted; and ensuring an appropriate and effective internal control mechanism to validate the stress tests and their findings;
3. Board and senior management should regularly review the results of scenario analyses and stress tests, including the major assumptions that underpin them. Stress test results may be used for setting risk limits; allocating capital for various risks; managing risk exposures; and putting in place appropriate contingency plans for meeting the situations that may arise under adverse circumstances.
4. Stress testing framework should be calibrated according to the complexity of each bank's business activities. The number of risk factors to be stressed would depend on the complexity of the portfolio and the risks the bank is exposed to. Banks should be able to justify their choice of stress tests and the choice of risk factors that are stressed. Banks which have foreign operations, or/and are active in derivatives markets, or/and are operating an active trading portfolio should use a combination of scenario analysis and sensitivity tests. Other banks may confine themselves to sensitivity tests run relatively more frequently to assess the impact of the relevant principal risk factors on their financial condition.
5. Banks are free to choose the various assumptions underlying the stress tests and the basis for their assumptions. However, these should be well documented and available for verification by the supervisor/auditors. The assumptions underlying the stress tests should be reviewed periodically for assessing their validity. Banks should undertake fresh stress tests when there are significant modifications in the underlying assumptions. Such periodic reviews are necessary to ensure the integrity, accuracy, and reasonableness of the stress testing framework.
6. Banks should use appropriate, accurate and complete data when performing stress tests. The IT resources should be commensurate with the complexity of the techniques and the coverage of the stress tests. Banks should have adequate MIS in place to support the stress testing framework. The systems should be able to support the conduct of stress tests on different risks at relevant levels (portfolios, regions, business units) and also aggregate the results for the bank as a whole.
7. As the environment in which banks are operating is quite dynamic, there are changes in macroeconomic environment, banks' instruments, trading strategies and regulatory policies. The risk measurement methodologies and stress testing techniques in banks should, therefore, evolve to accommodate these changes. The stress testing framework should, therefore, be reviewed periodically to determine its efficacy and to consider the need for modifying any of the elements. The framework should be subjected to at least annual reviews which should cover, among others, the following aspects:
   a. Adequacy of the documentation for various elements of the stress testing framework;
   b. Integration of the stress testing framework in the day-to-day risk management processes;
   c. Scope of coverage of the framework and the levels of stress applied;
   d. Integrity of MIS and data feeding into the stress tests; and
   e. Adequacy of the remedial actions and the efficiency of the systems for their activation;

Identification of Risks

While traditionally stress tests are used in the context of managing *market risks*, these may also be employed in the management of *credit risks, operational risks, and liquidity funding risk*. Banks should identify their major risks that should be subjected to stress tests. While identifying the major risks, banks should understand their exposures and the risks to which these are exposed as well as the correlation between these risks. An indicative list of the risks that banks, in general, are exposed to are credit risk, credit concentration risk, interest rate risk, price risk, foreign currency risk, impact of market movements on contingent credit risk, liquidity risk, operational risks, prepayment risk, model risk, macro economic risk, and political risk. The above is only an indicative list and banks should identify the risks to which they are exposed to with regard to their bank specific circumstances and portfolio.

Stress Scenarios/Levels

Banks should stress the relevant parameters at least at three levels of increasing adversity—minor, medium, and major—with reference to the normal situation and estimate the financial resources needed by it under each of the circumstances to

1. meet the risk as it arises and for mitigating the impact of manifestation of that risk;
2. meet the liabilities as they fall due; and
3. meet the minimum CRAR requirements.

A scenario analysis measures the combined effect of adverse movements in more than one risk factor. Banks should determine the various risks that should be included in a scenario, take into account the linkages among the various risks without looking at each of them in isolation and assess the extent to which the stress would impact their financial position. Stress scenarios may be designed on the basis of either historical events or hypothetical events. An important element of scenario development will be the assessment and incorporation of the linkages between the various risk factors.

A few examples of stress factors/scenarios are as follows: domestic economic downturn, economic downturn of major economies to which the bank is directly exposed or to which the domestic economy is related; decline in the prospects of sectors to which the banks are having significant exposures; increase in level of NPAs and provisioning levels; increase in level of rating downgrades; failure of major counterparties; timing difference in interest rate changes (repricing risk); unfavourable differential changes in key interest rates (basis risk); parallel/non parallel yield curve shifts (yield curve risk); changes in the values of standalone and embedded options (option risk); adverse changes in exchange rates of major currencies; decline in market liquidity for financial instruments; stock market declines; tightening of market liquidity; significant operational risk events.

Frequency of Stress Testing

Banks may apply stress tests at varying frequencies dictated by their respective business requirements, relevance and cost. While some stress tests may be conducted daily or weekly—for example: trading book items for the various market risks; some others may be conducted at monthly or quarterly intervals—for example: those items which are less volatile in nature like credit risk in loans or HTM securities; interest rate risk in the banking book; and liquidity risk. Further, ad-hoc stress tests may be warranted when there are any special circumstances—for example: a rapidly deteriorating political/economic conditions in a country may warrant a quick assessment of the likely impact on the bank on account of its exposures to that country.

Interpretation of Stress Test Results

The results of the various stress tests should be reviewed by the senior management and reported to the Board. These results should be an essential ingredient of bank's risk management systems.

Banks should be conscious of the fact that the stress tests only indicate the likely impact and do not indicate the likelihood of the occurrence of the stress events. Since stress testing is influenced by the judgment and experience of the people who design the stress tests, the effectiveness of the stress tests will depend upon whether banks have identified their major risks, whether they have chosen the right level of stress/stress scenarios, whether they have understood and interpreted the stress test results properly and whether they have initiated the necessary steps to address the situation presented by the stress test results. Hence, each of the above aspects need to be assigned their due importance.

Banks should document the stress tests undertaken by them, the underlying assumptions, the results and the outcomes. The documentation should be preserved *at least* for five years.

Remedial Actions

The remedial actions that banks may consider necessary to activate when the various stress tolerance levels are breached may include:

1. Reduction of risk limits;
2. Reduction of risks by enhancing collateral requirements, seeking higher level of risk mitigants, undertaking securitisation, and hedging;
3. Amend pricing policies to reflect enhanced risks or previously unidentified risks;
4. Augmenting the capital levels to enhance the buffer to absorb shocks;
5. Enhancing sources of funds through credit lines, managing the liability structure, altering the liquid asset profile, etc.

Prudential Regulation

There are two models for bank regulation: economic regulation and prudential regulation. Economic regulatory model calls for imposing constraints on interest rates, tightening entry norms, and directed lending. In the pre-reforms era, the RBI regulated banks through economic regulation. However, the empirical evidences indicated that this model hampered the productivity and efficiency of the banking system. Hence, the RBI adopted prudential regulation. Prudential regulatory model calls for imposing the regulatory capital level to maintain the health of banks and the soundness of the financial system. It allows greater play for market forces than economic regulatory model.

The RBI issued prudential norms based on the recommendations of the Narasimham Committee report. The major objective of prudential norms was to ensure financial safety, soundness, and solvency of banks. These norms strive to ensure that banks conduct their business activities as prudent entities, i.e., not indulging in excessive risk taking and violating regulations in pursuit of profit. Banking reforms were initiated by implementing prudential norms consisting of capital adequacy ratio, asset classification, income recognition, and provisioning. The core of financial sector reforms has been the broadening of prudential norms to the best internationally recognised standards.

Regulatory Capital and Economic Capital

The capital of a bank is a mix of regulatory capital and economic capital which are expected to cover unanticipated losses resulting from banks' business operations. The central bank prescribes the regulatory capital to be held mandatory by the bank as part of adherence to prudential regulations whereas, economic capital is held beyond the minimum required level at bank's own desire. Regulatory capital is held to comply with the regulator's requirements while economic capital is held to manage bank's own risks. The methodology to arrive at the amount of economic capital, the form in which it should be held and the areas of internal business it will support, may vary from bank to bank. Though both types of capital differ in scope and purpose, they are not mutually exclusive. Thus, the banks strive to maintain an optimal mix to minimise their average cost of capital.

The Basel Capital Accord

The Bank for International Settlements (BIS) is an international organisation which fosters international monetary and financial cooperation and serves as a bank for central banks.

The Basel Committee, established by the Central Bank Governors of the group countries at the end of 1974, meets regularly four times a year. It has about 30 technical working groups and task forces which also meet regularly.

India is a member of the group of 20 (G-20) countries that advises the Financial Stability Forum (FSF). The Core Principles Liaison Group set up the Basel Committee on Banking Supervision (BCBS) to promote and monitor principles of banking supervision and the working groups on capital, which discusses proposals for revising the capital adequacy framework. India is also an early subscriber to the Special Data Dissemination Standards (SDDS) and one of the first countries to accept the financial sector assessment programme of the IMF and the World Bank.

Different central banks in their own respective countries governed the banks by the rules set by them. International banks had to adhere to different regulations in different countries. To provide a level playing field for banks, the group of 15 most industrialised countries agreed on some common rules which came to be known as the Basel Accord. The central banks of more than 100 countries adopted it over a period of time.

The Basel Committee on Banking Supervision (BCBS) prepared a framework through a consultative process to secure international convergence of supervisory regulations governing the capital adequacy of international banks. This framework was finalised in 1988 and is known as the Basel Accord or Basel I. The objectives of Basel I were twofold: (i) serve to strengthen the soundness and stability of the international banking system and (ii) to diminish an existing source of competitive inequality among international banks. The three main components of the Basel I framework were constituents of capital, the risk weighting system, and the target ratio. The central focus of this framework was credit risk and especially, country transfer risk. Basel I prescribed two tiers of capital for the banks: Tier I capital which can absorb losses without a bank being required to cease trading and Tier II capital which can absorb losses in the event of a winding-up.

- Tier I capital is capital fund which can absorb losses without a bank being required to cease trading and Tier II capital is capital fund which can absorb losses in the event of a winding-up

- Tier I or Core Capital (the most permanent and readily available support against unexpected losses) included:
  - Paid-up capital, statutory reserves, share premium.
  - Capital reserve (representing surplus on sale of assets and held in a separate account only to be included) and other disclosed free reserves (if any) minus equity investments in subsidiaries, intangible assets, losses in the current period, and those brought forward from previous periods.
- Tier II Capital included:
  - Undisclosed reserves and fully paid-up cumulative perpetual preference shares.
  - Revaluation reserves arising out of revaluation of assets that are undervalued in the bank's books (like bank premises and marketable securities).
  - General provisions and loss reserves, not attributable to the actual diminution in value or identifiable potential loss in any specific asset and available to meet unexpected losses.
  - Hybrid debt capital instruments that combine characteristics of equity and debt.
  - Subordinated debt that is fully paid up, unsecured, subordinated to the claims of other creditors, free of restrictive clauses, and not redeemable at the initiative of the holder or without the consent of the supervisory authority of banks. If subordinated debt carries a fixed maturity, it should be subject to progressive discount and have an initial maturity of not less than five years.

At least 50 per cent of a bank's capital base was to consist of core elements and supplementary capital was allowed not to be more than 100 per cent of the core capital

The Basel Accord (1988) suggested the following principles of capital adequacy:

- A riskweighted assets ratio method to be adopted by banks in which capital was related to different categories of asset or off-balance-sheet exposure, weighted according to broad categories of relative riskiness. There were only five weights recommended for on balance-sheet items, *i.e.,* 0, 10, 20, 50, and 100 per cent. Government bonds of the countries that were members of the Organisation for Economic Cooperation and Development (OECD) (which includes all members of the Basel Committee) were assigned a zero risk weight, all short-term inter-bank loans and all long term inter-bank loans to banks headquartered in OECD countries a 20 per cent risk weight, home mortgages a 50 per cent risk weight, and most other loans a 100 per cent risk weight.
- A bank must hold equity capital at least 8 per cent of its assets when multiplied by appropriate risk weights.
- When capital falls below this minimum requirement, shareholders may be permitted to retain control provided they agree to recapitalise the bank.
- When this is not done, the regulatory authority may, at its discretion, sell or liquidate the bank. Basel I could introduce discipline among banks through risk weighted capital adequacy norms. These norms (1988) helped to arrest the erosion of the banks' capital ratios. However, they were not found to be adequate due to their perceived rigidities. Moreover, the financial markets, financial intermediaries, business of banking, risk management practices, and supervisory approaches under went significant changes. The problems in South-east Asian economies, recessionary trends in the Japanese economy, the financial sector problems encountered in Latin American economies, and in some European economies emphasised that capital adequacy norms were not adequate to hedge against failures.

The Basel I capital adequacy norms were criticised as several deficiencies surfaced. These deficiencies were:

1. It recommended a 'one size-fits-all' approach that did not adequately differentiate between assets that have different risk levels. This standard encouraged capital arbitrage through securitisation and off-balance sheet exposures.
2. It assumed that the aggregate risk of a bank was equal to the sum of its individual risks. It failed to take into consideration diversification of a bank's credit risk portfolio in the computation of capital ratios. Diversification through the pooling of risks could significantly reduce the overall portfolio risk of a bank.
3. These baseline capital adequacy norms were found to be inadequate as they almost entirely addressed credit risk Basel I did not explicitly address all the risks faced by banks such as liquidity risk, and operational risks.
4. Many large banks in advanced countries developed advanced risk measurement approaches to estimate the amount of capital required to support risks. Thus, the Basel I framework was found to be redundant in its approach.

In response to the same, the BCBS brought out their Consultative Paper on New Capital Adequacy Framework in June 1999 and a second revision in January 2001 after an informed public debate. The new rules have been effective from 2005.

The BCBS announced the establishment of an Accord Implementation Group.

The primary objectives of the new accord are (i) the promotion of safety and soundness of the financial system; (ii) the enhancement of competitive equality; (iii) the constitution of a more comprehensive approach to addressing risks.

The New Basel Capital Accord is based on three mutually reinforcing pillars that allow banks and supervisors to evaluate properly the various risks that the banks face. The New Basel Capital Accord focuses on the following.

- Minimum capital requirements, which seek to refine the measurement framework set out in the 1988 accord.
- Supervisory review of an institution's capital adequacy and internal assessment process.
- Market discipline through effective disclosure to encourage safe and sound banking practices.

Pillar I: Capital Adequacy The new framework maintains both the current definition of capital and the minimum requirement of 8 per cent of capital to risk-weighted assets. The revised accord will be extended on a consolidation basis to holding companies of banking groups. The accord stresses upon the improvement in the measurement of risks. Under Pillar 1, commercial banks are required to compute individual capital adequacy for three categories of risks: credit risk, market risk, and operational risk.

The new accord has elaborated the credit risk measurement methods and proposed a range of approaches to credit risk. The Basel II has recommended two approaches—the standardised approach, and the advanced internal risk based (AIRB) approach for estimating capital for credit risk. The standardised approach expands the scale of risk weights and uses external credit ratings to categorise credits. This approach can be employed by less complex banks. Banks with more advanced risks management capabilities can employ an IRB approach. This approach allows banks to use its internal estimates of the borrower's creditworthiness to assess credit risk in the portfolio subject to strict methodological and disclosure standards. The risk components include measures of the probability of default (PD)—the probability that counterparty will default within one year, loss given default (LGD)—the amount of the loss expressed as a percentage of the amount outstanding at the time when the counterparty defaults, the exposure at default (EAD)—the credit amount outstanding at the time of default, and effective maturity (M). In some cases, banks may be required to use a supervisory value as opposed to an internal estimate for one or more of the risk components.

One of the most noteworthy features of Basel II is assigning capital charge for operational risk. The BCBS has defined operational risk 'as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events'. This definition includes legal risk, but excludes strategic and reputational risk.

Three approaches namely, basic indicator (BI), standardised (SA), and advanced measurement (AMA) approaches have been recommended for estimating capital for operational risk. Basic indicator approach, which is the simplest method of quantifying operational risks, is based on annual revenue of the bank. In this approach, a risk weight of 15 per cent is applied to a single indicator, specifically the average gross income (*i.e.,* the sum of net interest income and net non-interest income) over the previous three years. Standardised approach is based on annual revenue of each of the broad business lines of the bank and includes not only a risk weight of 15 per cent, but specific risk weights defined for each business line. In the Standardised Approach, banks' activities are divided into eight business lines: corporate finance, trading & sales, retail banking, commercial banking, payment & settlement, agency services, asset management, and retail brokerage Within each business line, gross income is a broad indicator that serves as a proxy for the scale of business operations and thus the likely scale of operational risk exposure within each of these business lines. The capital charge for each business line is calculated by multiplying gross income by a factor (denoted beta) assigned to that business line. Beta serves as a proxy for the industry-wide relationship between the operational risk loss experience for a given business line and the aggregate level of gross income for that business line. It should be noted that in the Standardised Approach gross income is measured for each business line, not the whole institution, i.e. in corporate finance, the indicator is the gross income generated in the corporate finance business line.

The values of the betas are detailed below.

Business Lines Beta Factors Corporate finance 18 per cent, Trading and sales 18 per cent, Retail banking 12 per cent, Commercial banking 15 per cent, Payment and settlement 18 per cent, Agency services 15 per cent, Asset management 12 per cent, **and** Retail brokerage 12 per cent.

Advanced measurement approach is based on the internally developed risk measurement framework of the bank adhering to the standards prescribed and include methods such as internal measurement approach (IMA), loss distribution approach (LDA), scenario based, and scorecard. Advanced measurement approach calls for significant investment as compared to the other two approaches.

Pillar II: Supervisory Review This process emphasises the need for banks to develop sound internal processes to assess the adequacy of capital based on a thorough evaluation of its risks and set commensurate targets for capital. The internal processes would then be subjected to supervisory review and intervention. The supervisors would be responsible for evaluating the way the banks are measuring risks and the robustness of the systems and processes.

The four basic and complementary principles on which the Pillar 2 rests are: (a) a bank should have a process for assessing its overall capital adequacy in relation to its risk profile as well as a strategy for maintaining its capital levels; (b) supervisors should review and evaluate a bank's internal capital adequacy assessment and strategy as well as its compliance with regulatory capital ratios; (c) supervisors expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum; and (d) supervisors should seek to intervene at an early stage to prevent capital from dipping below prudential levels. Implementation of Pillar 2 requires that a comprehensive assessment of risks be carried out by both the banks (internally) and the supervisor (externally).

Pillar III: Market Discipline It can be bolstered through enhanced disclosure by banks. The new framework sets out disclosure requirements in several areas, including the way in which banks calculate their capital adequacy and their risk assessment methods. The transparency and disclosure standards will allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and hence the capital adequacy of the bank.

Basel II is more risk sensitive and aligns banks' capital requirements more closely with the underlying risks in the balance sheet. It helps banks formulate not only a better risk management strategy but also business strategy and capital efficiency (lower regulatory capital) and allocation. Moreover, banks would be required to adopt superior technology and information systems for efficient data collection, and detailed technical analysis.

Implementation of Basel Norms in India

The RBI adopted a phased approach to implementation of Basel norms in April 1992. Initially, the RBI directed the banks to maintain a minimum capital of 8 per cent on the risk-weighted assets. Banks with branches abroad were required to comply with minimum capital to risk weighted assets requirement of 8 per cent by end-March 1994, while other banks were required to comply by end-March 1996. The Committee on Banking Sector Reforms (1998) suggested further tightening of the capital adequacy norm. Subsequently the capital to risk-weighted asset ratio (CRAR) norm was revised upward to 9 per cent to be attained by March 2000. Moreover, with effect from the year ended-March 2006, banks in India are required to maintain capital charge for market risk also on their 'available for sale' portfolio, and 'held for trading' categories.

- Banks in India are required to maintain a minimum CRAR of 9% on an on-going basis

The RBI set up a Steering Committee comprising senior officials from 14 banks (public, private and foreign) and representatives of the Reserve Bank and the Indian Banks' Association (IBA). On the basis of the recommendations of the Steering Committee, The RBI issued detailed draft guidelines for implementation of the new accord in February 2005. The draft guidelines were revised and released on March 20, 2007 for comments/feedback and were then finalised on April 27, 2007 for implementation. The trial run on select banks on BaseI II norms was carried out in April 2006 and all banks were expected to adopt the norms by 2007.

The Reserve Bank gave more time to banks to put in place appropriate systems so as to ensure full compliance with Basel II. Foreign banks operating in India and Indian banks having presence outside India migrated to the standardised approach for credit risk and the basic indicator approach for operational risk under Basel II with effect from March 31, 2008. All other scheduled commercial banks are to migrate to these approaches under Basel II in alignment with them but in any case not later than March 31, 2009.

The commercial banks, which account for about 78 per cent of the total assets of the banking sector, are required to maintain capital for both credit and market risks as per Basel II framework; while the cooperative banks are required to maintain capital for credit risk as per Basel I framework and the regional rural banks undergoing restructuring are not subject to Basel norms.

Pillar 1

Prescribes capital charge for three types of risks, *viz*., credit risk, market risk and operational risk.

- All SCBs in India have adopted the Standardised Approach (SA) for credit risk, Basic Indicator Approach (BIA) for operational risk and standardised Duration Approach (SDA) for market risk for computing their capital requirements

The RBI has directed banks to adopt the standardised approach for **credit risk** wherein the rating assigned by the eligible external credit rating would largely support the measure of credit risk capital. Four domestic credit rating agencies (*viz*., Credit Analysis and Research Ltd., CRISIL Ltd., Fitch India, and ICRA Ltd.) and three international credit rating agencies (Fitch, Moody's, and Standard and Poor's) have been accredited by the Reserve Bank.

The on-balance sheet items are to be divided into fund-based and non-fund based and further classified as per the counterparty into certain asset heads such as domestic sovereigns, foreign sovereigns, public sector entities, and corporates for the purpose of assigning risk weights.

The off-balance sheet items are to be divided into market related and non-market related categories. The credit equivalent amount in the case of a non-market related off-balance sheet items like, direct credit substitutes, trade and performance related contingent items and commitments with certain drawdown, other commitments, etc. would be determined by multiplying the contracted amount of that particular transaction by the relevant credit conversion factor specified in the regulation. In the case of a market related off-balance sheet item like (a) interest rate contracts—including single currency interest rate swaps, basis swaps, forward rate agreements, and interest rate futures; (b) foreign exchange contracts, including contracts involving gold,—includes cross currency swaps (including cross currency interest rate swaps), forward foreign exchange contracts, currency futures, currency options; and (c) any other market related contracts specifically allowed by the Reserve Bank which give rise to credit risk., whether held in the banking book or trading book, the credit equivalent amount is to be determined by the current exposure method.

For on-balance sheet securitisation exposures, banks are required to calculate the risk weighted amount exposure by multiplying the principal amount (after deduction of specific provisions) of exposures by the applicable risk weight as prescribed in the guidelines. For the rated off-balance sheet securitisation exposures, banks are required to calculate the credit equivalent amount by multiplying the principal amount of the exposure (after deduction of specific provisions) with a 100 per cent credit conversion factor, unless otherwise specified. If the off-balance sheet exposure is not rated, it must be deducted from capital, except an unrated eligible liquidity facility.

Market risk is defined as the risk of losses in on-balance sheet and off-balance sheet positions arising from movements in market prices. The market risk positions subject to capital charge requirement are:

1. The risks pertaining to interest rate related instruments and equities in the trading book; and
2. Foreign exchange risk (including open position in precious metals) throughout the bank (both banking and trading books).

Trading book for the purpose of capital adequacy will include:

1. Securities included under the Held for Trading category
2. Securities included under the Available for Sale category(iii) Open gold position limits
3. Open foreign exchange position limits
4. Trading positions in derivatives, and
5. Derivatives entered into for hedging trading book exposures.

The minimum capital requirement for **market risks** is expressed in terms of two separately calculated charges: (i) 'specific risk' charge for each security which is designed to protect against an adverse movement in the price of an individual security; and (ii) 'general market risk' charge towards interest rate risk in the portfolio, where long and short positions (which is not allowed in India except in derivatives) in different securities or instruments can be offset. The capital charge for equities would apply on their current market value in bank's trading book. The instruments covered include equity shares, whether voting or non-voting, convertible securities that behave like equities, for example: units of mutual funds, and commitments to buy or sell equity. Capital charge for specific risk as well as general market risk has been stipulated at nine per cent and is to be computed on the banks' gross equity positions. Banks have been directed to adopt standardised duration method to arrive at the capital charge.

Banks are required to compute their capital requirements for **operational risk** using the basic indicator approach where in, banks must hold capital for operational risk equal to the average over the previous three years of 15 per cent of positive annual gross income. If negative gross income distorts a bank's Pillar 1 capital charge for operational risk, the RBI could consider appropriate supervisory action under Pillar 2.

Pillar 2

The two important components of Pillar 2 are internal capital adequacy assessment process (ICAAP) and supervisory review and evaluation process (SREP). The ICAAP comprises a bank's procedures and measures designed to ensure (a) an appropriate identification and measurement of risks; (b) an appropriate level of internal capital in relation to the bank's risk profile; and (c) application and further development of suitable risk management systems in the bank. The ultimate responsibility for designing and implementation of the ICAAP lies with the bank's board of directors, and with the Chief Executive Officer in the case of foreign banks with branch presence in India. The ICAAP document has to be submitted every year by the banks to the RBI.

The SREP would be conducted periodically by the RBI and would consist of a review and evaluation of the bank's ICAAP, conducting an independent assessment of the bank's risk management processes and control systems and taking appropriate prudential and supervisory actions.

Pillar 3

The RBI has set out disclosure standards for banks. Banks are required to ensure that there are no qualifications by the auditors in their financial statements for non-compliance with any of the accounting standards. Banks are now required to disclose maturity pattern of deposits, borrowings, investments, advances, foreign currency assets and liabilities, movements in NPAs, lending to sensitive sectors, total advances against shares, total investments made in equity shares, convertible debentures and equity oriented mutual funds, and movement of provisions held towards depreciation of investment. Banks are also required to comply with the Accounting Standard (AS I) on Disclosure of Accounting Policies issued by the Institute of Chartered Accountants of India (ICAI). The scope of disclosures to be made in 'notes on accounts' has been enlarged. Banks with capital funds of Rs. 100 crore or more are required to make interim disclosures on the quantitative aspects, on a stand alone basis, on their respective websites at end-September each year. Qualitative disclosures that provide a general summary of a bank's risk management objectives and policies, reporting system and definitions are required to be published only on an annual basis. All banks with capital funds of Rs. 500 crore or more, and their significant bank subsidiaries, must disclose their Tier 1 capital, total capital, total required capital and Tier 1 ratio and total capital adequacy ratio, on a quarterly basis on their respective websites.

Capital Adequacy Norms

- Capital adequacy ratio refers to the risk weight assigned to an asset raised by the banks in the process of conducting business and to the proportion of capital to be maintained on such aggregate risk weighted assets. The RBI stipulates a capital adequacy ratio of 9 per cent for all banks

Bank's capital is vital as it is the lifeblood that keeps the bank alive; it also gives the bank the ability to absorb shocks and thereby, avoid the likelihood of bankruptcy.

Capital adequacy ratio is a measure of the amount of a bank's capital expressed as a percentage of its risk-weighted credit exposures.

The concept of capital adequacy ratio relates to risk weight assigned to an asset raised by the banks in the process of conducting business and to the proportion of capital to be maintained on such aggregate risk-weighted assets. Capital adequacy ratio is calculated on the basis of risk weightages on assets in the books of banks. Each business transaction carries a specific risk and a portion of capital has to be earmarked for this risk. This portion acts as a 'secret reserve' to cushion any possible future loss. Higher capital adequacy will drive banks towards greater efficiency and this could force banks to bring down operating costs. Capital adequacy enables banks to expand their balance sheet and strengthen their fundamentals, which, in turn, help the banks to mobilise capital at reasonable cost. Hence, quality and risk weightage of assets are the new important parameters which are crucial for the growth of banks. The RBI stipulates a capital adequacy ratio of 9 per cent for all banks and a capital adequacy ratio below this stipulation indicates the inadequacy of a bank's capital, compared to its assets (largely loans advanced and investments) weighted against the risk they carry. In other words, the capital for these banks does not match up to the risk profile of their loan advances.

Banks are encouraged to maintain, at both solo and consolidated level, a Tier 1 CRAR of at least 6 per cent. Banks which are below this level must achieve this ratio on or before March 31, 2010.

RBI Guidelines on Capital Adequacy

A bank should compute its Tier 1 CRAR and Total CRAR in the following manner:

TABLE 13.11 Capital Adequacy Ratio—Bank Group-wise

(Per Cent)

Bank Group/End-March	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
1	2	3	4	5	6	7	8	9	10	11
Scheduled Commercial Banks	11.1	11.4	12.0	12.7	12.9	12.8	12.3	12.3	13.0	13.2
Public Sector Banks	10.7	11.2	11.8	12.6	13.2	12.9	12.2	12.4	12.5	12.3
Nationalised Banks	10.1	10.2	10.9	12.2	13.1	13.2	12.3	12.4	12.1	12.1
SBI Group	11.6	12.7	13.3	13.4	13.4	12.4	11.9	12.3	13.2	12.7
Old Private Sector Banks	12.4	11.9	12.5	12.8	13.7	12.5	11.7	12.1	14.1	14.3
New Private Sector Banks	13.4	11.5	12.3	11.3	10.2	12.1	12.6	12.0	14.4	15.1
Foreign Banks	11.9	12.6	12.9	15.2	15.0	14.0	13.0	12.4	13.1	15.1

Source: RBI, *Report on Trend and Progress of Banking in India*, 2007–08.

$$\text{Tier 1 CRAR} = \frac{\text{Eligible tier 1 capital funds}}{\text{Credit risk RWA* + Market risk RWA + Operational risk RWA}}$$

*RWA = Risk weighted Assets

$$\text{Total CRAR} = \frac{\text{Eligible total capital funds}}{\text{Credit risk RWA + Market risk RWA + Operational risk RWA}}$$

- The CRAR of all SCBs is above the prescribed requirement of 9%

Capital funds are broadly classified as Tier 1 and Tier 2 capital. Elements of Tier 2 capital will be reckoned as capital funds up to a maximum of 100 per cent of Tier 1 capital, after making the deductions/ adjustments referred to under the subtitle-Deductions from Capital.

Elements of Tier 1 Capital

For Indian banks, Tier 1 capital would include the following elements:

1. Paid-up equity capital, statutory reserves, and other disclosed free reserves, if any;
2. Capital reserves representing surplus arising out of sale proceeds of assets;
3. Innovative perpetual debt instruments eligible for inclusion in Tier 1 capital, which comply with the regulatory requirements
4. Perpetual Non-cumulative preference shares (PNCPS), which comply with the regulatory requirements; and
5. Any other type of instrument generally notified by the Reserve Bank from time to time for inclusion in Tier 1 capital.

Foreign currency translation reserve arising consequent upon application of Accounting Standard 11 (revised 2003): 'The effects of changes in foreign exchange rates'; shall not be an eligible item of capital funds. The AS 11 prescribes the rate at which the foreign currency transactions are required to be translated into rupees

For foreign banks in India, Tier 1 capital would include the following elements:

1. Interest-free funds from Head Office kept in a separate account in Indian books specifically for the purpose of meeting the capital adequacy norms.
2. Statutory reserves kept in Indian books.
3. Remittable surplus retained in Indian books which is not repatriable so long as the bank functions in India.
4. Capital reserve representing surplus arising out of sale of assets in India held in a separate account and which is not eligible for repatriation so long as the bank functions in India.
5. Interest-free funds remitted from abroad for the purpose of acquisition of property and held in a separate account in Indian books.

6. Head Office borrowings in foreign currency by foreign banks operating in India for inclusion in Tier 1 capital which comply with the regulatory requirements
7. Any other item specifically allowed by the Reserve Bank from time to time for inclusion in Tier 1 capital.
8. Foreign banks are required to furnish to Reserve Bank, an undertaking to the effect that the bank will not remit abroad the 'capital reserve' and 'remittable surplus retained in India' as long as they function in India to be eligible for including this item under Tier 1 capital.

Limits on Eligible Tier 1 Capital

1. The Innovative perpetual debt instruments(IPDIs), eligible to be reckoned as Tier 1 capital, will be limited to 15 per cent of total Tier 1 capital as on March 31 of the previous financial year. The above limit will be based on the amount of Tier 1 capital as on March 31 of the previous financial year, after deduction of goodwill, DTA and other intangible assets but before the deduction of investments.
2. The outstanding amount of Tier 1 preference shares i.e Perpetual Non-Cumulative Preference Shares along with Innovative Tier 1 instruments shall not exceed 40 per cent of total Tier 1 capital at any point of time. The above limit will be based on the amount of Tier 1 capital after deduction of goodwill and other intangible assets but before the deduction of investments. Tier 1 preference shares issued in excess of the overall ceiling of 40 per cent, shall be eligible for inclusion under Upper Tier 2 capital, subject to limits prescribed for Tier 2 capital. However, investors' rights and obligations would remain unchanged.
3. Innovative instruments/PNCPS, in excess of the limit shall be eligible for inclusion under Tier 2, subject to limits prescribed for Tier 2 capital.

Elements of Tier 2 Capital

Elements of Tier 2 Capital

- Revaluation Reserves
- General Provisions and Loss Reserves
- Hybrid Debt Capital Instruments
- Subordinated Debt
- IPDI and PNCPS

Revaluation Reserves These reserves often serve as a cushion against unexpected losses, but they are less permanent in nature and cannot be considered as 'Core Capital'. Revaluation reserves arise from revaluation of assets that are undervalued on the bank's books, typically bank premises. The extent to which the revaluation reserves can be relied upon as a cushion for unexpected losses depends mainly upon the level of certainty that can be placed on estimates of the market values of the relevant assets, the subsequent deterioration in values under difficult market conditions or in a forced sale, potential for actual liquidation at those values, tax consequences of revaluation, etc. Therefore, it would be prudent to consider revaluation reserves at a discount of 55 per cent while determining their value for inclusion in Tier 2 capital. Such reserves will have to be reflected on the face of the Balance Sheet as revaluation reserves.

General Provisions and Loss Reserves Such reserves, if they are not attributable to the actual diminution in value or identifiable potential loss in any specific asset and are available to meet unexpected losses, can be included in Tier 2 capital. Adequate care must be taken to see that sufficient provisions have been made to meet all known losses and foreseeable potential losses before considering general provisions and loss reserves to be part of Tier 2 capital. Banks are allowed to include the 'General Provisions on Standard Assets', Floating Provisions 'Provisions held for Country Exposures', and 'Investment Reserve Account' in Tier 2 capital. However, these four items will be admitted as Tier 2 capital up to a maximum of 1.25 per cent of the total risk-weighted assets.

Hybrid Debt Capital Instruments In this category, fall a number of debt capital instruments, which combine certain characteristics of equity and certain characteristics of debt. Each has a particular feature, which can be considered to affect its quality as capital. Where these instruments have close similarities to equity, in particular when they are able to support losses on an ongoing basis without triggering liquidation, they may be included in Tier 2 capital. Banks in India are allowed to recognise funds raised through debt capital instrument which has a combination of characteristics of both equity and debt, as Upper Tier 2 capital provided the instrument complies with the regulatory requirements. Indian Banks are also allowed to issue Perpetual Cumulative Preference Shares (PCPS), Redeemable Non-Cumulative Preference Shares (RNCPS) and Redeemable Cumulative Preference Shares (RCPS), as Upper Tier 2 Capital, subject to extant legal provisions as per guidelines contained in.

Subordinated Debt To be eligible for inclusion in Tier 2 capital, the instrument should be fully paid-up, unsecured, subordinated to the claims of other creditors, free of restrictive clauses, and should not be redeemable at the initiative of the holder or without the consent of the Reserve Bank of India. They often carry a fixed maturity, and as they approach maturity, they should be subjected to progressive discount, for inclusion in Tier 2 capital. Instruments with an initial maturity of less than 5 years or with a remaining maturity of one year should not be included as part of Tier 2 capital. Subordinated debt instruments eligible to be reckoned as Tier 2 capital shall comply with the regulatory requirements.

Total Tier 1 capital funds, subject to prudential limits for Innovative Perpetual Debt Instruments *minus* deductions from Tier 1 capital.

Total of eligible Tier 1 capital funds and eligible Tier 2 capital funds, subject to prudential limits for Innovative Tier 1 instruments, Upper Tier 2 instruments and subordinated debt instruments *minus* deductions from Tier 1 and Tier 2 capital.

Floating Provisions held by banks, which is general in nature and not made against any identified assets may be treated as part of Tier 2, if such provisions are not netted off from GNPAs to arrive at disclosure of net NPAs.

Innovative Perpetual Debt Instruments (IPDI) and Perpetual Non-cumulative Preference Shares (PNCPS) IPDI in excess of 15 per cent of Tier 1 capital may be included in Tier 2, and PNCPS in excess of the overall ceiling of 40 per cent ceiling may be included under Upper Tier 2 capital, subject to the limits prescribed for Tier 2 capital.

Any other type of instrument generally notified by the Reserve Bank from time to time for inclusion in Tier 2 capital.

Limits on Tier 2 Capital Upper Tier 2 instruments along with other components of Tier 2 capital shall not exceed 100 per cent of Tier 1 capital. The above limit will be based on the amount of Tier 1 after deduction of goodwill, DTA and other intangible assets but before deduction of investments.

Subordinated debt instruments eligible for inclusion in Lower Tier 2 capital will be limited to 50 per cent of Tier 1 capital after all deductions.

Deductions from Capital Intangible assets and losses in the current period and those brought forward from previous periods should be deducted from Tier 1 capital.

The deferred tax assets (DTA) computed as under should be deducted from Tier 1 capital:

1. DTA associated with accumulated losses; and
2. The DTA (excluding DTA associated with accumulated losses), net of deferred tax liabilities (DTL). Where the DTL is in excess of the DTA (excluding DTA associated with accumulated losses), the excess shall neither be adjusted against item (i) nor added to Tier 1 capital.

Any **gain-on-sale** arising at the time of securitisation of standard assets, as defined in the guidelines, **if recognised**, should be deducted entirely from Tier 1 capital. In terms of guidelines on securitisation of standard assets, banks are allowed to amortise the profit over the period of the securities issued by the SPV. The amount of profits thus recognised in the profit and loss account through the amortisation process need not be deducted.

Banks should not recognise minority interests that arise from consolidation of less than wholly owned banks, securities or other financial entities in consolidated capital to the extent specified below:

1. The extent of minority interest in the capital of a less than wholly owned subsidiary which is in excess of the regulatory minimum for that entity.
2. In case the concerned subsidiary does not have a regulatory capital requirement, the deemed minimum capital requirement for that entity may be taken as 9 per cent of the risk weighted assets of that entity.

Securitisation exposures shall be deducted from regulatory capital and the deduction must be made 50 per cent from Tier 1 and 50 per cent from Tier 2, except where expressly provided otherwise. Deductions from capital may be calculated net of any specific provisions maintained against the relevant securitisation exposures.

In the case of investment in financial subsidiaries and associates, the treatment will be as under for the purpose of capital adequacy:

1. The entire investments in the paid up equity of the financial entities (including insurance entities), which are not consolidated for capital purposes with the bank, where such investment exceeds 30 per cent of the paid up equity of such financial entities and entire investments in other instru-

ments eligible for regulatory capital status in those entities shall be deducted, at 50 per cent from Tier 1 and 50 per cent from Tier 2 capital.

2. Banks should ensure that majority owned financial entities that are not consolidated for capital purposes and for which the investment in equity and other instruments eligible for regulatory capital status is deducted, meet their respective regulatory capital requirements. In case of any shortfall in the regulatory capital requirements in the de-consolidated entity, the shortfall shall be fully deducted at 50 per cent from Tier 1 capital and 50 per cent from Tier 2 capital.

An indicative list of institutions which may be deemed to be financial institutions for capital adequacy purposes is as under:

- Banks,
- Mutual funds,
- Insurance companies,
- Non-banking financial companies,
- Housing finance companies,
- Merchant banking companies,
- Primary dealers.

A bank's aggregate investment in all types of instruments, eligible for capital status of investee banks/FIs/NBFCs/PDs should not exceed 10 per cent of the investing bank's capital funds (Tier 1 plus Tier 2, after adjustments). Any investment in excess of this limit shall be deducted at 50 per cent from Tier 1 and 50 per cent from Tier 2 capital. Investments in equity or instruments eligible for capital status issued by**FIs/NBFCs/Primary dealers** which are, within the aforesaid ceiling of 10 per cent and thus, are not deducted from capital funds, will attract a risk weight of 100 per cent or the risk weight as applicable to the ratings assigned to the relevant instruments, whichever is higher. As regards the treatment of investments in equity and other capital-eligible instruments of **scheduled banks**, within the aforesaid ceiling of 10 per cent, will be risk weighted as per prescribed regulation. Further, in the case of **non-scheduled banks**, where CRAR has become negative, the investments in the capital-eligible instruments even within the aforesaid 10 per cent limit shall be fully deducted at 50 per cent from Tier 1 and 50 per cent from Tier 2 capital.

Banks' investment in the following instruments will be included in the prudential limit of 10 per cent referred to at above.

1. Equity shares,
2. Perpetual Non-cumulative Preference Shares,
3. Innovative Perpetual Debt Instruments,
4. Upper Tier II Bonds,
5. Upper Tier II Preference Shares (PCPS/RNCPS/RCPS),
6. Subordinated debt instruments,
7. Any other instrument approved by the RBI as in the nature of capital.

The investments made by a banking subsidiary/associate in the equity or non equity regulatory-capital instruments issued by its parent bank, should be deducted from such subsidiary's regulatory capital at 50 per cent each from Tier 1 and Tier 2 capital, in its capital adequacy assessment on a solo basis. The regulatory treatment of investment by the non-banking financial subsidiaries/associates in the parent bank's regulatory capital would, however, be governed by the applicable regulatory capital norms of the respective regulators of such subsidiaries/associates.

Capital Charge for Credit Risk

Measurement of Capital Charge for Credit Risk	**Risk weight (in %)**
Claims on Domestic Sovereigns	
Fund based and non fund based claims on the central government	0
Direct loan/credit/overdraft exposure, if any, of banks to the State Governments and the investment in State Government securities	0
State Government guaranteed claims	20
Claims on the Reserve Bank of India, DICGC, and Credit Guarantee Fund Trust for Small Industries (CGTSI).	0
Claims on ECGC	20

Claims on Foreign Sovereigns

S&P*/FITCH Ratings	AAA to AA	A	BBB	BB to B	Below B	Unrated
Moody's Ratings	Aaa to Aa	A	Baa	Ba to B	Below B	Unrated
Risk Weight	0%	20%	50%	100%	150%	100%

Claims denominated in domestic currency of the foreign sovereign met out of the resources in the same currency raised in the jurisdiction of that sovereign	0

Claims on Foreign PSEs—Risk Weights

S&P/Fitch Ratings	AAA to AA	A	BBB to BB	Below BB	Unrated
Moody's Ratings	Aaa to Aa	A	Baa to Ba	Below Ba	Unrated
RW (%)	20	50	100	150	100

Claims on the Bank for International Settlements (BIS), the International Monetary Fund (IMF) and the eligible Multilateral Development Banks (MDBs) evaluated by the BCBS	20
Claims on the International Finance Facility for Immunisation (IFFIm)	20

Claims on Banks

Claims on banks incorporated in India and foreign bank branches in India

Level of CRAR (in%) of the Investee Bank (Where Available)	*Risk Weights*			
	All Scheduled Banks (Commercial, Regional Rural Banks, Local Area Banks, and Co-operative Banks)		*All Non-scheduled Banks (Commercial, Regional Rural Banks, Local Area Banks, and Co-operative Banks)*	
	Investments Within 10 Per Cent Limit Referred to Above (In Per Cent)	*All Other Claims (In Per Cent)*	*Investments Within 10 Per Cent Limit Referred to Above (In Per Cent)*	*All Other Claims (In Per Cent)*
1	*2*	*3*	*4*	*5*
9 and Above	Higher of 100% or the Risk Weight as Per the Rating of the Instrument or Counterparty, Whichever is Higher	20	Higher of 100% or the Risk Weight as Per the Rating of the Instrument or Counterparty, Whichever is Higher	100
6 to < 9	150	50	250	150
3 to < 6	250	100	350	250
0 to < 3	350	150	625	350
Negative	625	625	Full deduction*	625

* The deduction should be made @50% each, from Tier 1 and Tier 2 capital.

In the case of banks where no capital adequacy norms have been prescribed by the RBI, the lending/investing bank may calculate the CRAR of the cooperative bank concerned, notionally, by obtaining necessary information from the investee bank, using the capital adequacy norms as applicable to the commercial banks. In case, it is not found feasible to compute CRAR on such notional basis, the risk weight of 350 or 625 per cent, as per the risk perception of the investing bank, should be applied uniformly to the investing bank's entire exposure.

Claims on Foreign Banks—Risk Weights

S&P/FITCH Ratings	AAA to AA	A	BBB	BB to B	Below B	Unrated
Moody's Ratings	Aaa to Aa	A	Baa	Ba to B	Below B	Unrated
Risk Weight	20%	50%	50%	100%	150%	50%

The claims on a bank which are denominated in 'domestic' foreign currency met out of the resources in the same currency raised in that jurisdiction will be risk weighted at 20 per cent provided the bank complies with the minimum CRAR prescribed by the concerned bank regulator(s).

Claims on corporates, Primary dealers, and Public sector enterprises:
Part A: Long term claims on corporate—Risk weights

Domestic Rating Agencies	AAA	AA	A	BBB	BB&below	Unrated
Risk Weight	20%	30%	50%	100%	150%	100%

Part B: Short Term Claims on Corporate—Risk Weights

Short Term Ratings				*Risk Weights*
CARE	*CRISIL*	*Fitch*	*ICRA*	
PR1+	P1+	F1+(ind)	A1+	20%
PR1	P1	F1(ind)	A1	30%
PR2	P2	F2(ind)	A2	50%
PR3	P3	F3 (ind)	A3	100%
PR4&PR5	P4&P5	F4/F5 (ind)	A4/A5	150%
Unrated	Unrated	Unrated	Unrated	100%

Claims on non-resident corporates—Risk weights

S&P/Fitch Ratings	AAA to AA	A	BBB to BB	Below BB	Unrated
Moody's Ratings	Aaa to Aa	A	Baa to Ba	Below Ba	Unrated
RW (%)	20	50	100	150	100

Claims included in the regulatory retail portfolios **75**

Following claims are excluded from the retail portfolio

1. Exposures by way of investments in securities (such as bonds and equities), whether listed or not;
2. Mortgage loans to the extent that they qualify for treatment as claims secured by residential property or claims secured by commercial real estate;
3. Loans and advances to bank's own staff which are fully covered by superannuation benefits and/or mortgage of flat/house;
4. Consumer credit, including personal loans and credit card receivables;
5. Capital market exposures;
6. Venture capital funds.

Claims secured by residential property

Amount of Loan	Risk Weight
Up to Rs. 30 Lakh	50%
Rs. 30 Lakh and Above	75%

Lending for acquiring residential property, which meets the above criteria but have loan to value ratio (LTV) ratio of more than 75 per cent, will attract a risk weight of 100 per cent

Claims secured by commercial real estate **150**

Non-performing assets (NPAs)

When specific provisions are less than 20 per cent of the outstanding amount of the NPA 150
When specific provisions are at least 20 per cent of the outstanding amount of the NPA 100
When specific provisions are at least 50 per cent of the outstanding amount of the NPA 50

Fund based and non-fund based claims on the following segments

(a) Venture capital funds; and
(b) Commercial real estate 150

Consumer credit, including personal loans and credit card receivables but excluding educational loans	125
Capital market exposures	125

Claims on 'Non-deposit taking systemically important non-banking financial companies (NBFC-ND-SI), other than AFCs

Rated NBFC-ND-SI	
(Irrespective of the Amount)	
• BBB and Above	125%
• Below BBB	150%
Unrated NBFC-ND-SI	
• Below Threshold	125%
• Above Threshold	150

All investments in the paid up equity of non-financial entities, which are not consolidated for capital purposes with the bank	125
All Investments in the paid up equity of financial entities which are not consolidated for capital purposes with the bank, where such investment is upto 30 per cent of the equity of the investee entity	125
Loans and advances to bank's own staff which are fully covered by superannuation benefits and/or mortgage of flat/ house	20
All other assets	100

Non-market-related off-balance sheet items
Credit conversion factors—Non-market related off-balance sheet items

Sr. No.	*Instruments*	*Credit Conversion Factor (%)*
1.	Direct credit substitutes, e.g. general guarantees of indebtedness (including standby L/Cs serving as financial guarantees for loans and securities, credit enhancements, liquidity facilities for securitisation transactions), and acceptances (including endorsements with the character of acceptance). *(i.e., the risk of loss depends on the credit worthiness of the counterparty or the party against whom a potential claim is acquired)*	100
2.	Certain transaction-related contingent items (e.g. performance bonds, bid bonds, warranties, indemnities and standby letters of credit related to particular transaction).	50
3.	Short-term self-liquidating trade letters of credit arising from the movement of goods (e.g. documentary credits collateralised by the underlying shipment) for both issuing bank and confirming bank.	20
4.	Sale and repurchase agreement and asset sales with recourse, where the credit risk remains with the bank. *(These items are to be risk weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into.)*	100
5.	Forward asset purchases, forward deposits and partly paid shares and securities, which represent commitments with certain drawdown. *(These items are to be risk weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into.)*	100
6.	Lending of banks' securities or posting of securities as collateral by banks, including instances where these arise out of repo style transactions (i.e., repurchase / reverse repurchase and securities lending/ securities borrowing transactions)	100
7.	Note issuance facilities and revolving/non-revolving underwriting facilities.	50

(*Continued*)

Sr. No.	Instruments	Credit Conversion Factor (%)
8.	Commitments with certain drawdown	100
9.	Other commitments (e.g., formal standby facilities and credit lines) with an original maturity of	
	• up to one year	20
	• over one year	50
	Similar commitments that are unconditionally cancellable at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's credit worthiness	0
10.	Take-out Finance in the books of taking-over institution	
	(i) Unconditional take-out finance	100
	(ii) Conditional take-out finance	50

Market related off-balance sheet items
Credit Conversion Factors for market related off-balance sheet items

Residual Maturity	Conversion Factor to be Applied on Notional Principal Amount	
	Interest Rate Contract (In Per Cent)	Gold and Exchange Rate Contract (In Per Cent)
One Year or Less	0.25	1.0
Over One Year to Five Years	0.5	5.0
Over 5 Years	1.5	7.5

Risk weighted securitisation exposures

1. Banks shall calculate the risk weighted amount of an on-balance sheet securitisation exposure by multiplying the principal amount (after deduction of specific provisions) of the exposures by the applicable risk weight.
2. The risk-weighted asset amount of a securitisation exposure is computed by multiplying the amount of the exposure by the appropriate risk weight determined in accordance with issue specific rating assigned to those exposures by the chosen external credit rating agencies as indicated in the following tables:

Securitisation exposures—Risk weight mapping to long-term ratings

Domestic Rating Agencies	AAA	AA	A	BBB	BB	B and Below or Unrated
Risk Weight for Banks Other Than Originators	20%	30%	50%	100%	350%	Deduction*
Risk Weight for Originator	20%	30%	50%	100%		Deduction*

Commercial real estate securitisation exposures—Risk weight mapping to long-term ratings

Domestic Rating Agencies	AAA	AA	A	BBB	BB	B and Below or Unrated
Risk Weight for Banks Other Than Originators	50%	75%	100%	150%	400%	Deduction*
Risk Weight for Originator	50%	75%	100%	150%		Deduction*

Capital Charge for Market Risk

Measurement of Capital Charge for Interest Rate Risk

Specific Risk The capital charge for specific risk is designed to protect against an adverse movement in the price of an individual security owing to factors related to the individual issuer. The specific risk charges for various kinds of exposures would be applied as detailed ahead:

Specific risk capital charge for sovereign securities issued by Indian and foreign sovereigns—Held by banks under the HFT Category

Sr. No.	Nature of Investment	Residual Maturity	Specific Risk Capital (as % of Exposure)
A.	**Indian Central Government and State Governments**		
1.	Investment in Central and State Government Securities	All	0.00
2.	Investments in Other Approved Securities Guaranteed by Central Government	All	0.00
3.	Investments in Other Approved Securities Guaranteed by State Government	6 Months or Less	0.28
		More than 6 Months and Up to and Including 24 Months	1.13
		More than 24 Months	1.80
4.	Investment in Other Securities where Payment of Interest and Repayment of Principal are Guaranteed by Central Government	All	0.00
5.	Investments in Other Securities where Payment of Interest and Repayment of Principal are Guaranteed by State Government.	6 Months or Less	0.28
		More than 6 Months and Up to and Including 24 Months	1.13
		More than 24 Months	1.80
B.	**Foreign Central Governments**		
1.	AAA to AA	All	0.00
2.	A to BBB	6 Months or Less	0.28
		More than 6 Months and Up to and Including 24 Months	1.13
		More than 24 Months	1.80
3.	BB to B	All	9.00
4.	Below B	All	13.50
5.	Unrated	All	13.50

Alternative total capital charge for securities issued by Indian and foreign sovereigns—Held by banks under the AFS category

Sr. No.	Nature of Investment	Residual Maturity	Specific Risk Capital (as % of Exposure)
A.	**Indian Central Government and State Governments**		
1.	Investment in Central and State Government Securities	All	0.00
2.	Investments in Other Approved Securities Guaranteed by Central Government	All	0.00
3.	Investments in Other Approved Securities Guaranteed by State Government	All	1.80
4.	Investment in Other Securities where Payment of Interest and Repayment of Principal are Guaranteed by Central Government	All	0.00
5.	Investments in Other Securities where Payment of Interest and Repayment of Principal are Guaranteed by State Government.	All	1.80

(*Continued*)

Sr. No.	Nature of Investment	Residual Maturity	Specific Risk Capital (as % of Exposure)
B.	**Foreign Central Governments**		
1.	AAA to AA	All	0.00
2.	A	All	1.80
3.	BBB	All	4.50
4.	BB to B	All	9.00
5.	Below B	All	13.50
	Unrated	All	13.50

Specific risk capital charge for bonds issued by banks—Held by banks under the HFT category

Level of CRAR (where Available) (In Per Cent)	Residual Maturity	Specific Risk Capital Charge			
		All Scheduled Banks (Commercial, Co-operative, and Regional Rural Banks)		All Non-scheduled Banks (Commercial, Co-operative, and Regional Rural Banks)	
		Investments Within 10 Per Cent Limit Referred to Above (In Per Cent)	All Other Claims (In Per Cent)	Investments Within 10 Per Cent Limit Referred to Above (In Per Cent)	All Other Claims (In Per Cent)
1	2	3	4	5	6
9 and Above	6 Months or Less	1.40	0.28	1.40	1.40
	Greater than 6 Months and Up to and Including 24 Months	5.65	1.13	5.65	5.65
	Exceeding 24 Months	9.00	1.80	9.00	9.00
6 to < 9	All Maturities	13.50	4.50	22.50	13.50
3 to < 6	All Maturities	22.50	9.00	31.50	22.50
0 to < 3	All Maturities	31.50	13.50	56.25	31.50
Negative	All Maturities	56.25	56.25	Full Deduction	56.25

Alternative total capital charge for bonds issued by banks—Held by banks under AFS category

Level of CRAR (where Available) (In Per Cent)	Alternative Total Capital Charge			
	All Scheduled Banks (Commercial, Co-operative, and Regional Rural Banks)		All Non-scheduled Banks (Commercial, Co-operative, and Regional Rural Banks)	
	Investments Within 10 Per Cent Limit Referred to Above (In Per Cent)	All Other Claims (In Per Cent)	Investments Within 10 Per Cent Limit Referred to Above (In Per Cent)	All Other Claims (In Per Cent)
1	2	3	4	5
9 and Above	9.00	1.80	9.00	9.00
6 to < 9	13.50	4.50	22.50	13.50
3 to < 6	22.50	9.00	31.50	22.50
0 to < 3	31.50	13.50	50.00	31.50
Negative	56.25	56.25	Full Deduction	56.25

Specific risk capital charge for corporate bonds and securitised debt instruments (SDIs) (other than bank bonds)—Held by banks under HFT category

*Rating by the ECAI	Residual Maturity	Specific Risk Capital Charge		
		Corporate Bonds (In Per Cent)	Securi-tisation Exposures (In Per Cent)	Securitisation Exposures (SDIs) Relating to Commercial Real Estate Exposures (In Per Cent)
1	2	3	4	5
AAA to BBB	6 Months or Less	0.28	0.28	0.56
	Greater Than 6 Months and Up to and Including 24 Months	1.14	1.14	2.28
	Exceeding 24 Months	1.80	1.80	3.60
BB	All Maturities	13.50	31.50	36.00
B and Below	All Maturities	13.50	Deduction	Deduction
Unrated (if Permitted)	All Maturities	13.50 @	Deduction	Deduction

Alternative total capital charge corporate bonds and securitised debt instruments (SDIs) (other than bank bonds)—Held by banks under AFS category

# Rating by the ECAIs	Total Capital Charge		
	Corporate Bonds (In Per Cent)	Securitisation Exposures (SDIs) (In Per Cent)	Securitisation Exposures (SDIs) Relating to Commercial Real Estate Exposures (In Per Cent)
1	2	3	4
AAA	1.80	1.80	4.50
AA	2.70	2.70	6.75
A	4.50	4.50	9.00
BBB	9.00	9.00	13.50
BB	13.50	31.50 (Deduction in the Case of Originator)	36.00 (Deduction in the Case of Originator)
B and Below	13.50	Deduction	Deduction
Un-rated (if Permitted)	13.50	Deduction	Deduction

General Market Risk

The capital requirements for general market risk are designed to capture the risk of loss arising from changes in market interest rates. The capital charge is the sum of four components:

1. the net short (short position is not allowed in India except in derivatives) or long position in the whole trading book;
2. a small proportion of the matched positions in each time-band (the 'vertical disallowance');
3. a larger proportion of the matched positions across different time-bands (the 'horizontal disallowance'), and
4. a net charge for positions in options, where appropriate.

As 'duration' method is a more accurate method of measuring interest rate risk, it has been decided to adopt standardised duration method to arrive at the capital charge. Accordingly, banks are required to measure the general market risk charge by calculating the price sensitivity (modified duration) of each position separately. Under this method, the mechanics are as follows:

1. first calculate the price sensitivity (modified duration) of each instrument;
2. next apply the assumed change in yield to the modified duration of each instrument between 0.6 and 1.0 percentage points depending on the maturity of the instrument.
3. slot the resulting capital charge measures into a maturity ladder with the fifteen time bands as set out in Table 13.12 below.
4. subject long and short positions (short position is not allowed in India except in derivatives) in each time band to a 5 per cent vertical disallowance designed to capture basis risk; and
5. carry forward the net positions in each time-band for horizontal offsetting subject to the disallowances set out in Table 13.13.

TABLE 13.12 Duration Method—Time Bands and Assumed Changes in Yield

Time Bands	*Assumed Change in Yield*	*Time Bands*	*Assumed Change in Yield*
Zone 1		**Zone 3**	
1 Month or Less	1.00	3.6 to 4.3 Years	0.75
1 to 3 Months	1.00	4.3 to 5.7 Years	0.70
3 to 6 Months	1.00	5.7 to 7.3 Years	0.65
6 to 12 Months	1.00	7.3 to 9.3 Years	0.60
Zone 2		9.3 to 10.6 Years	0.60
1.0 to 1.9 Years	0.90	10.6 to 12 Years	0.60
1.9 to 2.8 Years	0.80	12 to 20 Years	0.60
2.8 to 3.6 Years	0.75	Over 20 Years	0.60

TABLE 13.13 Horizontal Disallowances

Zones	*Time*	*Within the Zones*	*Between Adjacent Zones*	*Between Zones 1 and 3*
Zone 1	1 Month or Less			
	1 to 3 Months			
	3 to 6 Months	40%		
	6 to 12 Months		40%	
	1.0 to 1.9 Years			
Zone 2	1.9 to 2.8 Years	30%		
	2.8 to 3.6 Years			100%
	3.6 to 4.3 Years			
	4.3 to 5.7 Years		40%	
	5.7 to 7.3 Years			
Zone 3	7.3 to 9.3 Years	30%		
	9.3 to 10.6 Years			
	10.6 to 12 Years			
	12 to 20 Years			
	Over 20 Years			

Measurement of Capital Charge for Equity Risk

Capital charge for specific risk (akin to credit risk) will be 9 per cent and specific risk is computed on the banks' gross equity positions (i.e. the sum of all long equity positions and of all short equity positions—short equity position is, however, not allowed for banks in India). The general market risk charge will also be 9 per cent on the gross equity positions.

Measurement of Capital Charge for Foreign Exchange Risk

The bank's net open position in each currency should be calculated by summing:

- The net spot position (i.e. all asset items less all liability items, including accrued interest, denominated in the currency in question);
- The net forward position (i.e. all amounts to be received less all amounts to be paid under forward foreign exchange transactions, including currency futures and the principal on currency swaps not included in the spot position);
- Guarantees (and similar instruments) that are certain to be called and are likely to be irrecoverable;
- Net future income/expenses not yet accrued but already fully hedged (at the discretion of the reporting bank);
- Depending on particular accounting conventions in different countries, any other item representing a profit or loss in foreign currencies;
- The net delta-based equivalent of the total book of foreign currency options

Foreign exchange open positions and gold open positions are at present risk-weighted at 100 per cent. Thus, capital charge for market risks in foreign exchange and gold open position is 9 per cent. These open positions, **limits or actual whichever is higher,** would continue to attract capital charge at 9 per cent. This capital charge is in addition to the capital charge for credit risk on the on-balance sheet and off-balance sheet items pertaining to foreign exchange and gold transactions.

Capital Charge for Operational Risk

The Basic Indicator Approach

Under the Basic Indicator Approach, banks must hold capital for operational risk equal to the average over the previous three years of a fixed percentage (denoted as alpha) of positive annual gross income. Figures for any year in which annual gross income is negative or zero should be excluded from both the numerator and denominator when calculating the average. If negative gross income distorts a bank's Pillar 1 capital charge, Reserve Bank will consider appropriate supervisory action under Pillar 2. The charge may be expressed as follows:

$$\mathbf{KBIA} = \frac{[\Sigma \mathrm{GI1} \ldots \mathbf{n} \times a)]}{\mathbf{n}}$$

where:

KBIA = the capital charge under the Basic Indicator Approach
GI = annual gross income, where positive, over the previous three years
n = number of the previous three years for which gross income is positive
α = 15 per cent, which is set by the BCBS, relating the industry wide level of required capital to the industry wide level of the indicator.

Gross income is defined as "Net interest income" plus "net non-interest income". It is intended that this measure should:

1. be gross of any provisions (e.g. for unpaid interest) and write-offs made during the year;
2. be gross of operating expenses, including fees paid to outsourcing service providers, *in addition to fees paid for services that are outsourced, fees received by banks that provide outsourcing services shall be included in the definition of gross income;*
3. exclude reversal during the year in respect of provisions and write-offs made during the previous year(s);
4. exclude income recognised from the disposal of items of movable and immovable property;
5. exclude realised profits/losses from the sale of securities in the *"held to maturity" category*;
6. exclude income from legal settlements in favour of the bank;
7. exclude other extraordinary or irregular items of income and expenditure; and
8. include income derived from insurance activities (i.e. income derived by writing insurance policies) and insurance claims in favour of the bank.

Banks are advised to compute capital charge for operational risk under the Basic Indicator Approach as follows:

1. rage of [Gross Income * alpha] for each of the last three financial years, excluding years of negative or zero gross income

2. Gross income = *Net profit (+) Provisions & contingencies (+) operating expenses (–) items (3) to (8) of the definition of Gross Income given in the above paragraph.*
3. Alpha = 15 per cent

Example

Following are the details of a bank as on 31/3/2009.

Sl. No	Details	Amount Rs. Crore
1	Cash & Balances with RBI	400.00
2	Bank Balances	400.00
3	Investments	4,000.00
	3.1 Held for Trading (Market Value)	1,000.00
	3.2 Available for Sale (Market Value)	2,000.00
	3.3 Held to Maturity	1,000.00
	3.4 Equity	600.00
4	Advances (Net)	4,000.00
5	Other Assets	600.00
6	**Total Assets**	**10,000.00**

In terms of counter party, the investments are assumed to be as under:
Government: Rs. 2000 crore
Banks: Rs. 1000 crore
Others: Rs. 1000 crore
The details of investments are assumed to be as under:

(i) Government Securities

Date of Issue	Date of Reporting	Maturity Date	Amount Rs. in Crore	Coupon (%)	Type
01/03/1998	31/03/2009	01/03/2010	200	12.50	AFS
01/05/1999	31/03/2009	01/05/2009	200	12.00	AFS
01/03/2000	31/03/2009	31/05/2009	200	12.00	AFS
01/03/2001	31/03/2009	01/03/2021	200	12.00	AFS
01/03/2004	31/03/2009	01/03/2016	200	11.50	AFS
01/03/2005	31/03/2009	01/03/2015	200	11.00	AFS
01/03/2006	31/03/2009	01/03/2011	200	10.50	HFT
01/03/2007	31/03/2009	01/03/2012	200	10.00	HTM
01/03/2008	31/03/2009	01/03/2018	200	8.00	HTM
01/03/2009	31/03/2009	01/03/2019	200	6.50	HTM
Total			**2,000**		

(ii) Bank Bonds

Date of Issue	Date of reporting	Maturity Date	Amount Rs. in Crore	Coupon (%)	Type
01/03/1998	31/03/2009	01/03/2010	200	12.50	AFS
01/05/1999	31/03/2009	01/05/2009	200	12.00	AFS
01/03/2000	31/03/2009	31/05/2009	200	12.00	AFS
01/03/2001	31/03/2009	01/03/2012	200	12.50	AFS
01/03/2004	31/03/2009	01/03/2013	200	11.50	HFT
Total			**1,000**		

(iii) Other Securities

Date of Issue	*Date of Reporting*	*Maturity Date*	*Amount Rs. in Crore*	*Coupon (%)*	*Type*
01/03/1998	31/03/2009	01/03/2010	200	12.50	HFT
01/05/1999	31/03/2009	01/05/2009	200	12.00	HFT
01/03/2000	31/03/2009	31/05/2009	200	12.00	HFT
01/03/2001	31/03/2009	01/03/2012	200	12.50	HTM
01/03/2004	31/03/2009	01/03/2023	200	11.50	HTM
Total			**1,000**		

(iv) Overall Position

Break-up of total investments (Rs. in crore)

	Government Securities	*Bank Bonds*	*Other Securities*	*Total*
HFT	200	200	600	**1,000**
AFS	1,200	800	0	**2,000**
Trading Book	**1,400**	**1,000**	**600**	**3,000**
HTM	600	0	400	**1,000**
Total	**2,000**	**1,000**	**1,000**	**4,000**

(v) Other Details of the Bank are as Follows

Paid up share capital	Rs. 200 crore
Statutory reserves	Rs. 200 crore
Disclosed free reserves	Rs. 100 crore
General provisions and loss reserves	Rs. 50 crore
Capital reserves	Rs. 200 crore
Unsecured redeemable long-term non-convertible bonds	Rs. 100 crore
Perpetual debt bonds	Rs. 25 crore
Unsecured redeemable short-term non-convertible bonds	Rs. 200 crore
Intangible Assets:	
Losses and deferred tax assets	Rs. 20 crore
Goodwill	Rs. 5 crore
Investments above 30 per cent in paid up equity capital of financial entities which are not consolidated for capital adequacy (including Insurance companies)	Rs. 50 crore

(**vi)** The annual gross income over the previous three years is Rs. 100 crore.

Calculate Risk Weighted Assets for Credit Risk, Market Risk and Operational Risk. Also compute the CRAR.

Solution

Computation of Risk Weighted Assets

Risk Weighted Assets for Credit Risk

As per the guidelines, Held for Trading and Available for Sale securities would qualify to be categorised as Trading Book. Thus, trading book in this case would be Rs. 3,000 crore as indicated above. In addition, equities position of Rs. 600 crore would be in the trading book. While computing the credit risk, the securities held under trading book would be excluded and hence the risk-weighted assets for credit risks would be as under:

				(Rs. in Crore)
Sl.No.	Details of Assets	Market Value*	Risk Weight (%)	Risk Weighted Assets
1	Cash & Balances with RBI	400	0	0
2	Bank Balances	400	20	80
3	Investments:			
	Government	600	0	0
	Banks	0	20	0
	Others	400	100	400
4	Advances (Net)	4,000	100	4,000
5	Other Assets	600	100	600
6	Total Assets	**6,400**		**5,080**

*Assumed as Market Value for illustration

Risk Weighted Assets for Market Risk (Trading Book)

(a) Specific Risk

Investments in interest related instruments:

(i) Government securities: Rs. 1,400 crore—Nil
(ii) Bank bonds:

		(Amount in Crores of Rupees)	
Details	Capital Charge	Amount	Capital Charge
For Residual Term to Final Maturity 6 Months or Less	0.28%	400	1.12
For Residual Term to Final Maturity Between 6 and 24 Months	1.13%	200	2.26
For Residual Term to Final Maturity Exceeding 24 Months	1.80%	400	7.20
Total		**1,000**	**10.58**

(iii) Other securities: Rs. 600 crore @ 9% = Rs. 54 crore
Equities-capital charge of 9 per cent-Rs. 54 crore

Total charge for specific risk (i) + (ii) + (iii) + equities
= Rs. 0 crore + Rs. 10.58 crore + Rs. 54 crore + Rs. 54 crore = Rs. 118.58 crore

Therefore, capital charge for specific risk in trading book is Rs. 118.58 crore.

(b) General Market Risk

Investments in interest rate related instruments: Modified duration is used to arrive at the price sensitivity of an interest rate related instrument. For all the securities listed below, date of reporting is taken as 31/3/2009.

			(Amount in Crores of Rupees)	
Counter Party	Maturity Date	Amount (Market Value)	Coupon (%)	Capital Charge for General Market Risk
Govt.	01/03/2010	200	12.50	1.68
Govt.	01/05/2009	200	12.00	0.16

			(Amount in Crores of Rupees)	
Counter Party	*Maturity Date*	*Amount (Market Value)*	*Coupon (%)*	*Capital Charge for General Market Risk*
Govt.	31/05/2009	200	12.00	0.32
Govt.	01/03/2021	200	12.50	7.26
Govt.	01/03/2016	200	11.50	5.58
Govt.	01/03/2015	200	11.00	5.50
Govt.	01/03/2011	200	10.50	2.70
Banks	01/03/2010	200	12.50	1.68
Banks	01/05/2009	200	12.00	0.16
Banks	31/05/2009	200	12.00	0.32
Banks	01/03/2012	200	12.50	3.54
Banks	01/03/2013	200	11.50	5.58
Others	01/03/2010	200	12.50	1.68
Others	01/05/2009	200	12.00	0.16
Others	31/05/2009	200	12.00	0.32
Total		**3,000**		**35.64**

Equities: Capital charge for general market risk for equities is 9 per cent. Thus, general market risk capital charge on equities is Rs. 54 crore.

(c) Total Charge for Market Risk

Total capital charge for general market risk is (Rs. 35.64 crore + Rs. 54 crore) Rs. 89.64 crore. Adding the capital charges for specific risk as well as general market risk would give the total capital charge for the trading book of interest rate related instruments and equities. Therefore, capital charge for Market Risks = Rs. 118.58 crore + Rs. 89.64 crore, i.e., Rs. 208.22 crore.

(d) Capital Charge for Operational Risk

It is 15 per cent of the annual gross income over the previous three years (Rs. 100 crore *0.15) = Rs. 15 crore

To facilitate computation of CRAR for the whole book, this capital charge needs to be converted into equivalent risk weighted assets. In India, the minimum CRAR is 9 per cent.

Hence, the capital charge could be converted to risk weighted assets by multiplying the capital charge by (100 ÷ 9), Thus risk weighted assets for market risk is 208.22*(100 ÷ 9) = Rs. 2313.55 crore and for operational risk is 15*(100/9) = Rs. 166.67 crore.

Computing Capital

Eligible Tier I Capital	
Paid-up share capital	Rs. 200 crore
Statutory reserves	Rs. 200 crore
Disclosed free reserves	Rs. 100 crore
Capital reserves	Rs. 200 crore
Perpetual debt bonds	Rs. 25 crore
Gross Tier I Capital	**Rs. 725 crore**

Deductions:	
Intangible Assets:	
Losses and deferred tax assets	Rs. 20 crore
Goodwill	Rs. 5 crore
Investments above 30 per cent in paid-up capital of financial entities	Rs. 25 crore
Net Tier I Capital	**Rs. 675 crore**
Eligible Tier II Capital	
General provisions and loss reserves	Rs. 50 crore
Upper Tier II Capital:	
Unsecured redeemable long-term non-convertible bonds	Rs. 100 crore
Lower Tier II Capital:	
Unsecured redeemable short-term non convertible bonds	Rs. 200 crore
Gross Tier II Capital	**Rs. 350 crore**
Deductions:	
Investments above 30 per cent in paid-up capital of financial entities	Rs. 25 crore
Net Tier II Capital	**Rs. 325 crore**
Total Eligible Capital (Net Tier I + Tier II Capital)	**Rs. 1,000 crore**

Computing the Capital Ratio

1 Total Capital	**Rs. 1,000 crore**
2 Risk weighted assets for Credit Risk	Rs. 5,080.00 crore
3 Risk weighted assets for Market Risk	Rs. 2,313.55 crore
4 Risk weighted assets for Operational Risk	Rs. 166.67 crore
5 Total Risk weighted assets (2+3+4)	**Rs. 7,560.22 crore**
6 CRAR [(1÷5)*100] **13.23%**	

Regional Rural Banks

Objectives of Setting-up RRBs

- Development of agriculture, trade, commerce industry, and other productive activities in rural areas
- Provide credit and other facilities to the small and marginal farmers, agricultural labourers and small entrepreneurs

A new category of scheduled banks came into existence in 1975 when 6 regional rural banks (RRBs) came into existence under the Regional Rural Banks Ordinance, 1975. This ordinance was promulgated by the Government of India on September 26, 1975. The ordinance was subsequently replaced by the Regional Rural Banks Act, 1976.

Although cooperative and commercial banks achieved a high reach and disbursement of credit, there existed a vast gap in the area of rural credit. In order to fill up this gap, a new set up of banks, namely, RRBs was established. RRBs were set up as institutions which combine the local feel and familiarity with rural problems, which the cooperatives possess and the degree of business organisation, ability to mobilise deposits, access to central money markets, and modernised outlook which commercial banks have. The major objective of setting up RRBs was to develop the rural economy by providing for the purpose of development of agriculture, trade, commerce, industry, and other productive activities in the rural areas, credit and other facilities, particularly to the small and marginal farmers, agricultural labourers, artisans, and small entrepreneurs.

The authorised capital of each RRB is Rs. 1 crore and the issued capital is Rs. 25 lakh. Of the issued capital, 50 per cent is authorised by the Government of India, 15 per cent by the concerned state government and the balance, namely, 35 per cent by the sponsor bank. Each RRB is sponsored by a public sector bank, which provides assistance in the form of subscription to its share capital, managerial and financial assistance, and help in the recruitment and training of personnel.

Every RRB is authorised to carry on and transact the business of banking as defined in Section (5b) and Section 6(1) of the Banking Regulation Act. The RBI can grant assistance to RRBs by way of loans and advances from the National Agricultural Credit (Stabilisation) Fund under Sections 46A and 46B. RRBs are required to maintain a cash reserve ratio of three per cent. They are not liable to pay income tax as they are deemed to be cooperative societies.

- Each RRB is sponsored by a public sector bank

The number of RRBs rose from six in 1975 to 196 in 1987. These 196 RRBs operate in 585 districts with a network of 14,520 branches excluding satellite branches and extension counters. The branch network comprises six metropolitan, 348 urban, 1,875 semi-urban and 12,084 rural branches. RRBs branch network forms nearly 37 per cent of the total rural branch network and 15 per cent of the total semi-urban branch network of all scheduled commercial banks. The massive expansion of their branch network enabled them to expand banking activities in the unbanked areas and mobilise rural savings. Although RRBs are spread over all the states, they have a major presence in north-eastern (34 per cent of branches), eastern (30 per cent) in and central (32 per cent) regions. In these states, the banking system mainly exists in the form of RRBs. Due to a higher presence in these areas, their share in total number of deposit accounts is significantly higher (18 per cent to 29 per cent) in these states vis-a vis only 12 per cent at all India level. RRBs have provided financial services to the SHG-Bank Linkage Programme for giving an impetus to micro-finance and are also functioning as self-help promoting institutions (SHPIs) with grant assistance from NABARD on account of non-availability of good NGOs in these states. Likewise, seven sponsor banks viz, Bank of Baroda, Bank of India, Central Bank of India, Punjab National Bank, State Bank of India, United Bank of India, and UCO Bank account for more than three-fifths of the RRBs. RRBs are at par with scheduled commercial banks with respect to priority sector lending, investment avenues, credit discipline, and transparency. RRBs have carved out a niche for themselves in terms of geographical coverage, clientele outreach, business volume, and contributions for development of the rural economy. But these RRBs are characterised by low productivity, high transaction costs, negative margins, low recovery rates and high non-performing assets (NPAs). A viability-based review of RRBs shows that the loss-incurring RRBs are concentrated in four states, namely, Bihar, Orissa, Madhya Pradesh, and Rajasthan and in five sponsor banks, namely, CBI, UCO Bank, SBI, BOI, and BOB. Their common characteristics included low productivity, high transaction costs, lower CD ratio, negative margins, low recovery rates, and high NPAs. The Union Budget 2004–05 made the sponsor banks 'squarely accountable' for the performance of RRBs under their control. According to the Reserve Bank, the problems faced by Regional Rural Banks include lack of dynamism/ motivation of the chief executive officer, inadequate interest taken by sponsor banks, sub-optimal size and restrictions on expenditure for business promotion due to accumulated losses. Both sponsor banks and rural banks compete with each other to grab a larger business share in the rural market. Hence, there is a need to empower RRBs to compete and survive in the emerging banking environment. They need full functional autonomy to make them financially stronger and increase their profitability.

As RRBs are important financial institutions in the rural credit structure, several measures were initiated towards strengthening them and making them vibrant channels of credit delivery. Some of the initiatives undertaken are:

1. A process of state-wise amalgamation of RRBs sponsored by the same sponsor bank was initiated in 2005 to take advantages of the economies of scale and reduce their operational costs. After the amalgamation, RRBs would have a three-tier structure consisting of a head office, controlling offices and branches. The middle tier has been envisaged with a view to step up the rural lending, for which the centre has set steep targets for all credit agencies. The controlling office in the middle tier will control 50 or more branches and have the power to sanction and supervise credit flow. This office will also have decision-making powers with regard to general administration, human resource development and monitoring. As a result of the amalgamation process, the number of RRBs in the country declined from 196 to 82 at the end of June 2010. These included 41 amalgamated banks and 41 stand alone banks. The branch network of the 41 amalgamated RRBs is quite large and diverse varying from 85 to 677 branches and of stand-alone RRBs varied between 8 and 242. These banks have 90 to 100 per cent branches in rural/ semiurban parts.
2. NABARD has permitted the RRBs to relocate their loss-making branches to good business locations/centers keeping in view the objective of building up sustainable rural financial institutions. Further, loss-incurring RRBs have been allowed to convert into satellite/ mobile offices provided such conversion would not impair the performance of service area obligations.

3. RRBs have been given greater autonomy to enlarge their business activities. They have also been allowed to open currency chests, conduct State government business as sub-agents of sponsor banks, take up corporate agency business without risk participation for distribution of all types of insurance products and open NRO/FCNR accounts, subject to certain conditions.
4. The branch licensing policy has been liberalised and the norms for opening new branches in hitherto uncovered districts have been relaxed.
5. All RRBs are required to disclose their Capital to Risk Weighted Assets Ratio (CRAR) in their balance sheets and a road-map for achieving the desired CRAR norms would be drawn up by the RBI.
6. RRBs are being equipped in terms of technology-computerisation and introducing core banking solutions-to provide efficient customer service to their clientele.
7. The report of committee under the chairmanship of Dr Y.S.P. Thorat, then Chairman, NABARD to examine and lay down parameters for staffing norms in RRBs and suggest norms and procedures for new recruitments is under consideration of Government.
8. RRBs with negative net-worth are in the process of being re-capitalised, A sum total of Rs. 2,188 crore was infused as additional capital support to 187 out of 196 RRBs through six phases of recapitalisation of the loss-making RRBs till January 2000. Out of 187 RRBs, 158 RRBs were fully recapitalised and 29 RRBs partially. The government did not recapitalise any RRBs during 2000–01. The recapitalisation of 27 RRBs with negative networth, in a phased manner, was announced in the Union Budget of 2007–08. The amount required for recapitalisation of Rs. 1,795.97 crore was contributed in the ratio of 50:35:15 by the government of India (GoI) sponsor banks and State Governments.
9. RRBs have been allowed to enhance their resource base issue, issue credit/debit cards, set up ATMs and handle pension and other government business as subagents.
10. The government in the Union Budget 2007–08 notified that RRBs will cover 49 uncovered districts and take up aggressive branch expansion. Of the proposed 678 branches,268 branches vis-à-vis 554 licenses issued by RBI, were opened as at end-March 2008.
11. The Securitisation and Reconstruction of Financial Assets and Enforcement of Securitisation of Interest (SARFAESI) Act was extended for loans advanced by RRBs.

- Because of their unique position as local level institutions, RRBs will play a useful role in financial inclusion

RRBs are focusing their attention on the attainment of sustainable viability, improved customer services, new and innovative loan products and diversified business portfolio. The RRBs are now being merged with their sponsor banks. The reduction in number of RRBs will increase their size, thus enabling them to take advantage of economies of scale and also, enabling sponsor banks to manage their affairs efficiently. It is expected that because of their unique position, they will play a very useful role in financial inclusion.

The following Regional Rural Banks have been included in the second schedule of the Reserve Bank of India Act:

1. Andhra Pradesh Grameena Vikas Bank, Warangal, Andhra Pradesh
2. Andhra Pragathi Grameena Bank, Kadapa, Andhra Pradesh
3. Aryavart Gramin Bank, Lucknow, Uttar Pradesh
4. Baroda Gujarat Gramin Bank, Bharuch, Gujarat
5. Cauvery Kalpatharu Grameena Bank, Mysore, Karnataka
6. Chaitanya Godavari Grameena Bank, Guntur, Andhra Pradesh
7. Deccan Grameena Bank, Rangareddy, Andhra Pradesh
8. Dena Gujarat Gramin Bank, Gandhinagar, Gujarat
9. Haryana Gramin Bank, Rohtak, Haryana
10. Jaipur Thar Gramin Bank, Jaipur, Rajasthan
11. Karnataka Vikas Grameena Bank, Dharwad, Karnataka
12. Kashi Gomti Samyut Gramin Bank, Varanasi, Uttar Pradesh
13. Lucknow Kshetriya Gramin Bank, Sitapur, Uttar Pradesh
14. Madhya Bharath Gramin Bank, Sagar, Madhya Pradesh
15. Madhya Bihar Gramin Bank, Patna, Bihar
16. Narmada Malwa Gramin Bank, Indore, Madhya Pradesh
17. Pallavan Grama Bank, Salem, Tamil Nadu
18. Pragathi Gramin Bank, Bellary, Karnataka
19. Punjab Gramin Bank, Kapurthala, Punjab
20. Rajasthan Gramin Bank, Alwar, Rajasthan
21. Saptagiri Grameena Bank, Chitoor, Andhra Pradesh
22. Saurashtra Gramin Bank, Rajkot, Gujarat
23. Shreyas Gramin Bank, Aligarh, Uttar Pradesh

24. Triveni Kshetriya Gramin Bank, Orai, Uttar Pradesh
25. Uttaranchal Gramin Bank, Dehradun, Uttaranchal

Local Area Banks

These banks are set up in private sector to cater to the credit needs of the local people and to provide efficient and competitive financial intermediation services in their area of operation. The RBI issued guidelines for setting up of local area banks in August 1996. The banks are registered as a public limited company under the Companies Act, 1956 and are issued licenses under the Banking Regulation Act, 1949. They are also eligible for inclusion in the Second Schedule of the Reserve Bank of India Act, 1934. The minimum paid up capital for such a bank is Rs. 5 crore and the promoters' contribution for such a bank is at least Rs. 2 crore. The promoters of the bank may comprise individuals, corporate entities, trusts and societies. These banks are set up in district towns, and hence their focus of lending will be to agriculture and allied activities, SSI, agro-industrial activities, trading activities and the non-farm sector with a view to ensuring the provision of timely and adequate credit to the local clientele in the area of operation. The area of operation of the bank is a maximum of three geographically neighbouring districts and they are allowed to open branches only in their area of operation Local Area Banks are subject to prudential norms, accounting policies and other policies as are laid down by RBI. The banks have to achieve capital adequacy of 9 per cent of the risk weighted assets and norms for income recognition, asset classification and provisioning are also applicable to them. The banks have to observe the priority sector lending targets at 40 per cent of adjusted net bank credit (ANBC) as applicable to other domestic banks.

There are four local area banks operating: Capital Local Area Bank Ltd. in Punjab having branches in three districts—Jalandhar, Hoshiarpur, and Kapurthala, Coastal Local Area Bank Ltd in Andhra Pradesh, Krishna Bhima Samruddhi Local Area Bank Ltd. which operates in Mehaboobnagar district of Andhra Pradesh, Gulbarga, and Raichur districts in Kamataka. and Subhadra Local Area Bank Ltd in Kolhapur.

Conclusion

In the last few years, the health of banking system has improved in profitability, productivity, asset quality and capital adequacy. Amid stiff competition from private sector banks and the turbulent economic environment, all the 27 public sector banks logged a 23 per cent growth in profit at Rs. 52,771 crore while their bad assets fell below three per cent during 2008–09. The Indian banking sector withstood the repercussions of the global finanical crisis and emerged as sound and efficient sector.

The New Basel Accord has been implemented since April 2009. Banks will require a large amount of funds and personnel expertise to manage risk. Banks will be required to put in place systems for internal controls and risk management.

Internet banking is gaining ground. Internet allows services to be provided from anywhere in the world but it carries high risks for banks. This will require continuous vigilance on the part of banks and coordination of regulation at the international level.

As the prime borrowers are increasingly borrowing abroad, banks need to diversify into less risky retail banking, explore a huge segment of business that is pining for bank funds, abandon traditional reliance on collateral and develop the skills to assess business potential, while making lending decisions. Banks have started taking interest in building the fee income stream with the advent of capital adequacy norms for banks. Fee income represents the income earned on services provided by the bank like demand drafts, telegraphic transfers, brokerage or commission earned on forex transactions, distribution of third party products like mutual funds, insurance, and financial advisory services. Fee income is a relatively easier way to increase revenues as the business does not involve any fund based exposure like a loan or cash advance. The trading income on investments was high for the banks under the soft interest rate regime. With interest rate hardening now, profits from treasury operations have gone down for most banks. Banks will have to book depreciation in their portfolio—depreciation would be adjusted against profits on treasury income. The greater the share of treasury income, the higher is the degree of volatility in bank's profits. Hence, a very high dependence on treasury earnings is not a sign of strength in earnings growth. Banks should focus on their core business, increase their fee-based income and cut down their costs.

Public sector banks need to focus on systems, reskilling people, and growing their loan portfolios.

The function of banking is no longer acceptance of deposits for lending. Banking today refers to intermediation and managing risks. Banks will have to focus not only on capital adequacy but also on capital efficiency–how quickly capital flows to its efficient use. To sum up, banks need to develop sound corporate governance practices to face the challenges of the changing future scenario.

COOPERATIVE BANKING

Cooperative Banking

- Urban Cooperative Banks
- Rural Cooperative Banks

Cooperative banks came into existence with the enactment of the Cooperative Credit Societies Act of 1904 which provided for the formation of cooperative credit societies. Subsequently, in 1912, a new act was passed which provided for the establishment of cooperative central banks. Cooperative credit institutions play a pivotal role in the financial system of the economy in terms of their reach, volume of operations, and the purpose they serve.

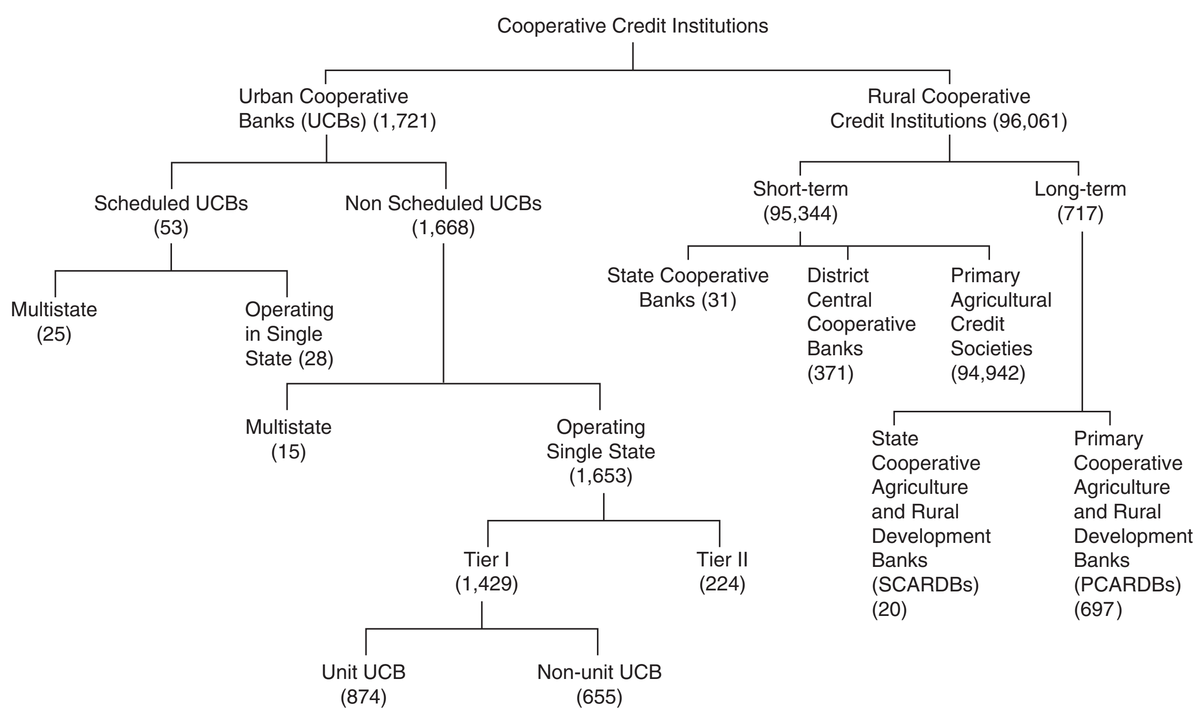
Cooperative banks fill in the gaps of banking needs of small and medium income groups not adequately met through by the public and private sector banks. The cooperative banking system supplements the efforts of the commercial banks in mobilising savings and meeting the credit needs of the local population.

A cooperative bank is member promoted and has to be registered with the state-based Registrar of Cooperative Societies. It functions with the rule of 'one member one vote' and on 'no-profit, no loss basis'.

The cooperative credit sector in India comprises rural cooperative credit institutions and urban cooperative banks. The rural cooperative credit institutions comprise of institutions such as state cooperative banks, district central cooperative banks, and primary agricultural credit societies, which specialise in short-term credit, and institutions such as state cooperative agriculture and rural development banks and primary cooperative agriculture and rural development banks, which specialise in long-term credit.

Urban cooperative banks (UCBs) are mostly engaged in retail banking. They are not permitted to deal in foreign exchange directly because of the high risks involved in forex business. Only three UCBs, namely, the Saraswat Cooperative Bank Limited, the Bombay Mercantile Cooperative Bank Limited, and the Maharashtra State Cooperative Bank Limited, have been authorised by the Reserve Bank to deal in foreign exchange. Their exposure to non-fund business like issuance of bank guarantees and letters of credit is also limited. Their exposure to corporate (wholesale) banking is also limited due to factors such as small size of their balance sheet and inadequate expertise.

UCBs expanded by leaps and bounds in the 1970s and in the 1990s. Both these decades were periods of high economic growth which led to a great demand for funds inadequately met by public sector banks. In 1993, the Narasimham Committee recommended the liberalisation of norms for cooperative banks Organisational Structure of Cooperative Credit Institutions which led to a surge in the number of cooperative banks. There are a large number of UCBs in Maharashtra, Gujarat, Karnataka, Andhra Pradesh, and Tamil Nadu.



Source: RBI, *Report on Trend and Progress of Banking in India*, 2008–09.

Note: Figures in brackets indicate the number of institutions at end March 2009 for UCBs and at end March 2008 for rural cooperative credit institutions.

Figure 13.2 Structure of Cooperative Credit Institutions

UCBs are included in the second schedule of the RBI Act, 1934, if their net demand and time liabilities (NDTL) are at least Rs. 100 crore and their overall functioning in terms of socket parameters is satisfactory.

Cooperative banks came under the purview of the Banking Regulations Act only in 1966. UCBs are supervised by the RBI, while rural cooperative credit societies are supervised by the NABARD. State registrars of cooperative societies also regulate certain functions of both urban and rural cooperative banks/societies. Multi-State UCBs are regulated by the union government as well and are registered under the Multi-State Cooperative Societies Act. The RBI is the regulatory and supervisory authority of UCBs for their banking operations while managerial aspects come under the purview of the state governments under their respective cooperative societies act. UCBs area of operation mostly confines to a single district or the adjoining districts. Only UCBs with Rs. 50 crore net owned funds or above can extend their area of operation to the entire country.

Urban Cooperative Banks

UCBs mobilise savings from the middle and low income urban groups and purvey credit to the weaker sections. They cater to the needs of small borrowers in the non-agricultural sector. The UCBs are varied and heterogeneous is terms of geographical spread, size, strength, levels of professionalism and performance and customer segments UCBs rely mostly on deposits as source of funds. The members bring in the share capital which cannot be withdrawn before the minimum lock-in period. UCBs are not permitted to issue shares at a premium. UCBs were brought under the purview of the Banking Regulation Act, 1949 in 1966. (As applicable to cooperative societies (AACS)). UCBs are registered as societies under the cooperative Societies Act of the respective state governments, and UCBs that have a multistate presence are registered under the Multi-state Cooperative Societies Act administered by the Government of India. The size of cooperative banks is comparatively smaller than that of commercial banks. Moreover, the cooperative structure in India gets a preferential treatment and regulations are relatively soft for this sector. The UCBs are regulated by three authorities: the central government (in case of banks havingmulti-state presence), state governments and the RBI. This multi-authority regulation has resulted in overlapping jurisdiction and difficulties in regulating these banks.

- Urban cooperative banks mobilise savings from the middle and low income urban groups and purvey credit to the weaker sections. They cater to the needs of small borrowers in the non-agricultural sector

UCBs are categorised as scheduled and non-scheduled. There are Mahila (women) UCBs, Scheduled Caste/Tribe UCBs and salary earners UCBs. Around 80 per cent of the UCBs are concentrated in five states, namely, Maharashtra, Gujarat, Karnataka, Andhra Pradesh and Karnataka which account for 72 per cent of total number of UCBs. There were 1,721 UCBs with 7,670 branches as at end-March 2009 and they provided credit to around 7 million borrowers aggregating Rs. 97,918 crore.

The RBI grants licenses to cooperative banks based on certain entry point norms. Initially, the entry norms for cooperative banks was very liberal. The RBI revised these norms in August 2000 prescribing four categories based on population criterion. According to the new norms, UCBs should have

- a minimum share capital of Rs. 4 crore and membership of at least 3,000, if the population is over 10 lakh;
- a minimum share capital of Rs. 2 crore and membership of at least 2,000 if the population is between five to 10 lakh;
- a minimum share capital of Rs. one crore and membership of at least 1,500 for population of one to five lakh; and
- a minimum share capital of Rs. 25 lakh and membership of at least 500 for population of less than one lakh. The number of licensed UCBs increased from 1,849 to 1,937 between end March 2000 and end March 2001.

New UCBs will have to achieve the prescribed share capital and membership before license is issued to them.

On October 30, 2003, the Government of India issued a notification enhancing the minimum demand and time liabilities of a cooperative bank to be included in second schedule of the RBI. As per this notification, the minimum demand and time liabilities that a cooperative bank should have to qualify for inclusion in second schedule has been enhanced to Rs. 250 crore from Rs. 100 crore.

There is a two-tier regulatory structure for UCBs. Banks falling under the following categories are classified as Tier I banks: (i) unit banks, *i.e.,* banks having a single branch/head office and banks with deposits below Rs. 100 crore, whose branches are located in a single district; (ii) banks with deposits below Rs. 100 crore having branches in more than one district, provided the branches are in contiguous districts, and deposits and advances of branches in one district separately constitute at least 95 per cent of the total deposits and advances, respectively, of the bank; (iii) banks with deposits below Rs. 100 crore, whose branches were originally in a single district but subsequently, became multi-district due to reorganisation of the district. The deposit base of Rs. 100 crore would be determined on the basis of average of fortnightly net demand and time liabilities (NDTL) in the financial year concerned and that of advances on the basis of fortnightly average in the financial year concerned. Rest of the UCBs are categorised as Tier II banks.

TABLE 13.14 Profile of UCBs

*(End-March 2009)**

(Amount in Rs. Crore)

1	*Non-scheduled* *2*	*Scheduled* *3*	*All* *4*
Number	1,668 (97.0)	53 (3.0)	1,721 (100.0)
Assets	1,10,500 (56.3)	85,895 (43.7)	1,96,395 (100.0)
Deposits	90,804 (57.2)	67,929 (42.8)	1,58,733 (100.0)
Advances	55,684 (56.9)	42,234 (43.1)	97,918 (100.0)
Investments	34,961 (56.5)	29,210 (43.5)	64,171 (100.0)
Total Number of Deposits Accounts	39,143,063 (73.0)	14,487,941 (27.0)	53,631,004 (100.0)
Total Number of Borrowal Accounts	6,761,846 (85.6)	1,138,934 (14.4)	7,900,780 (100.0)

*: Data are provisional.

Note: 1. Figures in parentheses are percentages to their respective totals.
2. Components may not add up to respective totals due to rounding off.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2008–09.

Some Sheduled UCBs

- Abhyudaya Cooperative Bank Ltd
- Ahmedabad Mercantile Cooperative Bank Ltd
- Amanath Cooperative Bank Ltd, Bangalore
- Andhra Pradesh Mahesh Cooperative Urban Bank Ltd
- Bharat Cooperative Bank (Mumbai) Ltd
- Cosmos Cooperative Urban Bank Ltd
- Goa Urban Cooperative Bank Ltd
- Jalgaon Janata Sahakari Bank Ltd
- Karad Urban Cooperative Bank Ltd
- Kalupur Commercial Cooperative Bank Ltd
- Sangli Urban Cooperative Bank Ltd
- Saraswat Cooperative Bank Ltd, Bombay
- The Akola Urban Cooperative Bank Ltd, Akola

Supervision and Inspection of UCBs

The RBI undertakes audit and on-site inspection of the scheduled and weak UCBs annually, whereas well-functioning non-scheduled UCBs are inspected once in three years and all other UCBs are inspected once in two years. A rating system of evaluating performance finalised for UCBs and this was implemented for scheduled UCBs from March 2003.

The periodicity of carrying out inspections is too large. Moreover, this inspection is not regularly carried out as the number of UCBs has increased. Hence, a system of continuous off-site supervision has been put in place through a set of periodical prudential returns which cover asset and liability position, profitability, non-performing assets, and details on credit portfolio and large exposures. Besides, various measures such as close monitoring of the submission of statutory returns by the banks, and special scrutiny of their books of accounts in case of default in maintaining CRR/SLR have been initiated to step up supervisory efforts towards banks developing serious financial problems after they received licenses.

All scheduled UCBs and other UCBs with high level of transactions in government securities were advised by the RBI to conduct special audits by chartered accountants.

The off-site surveillance system for supervision of all scheduled UCBs was extended to nonscheduled banks with deposit base of over Rs. 100 crore with effect from June 2004.

Statutory Reserve Requirements The scheduled UCBs are required to maintain a cash reserve ratio (CRR) at 5.5 per cent of the net demand and time liabilities (NDTL). Statutory liquidity ratio to be maintained is 25 per cent. Scheduled UCBs will have to deploy the entire SLR fund in government/approved securities. Non-scheduled UCBs in Tier I shall maintain SLR in the form of Government and other approved securities not less than 7.5 per cent of their NDTL by September 30, 2009 and 15 per cent of their NDTL by March 31, 2010. The exemption shall stand withdrawn effective from April 1, 2010. Non-scheduled UCBs in Tier-II shall hold SLR in Government and other approved securities not less than 15 per cent of their NDTL up to March 31, 2010. From March 31, 2011 onwards all non-scheduled UCBs shall be required to maintain SLR in Government and other approved securities up to 25 per cent of their NDTL.

Investments in Non-SLR Securities by UCBs

1. **Prudential limit:** The Non-SLR investments will be limited to 10 per cent of a bank's total deposits as on March 31 of the previous year.

2. **Instruments:** UCBs may invest in the following instruments:
   a. 'A' or equivalent *and higher* rated Commercial Papers (CPs), debentures and bonds.
   b. Units of Debt Mutual Funds and Money Market Mutual Funds.
3. **Restrictions**
   a. Investment in perpetual debt instruments is not permitted.
   b. Investment in unlisted securities should be subject to a minimum rating prescribed at (ii) above and should not exceed 10 per cent of the total non-SLR investments at any time. Where banks have already exceeded the said limit, no further investment in such securities will be permitted.
   c. Investment in deep discount/zero coupon bonds should be subject to the minimum rating as stated above and comparable market yields for the residual duration.
   d. Investment in units of mutual funds, other than units of debt mutual funds and money market mutual funds, are not permitted. The existing holding in units of mutual funds other than debt mutual funds and money market mutual funds, including those in UTI should be disinvested. Till such time that they are held in the books of the bank, they will be reckoned as non-SLR investments for the purpose of the limit at (i) above. The banks should, however, review risk management policy in place that ensures that they do not have disproportionate exposure in any one scheme of a mutual fund.
   e. Non-SLR investment, other than in units of debt mutual funds and money market mutual funds, and CPs, shall be in instruments with an original maturity of over one year.
   f. Fresh investments in shares of All India Financial Institutions (AIFIs) will not be permitted. The existing share holding in these institutions may be phased out and till such time they are held in the books of the bank, they will be reckoned as Non-SLR investments for the purpose of the limit at (i) above.
   g. All fresh investments under Non-SLR category should be classified under held for trading (HFT)/available for sale (AFS) categories only and marked to market as applicable to these categories of investments.
   h. All non-SLR investments will be subject to the prescribed prudential single/group counter party exposure limits.
   i. All transactions for acquisition/sale of non-SLR investments in secondary market may be undertaken only with commercial banks/primary dealers as counterparties.

SLR investments are the most preferred form of investment for UCBs (Table 13.15).

Placement of Deposits with Other Banks by UCBs

1. **Prudential inter-bank (gross) exposure limit:** The total amount of deposits placed by an UCB with other banks (inter-bank) **for all purposes** including call money/ notice money, and deposits, if any, placed for availing clearing facility, CSGL facility, currency chest facility, remittance facility and non-fund based facilities like bank guarantee (BG), letter of credit (LC), etc. shall not exceed 20 per cent of its total deposit liabilities as on March 31 of the previous year. The balances held in deposit accounts with commercial banks and in permitted scheduled UCBs and investments in certificate of Deposits issued by commercial banks, being inter bank exposures, will be included in this 20 per cent limit.
2. **Prudential inter-bank counter party limit:** Within the prudential inter-bank (gross) exposure limit, deposits with any single bank should not exceed 5 per cent of the depositing bank's total deposit liabilities as on March 31, of the previous year.
3. **Exemptions from the prudential limit:** Non-scheduled UCBs in Tier I have been exempted from maintaining SLR in Government and other approved securities up to 15 per cent of their NDTL provided the amount is held in interest bearing deposits with the Public Sector Banks and IDBI bank Ltd. These deposits are exempted from the prudential limit on inter-bank exposure limits.

   As per the provisions of Section 24 of the Banking Regulation Act, 1949 (AACS), deposits placed by UCBs with the higher financing agencies in the cooperative sector, viz., DCCBs/StCBs would be reckoned as SLR assets to the extent they are not encumbered.

   However, when a UCB avails of a loan from a DCCB/StCB with which it is maintaining deposits, for the purpose of computation of SLR, the amount of loan availed from the DCCB/StCB, would be deducted from the deposits, irrespective of whether lien has been marked on such deposits or not.

TABLE 13.15 Investments by Urban Cooperative Banks

(Amount in Rs. Crore)

Item	*As at End-March*			*Percentage Variations*
	2007	*2008*	*2009P*	*2008–09P*
1	*2*	*3*	*4*	*5*
Total Investments (A+B)	**50,859 (100.0)**	**56,912 (100.0)**	**64,171 (1000)**	**12.8**
A. SLR Investments (i to vi)	**42,742 (84.0)**	**52,302 (91.9)**	**58,677 (91.4)**	**12.2**
(i) Central Government Securities	26,826 (52.7)	33,408 (58.7)	36,205 (56.4)	8.4
(ii) State Government Securities	3,633 (7.1)	4,330 (7.6)	4,564 (7.1)	5.4
(iii) Other Approved Securities	918 (1.8)	1,040 (1.8)	819 (1.3)	21.3
(iv) Term Depoits with StCBs	4,542 (8.9)	4,081 (7.2)	5,406 (8.4)	32.5
(v) Term Deposits with DCCBs	6,382 (12.5)	8,163 (14.3)	9,258 (14.4)	13.4
(vi) Others, if any	441 (0.9)	1,280 (2.2)	2,425 (3.8)	89.5
B. Non-SLR Investments	**8,117 (16.0)**	**4,610 (8.1)**	**5,494 (8.6)**	**19.2**

(in bonds of public sector Institutions/AIFIs, shares of AIFIs and units of mutual funds)
P : Provisional.
Note: 1. Figures in parentheses are percentages to total investments.
2. Components may not add up to respective totals due to rounding off.
Source: RBI, *Report on Trend and Progress of Banking in India*, 2008–09.

4. The amount of deposits placed by a non-scheduled UCB with any scheduled UCB should not exceed 5 per cent of the depositing bank's total deposit liabilities as on March 31 of previous year. The total inter-UCB deposits accepted by a scheduled UCB should not exceed 10 per cent of its total deposit liabilities as on March 31st of the previous financial year as hither to.
5. Keeping in view the above prudential limits, UCBs may formulate a policy taking into account their funds position, liquidity and other needs for placement of deposits with other banks, the cost of funds, expected rate of return and interest margin on such deposits, the counter party risk, etc. and place it before their Board of Director. The Board should review the position at least at half yearly interval

Existing Mahila Banks which conform to the entry point norms for general category banks, can enrol male members up to a limit of 25 per cent of their total regular membership, subject to compliance by the banks with their respective bye-laws.

Priority Sector Lending Priority sector lending target for UCBs was brought at par with the target applicable to commercial banks, i.e., 40 per cent of the adjusted bank credit (ABC) (total loans and advances plus investments made by UCBs in non-SLR bonds) or credit equivalent amount of off balance sheet exposure (OBE), whichever is higher, as on March 31 of the previous year.

But there are no penal provisions for non-attainment of targets to priority sector and weaker sections. However, there are indirect incentives such as branch expansion, expansion of areas of operation, and attainment of scheduled status, which are dependent on the attainment of priority sector/weaker section targets by banks.

Lending to the Stock Market The RBI put a stop on lending by the UCBs directly or indirectly against security of stocks. UCBs were also advised to unwind existing lending to stockbrokers or direct investment in shares on the contracted dates.

It was proposed to allow UCBs to grant loans to individuals against security of shares, subject to the following parameters.

- Loans against shares/debentures may be granted to individuals to meet contingencies and personal needs or for subscribing to rights or new issues of shares/debentures or for purchase in the secondary market. Loans against primary/collateral security of shares/debentures will be limited upto Rs. five lakh, if the security is in physical form and upto Rs. 10 lakh, if the security is in demat form. Aggregate of all such loans should be within the overall ceiling of 20 per cent of the owned funds of the bank, and margin of 40 per cent should be maintained in all cases of such loans.

- It is essential that before accepting shares as security, UCBs should put in place a risk management system. UCBs should also have audit committee of their boards of directors and all the approved loan proposals should be placed before the audit committee at least once in two months. Details of loans sanctioned should be reported to the board in the subsequent board meeting. The management and audit committee should ensure that all loans against shares are made only to those individuals who are not in any way connected with any stock-broking activity or stock-broking entity.
- UCBs which have outstanding loans to individuals can renew them upto permissible amounts beyond the contracted date on merits, subject to the above conditions.
- UCBs should ensure that there is no direct investment by them in either primary or secondary market under any circumstances.

Deployment of Funds UCBs can grant loans to individuals against security of shares within the overall limit of 20 per cent of owned funds of the bank, subject to certain restrictions.

Advances UCBs cannot extend unsecured credit beyond Rs. 50,000 per borrower. As a prudential measure aimed at better risk management and avoidance of concentration of credit risk, UCBs were advised (a) to fix the prudential exposure limits at 15 per cent and 40 per cent of the capital funds in case of single borrower and group of borrowers respectively. UCBs cannot extend fund based/nonfund based facilities to builders/contractors for acquisition of land even as a part of a housing project. Further, wherever land is accepted as collateral, valuation of such land should be at the current market price only.

Interest on Deposits UCBs are allowed to offer higher interest rates on savings and current accounts by 1.0 per cent and 0.5 per cent, respectively, vis-a-vis the commercial banks. Higher interest rates have been allowed to facilitate deposit mobilisation by UCBs.

Refinance Facilities The RBI extends refinance at the bank rate to UCBs against the advances granted by them to the tiny/cottage industries. Since 2000–01, NABARD has designated scheduled UCBs as eligible institutions for drawing refinance in respect of loans issued for rural non-farm sector, including rural housing and for other agricultural activities.

Long-term Deposits UCBs are permitted to raise term deposits for a minimum period of not less than five years, which will be eligible to be treated as Tier II capital.

Share Linkage Norms Borrowings from UCBs are linked to shareholdings of the borrowing members. At present, the shareholding requirement is 2.5 per cent for secured borrowings and 5 per cent for unsecured borrowings. The extant share linking norm may be applicable for member's shareholdings upto the limit of 5 per cent of the total paid up share capital of the bank Where a member is already holding 5 per cent of the total paid up share capital of an UCB, it would not be necessary for him to subscribe to any additional share capital on account of the application of the extant share linking norms. In other words, a borrowing member may be required to hold shares for an amount that may be computed as per the extant share linking norms or for an amount that is 5% of the total paid up share capital of the bank, whichever is lower.

Classification of Capital Funds

Capital funds are divided into Tier I capital and Tier II capital. Elements of Tier II capital are reckoned as capital funds up to a maximum of 100 per cent of Tier I capital. Tier II capital may further be divided into upper and lower tiers. Perpetual Cumulative Preference Shares (PCPS), Redeemable Non-Cumulative Preference Shares (RNCPS) and Redeemable Cumulative Preference Shares (RCPS) would be treated as upper Tier II capital. Long Term Deposits would be treated as lower Tier II capital. PNCPS should not exceed 20 per cent of Tier I capital (excluding PNCPS). Long term deposit should not exceed 50 per cent of Tier I capital and that total Tier II should not exceed Tier I capital.

Tier II capital would be reckoned as capital funds for capital adequacy purpose even if a bank does not have Tier I capital up to March 31, 2013 for banks that are having CRAR less than the 9 per cent.

However, during this period, for the purpose of capital adequacy requirement, lower Tier II capital alone would be restricted to 50 per cent of the prescribed CRAR and the progressive discount in respect of Tier II capital would, be applicable.

As at end March 2004, 1,485 UCBs were complying with the regulating minimum of 9% (Table 13.16).

TABLE 13.16 CRAR-wise Distribution of All UCBs

*(End-March 2009)**

(Per Cent)

Range of CRAR (Per Cent)	*<3*	*3 to 6*	*6 to 9*	*>9*	*Grand Total*
1	*2*	*3*	*4*	*5*	*6*
Non-Scheduled	136	24	66	1,442	1,668
Scheduled	8	1	1	43	53
All UCBs	**144**	**25**	**67**	**1,485**	**1,721**

*: Data are provisional.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2008–09.

Asset Classification and Provisioning Norms

The asset classification and provisioning norms for Tier I UCBs are: (i) the 180 day loan delinquency norm for NPAs was extended by one year, *i.e.*, up to March 31, 2009; (ii) the 12-month period for classification of a ‘sub-standard’ asset in ‘doubtful’ category by Tier I UCBs would be made effective from April 1, 2009 (iii) these banks would be required to provide 100 per cent on the secured portion of D-III advances (‘doubtful’ for more than 3 years) as on or after April 1, 2010; and (iv) for the outstanding stock of D-III advances as on March 31, 2010, banks would be required to provide: (a) 50 per cent as on March 31, 2010; (b) 60 per cent as on March 31, 2011; (c) 75 per cent as on March 31, 2012; and (d) 100 per cent as on March 31, 2013.

For Tier II banks, 100 per cent provisioning norms for advances classified as D-III would be applicable on or after April 1, 2007 Consequently, for the outstanding stock of D-III assets as on March 31, 2007, banks are required to provide: (a) 50 per cent up to March 31, 2007; (b) 60 per cent as on March 31, 2008; (c) 75 per cent as on March 31, 2009; (d) 100 per cent as on March 31, 2010.

UCBs can take recourse to the SARFAESI Act for recovery of NPAs.

Table 13.17 reflects a decline in the gross NPAs and gross NPA ratio during 2008–09.

TABLE 13.17 Gross Non-performing Assets of Urban Cooperative Banks

End-March	*No. of Reporting UCBs*	*Gross NPAs (Rs. Crore)*	*Gross NPAs as Percentage of Gross Advances*	*Net NPAs (Rs. Crore)*	*Net NPAs as Percentage of Net Advances*	*Net NPAs as Percentage of Gross Advances*
1	*2*	*3*	*4*	*5*	*6*	*7*
2005	1,872	15,486	23.2	8,257	–	12.1
2006	1,853	13,506	18.9	6,335	–	12.3
2007	1,813	14,541	18.3	6,235	8.8	7.8
2008	1,770	14,037	15.5	6,083	7.7	7.5
2009P	1,721	13,043	13.3	5,318	6.1	–

P : Provisional

– : Not available.

Note: Components may not add up to respective totals due to rounding off.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2008–09.

Weak UCBs The UCBs are classified into strong and weak UCBs. The RBI revised the criteria for identification of weak UCBs in April 2002. A UCB is categorised as weak for the following reasons.

- The financial position is unsatisfactory, beyond specific threshold limits in terms of capital adequacy, i.e., CRAR below 75 per cent of the statutory minimum.

- Its non-performing assets (NPA) are above 10 per cent but below 15 per cent of outstanding loans and advances.
- It has incurred net losses for two out of last three consecutive years.

Weak banks are required to draw up a time bound package for revival and the implementation of this package would be monitored by the RBI and the registrar of cooperative societies.

If a UCB exhibits one of the above three symptoms, it is identified as weak. If the condition of the UCB deteriorates even further in terms of either NPA or profitability along with capital adequacy, then UCB would classified as sick. Sick UCBs would then be put under moratorium or liquidation. The RBI has laid down guidelines for merger/amalgamation of UCBs of the following types, subject to the post-merger entity meeting the prescribed prudential norms.

- Net worth of the acquiree bank is positive and the acquirer bank assures to protect entire deposits of all the depositors of the acquired bank.
- When the net worth of the acquiree bank is negative, the acquirer bank on its own assures to protect deposits of all the depositors of the acquired bank.
- When the net worth of the acquiree bank is negative and the acquirer bank assures to protect the deposits of all the depositors with financial support from the state government extended upfront as part of the process of merger.

The RBI has also laid down norms for financial restructuring of the liabilities of the weak UCB as an additional option for resolution of problem banks provided they conform to the following norms:

1. The interest of small depositors has to be protected in full. Accordingly, no conversion into equity will be permitted in the case of small depositors, i.e., depositor having deposit upto Rupees one lakh.
2. A portion of the deposit of individual depositors above Rupees one lakh may be converted into equity. Likewise, a portion of the deposits of the institutional depositors may be converted into Innovative Perpetual Debt Instrument (IPDI), which is eligible for inclusion as Tier I capital.
3. The conversion of deposits into equities and IPDI would be subject to consent of the depositors/ their forum.
4. Post-restructuring, no shares (equities) will be redeemed until the bank achieves a CRAR of 9 per cent.
5. The proportion of deposits converted into equity / IPDI should be such that the net worth of the bank after reconstruction turns positive.
6. The bank will have to maintain CRR / SLR on the restructured liabilities.
7. Post-restructuring, the management of the bank should be in the hands of a Board of Administrators consisting of representatives of individual depositors as well as professional bankers to ensure proper implementation of the reconstruction scheme including recovery of NPAs.

UCBs are graded into four categories on the basis of their financial performance. Grade I and II UCBs are relatively stronger banks and Grade III and IV are weak or sick banks.

Guidelines for Merger of UCBs (Having Negative Net Worth) with DICGC Support

UCBs whose net worth was assessed negative through statutory inspections with reference to their financial position as on March 31, 2007 or earlier are eligible for merger with DICGC support. The UCB to be merged should be registered either in a State, which has signed MOU with the RBI or under the Multi-State Cooperative Societies Act, 2002, where RCS concerned assures to order merger in public interest as provided under the respective State Cooperative Societies Act or where CRCS prepares a scheme of amalgamation under Section 18 of the Multi-State Cooperative Societies Act, 2002. The scheme of merger should provide the proportion of deposits of the transferor bank, which will be paid by the transferee bank out of the 'readily realisable assets' of the transferor bank and from its own contribution, hereafter referred to as 'deposit coverage ratio'. The deposit coverage ratio shall not be less than 65 per cent. Higher deposit coverage ratio may be insisted upon depending upon the RBI assessment. The difference between the 'net outside liabilities' and 'net readily realisable assets', hereafter called the 'uncovered gap' would be met through contribution to be made by the transferee bank, claim on DICGC and sacrifice to be made by the large depositors.

Well managed and financially sound UCBs are allowed to open new branches/extension counters including off-site ATMs in the States that have signed MoUs with the Reserve Bank for supervisory and regulatory co-ordination and those registered under the Multi-State Co-operative Societies Act, 2002. They are also permitted to open NRE account subject to compliance with eligibility norms laid down by the RBI.

TABLE 13.18 Financial Performance of All UCBs

(Amount in Rs. Crore)

Item	*As at End-March*			*Percentage Variations 2008–09P*
	2007	*2008*	*2009P*	
1	*2*	*3*	*4*	*5*
A. Total Income (i+ii)	**12,281 (100.0)**	**15,385 (100.0)**	**18,952 (100.0)**	**23.2**
(i) Interest Income	11,217 (91.3)	13,833 (89.9)	17,027 (89.8)	23.1
(ii) Non-interest Income	1,066 (8.7)	1,552 (10.1)	1,925 (10.2)	24.0
B. Total Expenditure (i+ii)	**9,797 (100.0)**	**12,400 (100.0)**	**15,402 (100.0)**	**24.2**
(i) Interest Expenditure	6,696 (68.3)	8,966 (72.3)	10,992 (71.4)	22.6
(ii) Non-interest Expenditure	3,099 (31.6)	3,434 (27.7)	4,411 (28.6)	28.5
of which:				
wage bill	1,150	1,836	2,445	33.2
C. Profit				
(i) Amount of Operating Profit	2,483	2,985	3,549	18.9
(ii) Provisions, Contingencies, Taxes	1,311	1,464	1,803	23.2
(iii) Amount of Net Profit	1,173	1,520	1,746	14.9

P: Provisional.
Note: 1. Figures in parentheses are percentages to respective totals.
2. Components may not add up to respective totals due to rounding off.
Source: RBI, *Report on Trend and Progress of Banking in India*, 2008–09.

- The non-interest income of a bank composes fee income, trading income on investments, income from foreign exchange operations and miscellaneous income
- Fee income represents the income earned on services provided by the bank like demand draft, telegraph transfers, distribution of third party products like mutual funds and insurance, and financial advisory services

UCBs have created a separate niche for themselves. They have played a significant role in creating banking habits among the lower and middle income groups and in semi-urban credit delivery through their extensive networks. In the post liberalisation era, many of the strong UCBs were involved in capital market scams: the 2001 Ketan Parekh scam and Home Trade Finance scam of 2002. Many of the depositors in Gujarat and provident funds in Maharashtra lost crores of rupees.

Moreover, the financial health of some UCBs has deteriorated due to high level of non-performing assets while some others are facing financial problems such as low capital base, lack of professionalism in conduct and management, poor recoveries, lack of funds for fresh deployment, mounting overdues, inadequate internal controls, and non-adherence to norms and regulations and low levels of diversification in business operations. Besides, there is increasing political clout on UCBs which acts as a constraint on their functioning. There is an absence of effective and coordinated regulation and supervision as they are under the regulatory control of multiple authorities. This is a major impediment to the strengthening and revitalisation of this sector.

Rural Cooperative Banks

Rural cooperative banks play an important role in the rural credit delivery system as they account for around 30 per cent of rural deposits and 44 per cent of the outstanding loans and advances of the banking system for agriculture and rural development. About 55 per cent of the short-term production loans for the agriculture sector come from cooperative credit institutions. Credit cooperatives form almost 70 per cent of the rural credit outlets. These rural cooperative banks receive refinance facility from NABARD.

Short-term Structure of Rural Cooperative Banks State Cooperative Banks (StCBs) are the apex institutions coordinating and regulating the working of Central Cooperative Banks (CCBs). They form the upper tier of short-term credit structure dispensing mainly short-and medium-term credit. As at end

March 2007, there were 31 StCBs of which, 17 were scheduled StCBs included in the second schedule under section 42 of the Reserve Bank of India Act, 1934 (Table 13.19).

Short-term Structure of Rural Cooperative Banks

- State cooperative banks form the upper tier
- Central cooperative banks the middle tier
- Primary agricultural societies the lower tier

Central cooperative banks (CCBs)—the middle tier in the short-term structure of rural cooperative banks—channelise funds from the state cooperative banks to primary agricultural credit societies. Deposits constitute the major component of sources of funds followed by borrowings. There were 371 CCBs on March 31, 2007.

Primary agricultural credit societies (PACSs) deal directly with the individual farmers, provide short- and medium-term credit, supply agricultural inputs and also arrange for marketing of produce of its members through a cooperative marketing society. PACSs are the grassroots level arms of the shortterm cooperative credit structure. As on end March 2008, there were 94,942 PACSs with membership of more than 13 crore of which, borrowing members at 7.9 crore constituted around 37 per cent. PACS is possibly one of the largest rural financial systems in the world. They are excluded from the scope of the Banking Regulation Act, 1949. Most of the PACSs are dependent on the finance provided by CCBs.

TABLE 13.19 Performance of Short-term Cooperative Credit Strucutre

(As on March 31)

(Rs. Crore)

Particulars	*StCBs*			*DCCBs*		
	2006	*2007*	*2008*	*2006*	*2007*	*2008*
Number	31	31	31	366	369	371
Share Capital	1,135	1,246	1,468	4,753	5,458	4,967
Reserves	9,387	9,303	9,250	17,624	20,722	19,787
Deposits	45,860	48,560	52,973	88,397	94,329	1,02,986
Borrowings	17,071	22,256	22,164	24,352	29,912	26,096
Loans Issued	48,203	52,777	57,455	73,864	82,963	93,162
Loans Outstanding	39,996	47,354	48,228	79,936	89,038	91,374

Source: NABARD, *Annual Report*, 2007–08.

The financial health of a large number of PACSs has deteriorated. This is due to a large proportion of non-performing assets to total loans outstanding and erosion of funds and deposits. To improve the financial health of PACSs, NABARD provides financial support for computerisation, human resource development, and so on.

Long-term Structure of Rural Cooperative Banks The long-term credit structure has only about 2,500 retail outlets as compared to over 1,00,000 retail outlets of the short-term credit structure. The long-term structure has a membership of about 16 million out of which 82 per cent are borrowing members. This structure provides medium and long-term loans for mechanisation, animal husbandry, redeeming farmers' lands, improving farmers' lands, crop loans, gold loans, rural industries, and housing.

- State cooperative agriculture and rural development Banks (SCARDBs) and primary cooperative agriculture and rural development banks form the upper and lower tiers respectively of long-term credit cooperatives

State Cooperative Agriculture and Rural Development Banks (SCARDBs) form the upper tier of long-term cooperative credit structure dispensing investment credit. There were 20 SCARDBs on March 31, 2008. SCARDBs provide long-term credit and are predominantly dependent on borrowings for their financial resources. With a view to strengthening their resource base, SCARDBs were permitted to mobilise fixed deposits for term of not less than twelve months. They can raise long-term deposits subject to certain conditions.

The primary cooperative agriculture and rural development banks (PCARDBs) are the lower tier of long-term credit cooperatives. The PCARDBs also provide long-term credit and are heavily dependent on borrowings. There were around 697 PCARDBs as on March 31, 2008 (Table 13.20).

The long-term credit cooperative banks were earlier known as land development banks. Their structure is much smaller in size and their business volume is also low as compared to the short-term structure. The long-term structure has lost its position as the dominant source of long-term credit on account of various factors such as limited range of long-term products and services offered, competition from short-term credit cooperative structure and commercial banks, infrequent interaction among members, and scattered lending.

TABLE 13.20 Performance of Long-term Cooperative Credit Structure

(As on March 31)

(Rs. Crore)

Particulars	*SCARDBs*			*PCARDBs*		
	2006	*2007*	*2008P*	*2006*	*2007*	*2008P*
Number	20	20	20	696	696	697
Share Capital	798	792	789	921	922	912
Reserves	2,243	2,279	2,685	2,589	2,646	3,289
Deposits	651	602	695	378	355	350
Borrowings	17,029	16,684	16,519	13,167	12,767	12,411
Loans Issued	2,907	2,436	2,221	2,296	1,970	1,822
Loans Outstanding	17,678	18,625	18,325	12,870	12,108	11,756

Source: NABARD, *Annual Report*, 2007–08.

More than 80 per cent of their resources are from borrowings and the remaining 20 per cent is in the form of contribution from members, government and deposits. Members of the cooperative banks are required to contribute 5 to 10 per cent of the loan applied as share capital at the time of availing loans. because of infrequent borrower contacts, the share capital does not increase which compels them to resort to higher borrowings. The borrowings are in the form of debentures floated with state government guarantee and these debentures are subscribed by the NABARD to the extent of 90–95 per cent and the remaining portion is subscribed by the Government of India (GOI) and the state government. SCARDBs borrow to meet the needs of the PCARDBs.

Regulation and Supervision The RBI is the regulatory authority for StCBs and CCBs. Among the rural cooperative banks, only these two banks are covered under the scope of the Banking Regulation Act, 1949. The supervision of these two banks has been entrusted to NABARD. NABARD has constituted a board of supervision for rural cooperative banks.

A revival package for short-term credit cooperative structure was communicated to the state governments by the Government of India in January 2006. The Revival Package focuses on:

- Introducing legal and institutional reforms which will enable the cooperatives to function as autonomous member centric and member-governed institutions. These reforms will enable wider access to financial resources and investment opportunities, remove geographical restrictions in operations as well as provide administrative autonomy to cooperatives at all levels.
- Suitable amendments in the Banking Regulation Act and certain provisions in the NABARD Act.
- Providing resources for covering the accumulated losses.
- Providing for taking cooperatives to a minimum level of CRAR of 7 per cent.
- Meeting the costs of computerisation and human resource development at all the levels of the short-term credit structure.
- The sharing of the accumulated losses between GOI, state governments and the credit cooperative structure is based on the concept of origin of losses rather than any arbitrary proportions.

NABARD has been designated the implementing agency for implementing the revival package in all the states.

A revival package of Rs. 13,596 crore for the Short Term Cooperative Credit Structure for wiping out accumulated losses, covering invoked but unpaid guarantees given by State Governments, increasing the capital adequacy ratio to a minimum level of seven per cent and technical assistance including cost of audit, training, computerisation was approved by the government wherein the Centre, State Governments and the Cooperative Credit Structure (CCS) would share the funding on a 68:28:4 ratio.

Conclusion

The upper tier of both short-term and long-term rural cooperative credit institutions (StCBs, CCBs and SCARDBs)made profits during 2006–07, while the lower tier (PACS and PCARDBs) incurred overall losses. Asset quality in terms of NPA as a percentage of loans outstanding improved for all categories of rural cooperative banks, except PCARDBs, for which it remained at the previous year's level. The

TABLE 13.21 Accumulated Losses of Rural Cooperative Banks

(As on March 31)

(Rs. Crore)

Year	*StCBs*	*DCCBs*	*SCARDBs*	*PCARDBs*
2005	305	4,776	1,039	2,466
2006	276	5,298	924	2,725
2007	389	5,719	964	2,891
2008P	429	6,106	1,354	3,283

Source: NABARD, *Annual Report*, 2008–09.

TABLE 13.22 Composition of NPAs of Cooperative Banks

(As on March 31, 2008)

(Rs. Crore)

Asset Classification	*StCBs*	*DCCBs*	*SCARDBs*	*PCARDBs*
Sub-standard	2,779.29	7,868.62	3304.95	3,004.97
Doubtful	2,652.44	8,222.09	2802.80	2,111.07
Loss Assets	736.99	2,660.04	17.66	23.80
Total NPAs	6,168.99	18,740.75	6,125.41	5,139.81
Provisions Required	2,654.30	6,565.69	1,395.13	909.16
Provisions made	2,997.90	7,110.79	1,417.75	944.99

Source: NABARD, *Annual Report*, 2008–09.

recovery performance of CCBs, PACS, and PCARDBs improved, while that of state cooperative banks StCBs and SCARDBs worsened (Table 13.21, 13.22 and 13.23). Both the scheduled commercial banks (SCBs) and rural banks will need to focus on semi-urban and rural areas for future growth.

Cooperative banks are an important segment in the Indian banking structure. Effective and coordinated regulation can strengthen and revitalise this sector.

NON-BANKING FINANCIAL COMPANIES

Non-banking financial companies (NBFCs) constitute an important segment of the financial system. NBFCs are financial intermediaries engaged primarily in the business of accepting deposits and delivering credit. They play an important role in channelising the scarce financial resources to capital formation. NBFCs supplement the role of the banking sector in meeting the increasing financial needs of the corporate sector, delivering credit to the unorganised sector and to small local borrowers. But they differ from banks in many ways. An NBFC can accept deposit but not demand deposits and hence, they cannot raise low cost funds through savings or current accounts. Moreover, it is not a part of the payment and settlement system, cannot issue cheques drawn on itself and cannot borrow from the RBI. NBFCs have a more flexible structure than banks. As compared to banks, they can take quick decisions, assume greater risks, and tailor-make their services and charges according to the needs of the clients. Their flexible structure helps in broadening the market by providing the saver and investor a bundle of services on a competitive basis.

- NBFCs supplement the role of the banking sector in meeting the increasing financial needs of the corporate sector, delivering credit to the unorganised sector and to small, local borrowers. NBFCs have a more flexible structure than banks

A non-banking financial company has been defined vide clause (b) of Section 45–1 of Chapter IIIB of the Reserve Bank of India Act, 1934, as (i) a financial institution, which is a company; (ii) a non-banking institution, which is a company and which has as its principal business the receiving of deposits under any scheme or arrangement or in any other manner or lending in any manner; (iii) such other non-banking institutions or class of such institutions, as the bank may with the previous approval of the central government and by notification in the official gazette, specify.

NBFC has been defined under Clause (xi) of Paragraph 2(1) of Non-Banking Financial Companies Acceptance of Public Deposits (Reserve Bank) Directions, 1998, as: 'non-banking financial company'

TABLE 13.23 Working Results of Cooperative Banks

(Rs. Crore)

Agency/ Year	*Total (No.)*	*In Profit*		*In Loss*	
		No.	*Amount*	*No.*	*Amount*
StCBs					
2005–06	31	26	403	5	32
2006–07	31	26	592	4	44
2007–08	31	26	515	5	49
DCCBs					
2005–06	366	276	1,120	90	925
2006–07	370	271	733	98	765
2007–08*	370	261	874	108	902
SCARDBs@					
2005–06$	20	11	316	7	66
2006–07	20	9	309	9	70
2007–08	20	9	147	9	48
PCARDBs					
2005–06#	696	370	336	329	519
2006–07^	696	371	438	325	507
2007–08	697	350	434	347	618

Data for 2006–07 is provisional
* : Data for Baran DCCB in Rajasthan not available.
@ : Manipur SCARDB under orders of liquidation.
$: Profit/Loss data for Bihar SCARDB not received.
: Data in respect of 3 liquidated PCARDBs in Orissa included
^ : Data in respect of 4 PCARDBS in Orissa not received.
Source: NABARD, *Annual Report*, 2008–09.

means only the non-banking institution which is a loan company or an investment company or a hire purchase finance company or an equipment leasing company or a mutual benefit finance company.

NBFCs provide a range of services such as hire purchase finance, equipment lease finance, loans, and investments. Due to the rapid growth of NBFCs and a wide variety of services provided by them, there has been a gradual blurring of distinction between banks and NBFCs except that commercial banks have the exclusive privilege in the issuance of cheques.

NBFCs have raised large amount of resources through deposits from public, shareholders, directors, and other companies and borrowings by issue of non-convertible debentures. In the year 1998, a new concept of public deposits meaning deposits received from public, including shareholders in the case of public limited companies and unsecured debentures/bonds other than those issued to companies, banks, and financial institutions, was introduced for the purpose of focused supervision of NBFCs accepting such deposits.

Types of NBFCs

NBFCs can be classified into different segments depending on the type of activities they undertake.

1. Asset Finance Company (AFC)
2. Investment Company (IC)
3. Loan Company (LC)

The RBI has defined AFC as any company which is a financial institution carrying on as its principal business the financing of physical assets supporting productive/economic activity, such as automobiles, tractors, lathe machines, generator sets, earth moving and material handling equipments, moving on own power, and general purpose industrial machines. Principal business for this purpose is defined as aggregate of financing real/physical assets supporting economic activity and income arising therefrom is not less than 60 per cent of its total assets and total income respectively.

TABLE 13.24 Number of NBFCs Registered with the Reserve Bank

End-June	*Number of Registered NBFCs*	*NBFCs-D*
1	*2*	*3*
1999	7,855	624
2000	8,451	679
2001	13,815	776
2002	14,077	784
2003	13,849	710
2004	13,764	604
2005	13,261	507
2006	13,014	428
2007	12,968	401
2008	12,809	364
2009	12,740	336

Source: RBI, *Report on Trend and Progress of Banking in India*, 2009.

The above type of companies may be further classified into those accepting deposits NBFCs-D or those not accepting deposits. There were 336 NBFCs-D registered with the RBI during 2008–09 (Table 13.24).

The above mentioned entities are either partially or wholly regulated by the RBI. The RBI regulates and supervises the NBFCs in terms of Chapter III B of the Reserve Bank of India Act, 1934.

Types of Non-banking Financial Entities (Regulated by the RBI)

Non-banking Financial Entity		*Principal Business*
I. Non-banking Financial Company		In terms of the Section 45-I (f) read with Section 45-I(c) of the RBI act, 1934, as amended in 1997, their principal business is that of receiving deposits or that of a financial institution, such as lending, investment in securities, hire purchase finance or equipment leasing.
(a) Equipment Leasing Company (EL)	Now Known as AFC	Equipment leasing or Financing of such activity.
(b) Hire Purchase Finance Company (HP)		Hire purchase transactions or Financing of such transactions.
(c) Investment Company (IC)		Acquisition of securities. These include primary dealers (PDs) who deal in underwriting and market making for government securities.
(d) Loan Company (LC)		Providing finance by making loans or advances, or otherwise for any activity other than its own; Excludes EL/HP/Housing Finance Companies (HFCs).
(e) Residuary Non-banking Company (RNBC)		Company which receives deposits under any scheme or arrangements, by whatever name called, in one lump-sum or in instalments by way of contributions or subscriptions or by sale of units or certificates or other instruments, or in any manner. These companies do not belong to any of the categories as stated above.
II. Mutual Benefit Financial Company (MBFC) i.e., Nidhi Company		Any company which is notified by the central government as a Nidhi Company under Section 620-A of the companies act, 1956 (1 of 1956).
III. Mutual Benefit Company (MBC), i.e., Potential Nidhi Company		A company which is working on the lines of a Nidhi Company but has not yet been so declared by the central government, has minimum Net Owned Fund (NOF) of Rs. 10 lakh, has applied to the RBI for CoR and also to Department of Company Affairs (DCA) for being notified as Nidhi Company and has not contravened directions/regulations of the RBI/DCA.

(*Continued*)

IV. Miscellaneous Non-banking Company (MNBC), i.e., Chit Fund Company	Managing, conducting or supervising as a promoter, foreman or agent of any transaction or arrangement by which the company enters into an agreement with a specified number of subscribers that every one of them shall subscribe a certain sum in instalments over a definite period and that every one of such subscribers shall in turn, as determined by tender or in such manner as may be provided for in the arrangement, be entitled to the prize amount.

Box 13.2 Regulatory Authorities of NBFCs

	Types of NBFCs	Name of the Regulatory Authority
	1	2
1.	Equipment Leasing Companies (EL)	Reserve Bank of India
2.	Hire purchase finance companies (HP)	Reserve Bank of India
3.	Loan companies	Reserve Bank of India
4.	Investment companies	Reserve Bank of India
5.	Residuary non-banking companies (RNBCs)	Reserve Bank of India
6.	Miscellaneous non-banking companies (Chit Funds)	Reserve Bank of India* and Registrars of chits of the concerned states
7.	Mutual benefit finance companies (Nidhis and Potential Nidhis)	Department of Company Affairs of the Government of India
8.	Micro-finance companies	Department of Company Affairs of the Government of India
9.	Housing-finance companies	National Housing Bank
10.	Insurance companies	Insurance Regulatory and Development Authority
11.	Stock Broking Companies	Securities and Exchange Board of India
12.	Merchant Banking Companies	Securities and Exchange Board of India

* Deposit taking activity only

Source: RBI, *Report on Trend and Progress in Banking*, 2003–04.

- RNBCs are a class of NBFCs that cannot be classified as equipment leasing, hire purchase, loan, investment, nidhi or chit fund companies, but which tap public savings by operating various deposit schemes, akin to recurring deposit schemes of banks

Residuary Non-banking Companies RNBCs are a class of NBFCs that cannot be classified as equipment leasing, hire purchase, loan, investment, nidhi, or chit fund companies, but which tap public savings by operating various deposit schemes, akin to recurring deposit schemes of banks. The deposit acceptance activities of these companies are governed by the provisions of Residuary Non-Banking Companies (Reserve Bank) Directions, 1987. Residuary Non-banking Companies (RNBCs) are required to be mandatorily registered with Reserve Bank of India. RNBCs have a strong presence in the rural areas. They have mobilised a large amount of deposits from the rural population. They generally lend funds to group companies, subsidiaries and associates which leads to concentration of risk, thereby resulting in loan losses and lack of public confidence. To safeguard the interest of depositors, the RBI has directed RNBCs to invest not less than 80 per cent of aggregate deposit liabilities as per the investment pattern prescribed by it and to entrust these securities to all public sector banks to be withdrawn only for repayment of deposits. Subject to compliance with the investment pattern, they can invest 20 per cent of aggregate liabilities or ten times its net owned fund, whichever is lower, in a manner decided by its board of directors.

The RNBCs are the only class of NBFCs for which the floor rate of interest for deposits is specified by the RBI while there is no upper limit prescribed for them. The floor interest rate prescribed is 3.5 per cent per annum (to be compounded annually) on daily deposit schemes and 5 per cent per annum (to be compounded annually) on other deposit schemes of higher duration or term deposits. The RBI has also prescribed prudential norms for RNBCs. Compliance with prudential norms is mandatory and a prerequisite for acceptance of deposits. The RBI monitors and inspects these RNBCs from time to time.

At present, there are three companies registered under Section 45 IA of the RBI Act, 1934 which operate as RNBCs. Aggregate deposits of these companies stood at Rs. 22,358 crore as on March 31, 2009, constituting 91.6 per cent of aggregate deposits of all NBFCs. Two large RNBCs—Peerless General

Finance and Investment Company Limited and Sahara Finance Limited—had a share of more than 99 per cent of the total deposits accepted by all the RNBCs. Peerless General Finance and Investment Company Limited (PGFIL) is the largest RNBC in the country. The company has crossed Rs. 1,000 crore deposit mobilisation march.

The RBI reviewed the current regulations relating to investments by RNBCs during 2003–04. Modifications include stipulation of minimum rating, exposure norms and an increase in investment in government securities as set out below.

- RNBCs should invest only in (i) the fixed deposits and CDs of scheduled commercial banks; and (ii) CDs of specified financial institutions provided such CDs are rated not less than AA+ or its equivalent by an approved credit rating agency, with exposure to a scheduled commercial bank not exceeding one per cent of the aggregate deposit liabilities of the bank as on March 31, of the previous accounting year and exposure to any one specified DFI not exceeding one per cent of the aggregate liabilities to the depositor (ALD).
- RNBCs should invest in the central and state government securities issued by the governments in the course of their market borrowing programme an amount which shall not be less than 15 per cent of the outstanding aggregate liabilities to the depositor (ALD).
- Investment in debt securities should be confined to those having minimum AA+ or equivalent grade rating and listed in any one of the stock exchanges.
- The investment in units of mutual funds should be in only debt-oriented mutual funds, subject to the aggregate investment in mutual funds not exceeding 10 per cent and in any one mutual fund not exceeding 2 per cent of ALD.

Bank finance to RNBCs is restricted to the extent of their Net Owned Fund (NOF).

These measures are expected to impart greater liquidity and safety to the investments of RNBCs and thus enhance protection available to depositors.

As RNBCs have acquired highly leveraged positions, they came under the scrutiny of the regulator. The RBI converted one of the three companies with miniscule deposit into a non-deposit taking NBFC. The two large RNBCs have agreed to migrate to another business model and to reduce their deposit to nil by the year 2015.

Mutual Benefit Financial Companies Mutual benefit financial companies (Nidhis) are NBFCs notified under Section 620 A of the Companies Act, 1956, and primarily regulated by the department of company affairs (DCA) under the directions/guidelines issued by them under Section 637A of the Companies Act, 1956. The Sabanayagam Committee on Nidhis defines Nidhi as ‘a company formed with the exclusive object of cultivating the habit of thrift, savings and functioning for the mutual benefit of members by receiving deposits only from individuals enrolled as members and by lending only to individuals, also enrolled as members, and which functions as per notification and guidelines prescribed by the DCA’.

These companies are exempt from the core provisions of the RBI Act and NBFC directions relating to acceptance of public deposits. However, the Reserve Bank is empowered to issue directions in matters relating to deposit acceptance activities and directions relating to ceiling on interest rate. They are also required to maintain register of deposits, furnish receipt to depositors, and submit returns to the RBI.

In order to facilitate healthy functioning of Nidhi companies and restore the confidence of the investing public, the Government of India constituted in March 2000, an expert committee under the chairmanship of Shri P. Sabanayagam to suggest an appropriate policy framework for overall improvement of these companies. The committee submitted its report to the government on September 28, 2000 which included recommendations such as entry point barriers, minimum capital funds, liquid assets requirements, restrictions on dividend, ceiling on interest rates on deposit and loans, regulations of various managerial aspects, disclosure norms, prudential norms, adequate supervisory framework, role of auditors, and other measures for protection of depositors’ interest.

Miscellaneous Non-banking Companies Miscellaneous Non-banking Companies (MNBCs) are companies engaged in the chit fund business. The term ‘deposit’ as defined under Section 45I(bb) of the Reserve Bank of India Act, 1934, does not include subscription to chit funds. The chit fund companies are exempted from all the core provisions of Chapter IIIB of the RBI Act. The RBI regulates only the deposits accepted by these companies, but it does not regulate their chit fund business. Chit fund company means a company managing, conducting or supervising, as foremen, agent or in any other capacity, chits as defined in Section 2 of the Chit Funds Act, 1982. Section 2(b) of the Chit Fund Act, 1982 defines a chit as "a transaction whether called chit, chit fund, chitty, kuri or by any other name by or under which a person enters into an agreement with a specified number of persons that every one of them shall subscribe a certain sum of money (or a certain quantity of grain instead) by way of periodical installments over a definite period and that each such subscriber shall, in his turn, as determined by lot or by auction or by tender or in such other manner as may be specified in the chit agreement, be entitled to the prize amount." A transaction is not a chit within the meaning of this clause, if in such transaction some alone, but not all, of the subscribers get the prize amount without any liability to pay future subscriptions; or all the subscribers get the chit amount by turns with a liability to pay future subscriptions Chit fund business is administered by the respective state governments through the offices of registrars of chits. Chit fund companies, as per the Miscellaneous Non-banking Companies (Reserve Bank) Directions, can accept deposits upto 25 per cent and 15 per cent of the net owned fund (NOF) from public and shareholders, respectively, for a period of 6 months to 36 months, but cannot accept deposits repayable on demand/notice.

The RBI (Amendment) Act, 1997, provides for compulsory registration with the Reserve Bank of all NBFCs, irrespective of their holding of public deposits.

The Amended Act (1997) provides an entry point norm of Rs. 25 lakh as the minimum net owned funds (NOF), which has been raised to Rs. 2 crore for new NBFCs seeking grant of certificate of registration (CoR) on or from April 21, 1999. The provisions relating to certificate of registration and minimum NOF were made mandatory for the following reasons.

- To ensure that only financially sound companies carry on this business.
- To reduce the number of NBFCs to a manageable universe.
- For effective regulation and supervision.

Certain types of financial companies, namely, insurance companies, housing finance companies, stock broking companies, chit fund companies, companies notified as 'nidhis' under Section 620A of the Companies Act, 1956, and companies engaged in merchant banking activities (subject to certain conditions), however, have been exempted from the requirement of registration under the RBI Act, as they are regulated by other agencies. NBFCs fund various stock market activities such as IPO financing, loan against shares and promoter financing.

Growth of NBFCs

NBFCs in India have existed since long. They came into limelight in the second half of the 1980s and in the first half of the 1990s.

NBFCs flourished during the stock market boom of the early 1990s. In the initial years of liberalisation, they not only became prominent in a wide range of activities but they outpaced banks in deposit raising owing to their customised services. They have backed many small entrepreneurs. They have also lent small-ticket personal loans of size of Rs. 25,000 to customers and thereby fuelled the consumption boom.

Total assets/liabilities of NBFCs grew at an average annual rate of 36.7 per cent during the 1990s (1991–98) as compared to 20.9 per cent during the 1980s (1981–91). The growing importance of this segment and the surfacing of some scams compelled the RBI to increase regulatory attention.

Almost all corporate houses have set up their own NBFCS. Big banks also floated NBFCs to tap certain segments on which restrictions were imposed by the regulator. Banks through the NBFCs could generously lend funds to promoters to raise his holdings through a creeping acquisition. Citi Financial is one of the oldest foreign bank-owned NBFC and a pioneer in this segment. There has been an increase in the number of NBFCs, especially those floated by foreign banks as there are strictures on branch licensing. The Reserve Bank tightened NBFC norms in November 2006 to reduce regulatory arbitrage between different financial sector players. According to the new guidelines, non-deposit taking NBFCs which have assets of over Rs. 100 crore will be subject to exposure and capital adequacy norms. Banks will not be able to lend indiscriminately to them. Nor will they be allowed to hold more than 10 per cent equity stake in deposit-taking NBFCs. Moreover, foreign banks with NBFC subsidiaries will be required to include the activities of their NBFC arms in their reporting to the Reserve Bank.

Regulation of NBFCs

In the 1960s, the RBI made an attempt to regulate NBFCs by issuing directions relating to the maximum amount of deposits, the period of deposits, and rate of interest they could offer on the deposits accepted. Norms were laid down regarding maintenance of certain percentage of liquid assets, creation of reserve funds, and transfer thereto every year a certain percentage of profit, and so on. These directions and norms were revised and amended from time to time.

In 1977, the RBI issued two separate sets of guidelines, namely, (i) NBFC Acceptance of Deposits Directions, 1977, for NBFCs and (ii) MNBD Directions, 1977, for MNBCs. These directions were related to deposit-taking activities of NBFCs. The Reserve Bank made an attempt to regulate the asset side of NBFCs in 1994 in pursuance of the Shah Committee recommendations. However, it was not empowered to regulate the asset side of NBFCs.

NBFCs became prominent in the first half of the 1990s. The growth in aggregate deposits of NBFCs outpaced that of banks. However, bank finance to NBFCs dried up in 1995 after the RBI cautioned banks against such lending. Therefore, NBFCs had to depend on fixed deposits often at rates upto 26 per cent. To service high-cost deposits, NBFCs invested in bought-out deals, shares, real estate and corporate financing—areas in which they had little experience. The slackness in the capital and real estate markets and general industrial activities resulted in sharp deterioration in NBFC's quality of assets.

Crores of rupees of small investors disappeared overnight as NBFCs like CRB Capital Markets, JVG Finance, and Prudential Capital Markets failed in 1997. This shook investor confidence which resulted in a rush of withdrawals of public deposits.

This is the only sector which had a number of committees trying to regulate its working. The first was the Shah Committee in 1992. It was followed by the Shere Committee, Khanna Committee, and various committees of the RBI.

In 1997, the RBI Act was amended and the Reserve Bank was given comprehensive powers to regulate NBFCs. The amended act made it mandatory for every NBFC to obtain a certificate of registration and have minimum net owned funds. Ceilings were prescribed for acceptance of deposits, capital adequacy, credit rating and net-owned funds. Net owned fund (NOF) of NBFCs is the aggregate of paid-up capital and free reserves, netted by (i) the amount of accumulated balance of loss and (ii) the deferred revenue expenditure and other intangible assets, if any, and further reduced by investments in shares and loans and advances to (a) subsidiaries (b) companies in the same group and (c) other NBFCs, in excess of 10 per cent of owned fund. Norms relating to capital adequacy, credit rating exposure, asset classification, and so on were laid down. The Reserve Bank also developed a comprehensive system to supervise NBFCs accepting/holding public deposits. Directions were also issued to the statutory auditors to report noncompliance with the RBI Act and regulations to the RBI, board of directors and shareholders of the NBFCs.

The task force constituted by Government of India under the Chairmanship of Shri C. M. Vasudev submitted its report on October 28, 1998, after reviewing the existing regulatory framework for NBFCs. The Government of India framed the Financial Companies Regulation Bill, 2000, to implement the recommendations requiring statutory changes, as also consolidate the law, relating to NBFCs and unincorporated bodies with a view to ensuring depositor protection. According to this bill, all the NBFCs will be known as financial companies instead of NBFCs.

Overview of Regulation of NBFCs

1. **Mission:** To ensure that

    - financial companies function on healthy lines;
    - these companies function in consonance with the monetary policy framework, so that their functioning does not lead to systemic aberrations; and
    - the quality of surveillance and supervision exercised by the RBI over the NBFCs keeps pace with the developments in this sector.

2. **Amendments to the Reserve Bank of India (RBI) Act, 1934:** RBI Act was amended in January 1997 providing for, inter alia,

    - entry norms for NBFCs and prohibition of deposit acceptance (save to the extent permitted under the Act) by unincorporated bodies engaged in financial business;
    - compulsory registration, maintenance of liquid assets and creation of reserve fund;
    - power of the RBI to issue directions to an NBFC or to the NMBFCs in general or to a class of NBFCs.

3. **Basic structure of regulatory and supervisory framework**

    - Comprehensive regulation and supervision of deposit taking NBFCs and limited supervision over those not accepting public deposits.
    - Prescription of prudential norms akin to those applicable to banks.

- Submission of periodical returns for the purpose of off-site surveillance.
- Supervisory framework comprising (a) on-site inspection (CAMELS pattern) (b) off-site monitoring through returns (c) market intelligence and (d) exception reports by statutory auditors.
- Asset liability and risk management system for NBFCs.
- Punitive action like cancellation of certificate of registration (CoR), prohibition from acceptance of deposits and alienation of assets, filing criminal complaints and winding up petitions in extreme cases, and appointment of the RBI observers in certain cases.

4. Other steps for protection of depositors' interest

- Coordination with state governments to curb unauthorised and fraudulent activities, training programmes for personnel of NBFCs, state governments and police officials.
- Publicity for depositors' education and awareness, workshops/seminars for trade and industry organisations, depositors' associations, and chartered accountants.
- In order to protect depositors' interest, all NBFCs accepting/holding public deposits were advised to ensure that there should be full asset cover available for public deposits accepted by them. The assets should be evaluated at their book value or realisable/market value, whichever is lower, for this purpose. NBFCs have to report to the Reserve Bank in case the asset cover calculated falls short of the liability on account of public deposits.

Regulatory Norms and Directions for NBFCs

At present, there are two categories of NBFCs—deposit-taking and non-deposit taking. The Reserve Bank has focussed on regulating deposit-taking NBFCs and subject them to regulations such as prudential limits and capital adequacy requirements which are more stringent than regulations imposed on banks. For regulatory purpose, non-deposit taking NBFCs (NBFCs-ND) with asset size of Rs. 100 crore and above have been classified as systemically important NBFCs (NBFCs-ND-SI). These NBFCs are subjected to 'limited regulations' and now subject to CRAR and exposure norms prescribed by the Reserve Bank. The CRAR prescription for such companies has recently been raised to 12 per cent by March 31, 2009 and 15 per cent by March 31, 2010. They are allowed to issue perpetual debt instruments (PDI) in rupees to augment their capital funds.

A. Important Statutory Provisions of Chapter IIIB of the RBI Act as Applicable to NBFCs

Sr. No.	*Subject*	*Particulars*
1.	Certificate of registration*	No company, other than those exempted by the RBI, can commence or carry on the business of non-banking financial institution without obtaining a CoR from RBI. The pre-requisite for eligibility for such a CoR is that the NBFC should have a minimum NOF of Rs. 25 lakh (since raised to Rs. 2 crore on and from April 21, 1999 for any new applicant BBFC). The RBI considers grant of the CoR after satisfying itself about the company's compliance with the criteria enumerated in Section 45-IA of the RBI Act.
2.	Maintenance of liquid assets*	NBFCs have to invest in unencumbered approved securities, valued at a price not exceeding current market price, an amount which, at the close of business on any day, shall not be less than five per cent but not exceeding 25 per cent, specified by the RBI, of the deposits outstanding at the close of business on the last working day of the second preceding quarter.
3.	Creation of reserve fund*	Every non-banking financial company shall create a reserve fund and transfer thereto a sum not less than 20 per cent of its net profit every year as disclosed in the profit and loss account and before any dividend is declared. Such fund is to be created by every NBFC irrespective of the fact whether it accepts public deposits or not. Further, no appropriation can be made from the fund for any purpose without prior written approval of the RBI.

(Continued)

B. Directions Applicable to NBFCs

The RBI has issued comprehensive deposit acceptance and asset side regulations as under for the NBFCs. While all the prudential norms are applicable to public deposit accepting/holding NBFCs only, some of the regulations are applicable to non-deposit accepting companies.

Sr. No.	Subject	Particulars
(1) Deposit Acceptance Related Regulations		
i.	Ceiling on quantum of public deposits	Loan and investment companies—1.5 times of NOF if the company has NOF of Rs. 200 lakh, minimum investment grade (MIG) credit rating, complies with all the prudential norms and has CRAR of 15 per cent. Asset finance companies (AFCs)—if company has NOF of Rs. 200 lakh and complies with all the prudential norms. • With MIG credit rating and 12 per cent CRAR—4 times of NOF. • Without MIG credit rating but CRAR 15 per cent or above—1.5 times of NOF, or Rs. 10 crore, whichever is less. Category of NBFC having more than Rs. 25 lakh but less than Rs. 200 lakh: AFCs maintaining CRAR of 12 per cent without credit rating—Equal to NOF AFCs with CRAR of 12 per cent and having MIG—1.5 times of NOF LCs/ICs with CRAR of 15 per cent and having MIG—Equal to NOF NBFCs prohibited from accepting fresh NRI deposits with effect from April 24, 2004, but could renew the deposits already accepted.
ii.	Investment in liquid assets	NBFCs—15 per cent of outstanding public deposit liabilities as at the close of business on the last working day of the second preceding quarter, of which • not less than 10 per cent in approved securities; and • not more than 5 per cent in term deposits with scheduled commercial banks. RNBCs—10 per cent of outstanding deposit liabilities as at close of business on last working day of second preceding quarter. These liquid asset securities are required to be lodged with one of the scheduled commercial banks or Stock Holding Corporation of India Ltd, or a depository or its participant (registered with the SEBI). Effective October 1, 2002, government securities are to be necessarily held by NBFCs either in Constituent's Subsidiary General. Ledger Account with a scheduled commercial bank or in a demat account with a depository participant registered with the SEBI. These securities cannot be withdrawn or otherwise dealt with for any purpose other than repayment of public deposits.
iii.	Period of deposits	No demand deposits. NBFCs—12 to 60 months RNBCs—12 to 84 months MNBCs (chit funds)—6 to 36 months
iv.	Ceiling on deposit rate	NBFCs, MNBCs, and Nidhis—12.5 per cent per annum (effective November 1, 2001). RNBCs—Minimum interest of 3½ per cent on daily deposits and 5 per cent on other than daily deposits. Interest may be paid or compounded at periods not shorter than monthly rests.

(*Continued*)

Sr. No.	Subject	Particulars
v.	Advertisement and methodology for acceptance deposits/public deposits	Every company which accepts deposits by advertisement has to comply with the advertisement rules prescribed in this regard, the deposit acceptance form should contain certain prescribed information, issue receipt for deposits, and maintain a deposit register.
vi.	Submission of returns	All NBFCs holding or accepting public deposits have to submit periodical returns to RBI at quarterly, half-yearly, and annual intervals. NBFCs not accepting/holding public deposits and having asset size of Rs. 500 crore and above are advised to submit a quarterly return in the prescribed format commencing from the quarter ended September 2004. It was also advised that a provisional return for the quarter ended March may be submitted within 30 days of the close of the quarter and a final return should be submitted with a copy of the audited balance sheet as soon as the same is finalised but not later than September 30 of the year.
(2) Prudential Norms applicable to only those NBFCs which are accepting/holding public deposits		
i.	Capital to Risk Assets Ratio (CRAR)	The NBFCs holding/accepting public deposits are required to maintain CRAR as under: • Equipment leasing companies/hire purchase finance companies (with MIG credit rating) 12 per cent • Equipment leasing companies/hire purchase finance companies (without minimum investment grade credit rating) 15 per cent • Loan/investment companies 15 per cent • RNBCs 12 per cent CRAR comprises—tier I and tier II capital. To be maintained on a daily basis and not merely on the reporting dates. Tier I capital—core capital or NOF but includes compulsorily convertible preference shares (CCPS) as a special case for CRAR purposes. Tier II Capital—all quasi-capital like preference shares (other than CCPS) subordinated debt, convertible debentures. Tier II capital not to exceed tier I capital. General provisions and loss reserves not to exceed 1.25 per cent of the risk-weighted assets. Subordinated debt issued with original tenor of 60 months or more.
ii.	Restrictive norms	Acceptance of public deposits not allowed if the prudential norms are not complied with fully. Any NBFC defaulting in repayment of the matured deposits prohibited from creating any further assets until the defaults are rectified. Investments in real estate, except for own use, restricted to 10 per cent of the owned fund. Investments in unquoted shares restricted as under: EL/HP companies 10 per cent of owned fund Loan/investment companies 20 per cent of owned fund No further investments in real estate or unquoted shares in case of excess position held till its regularisation. Sufficient adjustment period allowed—further extension on merits of each case.

Sr. No.	Subject	Particulars
iii.	Credit/Investment concentration norms	Single borrower exposure limits credit 15 per cent of owned fund Investments 15 per cent of owned fund Single group of borrowers exposure limits credit 25 per cent of owned fund Investments 25 per cent owned fund Composite (credit and investments) exposure limits Single borrower 25 per cent of owned fund Single group of borrowers 40 per cent of owned fund Exposure norms also applicable to own group companies and subsidiaries. Includes all forms of credit and credit related and certain other receivables as also off balance sheet exposures. Debentures/bonds to be treated as credit for the purpose of prudential norms but as investments for the purpose of balance sheet and compliance with investment obligations.
iv.	Reporting System: Half-yearly return	Half-yearly returns to be submitted as at the end of March and September every year. Time allowed for submission—three months from the due date. The return to be certified by the statutory auditors of the company. However, it need not wait for audit and the figures furnished therein could be the unaudited figures but must be certified by auditors.
(3) Prudential Norms applicable to all NBFCs irrespective of whether they accept/hold public deposits or not.		
i.	Income recognition norms	The recognition of income on the NPA is allowed on cash basis only. The unrealised income recognised earlier is required to be reversed.
ii.	NPA norms	Recognition of income on an accrual basis before the asset becomes NPA as under: Loans and advances: Upto six months and 30 days past due period (past due period done away with effect from March 31, 2003) Lease and Hire Purchase Finance: 12 months.
iii.	Restrictive norms	Loans against own shares not allowed.
iv.	Policy on demand/call loans	Companies to frame a policy for demand and call loans relating to cut-off date for recalling the loans, the rate of interest, periodicity of such interest, and periodical reviews of such performance.
v.	Accounting standards	All the accounting standards and guidance notes issued by Institute of Chartered Accountants of India (ICAI) are applicable to all NBFCs in so far as they are not inconsistent with the guidelines of the RBI.
vi.	Accounting for investments	All NBFCs to have a well-defined investment policy. Investments classified into two categories: (i) long-term and (ii) current investments. Long-term investments to be valued as per Accounting Standard, AS-13 of ICAI. Current investments to be classified into: (a) quoted and (b) unquoted.

(*Continued*)

Sr. No.	Subject	Particulars
		Current quoted investments to be valued at lower of cost or market value. Block valuation permitted—Notional gains or losses within the block permitted to be netted—but not inter-block, net notional gains to be ignored but notional losses to be provided for. Valuation norms for current unquoted investments are as under: • Equity shares (at lower of cost or break up value or fair value). • Rs. 1 for the entire block of holding if the balance sheet of the investee company is not available for the last two years. • Preference shares at lower of cost or face value. • Government securities at carrying cost. • Mutual fund units at net asset value (NAV) for each scheme. • Commercial Paper (CP) at its carrying cost.
vii.	Asset classification	All forms of credit (including receivables) to be classified into four categories. • Standard asset. • Sub-standard asset. • Doubtful asset. • Loss asset.
viii.	Provision for non-performing assets—loans and advances	Standard assets—no provision. Sub-standard assets—10 per cent of outstanding balance. Doubtful assets—on unsecured portion 100 per cent and on secured portion 20, 30, and 50 per cent depending on the age of the doubtful assets. Loss asset—100 per cent of the outstanding.
ix.	Provisioning for non-performing assets—equipments lease and hire purchase accounts	Unsecured portion to be fully provided for. Further provisions on net book value (NBV) of EL/HP assets. Accelerated additional provisions against NPAs. NPA for 12 months or more but less than 24 months 10 per cent of NBV NPA for 24 months or more but less than 36 months 40 per cent of NBV NPA for 36 months or more but less than 48 months 70 per cent of NBV NPA for 48 months or more 100 per cent of NBV. Value of any other security considered only against additional provisions. Rescheduling in any manner will not upgrade the asset upto 12 months of satisfactory performance under the new terms. Repossessed assets to be treated in the same category of NPA or own assets option lies with the company.
x.	Risk-weights and credit conversion factors	Risk-weights to be applied to all assets except intangible assets. Risk-weights to be applied after netting off the provisions held against relative assets. Risk-weights are 0, 20, and 100. Assets deducted from owned fund like exposure to subsidiaries or companies in the same group or intangibles to be assigned 0 per cent risk-weight.

Sr. No.	Subject	Particulars
		Exposures to all-India financial institutions (AIFIs) at a 20 per cent risk-weighted and all other assets to attract 100 per cent risk-weights. Off-balance sheet items to be factored at 50 or 100 and then converted for risk-weight.
xi.	Disclosure requirements	• Every NBFC is required to separately disclose in its balance sheet the provisions made as outlined above without netting them from the income or against the value of assets. • The provisions shall be distinctly indicated under separate heads of accounts as under: ■ Provisions for bad and doubtful assets; and ■ Provisions for depreciation in investments. • Such provisions shall not be appropriated from the general provisions and loss reserves held, if any, by the NBFC. • Such provisions for each year shall be debited to the profit and loss account. The excess of provisions, if any, held under the heads general provisions and loss reserves may be written back without making adjustment against them.

* Nidhi and chit fund companies exempted.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2007–08.

Supervision

In order to ensure that NBFCs function on sound lines and avoid excessive risk taking, the RBI has developed a four-pronged supervisory framework based on the following.

- On-site inspection structured on the basis of assessment and evaluation of CAMELS (Capital, Assets, Management, Earnings, Liquidity, and Systems) approach.
- Off-site monitoring supported by state-of-the-art technology. It is through periodic control reports from NBFCs.
- Use of market intelligence system.
- Reports of statutory auditors of NBFCs.

The RBI supervises companies not holding public deposits in a limited manner. Companies with asset size of Rs. 100 crore and above are subject to annual inspection while other non-public deposit companies are supervised by rotation once in every five years.

Role of Board for Financial Supervision in Monitoring NBFCs

With a view to having an integrated approach to the entire financial sector, the supervision of NBFCs was brought under the jurisdiction of the Board for Financial Supervision (BFS) with effect from July 1, 1995. BFS directs, formulates, and oversees the implementation of policy as well as supervises NBFCs. BFS also serves as an important forum for deciding the course of action against problem companies and monitoring their status on an on-going basis. In addition, quarterly and half-yearly reports on the performance of NBFCs are discussed in BFS meetings.

The outstanding deposits with NBFCs have declined since the scam hit the industry in 1997. Investors are preferring other investment avenues like mutual funds, stock markets and other small saving schemes to park their surplus funds. NBFCs, too, are raising funds through cheaper avenues like commercial papers (Table 13.25).

Capital adequacy norms were made applicable to NBFCs in 1998. The norms relating to capital to riskweighted assets ratio (CRAR) stipulate that every NBFC shall maintain a minimum capital ratio consisting of tier I and tier II capital that shall not be less than 12 per cent of its aggregate risk weighed assets and of risk-adjusted value of off-balance sheet items in case of asset finance companies and 15 per cent in case of unrated deposit taking loan and investment companies. Out of the 207 reporting NBFCs, 168

TABLE 13.25 Profile of NBFCs

(Amount in Rs. Crore)

Item	*As at End-March*			
	2009P		*2008*	
	NBFCs	*of which: RNBCs*	*NBFCs*	*of which: RNBCs*
1	*2*	*3*	*4*	*5*
Total Assets	95,727	20,211 (21.1)	99,014	24,452 (24.7)
Public Deposits	21,548	19,607 (91.0)	24,400	22,358 (91.6)
Net Owned Funds	13,458	1,870 (13.9)	11,921	1,718 (14.0)

Note: 1. NBFCs comprise NBFCs-D and RNBCs.
2. Figures in parentheses are percentages to respective total of NBFCs.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2009.

TABLE 13.26 NPA Ratios of NBFCs-D

(Per Cent)

End-March	*Gross NPAs to Gross Advances*	*Net NPAs to Net Advances*
1	*2*	*3*
2001	11.5	5.6
2002	10.6	3.9
2003	8.8	2.7
2004	8.2	2.4
2005	5.7	2.5
2006	3.6	0.5
2007	2.2	0.2
2008	2.1	0
2009P	2.7	0

P: Provisional.

Note: Figures in respect of 2007–08 include 'IFCI Ltd' and 'TFCI Ltd'.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2008.

NBFCs had CRAR above 30 per cent as on March 31, 2009. However, the number of NBFCs having capital adequacy ratio of less than 9 per cent increased during the year 2008–09. Around 93.7 per cent NBFCs (excluding nidhis, potential nidhis, and MNBCs) achieved more than 12 per cent capital adequacy ratio as on end March, 2009 (Table 13.27).

The RBI placed restrictions on bank funding to NBFCs in August 2005. The key areas where banks are not allowed to lend to NBFCs are: Investments of NBFCs in shares and debentures of any company, grant of unsecured loans to and inter-corporate deposits by NBFCs in any company, loans by NBFCs to subsidiaries and group companies and funding to NBFCs for on-lending to individuals for subscribing to IPOs and discounting or rediscounting of bills by NBFCs. Shares and debentures can not be accepted as collateral for secured loans granted to NBFCs. Bank funding to residuary non-banking companies (RNBCs), such as Sahara and Peerless, will be restricted to their net owned funds (NoF). Banks are also not allowed to execute guarantees covering intercompany deposits and loans for NBFCs. Banks are also prohibited from providing bridge loans of any nature or funding against an upcoming equity or bond issue. Bridge loans can not be granted in any other form such as floating rate bonds. Banks cannot enter into lease agreements with equipment leasing firms.

Two sets of players—small and large NBFCs—have emerged in the market. The small NBFCs rely more on deposit taking while large NBFCs focus on asset financing and rely less on deposit-taking. The large NBFCs, especially M & M Finance, DBS Cholasundaram Finance and Shriram Transport Finance have specialised skills in credit intermediation and have a collective asset base of around

TABLE 13.27 Capital Adequacy Ratio of NBFCs-D

(Per Cent)

CRAR Range	As at End-March									
	2008					2009P				
	AFC	EL	HP	LC/IC	Total	AFC	EL	HP	LC/IC	Total
1	2	3	4	5	6	7	8	9	10	11
1) Less than 12 Per Cent (a+b)	19	4	15	9	47	0	2	4	3	9
a) Less than 9 Per Cent	4	4	15	9	32	0	2	3	3	8
b) More than 9 and Up to 12 Per Cent	0	0	0	0	0	0	0	0	0	0
2) More than 12 and Up to 15 Per Cent	3	0	0	1	4	3	0	0	0	3
3) More than 15 and Up to 20 Per Cent	5	0	0	3	8	4	0	0	2	6
4) More than 20 and Up to 30 Per Cent	25	0	1	3	29	17	0	2	2	21
5) Above 30 Per Cent	117	10	66	46	239	99	8	34	26	168
Total	**169**	**14**	**82**	**62**	**327**	**123**	**10**	**40**	**33**	**207**

P: Provisional.

Note: AFC: Asset Finance Companies; EL: Equipment Leasing Companies; HP: Hire Purchase Companies; LC/IC = Loan Companies/Investment Companies.

Source: RBI, *Report on Trend and Progress of Banking in India*, 2009.

Rs. 17,000 crore. These NBFCs are leaders in financing used and new commercial vehicles, tractors and automobiles. NBFCs such as Citibank and GE have built large consumer-focused asset portfolios by offering personal loans, insurance and various other services thereby directly competing with banks. Banks, too, are entering high yield-high risk financing niche-segments of NBFCs. Banks have an edge over NBFCs as they have access to low-cost deposits while NBFCs have to rely more on high cost public deposits, bank and market borrowings to fund their balancesheets. Borrowings account for almost 65 per cent of total NBFC liabiliaties, of which, non-convertible debentures is a major component followed by bank borrowings. NBFCs now borrow from mutual funds by placing debentures with them. Borrowing from mutual funs is simple as there are little or no margins. NBFCS get the debentures rated by a credit rating agency and a good rating helps them raise funds.

Conclusion

NBFCs in India have become prominent in a wide range of activities like hire purchase finance, equipment lease finance, loans, and investments. NBFCs have greater reach and flexibility in tapping resources. In desperate times, NBFCs could survive owing to their aggressive character and customised services. NBFCs are doing more fee-based business than fund-based. They are focusing now on retail sector-housing finance, personal loans, and marketing of insurance. Many of the NBFCs have ventured into the domain of mutual funds and insurance. NBFCs undertake both life and general insurance business as joint venture participants in insurance companies. The strong NBFCs have successfully emerged as 'financial institutions' in a short span of time and are in the process of converting themselves into 'financial supermarket'—a one-stop financial shop. The NBFCs are taking initiatives to establish a self-regulatory organisation (SRO). At present, NBFCs are represented by the Association of Leasing and Financial Services (ALPS), Federation of Indian Hire Purchase Association (FIHPA), and Equipment Leasing Association of India (ELA). The RBI wants these three industry bodies to come together under one roof. The RBI has emphasised the formation of SRO particularly for the benefit of smaller NBFCs.

KEY TERMS

Banking, Demand Deposits, Time Deposits, Priority Sector Lending, Tier I Capital, Tier II Capital, Credit Risk, Market Risk, Operational Risk, Technological Risk, Liquidity Risk, Asset Liability Management, Capital Adequacy Ratio, Payment System, Loan Syndication, Non-Banking Financial Companies, Regional Rural Banks, Cooperative Banks.

SUMMARY

1. Banks are one of the oldest financial intermediaries in the financial system. They play an important role in the mobilisation of deposits and disbursement of credit to various sectors of the economy. The creation of credit is an important function of a bank and this function distinguishes banks from the non-banking institutions. Banks create deposits in the process of their lending operations.
2. For centuries, banks have borrowed and lent money to business, trade, and people, charging interest on loans and paying interest on deposits. These two functions are the core activities of banking.
3. In terms of ownership and function, commercial banks can be classified into four categories: public sector banks, private sector banks, foreign banks in India, and regional rural banks. There are 80 scheduled commercial banks—27 public sector banks, 21 in the private sector and 32 foreign banks.
4. Banks depend on deposits and non-deposits to meet their resource requirements. Deposits constitute the largest source of funds for the banks. Banks mobilise deposits from the household sector, corporate sector, financial institutions, rest of world-non-resident (NRI) and foreign consulates and embassies-deposits, and government. Banks raise deposits in the form of time and demand deposits.
5. Banks raise non-deposit resources through public issues—both debt and equity—in the domestic capital market and borrowings both at home and abroad. Banks raise short-term funds by borrowing in the call/notice money market, repo market and CBLO market. Banks also resort to external commercial borrowings (ECBs) and inter-bank borrowings in India and abroad to raise funds.
6. Lending or the extension of credit is the major activity of a commercial bank. Banks in India have traditionally been the main source of credit for small borrowers and various sectors of the economy such as agriculture, industry, infrastructure, services and government.
7. Banks provide short-term credit for seasonal agricultural operations such as crop cultivation and long-term credit for creation of assets. In order to ensure that the bank credit flowed to the vital sectors of the economy and according to national priorities, the concept of priority sector lending was developed. The broad sectors under the revised norms include agriculture (both direct and indirect), small enterprises (direct and indirect), retail trade in essential commodities and consumer cooperatives stores, micro credit, education loans and housing loans. The RBI has stipulated a target of 40 per cent of adjusted net bank credit (ANBC) or credit equivalent amount of off-balance sheet exposures (OBE), whichever is higher, for lending to the priority sector by both public and private sector scheduled banks. Within this, sub-targets of 18 per cent and 10 per cent of adjusted net bank credit or credit equivalent amount of off-balance sheet exposures (OBE), whichever is higher, respectively, have been stipulated for lending to agriculture and weaker sections of the population. A target of 32 per cent of adjusted net bank credit has been stipulated for lending to the priority sector by foreign banks.
8. Banks finance both short-term working capital and long-term requirements of industry. Banks also finance infrastructure projects by way of term loans, bonds and guarantees. For funding large infrastructure projects, banks also syndicate loans - in which different banks come forward to share the loan amount. Banks also lend to special purpose vehicles (SPVs) in the private sector, registered under Companies Act for directly undertaking infrastructure projects.
9. Banks lend funds to the household sector in the form of housing loans, auto loans, advances to individuals against fixed deposits, credit card, educational loans and loans for purchase of consumer durables. These are categorised as retail loans as the average size of loans is very small and loans are widely distributed over a large number of borrowers.
10. Banks extend need based working capital facilities as well as term loans to all NBFCs registered with RBI and engaged in equipment leasing, hire-purchase, loan, factoring and investment activities. Banks also extend financial assistance to support the factoring business of Factoring Companies.
11. Commercial banks invest in two types of securities: SLR securities and non-SLR securities. Investment of banks in government securities and other approved securities is categorised as SLR investments. In1985, the domain of eligible investments of SCBs was enlarged to cover commercial paper (CP), units of mutual funds, shares and debentures of public sector undertakings (PSUs) and private corporate sector, which are all known as non-SLR investments.
12. The Government of India set up the Narasimham Committee (1991) to examine all aspects relating to structure, organisation, and functioning of the Indian banking system. The recommendations of the committee aimed at creating a competitive and efficient banking system. Measures like capital adequacy, income recognition, asset classification, norms for investment, entry of private sector banks, gradual reduction of SLR and CRR were recommended and implemented to strengthen the banking system. These recommendations changed the face of Indian Banking.
13. Technology has made the banking business truly international and efficient. Technology will act not only as the facilitator but a catalyst to reach out and meet expectations of demanding customers. More than 95 per cent of the branches have been fully computerised and 50 per cent of these branches have core-banking solutions (CBS), which is automation of banks across multiple-delivery channels.
14. A payments system comprises of a set of rules, institutions, and technology for transfer of funds from one entity to another. It constitutes the core of a well-functioning financial system as the failure of a payment system may result in a systemic risk thereby triggering bank runs. There are two kinds of payment system in operation-retail and large value payment systems. Retail payment system comprises of paper-based payment system, and electronic payment systems like the electronic clearing services (ECS), NEFT and card payment system. Large Value Payment System consists of the real time gross settlement system (RTGS), government securities clearing and foreign exchange clearing.
15. In the post-liberalisation era, public sector banks have diversified to non-traditional activities such as mutual funds, merchant banking, venture capital funding, and other para-banking activities such as leasing, hire purchase, and factoring.
16. Globally, bank mergers have increased for improving the structure and efficiency of the banking industry. This phenomenon of bank mergers is a relatively recent one in India. Mergers have gained importance on account of globalisation, increasing competition, technological changes, and redefinition of takeovers.
17. Public sector banks were allowed to raise capital from the capital market to strengthen their capital adequacy ratios and reduce the holdings of the government/RBI. The Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970/1980 and the State Bank of India Act, 1955 were amended to allow banks to raise capital not exceeding 49 per cent of their equity. The State Bank of India was the first public sector bank to tap the equity market in December 1993.
18. Banking is the business of money where high risks are involved. Deregulation and globalisation have introduced new types of risks. Risk may be defined as an exposure to a transaction with loss, which occurs with some probability and which can be expected, measured and minimised. An element of risk is inherent in the banking operations. Thus, risk management is necessary to ensure sound , stable and efficient banking system. It is a continuous process which helps identify the amount and type of risks that the bank is willing to take, mobilise enough capital to cover such risks and allocate capital to profitable business units. Risk management involves identification, measurement, monitoring and controlling risks to optimise risk-reward trade-off.

19. Banks use a variety of tools to manage their risks which include hedging the credit risks by resorting to restricting fresh exposures, outright sale of an existing fund based exposure, obtaining credit guarantee cover, and more recently securitisation. Banks have adopted asset-liability management and stress testing as tools of risk management.
20. The RBI issued prudential norms based on the recommendations of the Narasimham Committee report. The major objective of prudential norms was to ensure financial safety, soundness, and solvency of banks. These norms strive to ensure that banks conduct their business activities as prudent entities, i.e., not indulging in excessive risk taking and violating regulations in pursuit of profit. Banking reforms were initiated by implementing prudential norms consisting of capital adequacy ratio, asset classification, income recognition, and provisioning.
21. The Basel Committee on Banking Supervision (BCBS) prepared a framework through a consultative process to secure international convergence of supervisory regulations governing the capital adequacy of international banks. This framework was finalised in 1988 and is known as the Basel Accord or Basel I. The objectives of Basel I were two-fold: (i) serve to strengthen the soundness and stability of the international banking system and (ii) to diminish an existing source of competitive inequality among international banks. The three main components of the Basel I framework were constituents of capital, the risk weighting system, and the target ratio. The central focus of this framework was credit risk and especially, country transfer risk. Basel I prescribed two tiers of capital for the banks: Tier I capital which can absorb losses without a bank being required to cease trading and Tier II capital which can absorb losses in the event of a winding-up. The Basel I capital adequacy norms were criticised as several deficiencies surfaced.
22. The New Basel Capital Accord (Basel II) is based on three mutually reinforcing pillars that allow banks and supervisors to evaluate properly the various risks that the banks face. The New Basel Capital Accord focuses on the following.

    - Minimum capital requirements, which seek to refine the measurement framework set out in the 1988 accord.
    - Supervisory review of an institution's capital adequacy and internal assessment process.
    - Market discipline through effective disclosure to encourage safe and sound banking practices.

23. A new category of scheduled banks came into existence in 1975 when 6 regional rural banks (RRBs) came into existence under the Regional Rural Banks Ordinance, 1975. The major objective of setting up RRBs was to develop the rural economy by providing for the purpose of development of agriculture, trade, commerce, industry, and other productive activities in the rural areas, credit and other facilities, particularly to the small and marginal farmers, agricultural labourers, artisans, and small entrepreneurs. A process of state-wise amalgamation of RRBs sponsored by the same sponsor bank was initiated in 2005 to take advantages of the economies of scale and reduce their operational costs.
24. Local Area banks are set up in district towns, and hence their focus of lending will be to agriculture and allied activities, SSI, agro-industrial activities, trading activities and the non-farm sector with a view to ensuring the provision of timely and adequate credit to the local clientele in the area of operation. The area of operation of the bank is a maximum of three geographically neighbouring districts and they are allowed to open branches only in their area of operation.
25. Cooperative banks fill in the gaps of banking needs of small and medium income groups not adequately met through by the public and private sector banks. The cooperative banking system supplements the efforts of the commercial banks in mobilising savings and meeting the credit needs of the local population. The cooperative credit sector in India comprises rural cooperative credit institutions and urban cooperative banks. The rural cooperative credit institutions comprise of institutions such as state cooperative banks, district central cooperative banks, and primary agricultural credit societies, which specialise in short-term credit, and institutions such as state cooperative agriculture and rural development banks and primary cooperative agriculture and rural development banks, which specialise in long-term credit.
26. NBFCs are financial intermediaries engaged primarily in the business of accepting deposits and delivering credit. They play an important role in channelising the scarce financial resources to capital formation. NBFCs supplement the role of the banking sector in meeting the increasing financial needs of the corporate sector, delivering credit to the unorganised sector and to small local borrowers. But they differ from banks in many ways. An NBFC can accept deposit but not demand deposits and hence, they cannot raise low cost funds through savings or current accounts. Moreover, it is not a part of the payment and settlement system, cannot issue cheques drawn on itself and cannot borrow from the RBI.

REVIEW QUESTIONS

1. Why were reforms undertaken in the banking system? How were the banking reforms initiated in India?
2. Discuss the state of banking in India.
3. What is capital adequacy? What are the capital adequacy norms stipulated by the RBI?
4. 'Regional rural banks are important financial institutions in the rural credit structure.' Discuss.
5. What measures have been taken by the RBI to restore the confidence of depositors in urban cooperative banks?
6. What are the steps taken by NABARD to revive the rural cooperative banks?
7. Should banks lend to large corporates only? Discuss.
8. What is priority sector? State the priority sector norms laid down for commercial Banks.
9. Describe the risk management process of banks.
10. How do banks manage their asset-liability mismatches?
11. What are the components of Tier I and Tier II capital?
12. 'The new basel Accord is based on three mutually reinforcing pillars.' Discuss.
13. 'Banks are an important financial intermediary in the financial system.' Discuss.
14. 'Technology has changed the face of banking services in India,' Discuss.
15. How have NBFCs contributed to the economic growth of the country?
16. What is upper Tier II capital and lower Tie II capital?
17. State the different kinds of risks a bank is exposed to?

14

Management of Non-Performing Assets by Banks

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *Non-performing assets*
2. *Tools available to banks to manage their NPAs*
3. *One-time settlement*
4. *Lok Adalats*
5. *Debt recovery tribunals*
6. *Corporate debt restructuring*
7. *Willful Defaulters*
8. *The SARFAESI Act*
9. *Asset reconstruction company*
10. *CIBIL*

INTRODUCTION

The quality of assets held by banks and financial institutions is a critical indicator of the health of the financial system. A high quality of assets reflects the level of bank's credit risk and efficiency in allocation of resources to productive sectors. The quality of assets has been deteriorating in case of both banks and financial institutions which has become an area of grave concern. While credit growth is one of the drivers of economic growth, NPAs are value destroyers of the economy. The total distressed asset stock in India as on March 2008 excluding state financial corporations, mutual funds, and the insurance sector is around Rs. 1,55,000 crore and this works out to 9.8 per cent of the GDP at constant prices. With a high credit growth of around 30 per cent, there may be an increase of fresh flow of non-performing assets as NPAs are a natural product of credit. The ratio of fresh distressed assets to total loans and advances of the scheduled commercial banks is in the range of 1.84 per cent to 3.65 per cent. The large amount of NPAs predominantly originate from the industrial sector. But retail loans account for bulk of the addition to NPAs.

The Narasimham Committee report notes, 'No other single indicator reflects the quality of assets and their impact on banks' viability, than the NPA figure in relation to advances'. Non-performing assets (NPAs) are loans given by a bank or a financial institution wherein the borrower defaults or delays interest or principal payments. According to the RBI norms, any interest or loan repayment delayed beyond 90 days has to be identified as a non performing asset. Non-performing assets are categorised into sub-standard, doubtful and loss assets for which provisions have to be made in the lender's books. Under the prudential norms laid down by the RBI, income should not be recognised on NPAs on an accrual basis but should be booked only when it is actually received in respect of such accounts. Any NPA would migrate from sub-standard to doubtful category after 12 months. It would get classified as a loss asset if it is irrecoverable or marginally collectible. With effect from March 31, 2005 an asset would be classified as doubtful if it remained in the sub-standard category for 12 months. The banks should make full provision for loss assets, 100 per cent of the unsecured portion of the doubtful asset and 20 per cent to 100 per cent of the secured portion depending upon the period for which the asset has remained doubtful. If the asset has remained doubtful for one year, the provisioning requirement is 20 per cent; if doubtful up to three years, the provisioning requirement is 30 per cent and for more than three years, it is 100 per cent with effect from March 31, 2005 (refer Annexure 14.1).

- An asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank

The Gross NPAs of the scheduled commercial banks has increased in absolute terms on account of hardening of interest rates and higher housing loans at floating interest rate charges. The NPAs of the new private sector banks and foreign banks have increased due to their higher exposures in real estate and housing sectors. The share of priority sector, especially agriculture sector's share in total NPAs has increased. (Refer Tables 14.1 to 14.6)

TABLE 14.1 Select Financial Sector Indicators

Category	Indicator	2004–05	2005–06	2006–07	2007–08	2008–09
1. Scheduled Commercial Banks	(a) Growth in Major Aggregates (Per Cent)					
	Aggregate Deposits	16.6	17.8	24.6	23.1	22.4
	Loans and Advances	33.2	31.8	30.6	25.0	21.2
	Investment in Government Securities	9.4	–1.0	9.3	22.7	25.8
	(b) Financial Indicators (As Percentage of Total Assets)					
	Operating Profits	2.2	2.0	1.9	1.9	2.1
	Net Profits	0.9	0.9	0.9	1.0	1.0
	Spread	2.8	2.8	2.6	2.4	2.4
	(c) Non-performing Assets (As Percentage of Advances)					
	Gross NPAs	5.2	3.3	2.5	2.3	2.3
	Net NPAs	2.0	1.2	1.0	1.0	1.1
2. Urban Cooperative Bank	(a) Growth in Major Aggregates (Per Cent)					
	Deposits	–4.7	6.9	6.4	15.2	13.5
	Credit	–1.6	5.2	11.3	13.4	8.3
	(b) Financial Indicators (As Percentage of Total Assets)					
	Operating Profits	0.8	1.1	1.5	1.4	4.1
	Net Profits	0.2	0.5	0.7	0.6	2.0
	Spread	1.8	1.9	2.8	2.6	7.0
	(c) Non-performing Assets (As Percentage of Advances)					
	Gross NPAs	23.4	19.7	18.3	15.5	13.3
	Net NPAs	12.5	9.6	8.8	7.7	6.1
3. Rural Cooperative Banks	(a) Number	1,09,924	–	98,343	96,061	–
	(b) Growth in Major Aggregates (Per Cent)		–			
	Deposits	3.3	–	9.1	9.0	–
	Loans	9.0	–	11.7	10.1	–
	(c) Financial Indicators (As Percentage of Total Assets)					
	Societies in Profit (Number)	47,610	–	34,641	38,776	–
	Societies in Loss (Number)	61,872	–	48,529	48,879	–
	Overall Profit/Loss (Rs. Crore)	232	–	–1,405	–3,954	–
	(d) Non-performing Assets (As Percentage of Advances)	24.4	–	19.8	25.9	–
4. All-India Financial Institutions	(a) Growth in Major Aggregates (Per Cent)					
	Sanctions	–45.1	38.9	12.9	86.2	71
	Disbursements	–37.0	33.9	82.8	14.6	96

(*Continued*)

TABLE 14.1 *(Continued)*

Category	*Indicator*	*2004–05*	*2005–06*	*2006–07*	*2007–08*	*2008–09*
	(b) Financial Indicators (As Percentage of Total Assets)					
	Operating Profits	1.2	1.4	1.5	1.6	1.7
	Net Profits	0.8	1.0	1.0	1.1	1.2
	Spread	1.6	1.8	1.5	1.4	1.4
	(c) Non-performing Assets (As Percentage of Advances)					
	Net NPAs	4.0	1.1	–	0.10	0.07
5. Non-banking Financial Companies (Excluding RNBCs)	(a) Growth in Major Aggregates (Per Cent)					
	Public Deposits	–9.1	–32.1	–15.1	–1.7	4.9
	(b) Financial Indicators (As Percentage of Total Assets)					
	Net Profits	1.6	0.4	1.0	2.6	2.7
	(c) Non-performing Assets (As Percentage of Advances)					
	Net NPAs	2.5	0.4	0.2	0	0
6. Residuary Non-banking Companies (RNBCs)	(a) Growth in Major Aggregates (Per Cent)					
	Deposits	8.3	21.5	12.1	–1.2	–12
	(b) Financial Indicators (As Percent-age of Total Assets)					
	Net Profits	0.5	0.7	0.9	1.5	0.98

Source: RBI, *Report on Trend & Progress of Banking in India,* 2008–09.

TABLE 14.2 Sector-wise NPAs—Bank Groupwise*

(Rs. Crore)

Sector	*Public Sector Banks*		*Old Private Sector Banks*		*New Private Sector Banks*		*All SCBs*	
	2008–09	*2007–08*	*2008–09*	*2007–08*	*2008–09*	*2007–08*	*2008–09*	*2007–08*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
A. Priority Sector	24,318	25,287	1,233	1,338	2,407	2,080	27,958	28,705
1. Agriculture	5,708	8,268	263	243	1,178	1,225	7,149	9,735
2. Small-scale Industries	6,984	5,805	307	359	363	292	7,654	6,456
3. Others	11,626	11,214	663	737	866	563	13,155	12,514
B. Public Sector	474	299	0	0	3	0	549	299
C. Non-priority Sector	19,251	14,163	1,839	1,219	11,334	8,339	32,423	23,721
Total (A+B+C)	**44,42**	**39,749**	**3,072**	**2,557**	**13,815**	**10,419**	**60,990**	**52,725**

*: Excluding foreign banks.
Source: RBI, Report on Trend and Progress of Banking in India, 2008–09.

TABLE 14.3 Gross and Net NPAs of Scheduled Commercial Banks—Bank Groupwise

(As at End-March)
(Amount in Rs. Crore)

Bank Group/Year	Gross Advances	Gross NPAs			Net Advances	Net NPAs		
		Amount	Per Cent to Gross Advances	Per Cent to Total Assets		Amount	Per Cent to Net Advances	Per Cent to Total Assets
1	2	3	4	5	6	7	8	9
Scheduled Commercial Banks								
2005	11,52,682	59,373	5.2	2.5	11,15,663	21,754	1.9	0.9
2006	15,51,491	51,097	3.3	1.8	15,16,812	18,543	1.2	0.7
2007	20,12,510	50,486	2.5	1.5	19,81,237	20,101	1.0	0.6
2008	25,07,885	56,309	2.3	1.3	24,769,36	24,730	1.0	0.6
2009	30,38,254	68,973	2.3	1.3	30,00,906	31,424	1.1	0.6
Public Sector Banks								
2005	8,77,825	48,399	5.5	2.7	8,48,912	16,904	2.0	1.0
2006	11,34,724	41,358	3.6	2.1	11,06,288	14,566	1.3	0.7
2007	14,64,493	38,968	2.7	1.6	14,40,146	15,145	1.1	0.6
2008	18,19,074	40,452	2.2	1.3	17,97,401	17,836	1.0	0.6
2009	22,83,473	45,156	2.0	1.2	22,60,156	21,033	0.9	0.6
Old Private Sector Banks								
2005	70,412	4,200	6.0	3.1	67,742	1,859	2.7	1.4
2006	85,154	3,759	4.4	2.5	82,957	1,375	1.7	0.9
2007	94,872	2,969	3.1	1.8	92,887	891	1.0	0.6
2008	1,13,404	2,557	2.3	1.3	1,11,670	740	0.7	0.4
2009	1,30,352	3,072	2.4	1.3	1,28,512	1,165	0.9	0.5
New Private Sector Banks								
2005	1,27,420	4,582	3.6	1.6	1,23,655	2,353	1.9	0.8
2006	2,32,536	4,052	1.7	1.0	2,30,005	1,796	0.8	0.4
2007	3,25,273	6,287	1.9	1.1	3,21,865	3,137	1.0	0.5
2008	4,12,441	10,440	2.5	1.4	4,06,733	4,907	1.2	0.7
2009	4,54,713	13,911	3.1	1.8	4,46,824	6,253	1.4	0.8
Foreign Banks								
2005	77,026	2,192	2.8	1.4	75,354	639	0.8	0.4
2006	98,965	1,928	1.9	1.0	97,562	808	0.8	0.4
2007	1,27,872	2,263	1.8	0.8	1,26,339	927	0.7	0.3
2008	1,62,966	2,859	1.8	0.8	1,61,133	1,247	0.8	0.3
2009	1,69,716	6.833	4.0	1.5	1,65,415	2,973	1.8	0.7

Source: RBI, *Report on Trend and Progress of Banking in India,* 2008–09.

TABLE 14.4 Classification of Loan Assets-Bank Groupwise

(As at End-March)
(Amount in Rs. Crore)

Bank Group	Standard Assets		Sub-standard Assets		Doubtful Assets		Loss Assets		Total Gross NPAs		Total Gross Advances
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount
1	2	3	4	5	6	7	8	9	10	11	12
Scheduled Commercial Banks											
2004	8,37,130	92.9	21,026	2.3	36,247	4.0	7,625	0.9	64,898	7.2	9,02,027
2005	10,93,523	94.9	14,016	1.2	37,763	3.3	7,382	0.6	59,161	5.1	11,52,684
2006	14,99,431	96.7	14,826	1.0	30,105	2.0	7,016	0.4	51,947	3.3	15,51,378

(*Continued*)

TABLE 14.4 *(Continued)*

(As at End-March)

(Amount in Rs. Crore)

Bank Group	Standard Assets		Sub-standard Assets		Doubtful Assets		Loss Assets		Total Gross NPAs		Total Gross Advances
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount
1	2	3	4	5	6	7	8	9	10	11	12
2007	19,61,877	97.5	20,010	1.0	24,408	1.2	6,215	0.3	50,633	2.5	20,12,510
2008	24,51,217	97.7	26,541	1.1	24,507	1.0	5,619	0.2	56,668	2.3	25,07,885
2009	29,61,524	97.7	37,030	1.2	26,998	0.9	6,035	0.2	70,063	2.3	30,31,587
Public Sector Banks											
2004	6,10,435	92.2	16,909	2.5	28,756	4.4	5,876	0.9	51,541	7.8	6,61,975
2005	8,30,029	94.6	11,068	1.3	30,779	3.5	5,929	0.7	47,796	5.4	8,77,825
2006	10,92,607	96.2	11,453	1.0	25,028	2.2	5,636	0.5	42,117	3.7	11,34,724
2007	14,25,519	97.3	14,275	1.0	19,873	1.4	4,826	0.3	38,974	2.7	14,64,493
2008	17,78,476	97.8	17,290	1.0	19,291	1.1	4,018	0.2	40,598	2.2	18,19,074
2009	22,37,556	98.0	20,603	0.9	21,019	0.9	4,296	0.2	45,918	2.0	22,83,473
Old Private Sector Banks											
2004	53,516	92.4	1,161	2.0	2,727	4.7	504	0.9	4,392	7.6	57,908
2005	66,212	94.0	784	1.1	2,868	4.0	549	0.8	4,201	6.0	70,413
2006	81,414	95.6	710	0.8	2,551	3.0	479	0.6	3,740	4.4	85,154
2007	91,903	96.9	760	0.8	1,783	1.9	425	0.4	2,969	3.1	94,872
2008	1,10,847	97.7	816	0.7	1,346	1.2	395	0.3	2,557	2.3	1,13,404
2009	1,20,733	97.6	1,295	1.1	1,267	1.0	390	0.3	2,952	2.4	1,23,685
New Private Sector Banks											
2004	1,13,560	95.0	1,966	1.6	3,665	3.0	321	0.3	5,952	5.0	1,19,512
2005	1,22,577	96.2	1,449	1.1	3,061	2.4	334	0.3	4,844	3.8	1,27,421
2006	2,28,504	98.3	1,717	0.7	1,855	0.8	460	0.2	4,032	1.8	2,32,536
2007	3,19,002	98.1	3,608	1.1	2,147	0.7	516	0.2	6,271	1.9	3,25,273
2008	4,02,013	97.5	6,473	1.6	3,106	0.8	849	0.2	10,428	2.5	4,12,441
2009	4,40,813	96.9	9,258	2.0	3,708	0.8	934	0.2	13,900	3.1	4,54,713
Foreign Banks											
2004	59,619	95.1	990	1.6	1,099	1.8	924	1.5	3,013	4.8	62,632
2005	74,705	97.0	715	1.0	1,035	1.3	570	0.7	2,320	3.0	77,025
2006	96,907	98.0	946	1.0	670	0.7	441	0.5	2,057	2.0	98,965
2007	1,25,453	98.1	1,367	1.1	605	0.5	447	0.3	2,419	1.9	1,27,872
2008	1,59,882	98.1	1,962	1.2	764	0.5	358	0.2	3,084	1.9	1,62,966
2009	1,62,442	95.7	5,874	3.5	1,004	0.6	416	0.3	7,294	4.3	1,69,716

Source: RBI, *Report on Trend and Progress of Banking in India,* 2008–09.

TABLE 14.5 Select Financial Indicators

(%)

Item	*Year*	*Scheduled Commercial Banks*	*DFIs*	*PDs*	*NBFCs*	*SUCBs*
CRAR	2007	12.3	25.3	33.4	21.1	11.4
	2008	13.1	26.3	37.5	22.4	11.9
Gross NPAs	2007	2.7	5.6	n.a	1.6	17.7
to Gross Advances	2008	2.4	0.6	n.a	2.6	14.2
Net NPAs	2007	1.1	0.1	n.a	0.0	3.3
to Net Advances	2008	1.1	0.1	n.a	0.3	2.3
Return on	2007	0.9	1.5	2.9	1.0	0.7
Total Assets	2008	1.0	1.3	2.5	n.a	0.7

(Continued)

Item	Year	Scheduled Commercial Banks	DFIs	PDs	NBFCs	(%) SUCBs
Return on	2007	13.2	6.7	9.0	8.6	n.a
Equity	2008	12.5	6.1	10.7	n.a	n.a
Costs/Income	2007	51.2	20.5	49.9	17.3	58.9
Ratio	2008	49.2	21.2	25.4	n.a	56.2

N.A.: Not Available.
Note:
- Data are provisional.
- Data for NBFCs pertain to deposit-taking NBFCs having an asset size of Rs. 10 crore and above. Data for 2008 in respect of NBFCs pertain to the period ended September 2007.
- Data for scheduled commercial banks pertain to domestic operations only and may not tally with the balance sheet data.

Source: RBI, *Annual Report*, 2007–08.

TABLE 14.6 Net NPAs to Net Advances of Scheduled Commercial Banks (Frequency Distributions)

Year	*Public Sector Banks*		*Private Sector Banks*		*Foreign Banks*
	SBI Group	*Nationalised Banks*	*Old*	*New*	
2008–09					
Upto 2 Per Cent	7	19	14	4	24
Above 2 Per Cent and Upto 5 Per Cent	0	0	1	3	6
Above 5 Per Cent and Upto 10 Per Cent	0	0	0	0	1
Above 10 Per Cent	0	0	0	0	0
2007–08					
Upto 2 Per Cent	7	19	15	7	25
Above 2 Per Cent and Upto 5 Per Cent	1	1	0	1	2
Above 5 Per Cent and Upto 10 Per Cent	0	0	0	0	0
Above 10 Per Cent	0	0	0	0	1

Source: RBI, *Annual Report*, 2008–09.

Box 14.1 Public Sector Banks to Spell Out Details of NPAs

Public sector banks will have to furnish details of their non-performing loans to the finance ministry while setting business goals.

These banks will have to provide information on the source of change in the net NPAs. This would entail setting targets for cash recovery, upgradation, and prudential write off. The government's idea is to make bank boards more responsible in meeting higher profit targets while giving greater autonomy.

Ten quantitative and six qualitative parameters have been listed for setting target. The quantitative parameters include return on average assets, return on average networth, earnings per share, capital adequacy ratio, growth in business, priority sector lending, net interest margin, non-performing loans (percentage), non-performing loans (actuals), source of change in NPA, cost to income ratio, and profit after tax. The qualitative parameters include compliance with Basel II norms, improvement in risk management practices, use of technology, HRD and career planning, new product innovations, and special efforts to reach out to the under-privileged.

Source: The Economic Times, July 12, 2005, p. 11.

TABLE 14.7 NPAs recovered by SCBs Through Various Channels

(Amount in Rs. Crore)

Recovery Channel	2008–09				2007–08			
	No. of Cases Referred	Amount Involved	Amount Recovered	Col. (4) as % of Col. (3)	No. of Cases Referred	Amount Involved	Amount Recovered	Col.(8) as % of Col. (7)
1	2	3	4	5	6	7	8	9
(i) Lok Adalats	5,48,308	4,023	96	5.4	186,535	2,142	176	8.2
(ii) DRTs	2,004	4,130	3,348	81.1	3,728	5,819	3,020	51.9
(iii) SARFAESI Act	60,760	12,067	3,962	33.0	83,942#	7,263	4,429	61.0

#: Number of notices issued.
Source: RBI, *Report on Trend and Progress of Banking in India,* 2008–09.

TOOLS AVAILABLE TO BANKS TO MANAGE THEIR NPAs

The provisions of Indian laws do not facilitate speedy and effective enforcement of securities. The Sick Industries Companies (Special Provisions) Act, 1985 was enacted to provide a framework for the rehabilitation and revival of sick industrial companies through the board for industrial and financial reconstruction so as to enable inter alia release of public funds that are locked up in such companies. This act was not only unable to provide a speedy and efficient mechanism for rehabilitation and revival of the sick companies, but also provided companies with a 'safe haven' for defaulting.

Now banks and financial institutions saddled with bad loans have multiple options like direct settlement across the table, legal recourse in the form of approaching the high court or debt recovery tribunals, enforcement of the new securitisation law (where securities pledged with them could be attached and subsequently sold), and lastly selling it to asset reconstruction companies (ARCs).

Among the various channels of recovery available to banks for dealing with bad loans, the amount recovered as percentage of amount involved was the highest under the SARFAESI Act, followed by debt recovery tribunals (DRTs) during 2007–08 (Table 14.7).

One Time Settlement/Compromise Scheme

Banks have been advised to devise one-time compromise settlement schemes for resolution of NPAs. The RBI issued guidelines for this scheme in March 2000. This scheme covers NPAs classified as doubtful and NPAs classified as sub-standard, which have subsequently become doubtful or less. This scheme covers actions under the SARFAESI Act and also cases pending before courts/DRTs/BIFR, subject to consent decree being obtained from them but does not cover cases of willful default, fraud and malfeasance. As per this scheme, for NPAs upto Rs. 10 crore, the minimum amount that should be recovered should be 100 per cent of the outstanding balance in the account. For NPAs above Rs. 10 crore, the CMDs of the respective banks should personally supervise the settlement of NPAs on a case-to-case basis. The RBI has allowed the board of directors to evolve policy guidelines regarding one-time settlement of NPAs as a part of their loan recovery policy. The amount arrived for settlement is to be paid in lumpsum. If not, borrowers should pay at least 25 per cent upfront and the balance within one year with interest at the existing PLR.

The Reserve Bank issued a new set of guidelines for all public sector banks to go in for one-time settlements of chronic NPAs of Rs. 10 crore and less in the small and medium enterprises (SME). The revised guidelines cover all NPAs in the SME sector which have become doubtful or loss or substandard.

Lok Adalats

- Lok Adalats help banks to settle disputes involving accounts in 'doubtful' and 'loss' category with an outstanding balance of Rs. 20 lakh

They were constituted under the Legal Services Authority Act, 1987. They have been setup to help banks to settle disputes involving accounts in 'doubtful' and 'loss' category with an outstanding balance of Rs. 20 lakh.

Lok adalats help in resolving disputes between the parties by conciliation, mediation, compromise or amicable settlement and thereby reduce burden on courts. They were conferred adjudicial status and every award of the Lok Adalat shall be deemed to be a decree of a civil court and no appeal can be made to any court against the award made by the Lok Adalat. They are generally presided over by two or three senior persons including retired senior civil servants, defense personnel and judicial officers.

Debt recovery tribunals (DRTs) have now been empowered to organise Lok Adalats to decide on cases of NPAs of Rs. 10 lakh and above. Banks were advised to participate in the Lok Adalats convened by various DRTs/DRATs for resolving cases involving Rs. 10 lakh and above to reduce the stock of NPAs.

Commercial banks have filed 1,164,650 cases involving an amount of Rs. 7,740 crore upto March 31, 2008. The number of cases resolved was 4,04,378 involving an amount of Rs. 2,009 crore and an amount of Rs. 885 crore was recovered till 2007–08. A large number of cases involving small amounts were successfully resolved through these fast –track courts. (Table 14.7)

Despite being a popular method, banks find difficulty in bringing the parties together when the Lok Adalat meets.

Debt Recovery Tribunals

They were setup under The Recovery of Debts due to Banks and Financial Institutions Act, 1993, also popularly called as the RDB Act. This act provides for the establishment of tribunals for expeditious adjudication and recovery of debts due to banks and FIs and for matters connected therewith and incidental thereto. Under the act, two types oftribunals are set up: (i) Debt Recovery Tribunals (DRTs) and (ii) Debt Recovery Appellate Tribunals (DRATs). The order passed by a DRT is appealable to a DRAT but no appeal shall be entertained by the DRAT unless the applicant deposits 75 per cent of the amount due from him. However, the DRAT may waive or reduce the amount of such deposit. DRTs have been empowered to decide on cases of advances of Rs. 10 lakh and above. Recoveries valued below Rs. 10 lakh are sent to civil courts, while those abovr Rs. 10 lakh are referred to the DRTs. After the enactment of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interests Act (SARFAESI Act), borrowers could become first applicants before the DRTs. Earlier only lenders could be applicants.

- DRTs help in expeditious adjudication and recovery of debts due to banks and FIs

The central government sets up the tribunals and provides them with a presiding officer, two recovery officers and other employees. The presiding officer is a judge of the rank of district and sessions judge. The presiding officer is the sole judicial authority to hear and pass any judicial order. Most cities have one DRT, while Mumbai and Delhi have three tribunals and Chennai and Kolkata two each. The number of cases decide the formation of a tribunal.

Every bank and financial institutions can initiate the procedure of recovery by making an application under Section 19 of the Recovery of Debts due to Banks and Financial Institutions Act, 1993, to the tribunal, within the local limits of whose jurisdiction the defaulter company is located. If there are other banks whose loan to the same company has become bad, the latter can join the recovery suit. After receiving a valid application, the DRT takes up the case and listens to arguments from the contesting parties. The parties to the suit or proceedings can be represented by an agent, including a lawyer, in which case the application must be accompanied by a duly executed *Vakalatnama*.

DRTs have become more active as they have been vested with new powers such as power to attach defendant's property/assets before judgement, penal provisions for disobedience of the tribunal's order or breach of any terms of the order and appointment of receiver with powers of realisation, management, protection and preservation of property. At present, there are 29 DRTs and 9 DRATs but they have hardly made a dent on the recovery process. Defendants challenge the validity of the act in the high court which hinders the functioning of the DRTs.

Corporate Debt Restructuring (CDR)

The scheme of CDR was institutionalised in 2001–02 to provide a timely and transparent system for restructuring of corporate debts of Rs. 20 crore and above with the banks and financial institutions. The corporate debt should be outside the purview of the Board for Industrial and Financial Reconstruction (BIFR), DRTs, or other legal proceedings. The objective of the scheme is to enable corporates affected by certain internal/ external factors to restructure their debt through an orderly and coordinated debtor—creditor agreement and inter-creditor agreement which results in preserving their viability and minimising losses to creditors/other stakeholders. This scheme enables speedy disposal of restructuring proposals of large corporate borrowers engaged in any type of activity and availing finance from more than one bank/FI/ under multiple banking/ syndication/consortium system of lending. CDR is a non-statutory mechanism which is a voluntary system based on Debtor-Creditor Agreement (DCA) and Inter-Creditor Agreement (ICA). The Inter-Creditor Agreement would be a legally binding agreement amongst the creditors, with necessary enforcement and penal clauses, wherein the creditors would commit themselves to abide by the various elements of CDR system.

CDR Mechanism

- Applies to outstanding multiple banking accounts/ consortium accounts of Rs. 20 crore and above

Restructuring of Debt Through

- Financial restructuring
- Business restructuring
- Operational restructuring

The eligibility criteria has been broadened to include recovery suit-filed cases by the creditors against the company provided the proposal to restructure is supported by 75 per cent of the lenders by value and 60 per cent of creditors (by number); large erstwhile BIFR cases to be decided by CDR Core Group on a case-to-case basis provided that the lending institutions complete all the formalities in seeking the approval from BIFR before implementing the package; cases involving frauds or diversion of funds without malafide intent may be admitted for restructuring with the approval of the Core Group only.

Reference to Corporate Debt Restructuring System could be triggered by (i) any or more of the creditor who have minimum 20 per cent share in either working capital or term finance, or (ii) by the concerned corporate, if supported by a bank or financial institution having stake as in (i) above.

CDR has a three-tier structure consisting of the CDR Standing Forum and its core Group (the policy-making body), CDR Empowered Group (the functional group deciding on the restructuring of cases referred to CDR mechanism) and the CDR Cell (the secretariat to the CDR system). The CDR Standing Forum is the representative general body of all financial institutions and banks participating in CDR system. Its function is to lay down policies and guidelines, and monitor the progress of corporate debt restructuring. It also provides an official platform for both the creditors and borrowers (by consultation) to amicably and collectively evolves policies and guidelines for working out debt restructuring plans in the interests of all concerned. The CDR Core Group, which is carved out of the CDR Standing Forum, lays down the policies and guidelines to be followed by the CDR Empowered Group and CDR Cell for debt restructuring. It also prescribes the PERT chart for processing of cases referred to the CDR system and decides on the modalities for enforcement of the time frame. The CDR Empowered Group looks into each case of debt restructuring, examines the viability and rehabilitation potential of the Company and approves the restructuring package within a specified time frame of 90 days, or at best within 180 days of reference to the Empowered Group. The CDR Empowered Group takes into consideration parameters such as return on capital employed (ROCE), debt service coverage ratio (DSCR), gap between the internal Rate of Return (IRR) and the Cost of Fund (CoF), and the extent of sacrifice to decide on the acceptable viability benchmark levels applied on a case-by-case basis. The decisions of the CDR Empowered Group shall be final. If restructuring of debt is found to be viable and feasible and approved by the Empowered Group, the company would be put on the restructuring mode. If restructuring is not found viable, the creditors would then be free to take necessary steps for immediate recovery of dues and/or liquidation or winding up of the company, collectively or individually. The CDR Standing Forum and the CDR Empowered Group are assisted by a CDR Cell in all their functions. The lead institution/major stakeholder to the corporate works out a preliminary restructuring plan in consultation with other stakeholders and submits it to the CDR Cell within one month. The CDR Cell will prepare the restructuring plan in terms of the general policies and guidelines approved by the CDR Standing Forum and place for consideration of the Empowered Group within 30 days for decision. The Empowered Group can approve or suggest modifications but ensure that a final decision is taken within a total period of 90 days. However, for sufficient reasons the period can be extended up to a maximum of 180 days from the date of reference to the CDR Cell.

The guidelines allow accounts to be categorised as standard, sub-standard or doubtful for restructuring and independent consultants to help in preparing the restructuring plan. The main features of the guidelines are the introduction of two types of restructuring under the CDR System. Accounts which are classified as 'standard' and 'sub-standard' would be restructured under the first category (Category I) whereas accounts classified as 'doubtful' would be restructured under the second category (Category II).

The Category 1 CDR system is applicable only to accounts classified as 'standard' and 'sub-standard.' If the account has been classified as 'standard'/ 'substandard' in the books of at least 90 per cent of creditors (by value), the same would be treated as standard/substandard, only for the purpose of judging the account as eligible for CDR, in the books of the remaining 10 per cent of creditors. There would be no requirement of the account/company being sick, NPA or being in default for a specified period before reference to the CDR system. However, potentially viable cases of NPAs will get priority. This approach provides the necessary flexibility and facilitates timely intervention for debt restructuring.

One of the most important elements of Debtor-Creditor Agreement is 'stand still' agreement binding for 90 days, or 180 days by both sides. Under this clause, both the debtor and creditor(s) shall agree to a legally binding 'stand-still' whereby both the parties commit themselves not to take recourse to any other legal action during the 'stand-still' period. This would be necessary for enabling the CDR System to undertake the necessary debt restructuring exercise without any outside intervention, judicial or otherwise. However, the stand-still clause will be applicable only to any civil action either by the borrower or any lender against the other party and will not cover any criminal action.

Additional finance, if any, is to be provided by all creditors of a 'standard' or 'substandard account' irrespective of whether they are working capital or term creditors, on a pro-rata basis. In case for any internal reason, any creditor (outside the minimum 75 per cent and 60 per cent) does not wish to commit additional financing, that creditor will have an option in accordance with the provisions. Such creditor can either (a) arrange for its share of additional finance to be provided by a new or existing creditor, or (b) agree to the deferment of the first year's interest due to it after the CDR package becomes effective. The providers of additional finance, whether existing creditors or new creditors, shall have a preferential claim, to be worked out under the restructuring package, over the providers of existing finance with respect to the cash flows out of recoveries, in respect of the additional exposure.

The lenders who wish to exit from the package would have the option to sell their existing share to either the existing lenders or fresh lenders, at an appropriate price, which would be decided mutually between the exiting lender and the taking over lender The new lenders shall rank on par with the existing lenders for repayment and servicing of the dues since they have taken over the existing dues to the exiting lender In order to bring more flexibility in the exit option, One Time Settlement can also be considered, wherever necessary, as a part of the restructuring package. If an account with any creditor is subjected to One Time Settlement (OTS) by a borrower before its reference to the CDR mechanism, any fulfilled commitments under such OTS may not be reversed under the restructured package. Further payment commitments of the borrower arising out of such OTS may be factored into the restructuring package.

There have been instances where the projects have been found to be viable by the creditors but the accounts could not be taken up for restructuring under the CDR system as they fell under 'doubtful' category. Hence, a second category of CDR is introduced for cases where the accounts have been classified as 'doubtful' in the books of creditors, and if a minimum of 75 per cent of creditors (by value) and 60 per cent creditors (by number) satisfy themselves of the viability of the account and consent for such restructuring. It will not be binding on the creditors to take up additional financing worked out under the debt restructuring package and the decision to lend or not to lend will depend on each creditor bank/FI separately. In other words, under the proposed second category of the CDR mechanism, the existing loans will only be restructured and it would be up to the promoter to firm up additional financing arrangement with new or existing creditors individually. The other conditions are similar to conditions applicable to category I.

CDR is a popular mechanism among lenders as it avoids delays in multiple lender arrangements and increases transparency in the process. A recent review of the operation of the scheme by the RBI revealed that nearly one-third of the units assisted under the scheme improved their financial position. Banks and financial institutions have restructured more than Rs. 1,00,000 debts through financial restructuring, business restructuring and operational restructuring. Financial restructuring includes extension of loan maturity, reduction of interest rates, write-off principal or debt to equity/convertible bond swap. Business restructuring comprises of sale of assets or business units, spin-off business division or mergers and amalgamations. Operational restructuring includes changes in company management, asset sales, special audits and divestiture and/or liquidation of non-viable and non-core assets.

Banks have also successfully used the threat of invoking the SARFAESI Act to recast troubled companies via the CDR mechanism and relieve the stress in their asset books. Under this arrangement, a company's debt is recast if 75 per cent of the lenders (in terms of value) agree to do so. The lenders normally compromise on the interest rates and stretch the maturity profile of debt while borrowers too sacrifice in terms of converting part of their debt into equity, offering high collaterals and pumping in fresh money.

The RBI issued guidelines on the CDR mechanism for small and medium enterprises (SMEs) on 9 September 2005. A small-scale industry is defined as one with investment in plant and machinery not exceeding Rs. one crore, while medium enterprises are those with an investment not exceeding Rs. 10 crore. According to the RBI norms:

- The CDR package would be available to all corporate and non-corporate SMEs irrespective of their level of dues with banks and even if they have banking facilities from only one bank.
- The repayment schedule should not exceed 10 years and banks should consider a proposal only if they are of the view that the unit could be viable in seven years.
- Accounts involving willful default, fraud and malfeasance would not be eligible for restructuring under these guidelines. Banks will also refrain from restructuring loans of companies categorised as loss accounts.
- If the borrowers outstanding is fully covered by tangible security, the rescheduling of instalments of principal amount would not result in down-grading the account to substandard category. However, tangible security is not required when the outstanding is Rs. 5 lakh.
- If the bank writes off or makes provision on the interest component in terms of present value, the restructured account need not be downgraded to sub-standard category.
- The provision made towards interest sacrifice should be created by debit to profit and loss account and held in a distinct account. For this purpose, the future interest due as per the bank's current prime lending rate should be discounted to the present value at a rate appropriate to the risk category of the borrower (i.e., current PLR plus the appropriate term premium and credit risk premium for the borrower category) and compared with the present value of the dues expected to be received under the restructuring package, discounted on the same basis.
- The sacrifice made by banks on such SME accounts would have to be recomputed on each balance sheet date till satisfactory completion of all repayment obligations and full repayment of the outstanding.
- Banks should also provide for the shortfall in provision or reverse the amount of excess provision held in the distinct account.

Willful Defaulters

- A willful defaulter is a borrower who defaults in meeting his obligation to the lender when he has the capacity to honor the obligations or when he has utilised funds for purposes other than those for which finance was granted

A large number of defaulters strategically defaulted on their repayment obligations on realising that the legal machinery was ineffective in taking any steps against them. As per the RBI guidelines on detection of willful defaults, a willful default occurs when a borrower defaults in meeting its obligations to the lender when it has a capacity to honour the obligations or when funds have been utilised for purposes other than those for which finance was granted.

The RBI publishes a list of borrowers with outstanding aggregating Rs. one crore and above and against whom suits have been filed by banks and financial institutions for recovery of their funds as on March 31 every year. The banks have to submit a list of willful defaulters to the SEBI also so as to prevent their access to capital markets. The RBI has also advised public sector banks to examine all cases of willful default of Rs. one crore and above and file criminal suits in such cases. A willful defaulter does not get any new loans from FIs. Also, promoters are not allowed to raise resources for floating new ventures for five years from the date of the Reserve Bank publishing their names in the list of willful defaulters.

Banks and financial institutions are required to form a committee of higher functionaries headed by the executive director for classification of borrowal accounts as willful defaulters, and create a redressal mechanism in the form of a committee headed by the chairman and the managing director to be carried out through two distinct processes, namely, (i) identification of default as 'willful' based on the prescribed norms through a committee approach, and (ii) suitably advising the borrower about the proposal to classify him as willful defaulter, along with the reasons thereof. The concerned borrower would be provided reasonable time for making representation against such decision to the committee members. A final declaration as 'willful defaulter' would be made only after a view is taken by the committee on a specific representation.

SARFAESI Act

SARFAESI Act Deals with

- Securitisation
- Asset Reconstruction
- Security Enforcement

Objectives of SARFAESI Act

- To strengthen the creditors' rights of recovery
- To pave the way for speedy NPA recovery
- To empower ARCs for asset reconstruction and recoveries

The government enacted the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest SARFAESI Act, 2002 for enforcement of security interest for realisation of dues without the intervention of courts or tribunals. This act is a step towards bringing down the level of risk in the system and encouraging banks to lend.

The act deals with the following aspects: (i) securitisation, (ii) asset reconstruction, and (iii) security enforcement. These three concepts have been interwoven to deal effectively with the problem of NPAs. Securitisation is conversion of a financial or non-financial asset into securities. These assets may be healthy or unhealthy (non-performing). Asset reconstruction is a financial tool for corporate debt restructuring and financial rehabilitation through rebundling, takeovers or sale. Enforcement of security interest confers the right on lenders to foreclose a non-performing loan.

The act has defined certain key terms relating to the above three concepts. Section 2 (1) (2d) defines a 'secured creditor' as a bank or a financial institution and including a debenture trustee appointed by the said bank/financial institution and an ARC/SC, in whose favour security interest is created for due payment by a borrower of any financial assistance. The term 'security interest' is defined as covering any right, title, interest of any kind upon property created in favour of the secured creditor. The definition of 'financial asset' includes claims to debt or receivables, secured or unsecured, any debt or receivable secured by mortgage, charge, hypothecation of movable property or any beneficial interest in property. The term 'securitisation' is defined as acquisition of financial assets by any securitisation company or reconstruction company from any organisation whether by raising of funds by such securitisation company or reconstruction company from qualified institutions buyers by issue of security receipts representing undivided interest in such financial assets or otherwise. 'Obligor' is defined as a person liable to the originator to pay a financial asset or discharge any obligation is respect of the financial asset. Originator is the owner of the financial asset which is to be acquired by an SC/ARC and security receipt or security issued by an SC/ARC to a qualified institutional buyer pursuant to a scheme evidencing acquisition by the holder of an undivided right, title or interest in the financial asset. 'Securitisation company' is a company formed and registered under the Companies Act, 1956 for the purpose of securitisation/asset reconstruction respectively.

The act permits a secured creditor whose debt has become an NPA to issue a notice to the borrower requiring the borrower in writing to discharge his dues within 60 days. In case the borrower fails to discharge his liability within 60 days of issue of the notice, the act permits the secured creditors to enforce their security interest provided that in case of financial asset held by more than one financial creditor or joint financing of the financial asset by secured creditors, not less than 75 per cent of the secured creditors agree. The secured creditor is entitled to take one or more of the following measures as mentioned in Section 13 (4) of the ordinance.

- Take over possession of the secured assets of the borrower including right to transfer by way of lease, assignment or sale.

- Take over the management of the secured assets of the borrower including the right to transfer by way of lease, assignment or sale.
- Appoint any person as a manager (such person could be the ARC if they do not accept any pecuniary liability) to manage the secured assets the possession of which has been taken over by the secured creditor.
- Require at any time by notice in writing to any person who has acquired any of the secured assets from the borrower and from whom any money is due or may became due to the borrower, to pay the secured creditor, so much of the money as is sufficient to pay the secured debt.

The secured creditors are required to get valuation of the assets taken over under Section 13 (4) of the act. They can then sell off the assets through any of the following routes.

- Only secured creditors can refer to SARFAESI

- By obtaining quotations from persons dealing in such assets or otherwise interested in buying the assets.
- By inviting tenders from the public.
- By holding public auctions.
- By private treaty.

The bargaining power of lenders has improved after the enactment of SARFAESI Act.

The act does not apply to unsecured loans, loans below Rs. 1,00,000 nor to loans where the remaining principal due is less than 20 per cent of the amount advanced.

The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act has given banks and FIs a much needed tool to recover bad debt. Along with this came the corporate debt restructuring (CDR) package, where both lenders and borrowers sit across the table and recast stressed debt for the benefit of both the parties. This is the classic carrot and stick approach—if borrowers are not willing to come to the discussion table, the SARFAESI sword hangs over their heads.

The act also introduces another global trend to the Indian credit market; the establishment of ARC to recover distressed assets. The banks can now clean up their books by selling assets to ARCs at a discounted price or taking over the assets of a defaulter and selling them to recover their dues without resorting to long-winded legal procedures. The first ARC ARCIL acquired 8.3 per cent of gross non-performing bonds during 2005–06. ARCIL took over Rs. 20,000 crore of sticky assets from the Indian financial system by March 2006. Banks can also generate funds locked in the existing assets through securitisation, i.e., issuing bonds against the security of assets. Moreover, the act no longer allows any reference to be made to the Board for Industrial and Financial Reconstruction (BIFR)—a traditional haven for promoters of sick companies. However, the act suffers from certain ambiguities such as the problem of stamp duty and larger powers granted to creditors.

The SARFAESI Act later got into legal wrangles before the supreme court on the issue of Mardia Chemicals. Mardia Chemicals challenged the provisions of the act in the supreme court. The supreme court, in its judgement dated April 8, 2004, upheld the constitutional validity of the act and its provisions except a sub-section (2) of Section 17 under Section 17 of the ordinance, the borrower has no right of appeal when notice is issued u/s.13(2) upto the stage when measures have been taken u/s.13(4). The supreme court declared Section 17 (2) as unconstitutional and violative of Article 14 of the Constitution of India.

The Apex Court struck down Section 17 (2) of the said act which requires pre-deposit of 75 per cent of the amount claimed by the secured creditor. However, in reality, the court transposed these powers to be vested with DRTs who, in turn, could impose conditions as they deem fit and proper having regard to the facts and circumstances of the case. In other words, DRTs can play a significant role in disciplining willful defaulters by specifically requiring them to furnish security in the form of deposit of such sums as they deem proper before proceeding to stay the action initiated by the secured creditor, having regard to the conduct of the borrower. As such, the decision of striking down Section 17 (2) would not majorly dilute the legislative intent in disciplining the defaulters.

Benefits of Sale of NPAs to ARCs

- Enables banks/FIs to remove NPAs from the loan books
- Enable banks/FIs to focus on their core activities
- Fuster implementation of resolution strategy by ARCs
- Reduces expenditure of banks/FIs on NPA maintenance

Asset Reconstruction Companies

The SARFAESI Act, 2002 paved the way for setting up asset reconstruction companies (ARCs) under Section 30 of the act. ARC is setup to help the banks and financial institutions to clean up their balance sheets. Asset reconstruction company is also known as securitisation company (SC) or reconstruction company (RC) which tries and resurrects bad loans into good ones.

ARC is an important constituent of the financial system because of the following reasons.

- Isolates non-performing loans from the balance sheets of banking and financial institutions and thereby enable them to focus on their core activities.
- Facilitates development of market for distressed assets.

An ARC is registered under the Companies Act and regulated by the RBI as a non-banking financial company [u/s. 451 (f) (iii) of RBI Act, 1934].

The functions of an ARC are specified in RBI Notification No. DNBS 2/CGM (CSM) 2003, dated April 23, 2003 and they are as follows:

- Acquisition of financial assets (as defined u/s.2 (L) of the SARFAESI Act.
- Change or take over of management/sale or lease of business of the borrower (as per the guidelines to be issued by the RBI in this behalf).
- Rescheduling of debts.
- Enforcement of security interest (as per Section 13 (4) of the SARFAESI Act, 2002.
- Settlement of dues payable by the borrower.

The SARFAESI Act vests the RBI with the powers to register such companies and frame regulations for their functioning, covering areas, such as, registration, owned fund, prudential norms, capital adequacy, aggregate value and type of assets to be acquired. Based on the recommendations of the two working groups constituted by the RBI to address the above issues, guidelines and directions have been issued to securitisation or reconstruction companies on April 23, 2003. Following are the main features of the SCs/RCs.

- SCs/RCs seeking registration with the RBI are required to have a minimum owned fund of Rs. 2 crore. This has now been raised to 15 per cent of the assets acquired or Rs. 100 crore whichever is less.
- Such SCs/RCs can undertake both securitisation and asset reconstruction activities. While SCs/RCs not registered with the RBI can carry out the business of securitisation and asset reconstruction outside the purview of the SARFAESI Act, they would not be able to exercise the powers of enforcement provided for in the SARFAESI Act.
- SCs/RCs registered with the RBI would confine their activities to the business of securitisation and asset reconstruction and such other activities as permitted under the SARFAESI Act. Carrying out any other business would require RBI approval. Companies carrying out any other business are to cease to undertake such activities by June 20, 2003.
- SCs/RCs should not accept deposits (as defined under Section 58 A of the Companies Act, 1956). It can issue bonds and debentures for meeting its funding needs.
- While change or take-over of management/sale or lease of business of the borrower is provided for in the SARFAESI Act, SCs/RCs cannot exercise these powers until the RBI issues necessary guidelines in this regard.
- Every SC/RC shall frame an asset acquisition policy with the approval of their board within 90 days of grant of certificate of registration (CoR) by the RBI. This should, inter alia, provide norms and procedure for acquisition of financial assets, types and desirable profile of the assets, valuation of assets and delegation of powers.
- SCs/RCs may reschedule and settle the debts payable by the borrower in terms of a policy framed by their boards in regard thereto.
- SCs/RCs should formulate a plan for realisation of assets, which clearly spell out the steps proposed to reconstruct the assets and realise the same within a specified time frame, which shall not in any case exceed five years from the date of acquisition.
- SCs/RCs may raise funds from qualified institutional buyers (QIBs) by way of issue of security receipts, as per policy framed in this regard, through one or more trusts set up for this purpose. The security receipts, to be issued on private placement basis, can be transferred only amongst QIBs.
- SC/RCs, may, as a sponsor or for the purpose of establishing a joint venture, invest in the equity share capital of another SC/RC for the purpose of asset reconstruction. Surplus funds available may be deployed in government securities and deposits with scheduled commercial banks in terms of a policy framed in this regard by their board. Investments in land and buildings can be made only out of funds borrowed and/or owned funds in excess of the minimum prescribed owned fund of Rs. two crore.
- Prudential norms covering capital adequacy, income recognition, asset classification, valuation of investments and provisioning, shall be applicable to the assets borne on the balance sheet of such companies.
- Every SC/RC should classify the assets on its balance sheet into standard and non-performing assets, and the non-performing assets further into sub-standard assets, doubtful assets and loss assets. Provisioning is to be made at the rate of 10 per cent and 50 per cent (100 per cent to the extent the asset is not covered by the estimated value of the security) in respect of substandard assets

Methods Available to ARCs for Asset Reconstruction and Recoveries

- Restructuring
- Settlement
- Sale of assets through enforcement of security rights under SARFAESI Act
- Sale/lease of management and business of the borrower

and doubtful assets, respectively. Loss assets are to be written off. If loss assets are retained in the books for any reason, provisions are to be made to the full extent.
- All investments made by the SCs/RCs are to be valued at the lower of cost or realisable value.
- SCs/RCs should maintain, on an ongoing basis, a capital adequacy ratio, which shall not be less than 15 per cent of its total risk-weighted assets.
- SCs/RCs are, inter alia to make disclosures in the balance sheet and offer document in the form of financial details, interest rate/probable yield, redemption details including servicing arrangements, credit rating, if any, description of assets backing the security receipts.

Asset reconstruction companies should have owned funds of not less than 15 per cent of the assets acquired or Rs. 100 crore, whichever is less. This requirement has been stipulated to enable ARCs to have a sound capital base and a stake in the management of the NPAs acquired. Further, the ARCs should maintain on an ongoing basis, a minimum capital adequacy of 15 per cent of its risk-weighted assets. They have been granted a maximum realisation time frame of five years from the date of the acquisition of the assets. The minimum owned fund has to be maintained irrespective of whether the assets are transferred to a trust set up for the purpose of securitisation or not, and until realisation of assets and redemption of SRs issued against such assets.

- Security Receipts are pass through certificates. They represents undivided rights, title and interest of the investors in the financial assets held by the trust

Operating Structure of an ARC

An asset/reconstruction company acquires assets from banks/FIs and transfers these assets to one or more trusts set up U/s. 7 (1) and 7 (2) of the SARFAESI Act, 2002. The trusteeship of such trusts shall vest with the ARC. The trusts shall then issue security receipts to QIBs as defined u/s. 2 (u) of the SARFAESI Act, 2002. Security receipts are in the nature of pass through certificates, evidencing an undivided right title or interest in the underlying assets. The proceeds of the issue are utilised for payment of purchase consideration to sellers. An ARC will get only management fee from the trusts. Any gain arising from the difference between acquired price and realised price, will be shared between the ARC and the beneficiary of the trusts while loss will be borne by beneficiary of the trusts only.

As shown in Figure 14.1, an ARC buys loans of bank at a discount and issues it Security Receipts (SRs) instead of paying cash. The ARC services the loan out of the recovery it makes on them. It charges a 2 per cent management fee which is built into the final redemption of SRs. Banks receive cash only

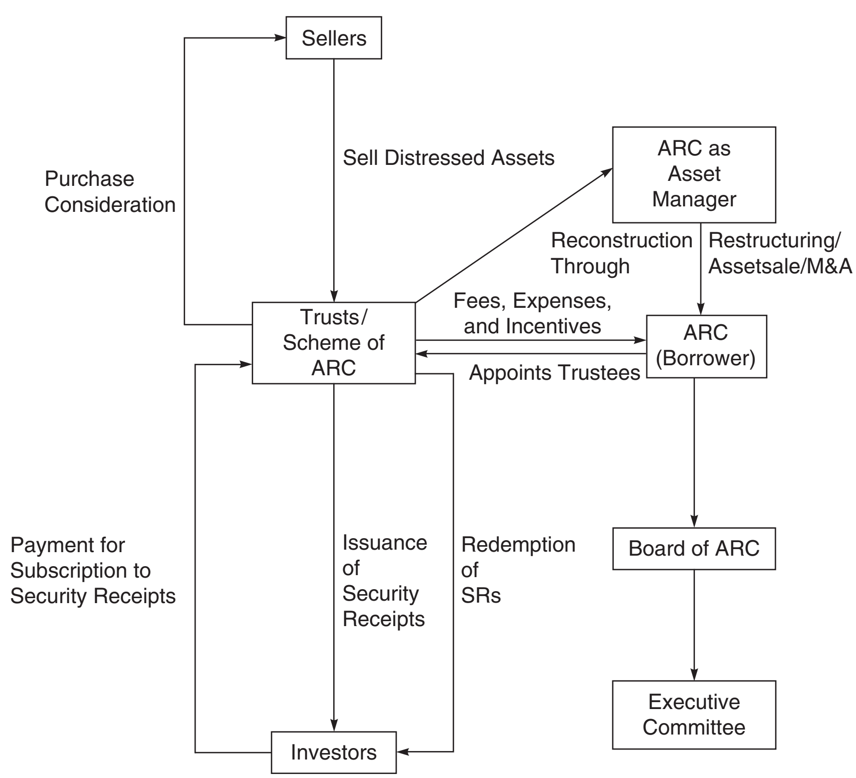


Figure 14.1 Operating Structure of an ARC

after SRs are redeemed. If ARC's recovery is more than the value of SRs, it keeps back the extra recovery. ARCs can even undertake a secondary sale of loans. The bad loans can be sold to another bank say, a foreign bank. Moreover, if an ARC controls 75 per cent of the bad-debts of the defaulting firm, it can use the security enforcement law to take management control of the company which banks cannot do.

Instead of issuing security receipts to QIBs as shown in Figure 14.1, an ARC buys loans of bank at a discount and issues it Security Receipts (SRs) instead of paying cash. The ARC services the loan out of the recovery it makes on them. It charges a 2 per cent management fee which is built into the final redemption of SRs. Banks receive cash only after SRs are redeemed. If ARC's recovery is more than the value of SRs, it keeps back the extra recovery. ARCs can even undertake a secondary sale of loans. The bad loans can be sold to another bank say, a foreign bank. Moreover, if an ARC controls 75 per cent of the bad-debts of the defaulting firm, it can use the security enforcement law to take management control of the company which banks cannot do.

An increasing trend is witnessed in the security receipts subscribed to by the SCs/RCs since June 2007. (Table 14.8).

Activities of an ARC

An ARC cannot undertake any other activities other than the following without prior permission of the RBI.

- It can act as an agent for any bank or financial institution for the purpose of recovering their dues from the borrower on payment of such fees or charges as may be mutually agreed upon between the parties.
- It can act as a manager referred to in Clause (c) of Sub-section (4) of Section 13 on such fee as may be mutually agreed upon between the parties. However, it cannot act as a manager if acting as such gives rise to any pecuniary liability.
- It can act as receiver if appointed by any court or tribunal.

ARCs can acquire financial assets by way of simple agreement from the banks/FIs subject to some terms and conditions or by an issuance of bonds and debentures to the originating banks/FIs. All the rights of the lender vest in the ARC after acquiring the assets and become party to all the contracts/deeds/agreement. ARCs are also allowed to function as a manager of collateral assets taken over by the lenders under security enforcement rights available to them as a recovery agent for any bank/institution. Since the date of acquisitions of assets, ARCs are given a resolution time frame of maximum five years. As per the act, to discharge its function of asset reconstruction, an ARC can undertake (i) enforcement of security interest; (ii) takeover or change the management of the borrower; (iii) undertake sale or lease of the borrowers' business; and (iv) enter into settlements and reschedule the debt. However, as per the SARFAESI act, for enforcement of security interest, at least 75 per cent of the secured creditors need to agree to exercise this right.

For speedier resolution of NPAs, financial assets due from a single debtor to various banks/FIs may be considered for acquisition. Similarly, financial assets having linkages to the same collateral may be considered for acquisition to ensure relatively faster and easy realisation. As per the guidelines, the valuation

TABLE 14.8 Details of Financial Assets Securitised by SCs/RCs

		(Rs. Crore)	
Item	*End-June 2007*	*End-June 2008*	*End-June 2009*
1	*2*	*3*	*4*
1. Book Value of Assets Acquired	28,544	41,414	51,542
2. Security Receipts Issued	7,436	10,658	12,801
3. Security Receipts Subscribed by	–	–	–
a. Banks	6,894	8,319	9,570
b. SCs/RCs	408	1,647	2,544
c. FIIs—	–	–	–
d Others(QIBs)	134	692	687
4. Amount of Security Receipts Completely Redeemed	660	1,299	2,792

Source: RBI, *Report on Trend and Progress of Banking in India,* 2008–09.

process should be uniform for assets of same profile and a standard valuation method should be adopted to ensure that the valuation of the financial assets is done in a scientific and objective manner. Valuation may be done internally and or by engaging an independent agency , depending upon the value of the assets involved. The acquired assets may be sold by inviting quotations from persons dealing in such assets, by inviting tenders from the public, by holding public auctions or by private treaty. While there is no restriction on ARCs to acquire assets which are considered to be unrealisable, as per the guidelines to banks, ARCs will normally not takeover such assets and will act as an agent for recovery on a fee basis for these assets.

The ARCs should be allowed to change the management, by converting debt into equity or otherwise. They should be also allowed to strip the asset or sell it as a going concern which will help create a true market for bad assets.

The Reserve Bank permitted persons/entities eligible under the Foreign Direct Investment (FDI) route, other than FIIs, to invest in the equity capital of Asset Reconstruction Companies (ARCs) registered with the Reserve Bank of India subject to the following conditions:

1. Maximum foreign equity shall not exceed 49 per cent of the paid-up equity capital of the ARC.
2. Where investment by any individual entity exceeds 10 per cent of the paid-up equity capital, ARC should comply with the provisions of Section 3 (3) (f) of the SARFAESI Act, 2002.

Foreign Institutional Investors (FIIs) registered with SEBI were permitted to invest in Security Receipts (SRs) issued by ARCs registered with the RBI. FIIs can invest upto 49 per cent of each tranche of scheme of Security Receipts subject to condition that investment of a single FII in each tranche of scheme of SRs shall not exceed 10 per cent of the issue

Asset Reconstruction Company of India Limited (ARCIL)

ARCIL is the first asset reconstruction company of India. It is sponsored by the State Bank of India, ICICI Bank Ltd, Industrial Development Bank of India, Housing Development Finance Corporation Limited, and HDFC Bank Ltd. ARCIL has been set up as a private sector entity with 51 per cent of its equity capital being held by the private sector banks. ARCIL started with a capital base of Rs. 10 crore. This was expanded to Rs. 220 crore with a view to broad base the equity structure and to have greater participation of major players in the banking sector by reducing individual sponsors' stake from 24.5 per cent to 19.5 per cent.

ARCIL is registered under the RBI under Section 3 of the SARFAESI Act 2002 as a Securitisation Company (SC) and Reconstruction Company (RC) to commence business with effect from August 29, 2003 and is considered as a public financial institution within the meaning of Section 4A of the companies Act,1956. ARCIL is also an associate member of the Indian Banks' Association and a member of the CDR system

Resolution Strategies Deployed by ARCIL

- Debt restructuring
- Mergers and acquisitions
- Settlement with promoters
- Strip sale of assets

Arcil's Objectives

- Convert NPAs into performing assets.
- Act as a nodal agency for NPA resolution.
- Unlock value by utilising productive assets.
- Create a vibrant market for NPA/restructured debt paper.
- Re-energise the financial sector.

ARCIL has deployed a comprehensive range of resolution strategies such as debt restructuring, mergers and acquisitions, settlement with promoters and strip sale of assets, based on an in-depth analysis of enterprise characteristics. ARCIL is focused towards resolution rather than the reschedulement of debt. Debt aggregation by ARCIL enables single point responsibility and ensure speedy implementation of resolution strategy based on sustainable level of debt within a reasonable timeframe.

The essential objective of both the corporate debt restructuring (CDR) and ARCIL is the same-unlocking value from non-performing/distress assets. Hence, they can be seen as complementary resolution efforts in addressing the distressed asset problem.

The ARCIL route has the advantage of taking the asset off the banks' books and creating a secondary market for it, thereby enhancing the value potential.

The SARFAESI Act, 2002 stipulates that once the assets are acquired by any securitisation/ARC no further reference can be made by the borrower company to the BIFR. Pending reference before the BIFR shall be made only when any measure is taken by ARCIL under Section 13 (4) of the SARFAESI Act, 2002.

ASREC (India) Limited

Second ARC to operate after ARCIL and UTI is the key promoter in ASREC with an equity of 30 per cent, followed by the Bank of India at 13.64 per cent and LIC, Allahabad Bank, Indian Bank and Standard Chartered Investment and Loans with holdings of 10 per cent each. Other shareholders include Andhra Bank (4.09 per cent), IL & FS (1.82 per cent), and Dena Bank (0.45 per cent).

The second asset reconstruction company (ARC)—ASREC (India) Limited has commenced its operations. This ARC is sponsored by the Specified Undertaking of Unit Trust of India (UTI-I) which is vested with all the assured return schemes of the erstwhile UTI. Three public sector banks—Bank of India, Allahabad Bank and Indian Bank and the public sector life insurance giant—Life Insurance Corporation of India, Infrastructure Leasing and Financial Services Limited (IL&FS) and Deutsche Bank are its shareholders. UTI-I has the largest stake—39 per cent in this company. The size of the ASREC is about Rs. 7000 crore-the NPAs of UTI-I.

The RBI has issued certificate of registration to eleven securitisation companies (SCs/RCs), of which six have commenced their operations.

Trading of NPAs

India's first ARC, ARCIL, invited bids for its acquired loans in July 2005 and received a good response from both foreign and private banks.

An attempt to create a secondary market for bad loans was made in 2004 by some banks such as Kotak Mahindra and Standard Chartered Bank when they bought bad loans from the Japanese bank Sumitomo Mitsui Banking Corporation and ICICI Bank.

The RBI has set the ground rules for buying and selling distressed assets by issuing prudential norms. A bank can sell a bad loan to another bank only after it remains an NPA in its books for two years, while it can sell the same loan to an ARC the day it is classified as an NPA. The norms on trading of bad loans stipulate that the loan should be sold without recourse.

Box 14.2 Major Factors Contributing to the Successful Operation of an Asset Management Company

The Bank for International Settlement (BIS) carried out a study on the captioned subject. This study highlighted the following factors to make an AMC successful.

Strong political will: Strong political backing on the part of the government to address NPLs in the system is a crucial starting point for any successful AMC. An AMC should operate with sufficient independence, free from political interference.

Explicit government financial support: Preferably, the government should fund the AMC's operations directly through its budget. If an AMC has to issue its own debt instead, an explicit guarantee by the government is needed to strengthen the financial positions of the banks and the AMC.

Supportive legal infrastructure: An effective legal regime—including bankruptcy and foreclosure laws as well as special legal powers granted to the AMC—that allows the AMC to resolve its assets more quickly and to achieve a higher recovery rate.

Efficient market environment: Well-functioning capital markets facilitate asset sales, while permitting foreign investors to purchase assets from the AMC will also speed up asset disposition, especially when the domestic capital market is not so well developed.

Clear AMC mandate: The AMC must have clear objectives and procedures for its operation, such as the types of assets to be acquired and the resolution methods it is permitted to use. It should focus on asset sales and not be overly burdened by broad corporate restructuring.

Well defined AMC life: In general, the tenure of an AMC should be limited in order to prevent it from sitting on assets it acquires for long periods of time for fear of realising large losses, but it should also be realistic relative to the task on hand in order to give the AMC sufficient time to deal with the assets under its control.

Adequate governance: The AMC should have a sound internal control system and effective external supervision, and be audited regularly by an independent audit firm.

Good transparency: The AMC should periodically disclose the results of its operations vis-à-vis its mandate as well as its audit results in a manner that can be easily understood by the market and the public.

Realistic asset pricing: Generally, assets should be transferred to an AMC at market-based prices, especially for privately owned banks. Often, proper incentives, such as option-like profit–loss sharing agreements, or enforcements help facilitate asset transfers.

Speedy resolution: The AMC should aim for speedy disposition of acquired assets. Waiting for an economic turnaround to increase recovery often leads to slower resolution progress and larger losses.

Source: www.arcil.com.

Box 14.3 Restructuring Agencies—International Experience in Select Countries

Country	ARCs	Key Features
Malaysia	Centralised agency—Danharta—set up in 1998 as a wholly-owned government company with capital of Ringitt 1.5 bn. Issued zero coupon bonds worth Ringitt 5 bn.	Assets acquired by it are either sold off or restructured. Danharta acts as a 'bad bank' with a focus on resolution of the asset rather than rapid liquidation to third party investors. However, substantial NPAs are unresolved and continue to burden the banking sector.
Thailand	The Financial Sector Reconstructuring Agency (FRA) formed in October 1997 by the Ministry of the Finance, the Bank of Thailand and the private sector was unsuccessful. The government then setup Thai Asset Management Corporation (TAMC) in 2001. Now supplemented by Individual Bank based resolution.	The FRA conducts auctions of NPAs and the TAMC acts as the bidder of the last resort at these auctions.
China	Four separate ARCs—China Orient, China Huarong, China Cinder and China Greatwall for four primary banks of China namely, Bank of China, Industrial and Commercial Bank of China, China Construction Bank and Agricultural Bank of China.	The non-performing assets transferred at face value to the respective ARC. The assets acquired by the ARC financed mainly through the People's Bank of China. ARCs have been able to deal with only 16 per cent of the NPAs.
Korea	Korea Asset Management Corporation (KAMCO). Now supplemented by individual bank-based NPA resolution.	Adopted an aggressive approach towards NPA sale and restructuring of assets. Used securitisation and joint venture route for investor participation in the assets.
Ghana	NPART (1990–97)	Non-performing loans transferred at book value excluding accrued interest.
Finland	Assenal (1993)	Non-performing loans transferred at book value and substantial share of assets disposed of.
U.S.A	The Resolution Trust Company (RTC) setup in 1992 to overcome thrift crisis).	Able to securitise consumer receivables, single family mortgages and pools of multi-unit residential mortgages. Less liquid assets sold off. RTC successfully ended operations in 1995.

A bank selling its loans to another bank receives hard cash and the loan moves out completely from the seller's book. Acquirers of bad loans are those banks who have low NPAs and are confident of turning around such assets on the strengths of their own resolution skills and also finding a scope for capital appreciation and higher returns. While acquiring such stressed assets, the acquirer takes into account the underlying value of the assets pledged as security, the potential time period for recovery, the amount which can be realised from that account and exclusive rights, if any, over the pledged security. The seller takes into consideration factors such as impact of such a loan sell-off on the balance sheet vis-à-vis the realisable value of the account, opportunity cost and the prospects of whether it would be in a better position to resolve the loan.

Factors inhibiting the growth of the market for bad loans:

1. Security Receipts in India are not listed and traded
2. There is a limit on the holding of a Security Receipt (SR) of a particular asset by an FII. At present, an FII cannot hold more than 10 per cent in the SRs of a particular asset.
3. There is an absence in the pooling of SRs and their securitisation. The securitised paper issued out of that pool would be in the form of junk bonds that carry lesser risk than SRs of a specific loan.

ARCs are a mechanism which can help cleanup the balancesheets of banks and financial institutions by cutting short the time to resolution as well as maximising the recoveries.

CIBIL

Banks and financial institutions have a lot of opportunity to expand their loan business looking to the higher industrial growth expansion plans of the corporate sector and relative importance of infrastructure development. Moreover, increased competition has driven these institutions to focus more on credit

- Credit Bureaus are specialised financial institutions that maintain records of credit histories of individuals and business entities

growth. Credit growth is associated with credit risk. These institutions have to take due diligence when granting credit so that there is no credit default which results in funds being locked-up in non-performing assets. Good credit decisions depend upon the availability of comprehensive credit information regarding borrowers. Hence, a need was felt for an institution which would provide credit-related information to lending institutions by maintaining a data base of all borrowers.

In developed financial markets there are specialised financial institutions, known as credit-bureaus, that maintain records of credit histories of individuals and business entities. They are usually set up by lenders—mostly banks and credit card companies. Whenever an individual seeks a loan from a bank or finance company the lender before extending the loan checks his credit profile with the bureau to find out whether the borrower has defaulted with any other lender and whether he is capable of settling the loan. This credit bureau also enables lenders to take quick decisions and charge a differential price based on the credit profile of the borrower. If the lenders, perceived that the risk of repayment of a borrower is low, he will charge a lower interest rate, otherwise, a higher one. The lender has not merely to judge the creditworthiness of the borrower, but he also has to monitor the borrower's behaviour during the term of the loan to assess whether there is a risk of default. This depends on the lender's ability to gather accurate and timely information about the borrower. There always exists some degree of information asymmetry between borrowers and lenders. It is the credit bureau which provides the formal mechanism by which lenders can pool and share information about the characteristics of potential borrowers. Also, it discourages borrowers from becoming over-debted by obtaining credit from multiple lenders.

Functions of Credit Bureau

- Maintain records and credit histories of borrowers
- Provide information of borrowers to lenders
- Help mitigate adverse selection and moral hazard problems in the market for credit

Credit Bureau helps mitigate certain problems which arise on account of insufficient or limited credit information. There exist 'adverse selection' and 'moral hazard' problems in the market for credit. Adverse selection refers to a situation where bad borrowers take higher amount and number of loans from various lenders even at higher interest rates. Moral hazard is a phenomenon whereby a borrower having taken a loan, makes a material change in income or spending that affects his ability to repay the loan. This phenomenon occurs when the borrowers knows that the lender cannot monitor borrowers' behaviour during the tenure of the loan.

The State Bank of India (SBI), Housing Development Finance Corporation Limited (HDFC), Dun and Bradstreet Information Services India Private Limited (D&B), and TransUnion International Inc (TransUnion) signed the Shareholders' Agreement on January 30, 2001 to establish the Credit Information Bureau (India) Limited (CIBIL). They initially held the share capital of CIBIL in the proportion of 40 : 40 : 10 : 10 respectively. The shareholding pattern has been diversified to include:

State Bank of India (10%), Bank of Baroda (5%), TransUnion International Inc (10%), Dun & Bradstreet Information Services India Pvt Ltd (10%), Bank of India (5%), The Hongkong and Shanghai Banking Corporation Ltd (5%), Indian Overseas Bank (5%), Sundaram Finance Ltd (2.5%), Housing Development Finance Corporation Ltd (10%), Punjab National Bank (5%), Union Bank of India (5%), Citicorp Finance (India) Ltd (5%), ICICI Bank Ltd (10%), Central Bank of India (5%), Standard Chartered Bank (5%), and GE Strategic Investments India (2.5%). CIBIL provides credit information of borrowers to banks, financial institutions, non-banking financial companies, housing finance companies and credit card companies. The data is shared on the principle of reciprocity—data can be obtained from CIBIL only by members who contribute all data on all borrowers.

CIBIL is India's first credit information bureau to help the financial institutions make informed, objective and speeder credit decisions and thereby curb the growth of NPAs and improve the functioning of the financial system.

At present, 164 of these credit grantors have accepted membership. These include 81 banks accounting for over 90 per cent of the total credit outstanding amongst the commercial banks, 17 HFCs accounting for over 70 per cent of the total credit outstanding amongst the HFCs, 11 FIs accounting for over 90 per cent of the total credit outstanding amongst the FIs, 2 credit card companies accounting for over 90 per cent of the total outstanding amongst the credit card companies, 7 State Financial Corporations, and 46 major NBFCs representing a substantial portion of the credit outstanding of that sector. The CIBIL maintains the database of suit-filed accounts of Rs. one crore and above and suit-filed accounts (willful defaulters) of Rs. 25 lakhs and above.

Conclusion

The environment for lending business should improve substantially with the passing of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Ordinance, 2002, by parliament. Banks will have to develop suitable strategy and infrastructure to handle the cases acted upon by them under the Securitisation Act. The new Securitisation Bill will help the banks in recovering NPAs and thereby increase their profitability. The act has empowered the banks to seize and dispose of assets of defaulters. According to the act, banks can issue notices to defaulters, take over the possessions of assets, take over the management of secured assets of the borrower and package and sell loans via securitisation. The banking industry has already provided for nearly 45 per cent of the total amount of NPA, by way of provisioning. Recovery of a small portion of these NPAs will add to the profits and improve the earning and book value per share of the banks considerably. Banks should now focus on integration between banking products and services and various segments of financial system to emerge as truly international in the new millennium.

KEY TERMS

Non-performing Assets, Securitisation, Asset Reconstruction Company.

SUMMARY

1. Non-performing assets (NPAs) are loans given by a bank or a financial institution wherein the borrower defaults or delays interest or principal payments. According to the RBI norms, any interest or loan repayment delayed beyond 90 days has to be identified as a non-performing asset.
2. Now banks and financial institutions saddled with bad loans have multiple options like direct settlement across the table, legal recourse in the form of approaching the high court or debt recovery tribunals, enforcement of the new securitisation law (where securities pledged with them could be attached and subsequently sold), and lastly selling it to asset reconstruction companies (ARCs).
3. Banks have been advised to devise one-time compromise settlement scheme for resolution of NPAs. As per this scheme, for NPAs upto Rs. 10 crore, the minimum amount that should be recovered should be 100 per cent of the outstanding balance in the account.
4. Lok Adalats have been setup to help banks to settle disputes involving accounts in 'doubtful' and 'loss' category with outstanding balance of Rs. 5 lakh to Rs. 20 lakh.
5. Debt recovery tribunals were setup under the Recovery of Debts due to Banks and Financial Institutions Act, 1993. This act provides for the establishment of tribunals for expeditious adjudication and recovery of debts due to banks and FIs and for matters connected therewith and incidental thereto. DRTs have been empowered to decide on cases of advances of Rs. 10 lakh and above.
6. The scheme of CDR was institutionalised in 2001–02 to provide a timely and transparent system for restructuring of corporate debts of Rs. 20 crore and above with the banks and financial institutions.
7. The Reserve Bank has advised the public sector banks to examine all cases of willful default of Rs. one crore and above and file criminal suits in such cases. A willful defaulter does not get any new loans from FIs nor can he raise funds from the capital market.
8. The Government enacted the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 for enforcement of security interest for realisation of dues without the intervention of courts or tribunals. This act is a step towards bringing down the level of risk in the system and encouraging banks to lend.
9. An Asset Reconstruction Company (ARC) is setup to help the banks and financial institutions to clean up their balance sheets. The functions of an ARC are acquisition of financial assets, change or take over of management/sale or lease of business of the borrower, rescheduling of debts, enforcement of security interest, and settlement of dues payable by the borrower.
10. The Asset Reconstruction Company of India Limited (ARCIL) is the first asset reconstruction company of India. It is sponsored by the State Bank of India, ICICI Bank Ltd, Industrial Development Bank of India, Housing Development Finance Corporation Limited, and HDFC Bank Ltd.
11. The Credit Information Bureau of India Limited provides credit information of borrowers to banks, financial institutions, non-banking financial companies, housing finance companies, and credit card companies.

REVIEW QUESTIONS

1. What is a non-performing asset? What are the prudential norms relating to non-performing assets?
2. Which are the tools available to banks to manage their NPAs?
3. What is corporate debt restructuring? What is the eligibility criteria for cases to be referred under this mechanism? How does this mechanism operate?
4. Write notes on
   a. Lok Adalats
   b. Debt reovery tribunals
5. What is SARFAESI Act? What are its objectives? How can a secured creditor enforce his right under this act?
6. Why is an ARC important constituent of the financial system? What are its functions? State the methods available to ARCs for asset reconstruction and recoveries?
7. What is a credit bureau? What are the functions of a credit bureau?

CASE STUDY

Brief History

ABC Limited is engaged in manufacturing Stainless Steel and Mild Steel products comprising of Ingots, Rolled Products, Plates, Billets, Hot Rolled Coils, Cold Rolled Coils, and also having captive power plant (CPP) and other products. The company is profit making since last 15 years, i.e., since inception. The company has achieved the turnover of Rs. 2,000 crores during the financial year 2007–08 which includes export turnover of Rs. 780 crores. The company has earned net profit of Rs. 82.30 crores for the financial year 2007–08 after providing for depreciation of Rs. 34 crores. The company has employed about 1,300 employees including Workers, Supervisors, Managers and Administrative Staff. The company is listed with Mumbai Stock Exchange and National Stock Exchange and the price of the share quoted between Rs. 150 and Rs. 200 per share before stock market melt down.

The balance sheet of the company as of 31.3.2008 & 30.11.2008 is as under:

The company was profit making company since inception and up to 31.03.2008. It had paid dividend up to the financial year 2007–08. However, due to world wide recession and sudden drop in the price of the commodities in the metal industry, market price of the stock of the company fell by about 80 per cent. More so, all the contracts/orders that were on the hand have been cancelled /kept on hold by the customers and accordingly the production of the company has been stopped for four days in a week since last two months. The labours have been laid off and the fixed expenditure has become a burden on the company. Meanwhile, the Company had embarked upon an expansion-cum-diversification programme since 2006 at a capital cost of about 350 crores. The Company could tie-up term loans of Rs. 150 Crores against the same. All these loans were for a period of 5 years including a moratorium of 6 months. The production of the expansion project could be commenced only from 01-10-2008. However, the Company had availed first installment of term loans during September 2006 and till November 2008, about 35% of the new loans were repaid back. Now, the Company is facing severe liquidity crunch and is unable to honour its commitments of letter of credit (L/C) of about Rs. 200 Crores, term loan installments of about Rs. 40 Crores on quarterly basis. Present situation of the Company is as under.

Balance Sheet of ABC Ltd

(Rs. in Crores)

Liabilities	*31/03/2008*	*30/11/2008*	*Assets*	*31/03/2008*	*30/11/2008*
SHARE CAPITAL	100	100	FIXED ASSETS		
RESERVES AND SURPLUS	370	300	GROSS BLOCK	514.5	921.76
SECURED LOANS			Less: DEPRECIATION	312.5	336.76
DEBENTURES	100	100	NET BLOCK	202	585
TERM LOANS			CAPITAL WORK-IN-PROGRESS	350	0
For expansion	150	98	INVESTMENTS	99	99
Others	180	135	DEF TAX ASSETS		14
C/C Limit	65	90	CURRRENT ASSETS		
UNSECURED LOANS	15	20	INVENTORY	430	45
DEF TAX LIAB.	20	0	DEBTORS	345	145
CURRENT LIABILITIES			LOANS & ADVANCES	85	76
CREDITORS			CASH & BANK BALANCE	45	56
For Goods	234	210			
For Expenses	123	128	OTHER CURRENT ASSETS	9	10
On Account of L/C	213	203	MISCELLANEOUS EXP	5	4
			DEBIT BALANCE OF P&L A/C	–	350
TOTAL	**1,570**	**1,384**	**TOTAL**	**1,570**	**1,384**

1. When the company drew its accounts up to 30.11.2008, the net-worth was almost fully eroded taking into account the current price of the stock
2. The company is passing through severe liquidity crunch and is unable to honor its letter of credit commitments as well as it will not be able to pay interest to its bankers.
3. The installment due on term loan as at 1.12.2008 could not be paid by the company and if the similar position persists, the company's account will be classified as Non Performing Assets (NPA) with all the banks.

The Management has the following options:

Under the circumstances, the Management is advised as under by various experts. As a Financial Expert, advise the Company to choose the correct option & draft the proper restructuring Scheme.

1. The Chief Financial Controller has advised the management to reduce the accounting year for 9 months and get the accounts audited up to 31.12.2008 by first week of January, 2009 and get the company registered with BIFR as 'Sick Unit.' He also advised not to make any payment to any bank

towards L/C dues as well as installments and interest of term loan and working capital.

2. The External Financial Advisor of the company has advised that the company should go to the bank with a request for comprehensive debt restructuring through CDR cell;
3. The outside consultant/lawyer has advised the Management that the company should approach the High Court with a scheme under section 391–394 for debt reduction and capital reduction.
4. One of the independent director on the board having financial background had stated that the management should approach lead bank to give a moratorium of three years for not making any payment and also to infuse additional corporate loan of Rs. 50 crores.

The Company can revive and earn good profits in future if proper & timely help is given to the Company.

ANNEXURE 14.1 PRUDENTIAL NORMS ON INCOME RECOGNITION, ASSET CLASSIFICATION, AND PROVISIONING PERTAINING TO ADVANCES

Definitions

1. Non-performing Assets

1.1 An asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank.

1.2 A non-performing asset (NPA) is a loan or an advance where;

- interest and/ or instalment of principal remain overdue for a period of more than 90 days in respect of a term loan,
- the account remains 'out of order' in respect of an Overdraft/Cash Credit (OD/CC),
- the bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
- the instalment of principal or interest thereon remains overdue for two crop seasons for short duration crops,
- the instalment of principal or interest thereon remains overdue for one crop season for long duration crops,
- the amount of liquidity facility remains outstanding for more than 90 days, in respect of a securitisation transaction undertaken in terms of guidelines on securitisation dated February 1, 2006.

1.3 Banks should, classify an account as NPA only if the interest charged during any quarter is not serviced fully within 90 days from the end of the quarter.

1.4 **'Out of order' status:** An account should be treated as **'out of order'** if the outstanding balance remains continuously in excess of the sanctioned limit/drawing power. In cases where the outstanding balance in the principal operating account is less than the sanctioned limit/drawing power, but there are no credits continuously for 90 days as on the date of Balance Sheet or credits are not enough to cover the interest debited during the same period, these accounts should be treated as **'out of order'**.

1.5 **'Overdue':** Any amount due to the bank under any credit facility is 'overdue' if it is not paid on the due date fixed by the bank.

2. Income Recognition

2.1. Income recognition policy

2.1.1 The policy of income recognition has to be objective and based on the record of recovery. Internationally income from nonperforming assets (NPA) is not recognised on accrual basis but is booked as income only when it is actually received. Therefore, the banks should not charge and take to income account interest on any NPA.

2.1.2 However, interest on advances against term deposits, NSCs, IVPs, KVPs, and Life policies may be taken to income account on the due date, provided adequate margin is available in the accounts.

2.1.3 Fees and commissions earned by the banks as a result of renegotiations or rescheduling of outstanding debts should be recognised on an accrual basis over the period of time covered by the re-negotiated or rescheduled extension of credit.

2.1.4 If Government guaranteed advances become NPA, the interest on such advances should not be taken to income account unless the interest has been realised.

2.2 Reversal of income

2.2.1 If any advance, including bills purchased and discounted, becomes NPA as at the close of any year, the entire interest accrued and credited to income account in the past periods, should be reversed or provided for if the same is not realised. **This will apply to government guaranteed accounts also**.

2.2.2 In respect of NPAs, fees, commission, and similar income that have accrued should cease to accrue in the current period and should be reversed or provided for with respect to past periods, if uncollected.

2.2.3 ***Leased assets:*** The *finance charge* component of finance income [as defined in 'AS 19 Leases' issued by the Council of the Institute of Chartered Accountants of India (ICAI)] on the leased asset which has accrued and was credited to income account before the asset became nonperforming, and remaining unrealised, should be reversed or provided for in the current accounting period.

2.3 Appropriation of recovery in NPAs

2.3.1 Interest realised on NPAs may be taken to income account provided the credits in the accounts towards interest are not out of fresh/ additional credit facilities sanctioned to the borrower concerned.

2.3.2 In the absence of a clear agreement between the bank and the borrower for the purpose of appropriation of recoveries in NPAs (i.e. towards principal or interest due), banks should adopt an accounting principle and exercise the right of appropriation of recoveries in a uniform and consistent manner.

2.4 Interest application

There is no objection to the banks using their own discretion in debiting interest to an NPA account taking the same to Interest Suspense Account or maintaining only a record of such interest in proforma accounts.

2.5 Computation of NPA levels

Banks should deduct the following items from the Gross Advances and Gross NPAs to arrive at the Net advances and Net NPAs respectively:

- Balance in Interest Suspense Account
- DICGC/ECGC claims received and held, pending adjustment
- Part payment received and kept in suspense account
- Total provisions held (excluding amount of technical write off and provision on standard assets)

For the purpose, the amount of gross advances should exclude the amount of Technical Write off but would include all outstanding loans and advances; including the advances for which refinance has been availed but excluding the amount of rediscounted bills. The level of gross and net NPAs will be arrived at in percentage terms by dividing the amount of gross and net NPAs by gross and net advances, computed as above, respectively.

3. Asset Classification

3.1 Categories of NPAs

Banks are required to classify non-performing assets further into the following three categories based on the period for which the asset has remained non-performing and the realisability of the dues:

- Substandard assets
- Doubtful assets
- Loss assets

3.1.1 ***Substandard assets:*** With effect from March 31, 2005, a substandard asset would be one, which has remained NPA for a period less than or equal to 12 months. In such cases, the current net worth of the borrower/ guarantor or the current market value of the security charged is not enough to ensure recovery of the dues to the banks in full. In other words, such an asset will have well defined credit weaknesses that jeopardise the liquidation of the debt and are characterised by the distinct possibility that the banks will sustain some loss, if deficiencies are not corrected.

3.1.2 ***Doubtful assets:*** With effect from March 31, 2005, an asset would be classified as doubtful if it has remained in the substandard category for a period of 12 months. A loan classified as doubtful has all the weaknesses inherent in assets that were classified as substandard, with the added characteristic that the weaknesses make collection or liquidation in full,—on the basis of currently known facts, conditions and values—highly questionable and improbable.

3.1.3 ***Loss assets:*** A loss asset is one where loss has been identified by the bank or internal or external auditors or the RBI inspection but the amount has not been written off wholly. In other words, such an asset is considered uncollectible and of such little value that its continuance as a bankable asset is not warranted although there may be some salvage or recovery value.

3.2 Guidelines for classification of assets

3.2.1 Broadly speaking, classification of assets into above categories should be done taking into account the degree of well-defined credit weaknesses and the extent of dependence on collateral security for realisation of dues.

3.2.2 Banks should establish appropriate internal systems to eliminate the tendency to delay or postpone the identification of NPAs, especially in respect of high value accounts. The banks may fix a minimum cut off point to decide what would constitute a high value account depending upon their respective business levels. The cut off point should be valid for the entire accounting year. Responsibility and validation levels for ensuring proper asset classification may be fixed by the banks. The system should ensure that doubts in asset classification due to any reason are settled through specified internal channels within one month from the date on which the account would have been classified as NPA as per extant guidelines.

3.2.3 ***Availability of security/net worth of borrower/guarantor:*** The availability of security or net worth of borrower/guarantor should not be taken into account for the purpose of treating an advance as NPA or otherwise.

3.2.4 ***Accounts with temporary deficiencies:*** The classification of an asset as NPA should be based on the record of recovery. Bank should not classify an advance account as NPA merely due to the existence of some deficiencies which are temporary in nature such as non-availability of adequate drawing power based on the latest available stock statement, balance outstanding exceeding the limit temporarily, non-submission of stock statements and non-renewal of the limits on the due date, etc. In the matter of classification of accounts with such deficiencies banks may follow the following guidelines:

- Banks should ensure that drawings in the working capital accounts are covered by the adequacy of current assets, since current assets are first appropriated in times of distress. Drawing power is required to be arrived at based on the stock statement which is current. However, considering the difficulties of large borrowers, stock statements relied upon by the banks for determining drawing power should not be older than three months. The outstanding in the account based on drawing power calculated from stock statements older than three months, would be deemed as irregular.

  A working capital borrowal account will become NPA if such irregular drawings are permitted in the account for a continuous period of 90 days even though the unit may be working or the borrower's financial position is satisfactory.
- Regular and ad hoc credit limits need to be reviewed/ regularised not later than three months from the due date/date of ad hoc sanction. In case of constraints such as non-availability of financial statements and other data from the borrowers, the branch should furnish evidence to show that renewal/review of credit limits is already on and would be completed soon.
- In any case, delay beyond six months is not considered desirable as a general discipline. Hence, an account where the regular/ ad hoc credit limits have not been reviewed/renewed within 180 days from the due date/ date of ad hoc sanction will be treated as NPA.

3.2.5 ***Upgradation of loan accounts classified as NPAs:*** If arrears of interest and principal are paid by the borrower in the case of loan accounts classified as NPAs, the account should no longer be treated as nonperforming and may be classified as 'standard' accounts.

3.2.6 ***Accounts regularised near about the balance sheet date:*** The asset classification of borrowal accounts where a solitary or a few credits are recorded before the balance sheet date should be handled with care and without scope for subjectivity. Where the account indicates inherent weakness on the basis of the data available, the account should be deemed as a NPA. In other genuine cases, the banks must furnish satisfactory evidence to the Statutory Auditors/Inspecting Officers about the manner of regularisation of the account to eliminate doubts on their performing status.

3.2.7 ***Asset Classification to be borrower-wise and not facility-wise***

- It is difficult to envisage a situation when only one facility to a borrower/one investment in any of the securities issued by the borrower becomes a problem credit/investment and not others. Therefore, all the facilities granted by a bank to a borrower and investment in all the securities issued by the borrower will have to be treated as NPA/NPI and not the particular facility/investment or part thereof which has become irregular.
- If the debits arising out of devolvement of letters of credit or invoked guarantees are parked in a separate account, the balance outstanding in that account also should be treated as a part of

the borrower's principal operating account for the purpose of application of prudential norms on income recognition, asset classification and provisioning.

3.2.8 ***Advances under consortium arrangements:*** Asset classification of accounts under consortium should be based on the **record of recovery of the individual member banks** and other aspects having a bearing on the recoverability of the advances. Where the remittances by the borrower under consortium lending arrangements are pooled with one bank and/or where the bank receiving remittances is not parting with the share of other member banks, the account will be treated as not serviced in the books of the other member banks and therefore, be treated as NPA. The banks participating in the consortium should, therefore, arrange to get their share of recovery transferred from the lead bank or get an express consent from the lead bank for the transfer of their share of recovery, to ensure proper asset classification in their respective books.

3.2.9 ***Accounts where there is erosion in the value of security/frauds committed by borrowers:*** In respect of accounts where there are potential threats for recovery on account of erosion in the value of security or non-availability of security and existence of other factors such as frauds committed by borrowers it will not be prudent that such accounts should go through various stages of asset classification. In cases of such serious credit impairment the asset should be straightaway classified as doubtful or loss asset as appropriate.

- Erosion in the value of security can be reckoned as significant when the realisable value of the security is less than 50 per cent of the value assessed by the bank or accepted by RBI at the time of last inspection, as the case may be. Such NPAs may be straightaway classified under doubtful category and provisioning should be made as applicable to doubtful assets.
- If the realisable value of the security, as assessed by the bank/ approved valuers/ RBI is less than 10 per cent of the outstanding in the borrowal accounts, the existence of security should be ignored and the asset should be straightaway classified as loss asset. It may be either written off or fully provided for by the bank.

3.2.10 ***Advances to PACS/FSS ceded to commercial banks:*** In respect of agricultural advances as well as advances for other purposes granted by banks to PACS/ FSS under the on-lending system, only that particular credit facility granted to PACS/ FSS which is in default for a period of two crop seasons in case of short duration crops and one crop season in case of long duration crops, as the case may be, after it has become due will be classified as NPA and not all the credit facilities sanctioned to a PACS/ FSS. The other direct loans & advances, if any, granted by the bank to the member borrower of a PACS/FSS outside the on-lending arrangement will become NPA even if one of the credit facilities granted to the same borrower becomes NPA.

3.2.11 ***Advances against term-deposits, NSCs, KVP/IVP, etc:*** Advances against term deposits, NSCs eligible for surrender, IVPs, KVPs, and life policies need not be treated as NPAs, provided adequate margin is available in the accounts. Advances against gold ornaments, government securities, and all other securities are not covered by this exemption.

3.2.12 ***Loans with moratorium for payment of interest***

- In the case of bank finance given for industrial projects or for agricultural plantations etc. where moratorium is available for payment of interest, payment of interest becomes 'due' only after the moratorium or gestation period is over. Therefore, such amounts of interest do not become overdue and hence do not become NPA, with reference to the date of debit of interest. They become overdue after due date for payment of interest, if uncollected.
- In the case of housing loan or similar advances granted to staff members where interest is payable after recovery of principal, interest need not be considered as overdue from the first quarter onwards. Such loans/advances should be classified as NPA only when there is a default in repayment of instalment of principal or payment of interest on the respective due dates.

3.2.13 ***Agricultural advances***

- A loan granted for short duration crops will be treated as NPA, if the instalment of principal or interest thereon remains overdue for two crop seasons. A loan granted for long duration crops will be treated as NPA, if the instalment of principal or interest thereon remains overdue for one crop season. For the purpose of these guidelines, 'long duration' crops would be crops with crop season longer than one year and crops, which are not 'long duration' crops, would be treated as 'short duration' crops. The crop season for each crop, which means the period up to harvesting of the crops raised, would be as determined by the State

Level Bankers' Committee in each State. Depending upon the duration of crops raised by an agriculturist, the above NPA norms would also be made applicable to agricultural term loans availed of by him.

In respect of agricultural loans, and term loans given to nonagriculturists, identification of NPAs would be done on the same basis as non-agricultural advances, which, at present, is the 90 days delinquency norm.

- Where natural calamities impair the repaying capacity of agricultural borrowers, banks may decide on their own as a relief measure conversion of the short-term production loan into a term loan or re-schedulement of the repayment period; and the sanctioning of fresh short-term loan, subject to guidelines issued by the RBI.
- In such cases of conversion or re-schedulement, the term loan as well as fresh short-term loan may be treated as current dues and need not be classified as NPA. The asset classification of these loans would thereafter be governed by the revised terms & conditions and would be treated as NPA if interest and/or instalment of principal remains overdue for two crop seasons for short duration crops and for one crop season for long duration crops. For the purpose of these guidelines, 'long duration' crops would be crops with crop season longer than one year and crops, which are not 'long duration' would be treated as 'short duration' crops.
- The debts as on March 31, 2004 of farmers, who have suffered production and income losses on account of successive natural calamities, i.e., drought, flood, or other calamities which might have occurred in the districts for two or more successive years during the past five years may be rescheduled/ restructured by the banks, provided the State Government concerned has declared such districts as calamity affected. Accordingly, the interest outstanding/accrued in the accounts of such borrowers (crop loans and agriculture term loans) up to March 31, 2004 may be clubbed with the principal outstanding therein as on March 31, 2004, and the amount thus arrived at shall be repayable over a period of five years, at current interest rates, including an initial moratorium of two years. As regards the crop loans and agricultural term loans which have already been restructured on account of natural calamities as per the standing guidelines, only the overdue instalments including interest thereon as on March 31, 2004 may be taken into account for the proposed restructuring. On restructuring as above, the farmers concerned will become eligible for fresh loans. The rescheduled/restructured loans as also the fresh loans to be issued to the farmers may be treated as current dues and need not be classified as NPA. While the fresh loans would be governed by the NPA norms as applicable to agricultural loans, in case of rescheduled/ restructured loans, the NPA norms would be applicable from the third year onwards, i.e., on expiry of the initial moratorium period of two years.
- In case of Kharif crop loans in the districts affected by failure of the SouthWest monsoon as notified by the State Government, recovery of any amount either by way of principal or interest during the financial year 2002–03 need not be effected. Further, the principal amount of crop loans in such cases should be converted into term loans and will be recovered over a period of minimum 5 years in case of small and marginal farmers and 4 years in case of other farmers. Interest due in the financial year 2002–03 on crop loans should also be deferred and no interest should be charged on the deferred interest. In such cases of conversion or re-schedulement of crop loans into term loans, the term loans may be treated as current dues and need not be classified as NPA. The asset classification of these loans would thereafter be governed by the revised terms and conditions and would be treated as NPA if interest and/or instalment of principal remain overdue for two crop seasons.
- While fixing the repayment schedule in case of rural housing advances granted to agriculturists under Indira Awas Yojana and Golden Jubilee Rural Housing Finance Scheme, banks should ensure that the interest/instalment payable on such advances are linked to crop cycles.

3.2.14 ***Government guaranteed advances:*** The credit facilities backed by guarantee of the Central Government though overdue may be treated as NPA only when the Government repudiates its guarantee when invoked. This exemption from classification of Government guaranteed advances as NPA is not for the purpose of recognition of income. The requirement of invocation of guarantee has been delinked for deciding the asset classification and provisioning requirements in respect of State Government guaranteed exposures. With effect from the year ending March 31, 2006 State Government guaranteed advances and investments in State Government guaranteed securities would attract asset classification and provisioning norms if interest and/or principal or any other amount due to the bank remains overdue for more than 90 days.

3.2.15 ***Restructuring/rescheduling of loans:*** The stages, at which the restructuring/rescheduling/renegotiation of the terms of loan agreement could take place, can be identified as under:

a. before commencement of commercial production;
b. after commencement of commercial production but before the asset has been classified as substandard,
c. after commencement of commercial production and after the asset has been classified as substandard.

In each of the foregoing three stages, the rescheduling, etc., of principal and/or of interest could take place, with or without sacrifice, as part of the restructuring package evolved.

Treatment of restructured standard accounts

a. A rescheduling of the instalments of principal alone, at any of the aforesaid first two stages would not cause a standard asset to be classified in the sub standard category provided the loan/credit facility is fully secured.
b. A rescheduling of interest element at any of the foregoing first two stages would not cause an asset to be downgraded to sub standard category subject to the condition that the amount of sacrifice, if any, in the element of interest, measured in present value terms, is either written off or provision is made to the extent of the sacrifice involved. For the purpose, the future interest due as per the original loan agreement in respect of an account should be discounted to the present value at a rate appropriate to the risk category of the borrower (i.e., current PLR + the appropriate credit risk premium for the borrower category) and compared with the present value of the dues expected to be received under the restructuring package, discounted on the same basis.
c. In case there is a sacrifice involved in the amount of interest in present value terms, as at (b) above, the amount of sacrifice should either be written off or provision made to the extent of the sacrifice involved.

Treatment of restructured substandard accounts

a. A rescheduling of the instalments of principal alone, would render a substandard asset eligible to be continued in the substandard category for the specified period, provided the loan/credit facility is fully secured.
b. A rescheduling of interest element would render a substandard asset eligible to be continued to be classified in sub standard category for the specified period subject to the condition that the amount of sacrifice, if any, in the element of interest, measured in present value terms, is either written off or provision is made to the extent of the sacrifice involved. For the purpose, the future interest due as per the original loan agreement in respect of an account should be discounted to the present value at a rate appropriate to the risk category of the borrower (i.e., current PLR + the appropriate credit risk premium for the borrower-category) and compared with the present value of the dues expected to be received under the restructuring package, discounted on the same basis.
c. In case there is a sacrifice involved in the amount of interest in present value terms, as at (b) above, the amount of sacrifice should either be written off or provision made to the extent of the sacrifice involved. Even in cases where the sacrifice is by way of write off of the past interest dues, the asset should continue to be treated as substandard.

Upgradation of restructured accounts The substandard accounts which have been subjected to restructuring etc., whether in respect of principal instalment or interest amount, by whatever modality, would be eligible to be upgraded to the standard category only after the specified period i.e., a period of one year after the date when first payment of interest or of principal, whichever is earlier, falls due, subject to satisfactory performance during the period. The amount of provision made earlier, net of the amount provided for the sacrifice in the interest amount in present value terms as aforesaid, could also be reversed after the one year period. During this one year period, the substandard asset will not deteriorate in its classification if satisfactory performance of the account is demonstrated during the period. In case, however, the satisfactory performance during the one year period is not evidenced, the asset classification of the restructured account would be governed as per the applicable prudential norms with reference to the pre-restructuring payment schedule.

4. Provisioning Norms

4.1 General

4.1.1 The primary responsibility for making adequate provisions for any diminution in the value of loan assets, investment or other assets is that of the bank managements and the statutory auditors. The assessment made by the inspecting officer of the RBI is furnished to the bank to assist the bank management and the statutory auditors in taking a decision in regard to making adequate and necessary provisions in terms of prudential guidelines.

4.1.2 In conformity with the prudential norms, provisions should be made on the nonperforming assets on the basis of classification of assets into prescribed categories as detailed in paragraphs 4 supra. Taking into account the time lag between an account becoming doubtful of recovery, its recognition as such, the realisation of the security and the erosion over time in the value of security charged to the bank, the banks should make provision against substandard assets, doubtful assets and loss assets as below:

4.2 Loss assets: Loss assets should be written-off. If loss assets are permitted to remain in the books for any reason, 100 per cent of the outstanding should be provided for.

4.3 Doubtful assets

- 100 per cent of the extent to which the advance is not covered by the realisable value of the security to which the bank has a valid recourse and the realisable value is estimated on a realistic basis.
- In regard to the secured portion, provision may be made on the following basis, at the rates ranging from 20 per cent to 100 per cent of the secured portion depending upon the period for which the asset has remained doubtful:

Period for Which the Advance has Remained in 'Doubtful' Category	*Provision Requirement (%)*
Up to One Year	20
One to Three Years	30
More than Three Years	100

Note: Valuation of Security for provisioning purposes

- Banks are permitted to phase the additional provisioning consequent upon the reduction in the transition period from substandard to doubtful asset from 18 to 12 months over a four year period commencing from the year ending March 31, 2005, with a minimum of 20 per cent each year.

  With a view to bringing down divergence arising out of difference in assessment of the value of security, in cases of NPAs with balance of Rs. 5 crore and above stock audit at annual intervals by external agencies appointed as per the guidelines approved by the Board would be mandatory in order to enhance the reliability on stock valuation. Collaterals such as immovable properties charged in favour of the bank should be got valued once in three years by valuers appointed as per the guidelines approved by the Board of Directors.

4.4 Substandard assets: A general provision of 10 per cent on total outstanding should be made without making any allowance for ECGC guarantee cover and **securities available**.

The 'unsecured exposures' which are identified as 'substandard' would attract additional provision of 10 per cent, i.e., a total of 20 per cent on the outstanding balance. The provisioning requirement for unsecured 'doubtful' assets is 100 per cent. Unsecured exposure is defined as an exposure where the realisable value of the security, as assessed by the bank/approved valuers/Reserve Bank's inspecting officers, is not more than 10 per cent, *ab-initio*, of the outstanding exposure. 'Exposure' shall include all funded and non–funded exposures (including underwriting and similar commitments). 'Security' will mean tangible security properly discharged to the bank and will not include intangible securities like guarantees (including state government guarantees), comfort letters etc.

4.5 Standard assets

1. Banks should make general provision for standard assets at the following rates for the funded outstanding on global loan portfolio basis:
   a. direct advances to agricultural and SME sectors at 0.25 per cent;
   b. residential housing loans beyond Rs. 20 lakh at 1 per cent;
   c. advances to specific sectors, i.e., personal loans (including credit card receivables), loans and advances qualifying as capital market exposures, commercial real estate loans, and loans and advances to non-deposit taking systemically important NBFCs at 2 per cent
   d. all other advances not included in (a), (b), and (c) above, at 0.40 per cent.

2. In order to ensure continued and adequate availability of credit to highly productive sectors of the economy, the provisioning requirement for loans and advances to asset finance companies (as defined by DNBS, RBI from time to time), which are standard assets, shall remain unchanged at 0.40 %
3. The provisions on standard assets should not be reckoned for arriving at net NPAs.
4. The provisions towards Standard Assets need not be netted from gross advances but shown separately as 'Contingent Provisions against Standard Assets' under 'Other Liabilities and Provisions Others' in Schedule 5 of the balance sheet.

Provisions on Leased Assets

1. **Substandard assets**
   a. Ten per cent of the sum of the net investment in the lease and the unrealised portion of finance income net of finance charge component. The terms 'net investment in the lease', 'finance income' and 'finance charge' are as defined in 'AS 19 Leases' issued by the ICAI.
   b. Unsecured lease exposures, as defined in paragraph 5.4 above, which are identified as 'substandard' would attract additional provision of 10 per cent, i.e., a total of 20 per cent.
2. **Doubtful assets:** 100 per cent of the extent to which, the finance is not secured by the realisable value of the leased asset. Realisable value is to be estimated on a realistic basis. In addition to the above provision, provision at the following rates should be made on the sum of the net investment in the lease and the unrealised portion of finance income net of finance charge component of the secured portion, depending upon the period for which asset has been doubtful:

Period for which the Advance has Remained in 'Doubtful' Category	*Provision Requirement (%)*
Up to One Year	20
One to Three Years	30
More than Three Years	100

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3. **Loss assets:** The entire asset should be written off. If for any reason, an asset is allowed to remain in books, 100 per cent of the sum of the net investment in the lease and the unrealised portion of finance income net of finance charge component should be provided for.

The Economic Survey prescribed a new bankruptcy law and The Companies Bill 2009 was introduced in Lok Sabha on August 3, 2009. The Bill proposes a revised framework for regulation of insolvency, including rehabilitation, winding up and liquidation of companies with the process to be completed in a time bound manner and incorporate international best practices based on the models suggested by the United Nations Commission on International Trade Law.

15

Mutual Funds

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Meaning and benefits of mutual funds*

2 *History of mutual funds*

3 *Growth of mutual funds in India*

4 *Types of mutual fund schemes*

5 *Net asset value*

6 *Organisation of a mutual fund*

7 *SEBI guidelines relating to mutual funds*

8 *Association of mutual funds in India*

9 *Unit Trust of India and US-64*

10 *Growth and performance of mutual funds in India*

INTRODUCTION

A mutual fund is a financial intermediary that pools the savings of investors for collective investment in a diversified portfolio of securities. A fund is 'mutual' as all of its returns, minus its expenses, are shared by the fund's investors.

The Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 defines a mutual fund as a 'a fund established in the form of a trust to raise money through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments or gold or gold related instruments or real estate assets'.

According to the above definition, a mutual fund in India can raise resources through sale of units to the public. It can be set up in the form of a trust under the Indian Trust Act. The definition has been further extended by allowing mutual funds to diversify their activities in the following areas.

- Portfolio management services
- Management of offshore funds
- Providing advice to offshore funds
- Management of pension or provident funds
- Management of venture capital funds
- Management of money market funds
- Management of real estate funds

A mutual fund serves as a link between the investor and the securities market by mobilising savings from the investors and investing them in the securities market to generate returns. Thus, a mutual fund is akin to portfolio management services (PMS). Although, both are conceptually same, they are different from each other. Portfolio management services are offered to high net worth individuals; taking into account their risk profile, their investments are managed separately. In the case of mutual funds, savings of small investors are pooled under a scheme and the returns are distributed in the same proportion in which the investments are made by the investors/unit-holders.

Mutual funds in India are not much different from portfolio managers for select corporates and high net worth individuals whose collective share in MF investment is more than 80 per cent.

Mutual fund is a collective savings scheme. Mutual funds play an important role in mobilising the savings of small investors and channelising the same for productive ventures in the Indian economy. Mutual fund is similar to a collective investment scheme (CIS) which pools the savings and invests them to generate returns. While mutual fund invests in securities, CIS invests only in plantations, real estate and art funds.

Benefits of Mutual Funds

An investor can invest directly in individual securities or indirectly through a financial intermediary. Globally, mutual funds have established themselves as the means of investment for the retail investor.

Professional Management An average investor lacks the knowledge of capital market operations and does not have large resources to reap the benefits of investment. Hence, he requires the help of an expert. It is not only expensive to hire the services of an 'expert' but it is more difficult to identify a real expert. Mutual funds are managed by professional managers who have the requisite skills and experience to analyse the performance and prospects of companies. They make possible an organised investment strategy, which is hardly possible for an individual investor.

Portfolio Diversification An investor undertakes risk if he invests all his funds in a single scrip. Mutual funds invest in a number of companies across various industries and sectors. This diversification reduces the riskiness of the investments.

Reduction in Transaction Costs Compared to direct investing in the capital market, investing through the funds is relatively less expensive as the benefit of economies of scale is passed on to the investors.

Liquidity Often, investors cannot sell the securities held easily, while in case of mutual funds, they can easily encash their investment by selling their units to the fund if it is an open-ended scheme or selling them on a stock exchange if it is a close-ended scheme.

Convenience Investing in mutual fund reduces paperwork, saves time and makes investment easy.

Flexibility Mutual funds offer a family of schemes, and investors have the option of transferring their holdings from one scheme to the other.

Tax Benefits Mutual fund investors now enjoy income tax benefits. Dividends received from mutual funds' debt schemes are tax exempt to the overall limit of Rs. 1,00,000 allowed under section 80C of the Income Tax Act.

Transparency Mutual funds transparently declare their portfolio every month. Thus, an investor knows where his/her money is being deployed and in case they are not happy with the portfolio they can withdraw at a short notice.

Stability to the Stock Market Mutual funds have a large amount of funds which provide them economies of scale by which they can absorb any losses in the stock market and continue investing in the stock market. In addition, mutual funds increase liquidity in the money and capital market.

Equity Research Mutual funds can afford information and data required for investments as they have large amount of funds and equity research teams available with them.

Protection of Interest of Investors Being regulated by SEBI, mutual funds have to adhere to the strict regulation designed to protect the interest of the investors.

HISTORY OF MUTUAL FUNDS

The history of mutual funds dates back to nineteenth century Europe, in particular, Great Britain. Robert Fleming set up, in 1868, the first investment trust called Foreign and Colonial Investment Trust which promised to manage the finances of the moneyed classes of Scotland by spreading the investment over a number of different stocks. This investment trust and other investment trusts which were subsequently set up in Britain and the US, resembled today's close-ended mutual funds. The first mutual fund in the US, Massachusetts Investors' Trust, was setup in March 1924. This was the first open-ended mutual fund.

The stock market crash in 1929, the Great Depression, and the outbreak of the Second World War slackened the pace of growth of the mutual fund industry. Innovations in products and services increased the popularity of mutual funds in the 1950s and 1960s. The first international stock mutual fund was introduced in the US in 1940. In 1976, the first tax-exempt municipal bond funds emerged and in 1979, the first money market mutual funds were created. The latest additions are the international bond fund in 1986 and arm funds in 1990. This industry witnessed substantial growth in the 1980s and 1990s when there was a significant increase in the number of mutual funds, schemes, assets, and shareholders. In the US, the mutual fund industry registered a tenfold growth in the 1980s (1980–89) only, with 25 per cent of the household sector's investment in financial assets made through them. Fund assets increased from less than USD 150 billion in 1980 to over USD 4 trillion by the end of 1997. Since 1996, mutual fund assets have exceeded bank deposits. The mutual fund industry and the banking industry virtually rival each other in size.

Box 15.1 Difference Between Stock IPO and MF IPO

Investors tend to equate a mutual fund IPO with a stock IPO. In a stock IPO, shares are allotted at a price arrived at through the book building process. They are then listed on a stock exchange/for trading. The price of the newly listed share is determined by the demand-supply forces at the time of listing resulting either in discount, par or premium price listing. Hence, the listing price may differ from the price at which the shares were offered at the time of subscription, allowing investors a chance to make money on listing. However, in the case of a mutual fund IPO, units are issued at a face value of Rs. 10 at the time of launching a scheme. The scheme then reopens for continuous sale and repurchase which is based on the net asset value (NAV). The NAV reflects the latest market value of the underlying assets in which the funds are invested. In other words, the price of each unit is linked to the market price of underlying assets and not to the demand-supply forces. An MF scheme, usually opens below par as new schemes often charge an entry load at the time of subscription which is a cost to the investor. Due to this load, the NAV of the fund opens lower than the par value. The fund managers also adjust initial issue expenses to the fund NAV and as a result of this, the opening NAV falls below the par value. Thus, it is possible that an investor in a mutual fund IPO may not immediately make money when the scheme reopens for sale and repurchase. The value of the securities fluctuates everyday and this impacts the value (NAV) of the mutual fund unit. Therefore, unlike shares, the demand or supply of MF units do not influence its post-issue value.

An investor receives dividend on his investment in stocks and mutual fund. The amount of dividend payment reduces the value of both stocks and units. However, a mutual fund dividend is not the same thing as a stock dividend. In the case of stock, it may quote at a price higher than cum-dividend price immediately after the dividend has been paid because it is the market forces which determine the share price, thus, resulting in an increase in shareholder wealth. But, in the case of open-ended funds, the unit NAV being solely determined by the value of the underlying securities reduces with the outflow of dividend and increases only when the value of the underlying securities rises. Thus, the unitholder's wealth may not increase immediately after the dividend payment.

SEBI has directed mutual funds to term their new scheme launches as 'new scheme offerings' or 'new fund offerings' instead of IPOs.

Growth of Mutual Funds in India

The Indian mutual fund industry has evolved over distinct stages. The growth of the mutual fund industry in India can be divided into four phases: Phase I (1964–87), Phase II (1987–92), Phase III (1992–97), and Phase IV (beyond 1997).

Phase I The mutual fund concept was introduced in India with the setting up of UTI in 1963. The Unit Trust of India (UTI) was the first mutual fund set up under the UTI Act, 1963, a special act of the parliament. It became operational in 1964 with a major objective of mobilising savings through the sale of units and investing them in corporate securities for maximising yield and capital appreciation. This phase commenced with the launch of the Unit Scheme 1964 (US-64), the first open-ended and the most popular scheme. UTI's investible funds, at market value (and including the book value of fixed assets) grew from Rs. 49 crore in 1965 to Rs. 219 crore in 1970–71 to Rs. 1,126 crore in 1980–81 and further to Rs. 5,068 crore by June 1987. Its investor base had also grown to about two million investors. It launched innovative schemes during this phase. Its fund family included five income-oriented, open-ended schemes, which were sold largely through its agent network built up over the years. Master share, the equity growth fund launched in 1986, proved to be a grand marketing success. Master share was the first real close-ended scheme floated by UTI. It launched the India Fund in 1986—the first Indian offshore fund for overseas investors, which was listed on the London Stock Exchange (LSE). UTI maintained its monopoly and experienced a consistent growth till 1987.

Phase II The second phase witnessed the entry of mutual fund companies sponsored by nationalised banks and insurance companies. In 1987, SBI Mutual Fund and Canbank Mutual Fund were set up as trusts under the Indian Trust Act, 1882. In 1988, UTI floated another offshore fund, namely, The India Growth Fund which was listed on the New York Stock Exchange (NYSE). By 1990, the two nationalised insurance giants, LIC and GIC, and nationalised banks, namely, Indian Bank, Bank of India, and Punjab National Bank had started operations of wholly-owned mutual fund subsidiaries. The assured return type of schemes floated by the mutual funds during this phase were perceived to be another banking product offered by the arms of sponsor banks. In October 1989, the first regulatory guidelines were issued by the RBI, but they were applicable only to the mutual funds sponsored by banks. Subsequently, the Government of India issued comprehensive guidelines in June 1990 covering all mutual funds. These guidelines emphasised compulsory registration with the SEBI and an arms length relationship be maintained between the sponsor and asset management company (AMC). With the entry of public sector funds, there was a tremendous growth in the size of the mutual fund industry with investible funds, at market value, increasing to Rs. 53,462 crore and the number of investors increasing to over 23 million.

The buoyant equity markets in 1991–92 and tax benefits under equity-linked savings schemes enhanced the attractiveness of equity funds.

Phase III The year 1993 marked a turning point in the history of mutual funds in India. The Securities and Exchange Board of India (SEBI) issued the Mutual Fund Regulations in January 1993. The SEBI notified regulations bringing all mutual funds except UTI under a common regulatory framework. Private domestic and foreign players were allowed entry in the mutual fund industry. The Kothari group of companies, in joint venture with Pioneer, a US fund company, set up the first private mutual fund, the Kothari Pioneer Mutual Fund, in 1993. Kothari Pioneer introduced the first open-ended fund Prima in 1993. Several other private sector mutual funds were set up during this phase. UTI launched a new scheme, Master-gain, in May 1992, which was a phenomenal success with a subscription of Rs. 4,700 crore from 63 lakh applicants. The industry's investible funds at market value increased to Rs. 78,655 crore and the number of investor accounts increased to 50 million. However, the year 1995 was the beginning of the sluggish phase of the mutual fund industry. During 1995 and 1996, unitholders saw an erosion in the value of their investments due to a decline in the NAVs of the equity funds. Moreover, the service quality of mutual funds declined due to a rapid growth in the number of investor accounts, and the inadequacy of service infrastructure. A lack of performance of the public sector funds and miserable failure of foreign funds like Morgan Stanley eroded the confidence of investors in fund managers. Investors perception about mutual funds, gradually turned negative. Mutual funds found it increasingly difficult to raise money. The average annual sales declined from about Rs. 13,000 crore in 1991–94 to about Rs. 9,000 crore in 1995 and 1996.

- A mutual fund can invest money mobilised under any of its schemes only in
  - securities
  - money market instruments
  - privately placed debentures
  - securitised debt instruments backed by assets
  - gold or gold related instruments

Phase IV During this phase, the flow of funds into the kitty of mutual funds sharply increased. This significant growth was aided by a more positive sentiment in the capital market, significant tax benefits, and improvement in the quality of investor service. Investible funds, at market value, of the industry rose by June 2000 to over Rs. 1,10,000 crore with UTI having a 68 per cent of the market share. During 1999– 2000 sales mobilisation reached a record level of Rs. 73,000 crore as against Rs. 31,420 crore in the preceding year. This trend was, however, sharply reversed in 2000–01. The UTI dropped a bombshell on the investing public by disclosing the NAV of US-64—its flagship scheme as on December 28, 2000, just at Rs. 5.81 as against the face value of Rs. 10 and the last sale price of Rs. 14.50. The disclosure of NAV of the country's largest mutual fund scheme was the biggest shock of the year to investors. Crumbling global equity markets, a sluggish economy coupled with bad investment decisions made life tough for big funds across the world in 2001–02. The effect of these problems was felt strongly in India also. Pioneer ITI, JP Morgan, and Newton Investment Management pulled out from the Indian market. The Bank of India MF liquidated all its schemes in 2002.

The Indian mutual fund industry stagnated at around Rs. 1,00,000 crore assets during the years 2000– 01 and 2001–02. This stagnation was partly a result of stagnated equity markets and an indifferent performance by players. As against this, the aggregate deposits of scheduled commercial banks (SCBs) as on May 3, 2002, stood at Rs. 11,86,468 crore. Mutual funds assets under management (AUM) form just around 10 per cent of deposits of SCBs.

The Unit Trust of India lost out to other private sector players during this period. While there was an increase in AUM by around 11 per cent during the year 2002, UTI, on the contrary, lost more than 11 per cent in AUM. The private sector mutual funds have benefited the most from the debacle of US-64 of UTI. The AUM of this sector grew by around 60 per cent for the year ending March 2002. There was a record growth in funds mobilised through a record number of new schemes during the year 2004–05. The assets under management during the year 2004–05 was Rs. 1,49,554 crore which subsequently increased to Rs. 4,17,300 crore on March 31, 2009 and Rs. 6.75 lakh crore on June 30, 2010.

MUTUAL FUND CONCEPTS

Net Asset Value

- Net asset value of a scheme reflects the performance of the scheme on a day-to-day basis

The net asset value of a fund is the market value of the assets minus the liabilities on the day of valuation. In other words, it is the amount which the shareholders will collectively get if the fund is dissolved or liquidated. The net asset value of a unit is the net asset value of fund divided by the number of outstanding units.

Thus NAV = Market price of securities + Other assets − Total liabilities/units outstanding as at the NAV date.

NAV = Net assets of the scheme/Number of units outstanding, i.e., Market value of investments + Receivables + Other Accrued Income + Other assets – Accrued expenses – Other payables – Other liabilities/No. of units outstanding as at the NAV date.

A fund's NAV is affected by four sets of factors: purchase and sale of investment securities, valuation of all investment securities held, other assets and liabilities, and units sold or redeemed.

The following recurring expenses are charged directly to the scheme which affects its NAV.

- Marketing and selling expenses (including distributors' fees).
- Brokerage charges.
- Registration charges.
- Audit fees.
- Custodian fees.
- Expenses on investors' communication.
- Insurance premium paid by the fund.
- Cost of statutory advertisement.

- Net Asset Value is the market value of the assets of the scheme minus its liabilities

Certain expenses are not charged to the scheme and hence do not affect the NAV. They are:

- Penalties and fines for violation of law.
- Interest on late payment to unit holders.
- Legal, marketing, publication and general expenses not attributed to any schemes.
- Expenses on investment management and general management.
- Depreciation on fixed assets and software development expenses.

- Net asset value is the price at which an investor can buy or sell a unit of a mutual fund scheme

The SEBI has issued guidelines on valuation of traded securities, thinly traded securities, and nontraded securities. These guidelines were issued to streamline the procedure of calculation of NAV of the schemes of mutual funds. The aggregate value of illiquid securities as defined in the guidelines shall not exceed 15 per cent of the total assets of the scheme and any illiquid securities held above 15 per cent of the total assets shall be valued in the manner as specified in the guidelines issued by the SEBI. Where income receivables on investments has accrued but has not been received for the period specified in the guidelines issued by the SEBI, provision shall be made by debiting to the revenue account the income so accrued in the manner specified by guidelines issued by the SEBI.

- NAVs are disclosed on daily basis in case of open ended schemes and on weekly basis in case of close-ended schemes

Mutual funds are required to declare their NAVs and sale-repurchase prices of all schemes updated daily on a regular basis on the AMFI website by 8.00 p.m. and declare NAVs of their close-ended schemes on every Wednesday.

Expense Ratio It is the ratio of expenses incurred by a mutual fund for managing a fund to net assets of the fund. The expense ratio represents the proportion of the fund's assets that go toward the expense of running the fund. It is a measure of the costs associated with operating a fund and these costs are deducted from the assets and thus, lower the return to the investor. Expense ratio includes expenses such as management fees (salaries and bonuses paid to top management and sales personnel), administrative costs (custodian charges, legal and audit fees, marketing and selling expenses, and other miscellaneous expenses), and commission paid to the distributor which is usually paid on a quarterly basis and is generally 0.5 per cent of the asset value. Expense ratio is different from load. Expense ratio is the cost of owning a fund while load is a cost of buying a fund. A load is paid directly by the investor to the fund at the time of buying, while expense ratio is charged as a percentage of net assets and subtracted from the investor's investments every year. The expense ratio is disclosed by a mutual fund house once every six months, i.e., every March and September. SEBI Mutual Fund regulations permit equity funds to charge a maximum of 2.5 per cent and debt funds, a maximum of 2.25 per cent as expense ratio. Expense ratio is higher for actively managed funds and lower for passively managed funds such as index funds. On an average, index funds have an expense ratio of around 1–1.5 per cent which is lower than that of equity funds that have an expense ratio of 1.5–2 per cent. In case of an index fund scheme or exchange traded fund, the total fee charged from an investor, including the investment and advisory expenses, cannot exceed 1.5% of the weekly average net assets.

Entry and Exit Load Mutual funds incur certain expenses such as brokerage, marketing expenses, and communication expenses. These expenses are known as 'load' and are recovered by the fund when it sells the units to investors or repurchases the units from withholders. In other words, load is a sales charge, or commission, assessed by certain mutual funds to cover their selling costs.

Loads can be of two types—front-end-load and back-end-load. Front-end-load, or sale load, is a charge collected at the time when an investor enters into the scheme. Back-end, or repurchase, load is a charge collected when the investor gets out of the scheme. Schemes that do not charge a load are called 'no load' schemes. In other words, if the asset management company (AMC) bears the load during the initial launch of the scheme, then these schemes are known as no-load schemes. However, these no-load schemes can have an exit load when the unitholder gets out of the scheme before a stipulated period mentioned in the initial offer. This is done to prevent short-term investments and redemptions. Some funds may also charge different amount of loads to investors depending upon the time period the investor has stayed with the

- SEBI abolished entry load for all mutual fund schemes launched on or after August 1, 2009

funds. The longer the investor stays with the fund, less is the amount of exit load charged. This is known as contingent deferred sales charge (CDSL). It is a back-end (exit load) fee imposed by certain funds on shares redeemed with a specific period following their purchase and is usually assessed on a sliding scale.

The SEBI has advised all mutual funds to use a uniform method for calculating sale and repurchase price effective from August 5, 2002, according to which the load shall be charged as a percentage of the NAV. The sale and repurchase price will be calculated using the following formulae: Sale Price = Applicable NAV (1 + sale load, if any). Repurchase Price = Applicable NAV (1 − Exit load, if any).

For investors, entry load increases the cost of investment resulting in a lesser number of units allocated and lower rate of return on investment. The entry load was around 2.25 per cent in most equity schemes. The SEBI has mandated that the asset management companies (AMCs) shall not charge entry as well as exit loads on bonus units and on units allotted on reinvestment of dividend from March 18, 2008.

No entry load shall be levied on direct applications received by the AMCs through Internet, submitted to AMC or collection centres/Investor-service centres provided that the applications are not routed through any distributor/broker/agent on investment in existing schemes with effect from January 4, 2008, and in new schemes launched on/after the same date. There will be no provision of charging initial issue expenses and amortisation of the same in respect of all mutual fund close-ended schemes launched thereafter. The schemes shall meet the sales, marketing, and other such expenses from the entry load.

In order to empower the investors in deciding the commission paid to distributors in accordance with the level of service received, to bring about more transparency in payment of commissions and to incentivise long term investment, the SEBI abolished the entry load for all mutual fund schemes on June 30, 2009. The upfront commission to distributors will be paid by the investor directly to the distributor, based on his assessment of various factors including the service rendered by the distributor.

Moreover, of the exit load or CDSC charged to the investor, a maximum of 1% of the redemption proceeds shall be maintained in a separate account which can be used by the AMC to pay commissions to the distributor and to take care of other marketing and selling expenses. Any balance shall be credited to the scheme immediately which would go to increase the NAV of the investors who stay invested. The distributors should disclose all the commissions (in the form of trail commission or any other mode) payable to them for the different competing schemes of various mutual funds from amongst which the scheme is being recommended to the investor. These provisions shall be applicable for:

1. Investments in mutual fund schemes (including additional purchases and switch-in to a scheme from other schemes) with effect from August 1, 2009;
2. Redemptions from mutual fund schemes (including switch-out from other schemes) with effect from August 1, 2009;
3. New mutual fund schemes launched on and after August 1, 2009; and
4. Systematic Investment Plans (SIP) registered on or after August 1, 2009.

- Exit load is charged to
  - discourage investors from exiting a fund within a short span
  - cover advertising and other expenses of the scheme

Many funds changed their exit load structure after the entry load was abolished. Many mutual funds hiked their exit load or increased the period of holding. The primary objective of an exit load is to discourage investors from exiting a fund within a short span, as frequent churning (prematurely exiting) increases the costs incurred by the scheme. Exit loads are also charged to cover advertising and other expenses related to managing the scheme or making payment to the distributors. It is a kind of deferred sales charge; the longer an investor holds his units, charges become lower or even nil thus enabling to achieve the true objective of mutual funds—'capital appreciation over the long term'. Liquid funds do not have an exit load but liquid plus schemes may have an exit load as a new norm requires to value money market and debt securities with a maturity of over 91 days to the daily market price from August 1, 2010. This would lead to volatility in returns, resulting in panic redemptions and to avoid this mutual funds may impose exit loads depending on the average maturity.

SEEI vide circular dated May 23, 2008 simplified the formats for Offer Document and Key Information Memorandum of Mutual Funds Scheme. The simplified Scheme Information Document format provides that "Wherever quantitative discounts are involved the following shall be disclosed—The Mutual Fund may charge the exit load within the stipulated limit of 7% and without any discrimination to any specific group of unit holders. However, any change at a later stage shall not affect the existing unit holders adversely".

Assets Under Management (AUM) The Mutual fund manager mobilises funds by offering a scheme/s which is/are then deployed in various securities/assets. Market value of these assets is known as assets under management. AUM of a scheme is calculated by multiplying the Net Asset Value (NAV) of a scheme by the number of units issued by that scheme. AUM of a mutual fund house is arrived at by adding the AUMs of all schemes offered by it and the sum total of AUMs of all mutual fund houses is AUM of mutual fund industry. A change in market prices/NAV or redemptions leads to a change in AUM.

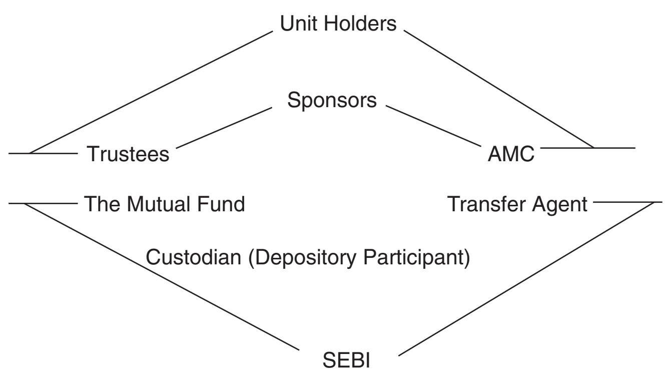
MUTUAL FUND INVESTORS AND ORGANISATION OF A MUTUAL FUND

Mutual funds in India are open to investment by

- Residents including
- Resident Indian individuals, including high net worth individuals and the retail or small investors
- Indian companies
- Indian trusts/charitable institutions
- Banks
- Non-banking finance companies
- Insurance companies
- Provident funds
- Non-residents, including Non-resident indians
- Foreign entities, namely, foreign institutional investors (FIIs) registered with the SEBI. Foreign citizens/entities are however not allowed to invest in mutual funds in India.

Figure 15.1 gives an idea of the organisation of a mutual fund.

Three key players namely the sponsor, the mutual fund trust, and the asset management company (AMC) are involved in setting up a mutual fund. They are assisted by either independent administrative entities like banks, registrars, transfer agents, and custodians (depository participants).



Source: AMFI.

Figure 15.1 Organisation of a Mutual Fund

Sponsor

Sponsor means any person who acting alone or with another body corporate establishes a mutual fund. The sponsor of a fund is akin to the promoter of a company as he gets the fund registered with the SEBI. The SEBI will register the mutual fund if the sponsor fulfills the following criteria.

- The sponsor should have a sound track record and general reputation of fairness and integrity in all his business transactions. This means that the sponsor should have been doing business in financial services for not less than five years, with positive net worth in all the immediately preceding five years. The net worth of the immediately preceding year should be more than the capital contribution of the sponsor in AMC and the sponsor should show profits after providing depreciation, interest, and tax for three out of the immediately preceding five years.
- The sponsor and any of the directors or principal officers to be employed by the mutual fund, should not have been found guilty of fraud or convicted of an offence involving moral turpitude or guilty of economic offences.

The sponsor forms a trust and appoints a board of trustees. He also appoints an AMC as fund managers. The sponsor, either directly or acting through the trustees, also appoints a custodian to hold the fund assets. The sponsor is required to contribute at least 40 per cent of the minimum net worth of the asset management company.

A mutual fund can be sponsored by a bank, financial institution, or companies whether foreign or Indian or a joint venture between Indian and foreign entities. Out of the 39 mutual funds in India, four are bank sponsored, one by Life Insurance Corporation, sixteen by Indian entities, five by foreign entities, and the remaining are joint ventures (Refer Table 15.1). For example, Reliance Mutual Fund (RMF) is

TABLE 15.1 Average Assets Under Management for the Month of May 2010

Sr. No	*Name of the Asset Management Company*	*Rs.' in Crores*
A	**Bank Sponsored**	
	(i) **Joint Ventures—Predominantly Indian**	
1	Canara Robeco Asset Management Co. Ltd.	10,662
2	SBI Funds Management Private Ltd.	36,236
	Total A (i)	**46,898**
	(ii) **Joint Ventures—Predominantly Foreign**	
1	Baroda Pioneer Asset Management Company Limited	4,760
	Total A (ii)	**4,760**
	(iii) **Others**	
1	UTI Asset Management Company Ltd.	78,617
	Total A (iii)	**78,617**
	Total A (i+ii+iii)	**1,30,275**
B	**Institutions**	
1	LIC Mutual Fund Asset Management Co. Ltd.	38,963
	Total B	**38,963**
C	**Private Sector**	
	(I) **Indian**	
1	Axis Asset Management Co. Ltd.	4,716
2	Benchmark Asset Management Co. Private Ltd.	2,263
3	Deutsche Asset Management (India) Private Ltd.	10,102
4	Edelweiss Asset Management Limited	261
5	Escorts Asset Management Ltd.	196
6	IDFC Asset Management Company Private Limited	26,615
7	J.M. Financial Asset Management Private Ltd.	8,950
8	Kotak Mahindra Asset Management Co. Ltd.	40,658
9	L&T Investment Management Ltd.	5,171
10	Peerless Funds Management Co. Ltd	823
11	Quantum Asset Management Co. Private Ltd.	102
12	Reliance Capital Asset Management Ltd.	1,18,973
13	Religare Asset Management Company Private Limited	15,464
14	Sahara Asset Management Co. Private Ltd.	765
15	Tata Asset Management Ltd.	22,673
16	Taurus Asset Management Co. Ltd.	3,056
	Total C (I)	**2,60,790**
	(ii) **Foreign**	
1	AIG Global Asset Management Company (India) Private Ltd.	1,031
2	FIL Fund Management Private Ltd.	7,458
3	Fortis Investment Management (India) Private Ltd.	7,537
4	Franklin Templeton Asset Management (India) Private Ltd.	35,775
5	Mirae Asset Global Investments (India) Private Ltd.	237
	Total C (iii)	**52,038**
	(iii) **Joint Ventures—Predominantly Indian**	

(*Continued*)

Sr. No	*Name of the Asset Management Company*	*Rs.' in Crores*
1	Birla Sun Life Asset Management Co. Ltd.	73,828
2	DSP BlackRock Investment Managers Ltd.	21,885
3	HDFC Asset Management Co. Ltd.	1,01,863
4	ICICI Prudential Asset Management Co. Ltd.	87,710
5	Sundaram BNP Paribas Asset Management Company Ltd.	13,976
	Total C (iii)	**299,262**
	(iv) **Joint Ventures—Predominantly Foreign**	
1	Bharti AXA Investment Managers Private Limited	724
2	HSBC Asset Management (India) Private Ltd.	5,851
3	ING Investment Management (India) Private Ltd.	1,645
4	JP Morgan Asset Management (India) Private Ltd.	3,755
5	Morgan Stanley Investment Management Private Ltd.	2,254
6	Principal Pnb Asset Management Co. Private Ltd.	7,648
7	Shinsei Asset Management (India) Pvt. Ltd.	324
	Total C (iv)	**22,231**
	Total C (i+ii+iii+iv)	**6,34,321**
	Total (A+B+C)	**8,03,559**

Source: AMFI, www.amfiindia.com

sponsored by Reliance Capital Ltd (RCL); HDFC Mutual Fund is a joint venture- sponsored by HDFC and British investment firm Standard Life Investments Limited. All the mutual funds have assets under management of around Rs. 8 lakh crore.

Mutual Funds as Trusts

A mutual fund in India is constituted in the form of a public trust created under the Indian Trusts Act, 1882. The sponsor forms the trust and registers it with the SEBI. The fund sponsor acts as the settler of the trust, contributing to its initial capital and appoints a trustee to hold the assets of the trust for the benefit of the unit holders, who are the beneficiaries of the trust. The trust deed deals with the establishment of the trust, the authority, and responsibility of the trustees towards the unit holders and the asset management company (AMC). The fund then invites investors to contribute their money in the common pool, by subscribing to 'units' issued by various schemes established by the trust as evidence of their beneficial interest in the fund. Thus, a mutual fund is just a 'pass through' vehicle. Most of the funds in India are managed by the board of trustees, which is an independent body and acts as protector of the unit holders' interests. At least, two-thirds of the trustees shall be independent trustees (who are not associated with an associate, subsidiary, or sponsor in any manner). For example, HDFC Trustee Company Limited, a company incorporated under the Companies Act, 1956, is the Trustee to HDFC Mutual Fund. HDFC Trustee Company Ltd is wholly owned subsidiary of Housing Development Finance Corporation Limited (HDFC). Reliance Mutual Fund (RMF) has been established as a trust under the Indian Trusts Act, 1882, with Reliance Capital Limited (RCL) as the Settlor/Sponsor and Reliance Capital Trustee Co. Limited (RCTCL) as the Trustee, a company incorporated under the Companies Act, 1956.

- A mutual fund is a trust that pools the savings of investors and invests these savings in capital market/money market instruments

The trustees shall be accountable for and be the custodian of funds/property of respective scheme. The trustees, on the board of trust of the fund, hold its property for the benefit of the unitholders, which are the investors. The trustees have the power of superintendence and control over the asset management company (AMC). They monitor the performance and compliance of regulations by the mutual fund. The AMC manages the funds by making investments in various types of securities. According to new SEBI regulations, atleast two-thirds of the trustees, on the Board of Trustees must be independent meaning they should not be associated with the sponsors. The new regulations ensure that the trustees will be able to be associated with only one mutual fund and also, bar trustees of one mutual fund to be on the board of trustees or AMC of another mutual fund.

- A trustee company/ board of trustees comprising two-thirds independent trustees is setup by the sponsor

Asset Management Company

- Asset Management Company manges the funds by investing in various securities. It acts like the investment manager of the trust

The trustees appoint the asset management company (AMC) with the prior approval of the SEBI. The AMC is a company formed and registered under the Companies Act, 1956, to manage the affairs of the mutual fund and operate the schemes of such mutual funds. An Investment Management Agreement is executed between the trustee and the asset management company to manage the mutual fund. It charges a fee for the services it renders to the mutual fund trust. It acts as the investment manager to the trust under the supervision and direction of the trustees. The AMC, in the name of the trust, floats and then manages the different investment schemes as per the SEBI regulations and the trust deed. The AMC should be registered with the SEBI.

- AMCs and corporate trustees have to comply with the provisions of the Companies Act

The AMC of a mutual fund must have a net worth of at least Rs. 10 crore at all times and this net worth should be in the form of cash. It cannot act as a trustee of any other mutual fund. It is required to disclose the scheme particulars and base of calculation of NAV. It can undertake specific activities such as advisory services and financial consultancy. It must submit quarterly reports to the mutual fund. The trustees are empowered to terminate the appointment of the AMC and may appoint a new AMC with the prior approval of the SEBI and unit holders. At least 50 per cent of the directors of the board of directors of AMC should not be associated with the sponsor or its subsidiaries or the trustees.

Most AMCs in India are private limited companies. The capital of the AMC is contributed by the sponsor and its associates. AMCs are the investment managers of mutual funds. They design new products, provide portfolio management/advisory services, set up offices and distribution centers, appoint distributors, allocate the funds, and report the portfolio performance to trustees and investors.

For example, HDFC Asset Management Company Limited (AMC) acts as an Asset Management Company for the HDFC Mutual Fund. HDFC AMC is a joint venture between housing finance giant HDFC and British investment firm Standard Life Investments Limited. The paid up capital of the AMC is Rs. 25.161 crore and 60 per cent of this paid-up capital is contributed by Housing Development Finance Corporation Limited and the remaining by Standard Life Investments Limited.

Reliance Mutual Fund schemes are managed by Reliance Capital Asset Management Limited (RCAM), a subsidiary of Reliance Capital Limited, which holds 93.37 per cent of the paid-up capital of RCAM, the balance paid up capital being held by minority shareholders. Reliance Capital Asset Management Ltd. (RCAM) is an unlisted Public Limited Company incorporated under the Companies Act, 1956.

Obligations of an AMC An AMC has to follow a number of obligations. They are as follows.

- The AMC shall take all the reasonable steps and exercise due diligence to ensure that any scheme is not contrary to the trust deed and provisions of investment of funds pertaining to any scheme is not contrary to the provisions of the regulations and trust deed.
- The AMC shall exercise due diligence and care in all its investment decisions. The AMC shall be responsible for the acts of commission or commissions by its employees or the persons whose services have been procured.
- An AMC shall submit to the trustees quarterly reports.
- The trustees at the request of an AMC can terminate the assignments of the AMC.
- An AMC shall not deal in securities through any broker associated with a sponsor or a firm which is an associate of sponsor beyond 5 per cent of the daily gross business of the mutual fund.
- No AMC shall utilise services of the sponsor or any of its associates, employees, or their relatives for the purpose of any securities transaction and distribution and sale of securities, unless disclosure is made to the unit holders and brokerage/commission paid is disclosed in half-yearly accounts of the mutual fund.
- No person, who has been found guilty of any economic offence or involved in violation of securities law, should be appointed as key personnel.
- The AMC shall abide by the code of conduct specified in the fifth schedule.
- The registrars and share transfer agents to be appointed by AMC are to be registered with the SEBI. The SEBI regulations (2001) provide for exercise of due diligence by AMCs in their investment decisions. For effective implementation of the regulations and also to bring about transparency in the investment decisions, all the AMCs are required to maintain records in support of each investment decision, which would indicate the data, facts, and other opinions leading to an investment decision. While the AMCs can prescribe broad parameters for investments, the basis for taking individual scripwise investment decision in equity and debt securities would have to be recorded. The AMCs are required to report its compliance in their periodical reports to the trustees and the trustees are required to report to the SEBI in

- Mutual funds in India are governed by the SEBI (Mutual fund) Regulations, 1996 their half-yearly reports. Trustees can also check its compliance through independent auditors or internal statutory auditors or through other systems developed by them.

- The AMC has to make a continuous effort to remind the investors through letters to take their unclaimed amounts. In case of schemes to be launched in the future, disclosures on the above provisions are required to be made on the offer documents. Also, the information on amount unclaimed and number of such investors for each scheme is required to be disclosed in the annual reports of mutual funds. The unclaimed redemption and dividend amounts can now be deployed by the mutual funds in call money market or money market instruments and the investors who claim these amounts during a period of three years from the due date shall be paid at the prevailing net asset value. After a period of three years, the amount can be transferred to a pool account and the investors can claim the amount at NAV prevailing at the end of the third year. The income earned on such funds can be used for the purpose of investor education.

General Obligations These obligations are:

- Every AMC, for each scheme, shall keep and maintain proper books of accounts, records, and documents, for each scheme so as to explain its transactions and to disclose at any point of time the financial position of each scheme and in particular give a true and fair view of the state of affairs of the fund and intimate to the board the place where such books of accounts, record, and documents are maintained.
- The financial year for all the schemes shall end as of March 31, of each year. Every mutual fund or the AMC shall prepare, in respect of each financial year, an annual report and annual statement of accounts of the schemes and the fund as specified in eleventh schedule.
- Every mutual fund shall have the annual statement of accounts audited by an auditor who is not in any way associated with the auditor of the AMC.

Procedure in Case of Default On and from the date of the suspension of the certificate or the approval, as the case may be, the mutual fund, trustees, or asset management company shall cease to carry on any activity as a mutual fund, trustee, or AMC during the period of suspension, and shall be subject to the directions of the board with regard to any records, documents, or securities that may be in its custody or control, relating to its activities as mutual fund, trustees, or AMC.

Other Administrative Entities

Custodian A custodian is responsible for safe keeping of cash and securities of the mutual fund. In case of a gold exchange traded fund scheme, the assets of the scheme being gold or gold-related instruments are kept in custody of a bank which is registered as a custodian with the SEBI. The custodian is also involved in clearing and settlement of dematerialised securities transactions on behalf of mutual funds.

Custodian is appointed by the trustee and is independent of the sponsor. No custodian in which the sponsor or its associates hold 50 per cent or more of the voting rights of the share capital of the custodian or where 50 per cent or more of the directors of the custodian represent the interest of the sponsor or its associates shall act as custodian for a mutual fund constituted by the same sponsor or any of its associates or subsidiary company.

The Reliance Capital Trustee Co. Limited—trustee of the Reliance Mutual Fund—has appointed Deutsche Bank, AG as the Custodian of the securities that are bought and sold under the Scheme. A Custody Agreement has been entered between Deutsche Bank and Reliance Capital Trustee Co. Limited.

A custodian provides post-trading and custodial services to the mutual fund, keeps securities and other instruments belonging to the scheme in safe custody, tracks corporate actions and payouts such as rights, bonus, offer for sale, buy back offers, dividends, interest, and redemptions on the securities held by the fund, ensures smooth inflow/outflow of securities and such other instruments as and when necessary, in the best interests of the unitholders, ensures that the benefits due to the holdings of the Mutual Fund are recovered, offer fund accounting and valuation services to mutual funds, and is responsible for loss of or damage to the securities due to negligence on its part on the part of its approved agents.

- A custodian is responsible for safe keeping of cash, securities, gold or gold related instruments or real estate mutual fund instruments. A custodian also participates in the clearing system through approved depository
- Registrar and Transfer Agent is a vital communication link between the unit holder and mutual fund

Registrar and Transfer Agents They accept and process investor's applications, handle communications with investors, perform data entry services, despatch account statements, and also perform such other functions as agreed, on an ongoing basis. The Registrar is responsible for carrying out diligently the functions of a Registrar and Transfer Agent and is paid fees for investor services. Reliance Capital Asset

Management Limited has appointed M/s. Karvy Computershare Pvt. Limited to act as the Registrar and Transfer Agent to the Schemes of Reliance Mutual Fund. HDFC Mutual Fund has appointed Computer Age Management Services Pvt. Ltd as the Registrar and Transfer Agent.

Role of Intermediaries in the Indian Mutual Fund Industry

Intermediation in the mutual fund industry started with individual agents providing the foundation for growth in the early years. AMCs appoint distributors/agents who sell the mutual fund units to investors on behalf of the mutual fund. Distributors may sell mutual fund units of more than one mutual fund. Now there are a wide variety of intermediaries such as institutional agents, distribution companies, brokers, banks, finance companies, secondary market brokers and post offices who are marketing mutual funds to their existing and potential clients. They make the forms available to clients, explain the schemes and provide administrative and paperwork support to investors, making it easy and convenient for the clients to invest. Investors can also directly purchase mutual fund units from asset management companies (AMCs) including the Unit Trust of India.

Investors of mutual funds can be broadly classified into three categories.

- Those who want product information, advice on financial planning and investment strategies.
- Those who require only a basic level of service and execution support, i.e., delivering and collecting application forms and cheques, and other basic paperwork and post-sale activities.
- Those who prefer to do it all themselves, including choice of investments as well as the process/ paperwork related to investments.

To cater to different types of investors, intermediaries offer the following two levels of services.

- **Value added services:** This includes product information and advice on financial planning and investment strategies. The advice encompasses analysing an investor's financial goals depending upon the segment of investor, assessing his/her resources, determining his/her riskbearing capacity/ preference and then using this information to recommend an asset allocation/ specific investment/s that are in tandem with the investor's needs. Investors ay also receive information on taxation, estate planning, and portfolio rebalancing to remain aware about the changes/developments in market conditions and adjust the portfolios from time-to-time according to their needs. In such advisory services, the emphasis is on building an ongoing relationship with the investor/s.
- **Basic services:** This includes providing the basic information on schemes launched to investors, assisting them in filling application forms, submission of application forms alongwith cheques at the respective office/s, delivering redemption proceeds, and answering scheme-related queries investor/s may have. What investors receive here is convenience and access to mutual funds through agents and employees of brokers who visit them and facilitate the paperwork related to investment.

These services are also given through the branches and front office staff of AMCs and intermediaries.

Now, mobile commerce facility is offered by mutual funds for their investors whereby they can purchase, redeem, or switch units of mutual fund schemes using their mobile phones. They can also view their account details, transaction details, and request for their account statements and check the Net Asset Values (NAV) of the schemes of the mutual fund.

The SEBI has facilitated transactions in mutual fund schemes through the Stock Exchange infrastructure. The infrastructure that already exists for the secondary market transactions through the stock exchanges with its reach to over 1,500 towns and cities, through over 200,000 stock exchange terminals can be used for facilitating transactions in mutual fund schemes. Units of mutual fund schemes are permitted to be transacted through registered stock brokers of recognised stock exchanges market. This on-line trading facility on stock exchanges is an order routing system wherein the eventual transaction is executed by the fund house. Both the NSE and the BSE have launched mutual funds trading platform. This will lead to paperless mutual fund transactions leading to a reduction in paper work, high reach, and high security for investors.

Types of Mutual Fund Schemes

The objectives of mutual funds are to provide continuous liquidity and higher yields with high degree of safety to investors. Based on these objectives, different types of mutual fund schemes have evolved.

Box 15.2 Types of Mutual Fund Schemes

Functional	Investment Pattern	Portfolio-Objective	Geographical	Other
Open-ended schemes	**Equity Funds**	Income	Domestic	P/E Ratio
Close-ended schemes	Diversified	Growth	Off shore	Exchange Traded Funds – Gold Exchange Traded Funds – Other Exchange Traded Funds Real Estate Mutual Funds
Interval schemes	Value	Balanced		
	Special			
	Sectoral			
	Derivatives Arbitrage			
	Tax Saving-ELSS			
	Index			
	Fund-of-funds			
	Quant			
	Debt Funds			
	Money Marker/Liquid			
	Short-term Bond			
	Long-term Bond			
	Gilt			
	Floating Rate			
	Fixed Maturity Plans			
	Capital Protection Schemes			

Functional Classification of Mutual Funds

Open-ended Schemes In case of open-ended schemes, the mutual fund continuously offers to sell and repurchase its units at NAV or NAV-related prices. Unlike close-ended schemes, open-ended ones do not have to be listed on the stock exchange and can also offer repurchase soon after allotment.

- Open-ended schemes are those schemes where investors can redeem and buy new units all throughout the year as per their convenience at NAV-related prices

Investors can enter and exit the scheme any time during the life of the fund. Open-ended schemes do not have a fixed corpus. The corpus of fund increases or decreases, depending on the purchase or redemption of units by investors.

There is no fixed redemption period in open-ended schemes, which can be terminated whenever the need arises. The fund offers a redemption price at which the holder can sell units to the fund and exit.

Besides, an investor can enter the fund again by buying units from the fund at its offer price. Such funds announce sale and repurchase prices from time-to-time. UTI's US-64 scheme is an example of such a fund.

The key feature of open-ended funds is liquidity. They increase liquidity of the investors as the units can be continuously bought and sold. The investors can develop their income or saving plan due to free entry and exit frame of funds. Open-ended schemes usually come as a family of schemes which enable the investors to switch over from one scheme to another of same family.

Close-ended Schemes Close-ended schemes have a fixed corpus and a stipulated maturity period ranging between two to five years. Investors can invest in the scheme when it is launched. The scheme remains open for a period not exceeding 45 days. Investors in close-ended schemes can buy units only from the market, once initial subscriptions are over and thereafter the units are listed on the stock exchanges where they can be bought and sold. The fund has no interaction with investors till redemption except for paying dividend/bonus. In order to provide an alternate exit route to the investors, some close-ended funds give an option of selling back the units to the mutual fund through periodic repurchase at NAV-related prices. The NAV of close-ended schemes are disclosed generally on weekly basis. If an investor sells units directly to the fund, he cannot enter the fund again, as units bought back by the fund cannot be reissued. Close-ended schemes can be converted into an openended one. The units can be rolled over by the passing of a resolution by a majority of the unit holders.

- Close-ended schemes are open for subscription only for a specified period and have a fixed corpus

- As close-ended schemes are listed on one or more stock exchanges, they are subject to the regulation of the concerned stock exchange through the listing agreement between the fund and the stock exchange
- Listing of close-ended schemes along with daily computation of NAV and its publication has been made mandatory

Interval Scheme Interval scheme combines the features of open-ended and close-ended schemes. They are open for sale or redemption during predetermined intervals at NAV-related prices.

Portfolio Classification

Here, classification is on the basis of nature and types of securities and objective of investment.

Income Funds The aim of income funds is to provide safety of investments and regular income to investors. Such schemes invest predominantly in income-bearing instruments like bonds, debentures, government securities, and commercial paper. The return as well as the risk are lower in income funds as compared to growth funds.

Growth Funds The main objective of growth funds is capital appreciation over the medium- to longterm.

They invest most of the corpus in equity shares with significant growth potential and they offer higher return to investors in the long-term. They assume the risks associated with equity investments.

There is no guarantee or assurance of returns. These schemes are usually close-ended and listed on stock exchanges.

Balanced Funds The aim of balanced scheme is to provide both capital appreciation and regular income. They divide their investment between equity shares and fixed interest-bearing instruments in such a proportion that the portfolio is balanced. The portfolio of such funds usually comprises companies with good profit and dividend track records. Their exposure to risk is moderate and they offer a reasonable rate of return. The NAVs of such funds are likely to be less volatile compared to pure equity funds. An example of balanced fund is HDFC Prudence, an equity-oriented hybrid (balanced) fund, with an asset size of Rs. 3,200 crore. It is the largest and the most popular scheme in the category of balanced funds.

Others The other mutual funds are load funds, exchange traded funds, price-earnings ratio fund, fund-of-funds, and real estate mutual funds.

Investment Classification

Here, the funds can be classified on the basis of the asset class (types of securities) in which they are invested.

1. **Equity fund:** If funds of a particular scheme are invested in equity shares, then it is as an equity fund. Equity funds are riskier compared to debt funds and they can be further classified on the basis of their investment strategy as diversified, aggressive, growth, value, and sector funds. Examples of equity funds are index funds, diversified funds, arbitrage funds, large-cap funds, small-cap funds, mid-cap funds, sector funds, and equity-linked saving schemes.
2. **Debt fund:** If funds of a particular scheme are invested in debt instruments, then it is a debt fund. Debt funds are characterised as low- risk and high liquidity investments. Debt funds invest in government securities, money market instruments, corporate debt instruments including floating rate bonds and non-convertible debentures, PSU bonds, securitised debt including asset-backed securities, and mortgage-backed securities and bank fixed deposits. Examples of debt funds are liquid/money market funds, income funds, gilt funds, fixed maturity plans, and floating rate funds.
3. **Hybrid fund:** In order to provide the benefits of both equity and debt investment to the investors, some funds invest in both the asset classes and they are known as hybrid funds. Hybrid funds may be further categorised into equity-oriented fund and debt-oriented fund.
   a. Equity-oriented funds are defined as those schemes where the equity holding of the fund in domestic companies is more than 65 per cent.
   b. Debt-oriented funds are those where the investment in debt securities exceeds 65 per cent. Examples of debt-oriented funds are capital protection schemes, monthly income plans, and children's investment funds.
   c. Balanced funds are those where 50 per cent is invested in equity instruments and 50 per cent in debt instruments.

Geographical Classification

Domestic Funds Funds which mobilise resources from a particular geographical locality like a country or region are domestic funds. The market is limited and confined to the boundaries of a nation in which the fund operates. They can invest only in the securities which are issued and traded in the domestic financial markets.

Offshore Funds Offshore funds attract foreign capital for investment in the country of the issuing company. They facilitate cross-border fund flow which leads to an increase in foreign currency and foreign exchange reserves. Such mutual funds can invest in securities of foreign companies. They open domestic capital market to international investors. Many mutual funds in India have launched a number of offshore funds, either independently or jointly with foreign investment management companies. The first offshore fund, The India Fund, was launched by Unit Trust of India in July 1986 in collaboration with the US fund manager, Merril Lynch.

EQUITY FUNDS

Diversified Equity Funds

Equity Funds

- Diversified Equity Funds
  - Large-cap
  - Mid-cap
  - Small-cap
- Value
- Special
- Sectoral
- Derivatives
- Tax Saving
- Index
- Fund-of-Funds
- Quant

These funds invest in equity shares and hold a diversified equity portfolio. These funds are characterised as high risk high return investments as their returns are linked to the performance of the stock market. But when compared to sectoral funds, they feature a lower risk. Unlike equity linked savings schemes (ELSS), they have no lock-in period. Examples of diversified funds are HDFC Equity, HDFC Top200, HSBC Equity, and Birla SunLife Frontline Equity.

Categories of Diversified Equity Funds

(a) Large-cap Funds These are funds that make investments mainly in the shares of big companies. The investors prefer to make investments in these funds as the portfolio consists of well established companies with high trading volumes and market capitalisation of more than Rs. 1000 crores. Examples of major large- cap funds are Franklin India Blue Chip, HDFC Top 200, Reliance Growth Fund, and Kotak 30.

(b) Mid-cap Funds These funds invest in equity shares of medium sized companies that have a market capitalisation between Rs. 500 crore and Rs. 1,000 crore and a huge potential to become big. Mid cap funds are volatile as risk of failures especially during the down turn in business cycles can be high. Examples of mid-cap funds are Sundaram BNP Paribas Select Mid Cap Fund, Franklin India Prima Fund, HDFC Capital Builder, Kotak Indian Mid Cap Fund, and HSBC Midcap Equity Fund.

(c) Small-cap Funds These funds invest in equity shares of small companies with a market capitalisation of up to Rs. 500 crore. Some small and upcoming companies have ability to grow faster than the large caps and have the potential of providing high returns. But these companies need to be explored as the information available about them is limited compared to large caps. Examples of small-cap funds are DSPBR Small and Mid Cap Fund and Sundaram BNP Paribas Select Small Cap Fund.

- There are 10 small-cap funds in India with AUM of around Rs. 3,450 crores

Value Funds

These funds invest in undervalued stocks-stocks with strong fundamentals but are under performing-either due to a difficult phase or economic downturn. For instance, during 2008, higher raw material cost and slack in demand resulted in underperformance of the auto sector. Consequently, blue-chip auto stocks like Bajaj Auto and Hero Honda underperformed. Value stocks are acquired not only from large-cap segment but also from mid-cap and small-cap segments. Superior returns can be earned from value investing in the long run. Examples of value funds are ICICI Prudential Discovery, Tata Equity PE, Templeton India Growth, and UTI Master Value.

Special Funds

Mutual funds have launched special schemes to cater to the special needs of investors. Examples of special schemes are ICICI Child Care Plan–Gift Plan, Tata Young Citizen’s Fund, and UTI Mahila Unit Scheme. Taurus AMC has launched an open-ended diversified equity fund—Taurus Ethical Fund—which invests in stocks that comply with Shariah norms. This fund does not invest in industries not permitted by Shariah such as banks, liquor, and tobacco.

Sectoral Funds

- Arbitrage funds exploit arbitrage opportunities available between the cash and futures market of a particular stock
- Fixed maturity plans are short-term close-ended schemes investing in short-term debt instruments

These funds, also known as thematic funds, restrict their investments to a particular segment or sector of the economy such as infrastructure, banking, technology, energy, real estate, power, heath care, FMCG, pharmaceuticals, etc. They are high- risk, high- return investments and they generate high returns if the particular sector in which funds are invested perform well. For example, Reliance Mutual Fund launched Reliance Diversified Power Sector Fund, Reliance Pharma Fund, and Reliance Media Entertainment., Since these funds focus on just one sector of the economy, they limit diversification and the fund manager's ability to earn higher returns by investing in other sectors which are doing well.

All the IPOs in the mutual fund industry during 2004 were for theme funds. Leadership, valuation, and sector-specific funds were the three broad themes that gained popularity in 2004. The leadership category looks at companies which are leaders in various sectors and on a macrolevel, in sectors that could emerge as leaders in the economy. Sundaram India Leadership, HSBC India Opportunities, Kotak Global India, and ICICI Emerging STAR fall under this category.

Derivatives Arbitrage Funds

They are open-ended equity schemes aimed to generate low volatility and better returns by investing in a mix of cash equities, equity derivatives, and debt markets. This fund claims to provide better returns, tax benefits, and greater liquidity. This fund seeks to buy stocks in the cash market and sell the corresponding stock futures to lock-in the price difference between the two, i.e, the arbitrage spread. Benchmark Derivative, JM Equity and Derivative, ICICI Blended Plans A & B, JM Advantage Arbitrage, UTI Spread, Pru ICICI Equity, and Derivative are some examples of derivatives arbitrage funds.

Tax Saving Schemes

- Equity Linked Savings Scheme and Pension schemes offered by mutual funds are tax saving schemes

Tax-saving schemes are equity-oriented schemes designed on the basis of tax policy with special tax incentives to investors. Mutual funds have introduced a number of tax-saving schemes. These are close-ended schemes and investments are made for ten years, although investors can avail of encashment facilities after three years. These schemes contain various options like income, growth or capital appreciation. Examples of tax saving schemes are equity linked saving scheme and pension scheme.

- Equity-linked savings schemes diversified, tax saving schemes with a lock-in period of three years

(a) Equity-linked Savings Schemes Equity-linked savings schemes are diversified schemes investing in shares of blue-chip companies. Returns in these schemes are linked to the returns of the stock market. In order to encourage investors to invest in the equity market, the government has given tax concessions through special schemes. Investment in these schemes entitles the investor to claim an income tax rebate, but these schemes carry a lock-in period of three years before the end of which funds cannot be withdrawn. These schemes being growth oriented, invest predominantly in equities. They fall in the high risk and high return category.

New ELSS plans launched by mutual-fund houses will have to be close-ended schemes that have to be wound up 10 years after allotment of units. Investors cannot plan entry into this scheme as the fund houses can announce the repurchase price only a year after the allotment of units and thereafter on half-yearly basis. The schemes could be wound up before completion of the stipulated 10 years if 90 per cent or more of the units are repurchased before completion of 10 years of the plan. Further, the ELSS plans for a minimum of three months. Schemes launched prior to April 1, 2005 have been exempted from this requirement. Examples of ELSS are SBI Magnum Taxgain, HDFC Long term Advantage Fund, HDFC Tax Saver, and Franklin India Taxshield.

(b) Pension Schemes These are balanced schemes which aim to provide regular income to individuals after their retirement. There are two pension schemes offered by Templeton and UTI which were launched in the '90s, but put together these two schemes have only Rs. 600 crore between them. Pension plans of insurance companies are more popular as these plans cover risk of life also.

From April 1, 2009 any individual will be able to start a New Pension System (NPS) account. The Pension Fund Regulatory and Development Authority (PFRDA) has mandated six mutual fund houses—UTI Retirement Solutions, SBI, ICICI Prudential Life Insurance, Reliance Capital, IDFC AMC, and Kotak Mahindra AMC—to manage pension fund in the NPS. This pension plan will be managed at 0.09 paisa per Rs. 100 that is cheaper than even liquid mutual funds. Moreover, investors will have a wide choice of selection of investment and tenure as long as 40 years with the benefit of portability, that is they can change fund manager at no cost.

Index Funds An index fund is a mutual fund which invests in securities in the index on which it is based—BSE Sensex or S&P CNX Nifty. It invests only in those shares which comprise the market index and in exactly the same proportion as the companies/weightage in the index so that the value of such index funds varies with the market index. An index fund follows a passive investment strategy as no effort is made by the fund manager to identify stocks for investment/disinvestment. The fund manager has to merely track the index on which it is based. His portfolio will need an adjustment in case there is a revision in the underlying index. In other words, the fund manager has to buy stocks which are added to the index and sell stocks which are deleted from the index.

- Index funds replicate the portfolio of a particular index such as the BSE Sensex or the S&P CNX Nifty

Internationally, index funds are very popular. Around one-third of professionally run portfolios in the US are index funds. Empirical evidence points out that active fund managers have not been able to perform well. Only 20 to 25 per cent of actively managed equity mutual funds out-perform benchmark indices in the long-term. These active fund managers park 80 per cent of their money in an index and do active management on the remaining 20 per cent. Moreover, risk averse investors like provident funds and pension funds prefer investment in passively managed funds like index funds. Tracking error can occur in case of index funds. Tracking error is the error between index returns and index fund returns. In other words, there is a deviation of returns from an index fund as compared to the returns on the index. Tracking error is the variance between the daily returns of the underlying index and the NAV of the scheme over a given period. Tracking error is a good measure to compare performance among index funds. Lower the tracking error, better the index fund. Tracking error of various index funds can be calculated by comparing their daily returns with those of its benchmark index. Funds like Franklin India Index, Principal Index, and Prudential ICICI Index consider Nifty TRI as its benchmark, while funds like UTI Master Index and Pru ICICI SPICE track the Sensex TRI.

- Index fund scheme means a mutual fund scheme that invests in securities in the same proportion as an index of securities.

It is a result of transaction costs for buying and selling of stocks and payment of asset management fees.

But an index fund gains over the index owing to stock lending and index arbitrage.

Index funds mirror the performance of their benchmark index. Higher tracking errors can be attributed to factors such as higher expenses of the scheme (higher expense ratio) and large-scale fluctuations/redemptions in the fund's assets under management (AUM).

Fund-of-Funds

A Fund-of-Funds (FOF) scheme invests in a combination of equity and debt mutual fund schemes available in the market. The fund manager changes the percentage of equity and debt allocation based on the market view.

Fund-of-funds invests in other mutual funds and offers a return to investors. Internationally, fund-of-funds do not limit their exposure to other mutual funds. They are more like hedge funds and put money in other fund classes such as private equity funds and distressed assets funds. This enables the investors in FOFs to obtain diversity in risk allocation. This strategy provides the fund manager more flexibility in allocating the investible corpus.

- A Fund-of-funds scheme invests in schemes of the same mutual fund of other mutual funds

The flip side is that there may be a double layer of fees charged to the end investors. Investors pay the expense fees to the fund manager responsible for the FOF. In addition, they could be required to bear the charges incurred by the fund manager in buying into various MF schemes. Also, it is possible that the fund manager may be buying the same stock through various schemes.

Kotak Mutual Fund has an FOF that invests in schemes of other fund houses. The other mutual funds offering the scheme are Standard Chartered Mutual Fund and Prudential ICICI Mutual Fund. The assets under management (AUM) of FOF schemes is quite low. The factors restraining the growth of FOF are:

- Dividend distribution tax is levied on FOF and this tax rate applicable to individuals is 14 per cent.
- The long-term capital gains tax of 10 per cent without indexation and 20 per cent with indexation is applicable to FOF. In equity mutual funds, the short-term gains tax is 10 per cent and long-term gains tax is nil. Hence, taxes are a major deterrent to the growth of FOFs. All investments in fund-of-funds are treated as debt investments and are taxed like debt funds. Investment in equity funds is exempt from long-term capital gains while debt funds are subject to the same at 10 per cent. Investment in a fund-of-funds attracts a long-term tax of 10 per cent. Fund-of-funds have to be actively managed by fund managers. But it is difficult as very few asset classes are available to invest in and there is lack of information regarding the composition of corporate and retail investment.
- Most fund houses choose their own schemes to invest in an FOF schemes which limits the advantage of diversification an investor is looking for.

Quant Funds

The word 'Quant' is a short form of the term 'Quantitative'. These funds use a quantitative approach to invest in stock markets based on a computer-generated mathematical model. These mathematical models are developed by the mutual fund manager by taking into consideration various parameters such as valuations, earning sentiments, price, momentum, and share holders' value. A quant fund is positioned between two kinds of equity funds, actively managed equity funds and passively managed index funds. Examples of Quant Funds are Lotus Agile Fund and Reliance Quant Plus Fund.

DEBT FUNDS

- Most corporate houses park short-term cash in money market and liquid funds
- Liquid fund schemes and plans shall make investment in purchase debt and money market securities with maturity of upto 91 days only

Money Market Mutual Funds/Liquid Funds They specialise in investing in short-term money market instruments like treasury bills, CBLO, commercial paper, certificate of deposit, and other money market instruments. They do not carry either interest rate risk or entry or exit loads. The objective of such funds is high liquidity with low rate of return. There is lot of portfolio churning (high portfolio turnover) in liquid funds as the investments are of a very short term nature ranging from daily to monthly. Corporates invest in these funds to park their short-term surplus funds. Examples of money market funds are Templeton India Money Market Account and UTI MMF. There are two types of schemes: Liquid schemes and Liquid Plus schemes. Both invest in short-term debt securities but the difference between the two schemes is that liquid plus schemes invest in debt securities over 91 days maturity while liquid funds invest in money market instruments of maturity below 91 days.

Short-term Bond Funds These are funds that seek to provide a high degree of liquidity, along with generation of reasonable returns, by investing in a portfolio consisting of short-term debt and money market instruments. Short-term bond funds are most often primarily made up of corporate bonds. During periods of low interest rates, short-term bond funds do not yield higher returns as it is cheaper for companies to raise funds from banks than to raise funds from the corporate debt market.

It is a fund positioned between a liquid and a short-term debt product. The average maturity of the portfolio would be longer than a typical Liquid scheme but shorter than a typical debt scheme. Correspondingly, the risk-return magnitude would also be higher than liquid but lower than debt scheme. Examples of short-term bond funds are HSBC Ultra Short Term Bond Fund and Kotak Bond Short Term.

Long-term Bond Funds These funds invest in long-term government dated securities and corporate bonds. The market price of the underlying securities—government securities, bonds, debentures—determines the net asset value (NAV) of these funds. These securities carry high interest rate risk There is an inverse relationship between the interest rates and NAV of bond funds. With a change (increase/decrease) in the interest rates, the market price of bonds fluctuates (decreases/increase) leading to a change (fall/rise) in the NAV of bond funds. An example of long-term bond funds is Kotak Bond.

- Gilt funds invest exclusively in government securities.
- Schemes that charge a load i.e., a percentage of NAV for entry or exit are known as Load Fund

Gilt Funds Mutual funds which invest exclusively in government securities, both central and state government, are called gilt funds. Gilt funds are safe as they do not carry credit or default risk. With a view to creating a wider investor base for government securities, the RBI encouraged setting up of gilt funds. These funds are provided liquidity support by the RBI.

Floating Rate Funds Floating rate funds are non-traditional funds which invest in floating rate instruments. A floating rate instrument is one where the coupon rate is reset periodically to reflect the current interest rates. The coupon rate is linked to a benchmark rate which may be the overnight call money rate or treasury bill rate. In India, a variety of benchmark rates such as MIBOR (Mumbai Interbank Offer Rate), INBMK (Routers India Gilts Benchmark), INCPBMK (Reuters India Commercial Paper Reference Rate), yields on 91-day and 364-day treasury bill auctions are used by market players. The most popular among these is the MIBOR.

- Floating rate funds invest in floating rate instruments

Floating rate instruments serve as an effective hedge against rising interest rates. With interest rates bottoming out and rise in inflation, floating rate funds are gaining popularity.

A higher number of companies issued floating rate bonds in 2004. The benchmark five year AAA corporate bond yield rose resulting in an increase in cost of borrowing. Hence, most of the companies raised funds via FRBs to save on coupon payments. FRBs allow issuers to borrow on a long-term (3 to 5 year tenors) basis based on a one-year benchmark such as government security yield or the call money rate—MIBOR. Moreover, demand for FRBs stemmed from mutual funds. The floating rate schemes of mutual funds gained popularity which led to companies increasing by issuing floating rate bonds.

Floating rate bonds are attractive as they can be swapped into a fixed rate through the overnight indexed swap (OIS) market. The overall cost of borrowing after paying the swap cost works out to be cheaper than a fixed rate bond. floating rate funds and liquid funds perform better when interest rates inch up There are 38 floating rate fund schemes available to investors in India. This product is attractive to investors who are seeking protection from rising inflation and potential interest rate rise.

Templeton Floating Rate Fund is the largest floating rate fund in the Indian mutual fund industry. The fund was launched in 2002 with two plans—the long-term plan and the short-term plan. The asset allocation of the fund is a maximum of 35 per cent in fixed rate instruments and a minimum of 65 per cent in floating rate instruments.

Fixed Maturity Plans They are debt-oriented funds, which invest in fixed income securities like bonds, government securities and money market instruments. Being close- ended income schemes, they have a fixed maturity period ranging from 15 days to one year. There are three-months, half-year, one-year durations fixed maturity plans offered by mutual fund houses. As these bonds are held-to-maturity, these funds are relatively less susceptible to interest rate risk. Fixed maturity plans (FMPs) lock-in the yield till maturity to curb the interest rate risk. They are popular as they provid higher returns in the shorter term. In an increasing interest rate scenario, fund houses invest in bonds of shorter duration which fetch good yields for investors. Also, investing in FMPs during the last week of March gives rise to the tax planning mechanism of double indexation. Let us understand this with the help of an illustration.

- Fixed maturity plans are short-term close-ended schemes investing in short-term debt instruments

Suppose Mr A's income is more than Rs. 10 lakh p.a. He wants to invest on March 25, 2010 for one year an amount of Rs. 5 lacs . He has two options: to invest this amount in a fixed deposit which will earn him an interest rate of 9 per cent per annum or to invest this amount in a fixed maturity plan which will yield him a return of 8.9 per cent for 375 days. Suppose the official inflation rate on March 31, 2010 is 5 per cent. In which option should Mr. A invest his money?

The interest income on fixed deposit will be fully taxable in the hands of the investor. The tax rate applicable to Mr. A is 33 per cent. Hence, the tax liability on interest income of Rs. 45,000 (Rs. 5,00,000*9%) is Rs. 14,850/-. Thus, the net interest income after tax on fixed deposit is Rs. 30,150/- Now, if he invests in FMP he will earn a yield of Rs. 44,500 (Rs.5,00,000*8.9%). As he is investing during the last week of March, he will get benefit of capital gain double indexation (as the investment is across two financial years) which is 5 per cent + 5 per cent = 10 per cent which raises the basic cost to Rs. 5,50,000, thus exempting him from tax on capital gain. Thus, the net income after tax on investment in FMP is Rs. 44,500/-.

Capital Protection Schemes Investment in equity markets is risky as there is a possibility of losing investment. Risk averse investors avoid investing in stocks and prefer low-return assured schemes such as NSC, Post office monthly income schemes, provident fund, bank deposits, etc. In order to attract these risk-averse investors to mutual funds and increase the total size of the market of mutual funds, SEBI gave approval to fund houses to launch Capital Protection Schemes (CPS). These schemes aim at protecting the initial capital investment of the investor and do not guarantee any assured returns. Few years ago mutual funds used to offer assured return schemes which assured a specific (fixed) return to the investors irrespective of the performance of the scheme. These schemes were banned in 2004.

- Capital protection schemes aim at protecting the initial capital investment of the investor
- These schemes are close-ended and rated by a credit-rating agency

According to SEBI guidelines, in case of capital protection oriented scheme, the mutual funds shall disclose in the offer document, Key Information Memorandum (KIM) as well as in the advertisements that the scheme offered is 'oriented towards protection of capital' and 'not with guaranteed returns'. It should also be indicated that the orientation towards protection of the capital originates from the portfolio structure of the scheme and not from any bank guarantee, insurance cover etc. The proposed portfolio structure should be rated on a quarterly basis by a credit rating and continuously monitored by the trustees from the perspective of assessing the degree of certainty for achieving the objective of capital protection. Further, it should also be ensured that the debt component of the portfolio structure has the highest investment grade rating.

Capital protection scheme is close-ended and rated by a credit rating agency. Under this scheme, a large proportion of the corpus is invested in highly-rated debt securities to ensure capital protection and small proportion of the corpus is invested in equities to gain from capital appreciation to provide a return higher than the traditional low-return assured schemes of the government and banks.

This scheme is of advantage to both the risk-averse investors and fund managers. The investors capital is protected and they can access the capital market without increasing their risk. Being closeended schemes, the fund managers can effectively manage the funds but the investors funds are blocked for a particular period.

Franklin Templeton Capital Protection Oriented Fund, Reliance Capital Shield Fund, and Sundaram BNP Paribas Savings Plus are some examples of Capital Protection Schemes.

OTHER FUNDS

- P/E ratio fund invests in equities and debt instruments wherein the proportion of the investment is determined by the ongoing price-earnings multiple of the market
- Exchange traded funds are index funds listed and traded on the stock exchange

- Benchmark Mutual Fund, ICICI Prudential Mutual Fund, Kotak Mahindra Mutual Fund, Quantum Mutual Fund, Reliance Mutual Fund and UTI Mutual Fund have launched open ended exchange traded funds

P/E Ratio Fund P/E ratio fund is another mutual fund variant that is offered by Pioneer ITI Mutual Fund. The P/E (price–earnings) ratio is the ratio of the price of the stock of a company to its earnings per share (EPS). The P/E ratio of the index is the weighted average price–earnings ratio of all its constituent stocks.

The P/E ratio fund invests in equities and debt instruments wherein the proportion of the investment is determined by the ongoing price-earnings multiple of the market. Broadly, around 90 per cent of the investible funds will be invested in equity if the Nifty Index P/E ratio is 12 or below. If this ratio exceeds 28, the investment will be in debt/money markets. Between the two ends of 12 and 28 P/E ratio of the Nifty, the fund will allocate varying proportions of its investible funds to equity and debt. The objective of this scheme is to provide superior risk-adjusted returns through a balanced portfolio of equity and debt instruments.

Exchange Traded Funds Exchange traded funds (ETFs) are a hybrid of open-ended mutual funds and listed individual stocks. They are index funds listed on stock exchanges and trade like individual stocks on the stock exchange. However, trading at the stock exchanges does not affect their portfolio. ETFs do not sell their shares directly to investors for cash. The shares are offered to investors over the stock exchange. In case of ETFs, the AMC issues units to Authorised Participants (APs), who, in turn, act as market makers for the ETFs. The Authorised Participants provide two way quotes for the ETFs on the stock exchange, which enables investors to buy and sell the ETFs at any given point of time.

ETFs are basically passively managed funds that track a particular index such as S&P CNX Nifty. They are passive index funds and due to passive fund management these funds charge lesser fees as compared to other funds Since they are open-ended and listed on stock exchanges, it is possible to buy and sell them throughout the day and their price is determined by the demand–supply forces in the market. In practice, they trade in a small range around the value of the assets (NAV) held by them.

ETFs are the innovation of the last few years, a mix between mutual funds and investment trusts. As with mutual funds, new units can be created at any time, so in theory there is no maximum size the fund can reach. This also means that the issuer can keep the price linked to the price of asset, by issuing or redeeming shares if it gets out of line. But, as with investment trusts, they are traded continuously, so you can buy and sell them much like shares. Unlike any other open-ended scheme, where the NAV of the scheme is declared at the end of the day and the units can be bought and sold through the fund house only, ETF units are traded on stock exchanges and can be bought and sold through these exchanges. The rate or price at which the ETF unit is traded on the exchange is very close to the real NAV of the scheme. They can be bought or sold at the prevailing prices through any broker throughout the country. Thus, ETF prices will vary for each investor as the prices vary throughout the day. Moreover, as ETFs are traded on a stock exchange, investors need to open a demat account.

Now, asset classes such as indices, gold, and silver are used to create ETFs. In India, there are ETFs on two asset classes—indices (Nifty, Sensex, and Bankex) and gold.

ETFs offer several distinct advantages.

Advantages of ETFs

- Allows intra-day trading
- Simple to understand
- Used to arbitrate between index futures and spot index
- Provides benefits of diversified index funds
- Less costly than index funds
- Beneficial for financial institutions also

- ETFs bring the trading and real time pricing advantages of individual stocks to mutual funds. The ability to trade intra-day at prices that are usually close to the actual intra-day NAV of the scheme makes it almost real-time trading. ETFs can be bought and sold throughout the trading day, allowing for intra-day trading—which is rare with mutual funds.
- ETFs are simpler to understand and hence they can attract small investors who are deterred to trade in index futures due to requirement of minimum contract size. Small investors can buy minimum one unit of ETF, can place limit orders and trade intra-day. This, in turn, would increase liquidity of the cash market.
- ETFs can be used to arbitrate effectively between index futures and spot index. The presence of market makers can create or redeem units directly with the funds for exchange of defined basket of underlying securities. Hence, any difference in the NAV and the price on the exchange is used as an arbitrage opportunity by the market maker.
- ETFs provide the benefits of diversified index funds. The investor can benefit from the flexibility of stocks as well as the diversification.
- ETFs being passively managed, have a somewhat higher NAV against an index fund of the same portfolio. The operating expenses of ETFs are lower than even those of similar index funds as they do not have to service investors who deal in shares through stock exchanges.
- ETFs can be beneficial for financial institutions also. Financial institutions can use ETFs for utilising idle cash, managing redemptions, modifying sector allocations, and hedging market exposure.

Working of ETFs

1. An AMC appoints authorised participants (APs) who deposit all the shares that comprise the index (or the gold in case of Gold ETF) with the AMC.
2. The shares or gold deposited with the AMC is known as 'Portfolio Deposit' which is then deposited with a custodian for safe-keeping. The custodian keeps record of all the shares/gold that has been deposited/ withdrawn under the ETF.
3. The AMC then allots 'creation units' to the authorised participants. Creation units are bundled ETF units which are then split into small units for selling to retail investors. Each Creation Unit comprises of a pre-defined number of ETF Units (say 100, 500, 1,000, 10,000, or any other number).
4. If there is more demand, these authorised participants will increase their portfolio deposit (deposit more shares/gold) with the AMC and get more creation units to satisfy the demand. Or if there is more redemption, then they give back these creation units to the AMC, take back their shares/ gold, sell them in the market, and pay the investor.

The first exchange traded fund—Standard and Poor's Depository Receipt (SPDR—also called Spider)—was launched in the US in 1993. ETFs have grown rapidly with around USD 100 billion in assets as on December 2001. Today, about 60 per cent of trading value on the American Stock Exchange (AMEX) is from ETFs. ETFs were launched in Europe and Asia in 2001. Currently, more than 280 ETFs are available in US, Europe, Singapore, Hongkong, Japan, and other countries. Among the popular ones are SPDRs (Spiders) based on the S&P 500 Index, QQQs (cubes) based on the Nasdaq-100 Index, i SHARES based on MSCI Indices and TRAHK (Tracks) based on the Hang Seng Index. The ETF structure has seen over USD 336 billion pouring into more than 390 ETFs. It has become the fastest growing fund structure.

The first ETF to be introduced in India is Nifty Benchmark Exchange-Traded Scheme (Nifty BeES). It is an open-ended ETF, launched towards the end of 2001 by Benchmark Mutual Funds. The fund is listed in the capital market segment of the NSE and trades the S&P CNX Nifty Index. The Benchmark Asset Management Company has become the first company in Asia (excluding Japan) to introduce ETF. Each Nifty BeES unit is 1/10th of the S&P CNX Nifty Index value. Nifty BeES units are traded and settled in dematerialised form like any other share in the rolling settlement. It charges a management fee of 0.35 per cent and the total expense ratio is 0.80 per cent p.a., which is the lowest in India. It has a tracking error of 0.12 per cent (annualised), which is again the lowest in India for any index fund. Junior BeES was launched by Benchmark Mutual Fund on March 6, 2003 and trades on the capital market segment of the NSE. Each Junior BeES unit is 1/10th of the CNX Nifty Junior Index value. Benchmark Mutual Fund now offers six ETF products: Banking BeES, Benchmark Derivative Fund, Benchmark Split Capital Fund (A and B), Liquid Benchmark ETS, Nifty Benchmark ETS (BeES), and Nifty Junior BeES. The Liquid BeES fund was launched in July 2003 and tracks the Crisil Liquid Benchmark. The banking BeES fund tracks the CNX Bank Index, which comprises 12 key banking stocks. Each unit is priced at 1/10th of the CNX Bank Index. The Benchmark Derivative fund was launched in December 2004 and the Split Capital fund was launched in July 2005. Benchmark Asset Management handles four out of five ETFs currently available in the market. Benchmark AMC has also launched an exchange-traded index fund—Shariah BeES—that invests insecurities which are constituent of S&P CNX Nifty Shariah index in the same proportion as in the index. A Shariah compliant fund is one which does not invest in companies engaged in the business of liquor, tobacco, and banking.

SENSEX Prudential ICICI Exchange Traded Fund (SPICE) is the first exchange traded fund (ETF) on SENSEX launched by Prudential ICICI Mutual Fund. One unique feature of SPICE is that it can be bought and sold like any other equity share on the BSE trading terminal (BOLT) through a stockbroker. The price of one SPIcE unit will be equal to approximately 1/100th of SENSEX value. For example, if the current SENSEX is at 17,500, one SPIcE unit will trade at around Rs. 175. The minimum lot size is one unit of SPICE and a retail investor can buy one SPICE unit for Rs. 175 and hold it in his demat account just like any other security. UTI launched UTI Sunder Fund which tracks the S&P CNX Nifty.

Gold Exchange Traded Funds In January 2006, SEBI permitted introduction of Gold Exchange Traded Fund (GETF) schemes by mutual funds. Gold Exchange Traded Fund schemes are permitted to invest primarily in (a) Gold (b) Gold related instruments—Regulation 2 (mc) stipulates that gold related instruments are such instruments having gold as underlying, as may be specified by SEBI from time to time.

Gold Exchange Traded Fund

- A listed security backed by allocated gold held in a custody of a bank on behalf of investors

Since physical gold and other permitted instruments linked to gold are denominated in gold tonnage, it will be valued based on the market price of gold in the domestic market and will be marked to market on a daily basis. The market price of gold in the domestic market on any business deal would be arrived at as under:

- Allows investors to participate in the gold bullion market without taking physical delivery of gold
- Gold BeES–India's first GETF launched by Benchmark Asset Management Company in February 2007
- There are seven open ended Gold ETF schemes
  - Gold Benchmark Exchange Traded scheme (Gold BeES)
  - Kotak Gold ETF
  - Quantum Gold ETF
  - Reliance Gold ETF
  - Religare Gold ETF
  - SBI Gold ETF
  - UTI Gold ETF

Domestic price of gold = (London Bullion Market Association AM fixing in US $/ounce × conversion factor for converting ounce into kg for 0.995 fineness × rate for US $ into INR) + custom duty for import of gold + sales tax/octroi and other levies applicable.

NAV of units under the scheme shall be calculated as shown below:

NAV = Market or Fair Value of Scheme's Investments + Current Assets – Current Liabilities and Provision / Number of Units outstanding under scheme on the valuation date

As there are no indices catering to the gold sector/securities linked to Gold, GETF shall be benchmarked against the price of gold.

Globally, the first GETF—Gold BeES was mooted by Benchmark Mutual Fund during May 2002.

GETFs have been successfully launched in countries like Australia, the UK, the US, and South Africa and have total assets under management (AUM) of over $2.7 billion.

In India, investment in gold is a preferred avenue and asset allocation in gold is around 10 per cent. Hence, GETFs should be aimed at gold investors who can diversify the portfolio risk and enhance their wealth.

Investment in GETFs is beneficial to investors in many ways.

1. They not only provide ease of trade to investors, but also enable them to buy gold at near-market price.
2. Units can be resold anytime on the stock exchange at the trading price on the date of sale. Resale is not subject to tax deducted at source.
3. Holding gold in demat form does not attract wealth tax and the benefit of long-term gains accrues at the end of one year. Thus, the tax liability on the gains arising from sale of the units is 20 per cent after one year.
4. No storage or insurance costs have to be borne by investors.
5. GETFs are a good hedge against stock market volatility and depreciation of the dollar.

Thus, GETFs are one of the most cost-effective ways to acquire gold. But the investors have to bear brokerage charges at the time of purchase of units from the exchange, which can range from 0.10–1 per cent. Fund houses also charge an expense ratio of 1 per cent per annum on account of administrative and custodian expenses. Moreover, investors cannot exchange GETF units for physical gold or jewellery.

Real Estate Mutual Funds

- Invest in real estate
- Close-ended fund with units listed on the stock exchange
- Allow investors participate in the booming real estate market

Real Estate Mutual Funds Real Estate Mutual Funds (REMFs) mobilise money from individuals and institutions and deploy them in real estate. The real estate industry in India is one of the fastest growing sectors on account of liberalised (100 per cent) FDI regime, booming economy and easy availability of retail loans at attractive rates from banks and financial institutions leading to a bull rally in real estate prices. These funds allow retail investors a chance to participate in the booming real estate market and diversify their investment portfolio. Besides, because of lack of transparency and hassles involved in direct investment in real estate, REMFs provide a sense of security to small investor and ease of transactions.

REMFs also benefit developers of properties as it provides a long-term alternative to bank finance or overseas borrowing. Moreover, participation of REMFs in property development projects can serve to improve corporate governance of real estate companies.

According to the SEBI guidelines,

1. REMFs can invest directly in real estate properties within India, in mortgage-backed (housing lease) securities, in equity shares/bonds/debentures of listed/unlisted companies which deal in properties and also undertake property development.
2. The structure of REMFs will be close-ended initially.
3. The units of REMFs shall be listed on the stock exchanges and NAVs of such schemes should be declared on a daily basis.
4. REMFs should appoint a registered custodian who could safe-keep the titles of the real estate properties held by them.
5. A real estate mutual fund scheme shall not undertake lending or housing finance activities.
6. The asset management company of a mutual fund having real estate mutual fund schemes shall appoint suitable number of qualified key personnel with relevant experience, before undertaking investment management of real estate assets of a real estate mutual fund scheme.
7. SEBI-registered real estate mutual funds will be given a tax pass-through status if they invest the money raised from investors in shares of real estate companies. So will be the case for all mutual funds investing in shares of realty companies.

Definition of Real Estate Asset A 'real estate asset' means an identifiable immovable property

1. which is located within India in such city as may be specified by the Board from time to time or in a special economic zone within the meaning of clause (za) of Section 2 of the Special Economic Zones Act, 2005 (28 of 2005);
2. on which construction is complete and which is usable;
3. which is evidenced by valid title documents;
4. which is legally transferable;
5. which is free from all encumbrances;
6. which is not subject matter of any litigation; but does not include
   a. a project under construction; or
   b. a vacant land; or
   c. a deserted property; or
   d. a land specified for agricultural use; or
   e. a property which is reserved or attached by any Government or other authority or pursuant to orders of a court of law or the acquisition of which is otherwise prohibited under any law for the time being in force;

Eligibility Criteria A Certificate of registration may be granted under Regulation 9 to an applicant proposing to launch only real estate mutual fund schemes if he has been carrying on business in real estate for a period of not less than five years. An existing mutual fund may launch a real estate mutual fund scheme if it has an adequate number of key personnel and directors having adequate experience in real estate.

Permissible Investments

1. Every real estate mutual fund scheme shall invest at least 35 per cent of the net assets of the scheme directly in real estate assets.
2. Subject to sub-regulation (1), every real estate mutual fund scheme shall invest
   a. at least 75 per cent of the net assets of the scheme in (i) real estate assets; (ii) mortgage backed securities (but not directly in mortgages); (iii) equity shares or debentures of companies engaged in dealing in real estate assets or in undertaking real estate development projects, whether listed on a recognised stock exchange in India or not;
   b. the balance in other securities;
3. Unless otherwise disclosed in the offer document, no mutual fund shall, under all its real estate mutual fund schemes, invest more than 30 per cent of its net assets in a single city.
4. No mutual fund shall, under all its real estate mutual fund schemes, invest more than 15 per cent of its net assets in the real estate assets of any single real estate project. A 'single real estate project' means a project by a builder in a single location within a city.
5. No mutual fund shall, under all its real estate mutual fund schemes, invest more than 25 per cent of the total issued capital of any unlisted company.
6. No mutual fund shall invest more than 15 per cent of the net assets of any of its real estate mutual fund schemes in the equity shares or debentures of any unlisted company.
7. No real estate mutual fund scheme shall invest in any
   a. unlisted security of the sponsor or its associate or group company;
   b. listed security issued by way of preferential allotment by the sponsor or its associate or group company;
   c. listed security of the sponsor or its associate or group company, in excess of 25 per cent of the net assets of the scheme.
8. No mutual fund shall transfer real estate assets amongst its schemes.
9. No mutual fund shall invest in any real estate asset which was owned by the sponsor or the asset management company or any of its associates during the period of last five years or in which the sponsor or the asset management company or any of its associates hold tenancy or lease rights.

Valuation of Real Estates Assets and Declaration of Net Asset Value

1. The real estate assets held by a real estate mutual fund scheme shall be valued at
   a. cost price on the date of acquisition; and
   b. fair price on every 19th day from the day of its purchase in accordance with the norms specified in Schedule IXB.

2. The asset management company, its directors, the trustees, and the real estate valuer shall ensure that the valuation of assets held by a real estate mutual fund scheme are done in good faith, in accordance with the norms specified in Schedule IX B and that the accounts of the scheme are prepared in accordance with accounting principles specified in Schedule XI.
3. The net asset value of every real estate mutual fund scheme shall be calculated and declared at the close of each business day on the basis of the most current valuation of the real estate assets held by the scheme and accrued income thereon, if any.

Usage of Real Estate Assets of a Real Estate Mutual Fund Scheme

1. The asset management company may let out or lease out the real estate assets held by the real estate mutual fund scheme if the term of such lease or letting does not extend beyond the period of maturity of the scheme.
2. Where real estate assets are let out or leased out, the asset management company shall diligently collect the rents or other income in a timely manner.
3. Real estate assets held by a real estate mutual fund scheme may be let out to the sponsor, asset management company or any of their associates, at market price or otherwise on commercial terms provided that not more than 25 per cent of the total rental income of the scheme shall be derived from assets so let out. In the US, wealthy promoters set up Real Estate Investment Trusts (REITs) in 1960 to make investments in large income producing real estates. The shares of many REITs are traded on New York Stock Exchange on the basis of yield. There are over 190 REITs registered with Securities Exchange Commission (SEC) and having total assets exceeding USD 500 billion. These funds have given excellent risk-adjusted returns to the unitholders.

Real Estate Investment Trusts (REITs) REITs are classified as equity, mortgage, or hybrids. Equity REITs own and operate income producing real estate. Mortgage REITs lend money directly to real estate owners and operators or extend credit directly through the acquisition of loans or mortgage-backed securities. Hybrids own properties as well as lend to real estate owners and operators.

REITs pool in investors' money and invest the fund generated in commercial and residential property. An investor, therefore, becomes a 'unitholder' in the REIT. In contrast to directly investing by purchasing property that, otherwise, is expensive to buy, an owner of one REIT unit buys a 'one-unit portion' of a managed pool of property. This pool of property then generates income through renting, leasing, and sales, and distributes the said income directly to the REIT-holder on a regular basis in the form of dividends. REITs would provide an opportunity for small investors to access high yields as well as liquidity at small units of investment. Among other things, REITs invest in residential and commercial property such as shopping malls, office buildings, apartments, warehouses, and hotels. Hence, investment in REIT would make the investor portfolio a diversified one and also increase the stability of income sources. The introduction of REITs in India would provide a further boost to the real estate industry. This would result in increased rental housing generation and also raise cheaper funds for this sector.

- REITs are permitted to invest only directly in real estate mainly in commercial property. They pay the rent collected from properties to shareholders as dividend

REITs are different from REMFs. Real estate mutual funds (REMFs) are permitted to invest both in real estate directly as well as in securities, including mortgage-backed securities and shares of companies owning/developing real estate. As opposed to that, under the draft regulations, REITs are permitted to invest only directly in real estate. Moreover, REMFs can take development risk and trade in securities, hence have a potential for higher returns, albeit with a higher risk, while REITs would generally invest in stabilised income-yielding assets with lower returns and commensurate risk. Thus, REMFs are like balanced mutual funds, whereas REITs are like pure debt funds.

The SEBI issued draft regulations in January 2008 for the functioning of real estate investment trusts (REITs) in India.

1. The REIT should be in the form of a trust created under the Indian Trusts Act. Trustees should either be a scheduled bank, public financial institution, insurance company, or a body corporate.
2. The scheme should be launched by a trust and managed by a real estate investment management company. Both the trust and real estate investment management company should be registered with the SEBI.
3. Only close-ended schemes should be launched by the trusts, and these schemes have to be listed on the stock exchange mentioned in the offer document

   The scheme shall only invest in real estate and the real estate shall generally be income-generating.

4. An independent principal valuer should be appointed who will value all the real estate under the scheme after physical inspection. The valuation methodology shall follow the 'valuation standards on properties' published from time to time by the concerned Indian institute or the international valuation standards issued from time-to-time by the International Valuation Standards Committee.
5. REIT, under all its schemes, should not have exposure to more than 15 per cent of any single real estate project. It can buy uncompleted units in a building, which is unoccupied and non-income producing ,or in the course of development but the aggregate contract value of such real estate should not exceed 20 per cent of the total net asset value of the scheme at the time of acquisition.
6. REIT, under all its schemes, should not have exposure to more than 25 per cent of all the real estate projects developed, marketed, or financed by the same group of companies. The scheme is prohibited from investing in vacant land or participating in property development activities.
7. A scheme may borrow for financing investment or operating purposes but aggregate borrowings shall not at any time exceed one-fifth of the value of total gross assets of the scheme. The scheme may mortgage or pledge its assets to secure such borrowings. The scheme shall disclose in its offer document its borrowing policy including its maximum borrowing limit and the basis for calculating such limit.
8. The scheme shall distribute to unit holders as dividends each year an amount not less than 90 per cent of its annual net income after tax.

Real asset investment trusts and real estate mutual funds will widen options for investors and thereby help in the growth of mutual fund business. According to a study by McKinsey, a consultancy firm, both the products could add \$10–14 billion to the asset under management (AUM) by 2012.

RISK AND RETURN IN MUTUAL FUNDS

Risk Mutual fund investments are not free from risk. Equity-oriented mutual funds more risky compared to debt mutual funds. Equity-oriented mutual fund schemes are risky as their returns are market-linked. A fall in the price of equity shares can lead to a fall in the value of equity holdings in the scheme which may result in a fall in the net asset value (NAV). There is wide variety of equity schemes such as diversified equity schemes, index funds, sectoral schemes and equity-linked savings schemes. The proportion of risk varies from scheme to scheme. Sectoral schemes, which invest their funds into shares of a particular sector are considered to be more risky as compared to diversified equity schemes as their investment is concentrated in one sector. In case of index funds, the risk is proportionate to the movement of the index and this movement is reflected in the fund. Equity-linked saving schemes give high returns with high risk (Figure 15.2).

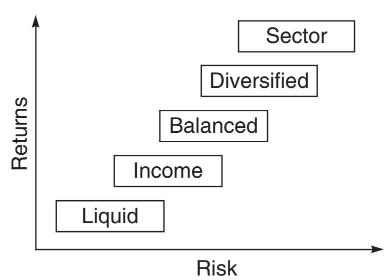


Figure 15.2 Risk vs Return

Tax Implications for Mutual Fund Investors In the amendments made by the finance minister on July 21, 2004, units of equity oriented mutual funds are to be treated as 'securities'. Thus, transaction in these units attract Securities Transaction Tax (STT) on equity-oriented fund schemes. The transaction tax is payable by the seller at rate of 0.25 per cent on the sale of a unit of an equity-oriented fund to the mutual fund. Trading of units of debt and liquid funds do not attract STT but are liable to capital gains tax. The mutual fund units in case of equity-oriented fund schemes are exempt from long-term capital gains tax and carry a flat rate of 10 per cent short-term capital gains tax.

Divided distribution tax (DDT) is paid by the mutual fund and not its investor. However, the investor indirectly bears the tax burden as it is deducted from the NAV. This results in lower returns to investors.

This tax is applicable only to investors in dividend options of debt-oriented mutual fund schemes. On February 28, 2007, the DDT on liquid and money market funds for individual investors was hiked to 25 per cent (effective rate inclusive of education cess and surcharge around 28.32 per cent), while the tax on other debt funds remained at 12.5 per cent (effective rate inclusive of surcharge 14.2 per cent). For corporates, the DDT on liquid and money market funds was hiked to 25 per cent (effective rate 28.32 per cent) and on other debt funds was hiked to 20 per cent (effective rate 22.66 per cent).

Returns from Mutual Funds

Dividends Profits earned by the fund is either distributed among unit holders in the form of dividend or is reinvested in the fund. Dividends are reinvested automatically in the dividend reinvestment plan.

- Tax free in the hands of the investor.

Capital Appreciation When the investor books profit by selling the units at prices higher than the purchase price, it is known as capital appreciation.

- Equity-oriented schemes are defined as those schemes where the equity holding of the fund in domestic companies is more than 50 per cent. Diversified equity funds and sector funds are examples of equity-oriented schemes

Equity-oriented Schemes

- Holding period less than 12 months—short-term capital gains tax of 10 per cent.
- Holding period more than 12 months—no long-term capital gains tax but securities transaction tax.

Box 15.3 A Comparison of Investment in Mutual Funds with Investment in Fixed Deposits, Public Provident Fund, Company Fixed Deposit, Equity, and Debenture

In the process of financial planning, an investor has to understand different investment avenues available to him while planning his financial portfolio.

Fixed deposits offer assurance of returns over the tenure of the investment. Moreover, investors can also avail the benefit of writing cheques against fixed deposits and finance through loans against their fixed deposits. An investor can plan out his cash flows as interest and the maturity period is fixed. Fixed deposits have always been popular among all classes of investors as they offer good returns and easy liquidity. Besides, they can be used as collateral security for commercial borrowings. Banks willingly give overdrafts upto 90 per cent of the deposit amount for meeting short-term fund requirements.

But as compared to mutual funds, fixed deposits do not offer the advantages of liquidity, professional management and transparency offered by mutual funds. Moreover, interest is not tax free in case of fixed deposits, while dividend is tax free when investing in mutual funds. Liquid and liquid-plus schemes, which invest in short-term corporate paper (CPs) and government securities such as T-Bills for a period of 60–90 days, offer the benefits of high liquidity and tax arbitrage. The return offered on such schemes is superior to interest rate offered by banks on savings bank accounts. The annual interest rate on savings bank account is 3.5% p.a. while the average return on liquid schemes ranges between 4% and 7% annually. The tax treatment of income on liquid schemes and savings bank account is almost similar. The return on growth option of liquid schemes and interest on bank deposits are taxable according to the income tax slab of the investor. Moreover, investment in liquid schemes enables an investor to transfer money from liquid scheme to other debt or equity schemes.

Public provident funds offer an assured return over the tenure of the investment but do not pay interest as it is accumulated over the tenure. On the other hand, equity-linked saving schemes pay dividends but do not offer assured returns. Life insurance schemes, ELSS, ULIP, five year bank deposits, provident fund and public provident fund, investments in infrastructure bonds, and National Savings Certificates (NSCs) are some of the most common instruments that allow investors to save upto Rs. 1 lakh on their taxable portion of their income.

Investment in ELSS is more alluring as it has the shortest lock-in period (the maturity for NSC and PPF is 5 and 15 years respectively), yields tax-free dividends, and no capital gains tax to the investor. Moreover, the minimum investment required in ELSS is Rs. 500, while in case of ULIP, it is Rs. 10,000 along with higher charges than ELSS.

Company fixed deposits offer a fixed return but as compared to debt funds they are not liquid, interest is taxable, and risk is maximum as the entire investment is in a single company.

With equities, the investor does earn a higher rate of return when markets are buoyant but the uncertainty of returns is quite high and he has to rely on his own knowledge for earning return on equity. Equity mutual funds offer the advantage of diversified investment coupled with professional management which may enable the investor to earn a higher rate of return.

Investment in debentures is secured with a fixed return, but when compared to debt funds they are less liquid and interest is taxable in the hands of the investor.

Debt-oriented Schemes

- Short-term capital gains added to the total income and taxed at the applicable rate of tax for the individual.
- In case of long-term capital gains, the investor has a choice of selecting the rate of 10 per cent flat without using the benefit of indexation or 20 per cent after using the benefits of indexation. Indian tax laws provide a benefit of inflating the cost price of an asset by accounting for inflation, if the asset is held for more than one year, thereby reducing the tax liability of an investor. The Cost Inflation Index (CII) that the government updates every year is used to calculate the actual gains on which the taxes should be paid.

How to Invest in a Scheme of Mutual Fund?

There are around 857 schemes floated by 39 mutual funds (Table 15.3). Every month fund, houses come up with new schemes. It is on the investor to decide whether to invest in an existing scheme or a new fund offering of a mutual fund.

Whenever a new scheme is to be launched by a fund house, it is advertised in newspapers. The investor has to fill up an application form to subscribe to a scheme. Mutual funds appoint agents and distributors to provide services such as distribution of application forms, providing information about the scheme and giving investment advice. Nowadays, banks and post offices also help in distribution of mutual funds scheme to investors. An investor can also approach the respective offices of the mutual funds called Investor Service Centers (ISCs) in his particular town or city.

Investor also receives an abridged offer document or the Key Information Memorandum (KIM), which is provided with the application form containing information regarding main features of the scheme, risk factors, initial issue expenses and recurring expenses to be charged to the scheme, entry or exit loads, sponsor's track record, educational qualification and work experience of key personnel including fund managers, performance of other schemes launched by the mutual fund in the past, pending litigations and penalties imposed. The application form for subscription to a scheme is an integral part of the offer document.

Investment in mutual fund is not free from risks. All investments in mutual fund and securities are subject to market risks and the NAVs of the schemes may go up or down depending upon the factors and forces affecting the securities market including the fluctuations in the interest rates. Besides the NAV, the investor should look at average returns and volatility of the returns given by the fund. A fund giving consistent returns is better than a fund whose returns are highly volatile. Moreover, the returns given by the fund should be compared with benchmarks like BSE Sensex and S&P Nifty. An investor should also study the past performance track record of the scheme and also compare its performance with other schemes having similar investment objectives. The past performance of the mutual fund is not necessarily indicative of future performance of the scheme. He should also look at the quality of the scheme portfolio, i.e., investment made in each security such as equity, debentures, money market instruments and government securities, their quantity, market value, and percentage to NAV. In case of debt-oriented scheme, he should also look into the rating of the debt instrument. An investor should also check whether the scheme is open-ended or close-ended. If it is a close-ended scheme, he may have to pay an exit load. When choosing a fund, an investor should also look into the expense ratio- the cost he pays towards the services he avails of from mutual funds. A high expense ratio lowers the rate of return of schemes and a lower expense ratio boosts the rate of return. For debt funds and index funds, expense ratio is more important. He may also consult financial experts or read financial dailies which publish research reports on performance of mutual funds.

Apart from assessing the risk profile of the scheme, an investor should also take into account his risk-taking capacity, objective of investment, time period of investment, age, lifestyle, and cash flow requirements before making a choice of particular scheme. Asset allocation, which is a function of risk appetite and goals, contributes more than 90 per cent to the portfolio's returns. A young investor with an above average risk appetite may go for growth oriented scheme or an investor nearing retirement may prefer debt- oriented scheme or fixed maturity plans. If an investor prefers cash flow at regular intervals, he may look at dividend plans as most give payouts at least once a year. Mutual funds should be looked at from a medium-term to long-term perspective and investors need to go for a careful combination of different themes and sectors. Investor should design a well-balanced portfolio and rebalance it on a regular basis.

After subscribing to the units of a particular scheme of a mutual fund, he will receive a certificate or statement of accounts within 30 days from the date of closure of the initial public offer of the scheme. An account statement is a document that contains details of the investors; the units allotted or redeemed, NAV on that particular day, and the date of transaction. In case of close-ended schemes, he will receive either a demat account statement or unit certificates within six weeks of the date of closure of the initial subscription of the scheme. An investor must monitor his investments regularly by going through the Fund Fact Sheet- a monthly document published by all mutual funds. This document gives all details as regards the AUMs of all its schemes, top holdings in all the portfolios of all the schemes, loads, minimum investment, performance of the scheme since its launch, comparison of scheme's performance with the benchmark index such as the S&P CNX Nifty, fund manager's outlook, portfolio composition, expense ratio, portfolio turnover, risk adjusted returns, equity/ debt split for schemes, YTM for debt portfolios, and other information which the mutual fund considers important from the investor's decision making point of view.

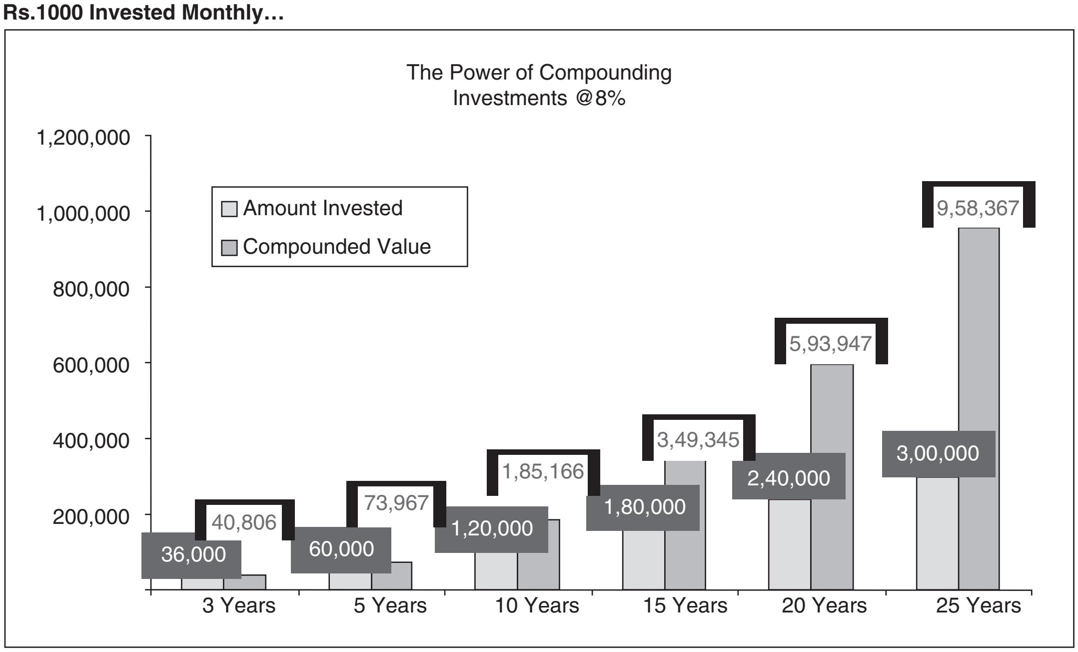
Subsequently, investor will also receive quarterly newsletter from the fund house informing him about any material changes such as changes in the nature or terms of the scheme, conversion of the scheme from close-ended to open-ended and change in sponsor. Fund houses also disclose scheme portfolio on half-yearly basis to their unitholders. These disclosures help the investor to decide the timing of entry and exit in a particular scheme of the mutual fund. Investors are also offered switching facility which provides investors with an option to transfer the funds among different types of schemes or plans. An entry load is charged to an investor switching from a debt scheme to equity scheme while there is no entry load on switching from an equity scheme to a debt scheme.

Methodology of Investment in a Mutual Fund An investor may invest a lumpsum in a particular scheme/s of mutual fund. But he needs to correctly time the market and predicting whether the market is going to move up, down or sideways is difficult even for professionals. If the investment is done when the markets are at high levels, his risk increases on account of volatility of markets. There is an alternative mode of investment available known as **Systematic Investment plans (SIPs).** Instead of making one lumpsum investment, an investor may put in a fixed sum of money each month, over a period of time regardless of the mutual fund's unit price. Under this plan a fixed sum of money is invested periodically in equity and equity-oriented mutual fund schemes. This plan avoids the problem of market timing and usually gives high returns if the investor has a long-term investment horizon. Hence, through the power of compounding, this plan usually does well in the long run (Refer Figure 15.3).

Systematic investment plan (SIP) is a popular investment strategy employed by a large mass of investors.

- As the minimum of investment is Rs. 500 every month, this plan attracts investors of diverse income groups.
- Regular commitment of investment of small amount for longer duration. Investing a small amount every month or every quarter results in forced savings.

Rs.1000 Invested Monthly…



Investing Even a Small Amount Regularly, Helps Create Wealth

Figure 15.3 Regular Investment Benefits

Box 15.4 Rupee-Cost Averaging when Unit Prices are Volatile

Month	*Amount Invested*	*Unit Price*	*No. of Units Purchased*
01-Jan	Rs. 1,000	Rs. 24	41.67
01-Feb	Rs. 1,000	Rs. 21	47.62
01-Mar	Rs. 1,000	Rs. 25	40.00
01-Apr	Rs. 1,000	Rs. 16	62.50
01-May	Rs. 1,000	Rs. 20	50.00
01-Jun	Rs. 1,000	Rs. 21	47.62
	Total: Rs. 6000	**Avg Cost: Rs. 20.73**	**Total: 289.41**

- Skill of timing the market is not required because an investor is investing at all levels. Through disciplined, regular investments an investor has not to worry about when and how much to invest.
- Equity market moves both sides so he gets the benefit of averaging out the cost of purchase.
- Investing regularly, irrespective of market behavior, helps manage volatility. Investing a small amount every month brings down the risk. Also, more the volatility more chances of returns.

A fixed amount invested regularly buys more units when the price is low and fewer when the price is high, which can mean a lower average cost per unit over a period of time- this concept is known as Rupee Cost Averaging. Let us understand this with help of an illustration.

Following is the NAV of a mutual fund scheme on the first of each month from January to June-Rs. 24, Rs. 21, Rs. 18, Rs. 16, Rs. 16 and Rs. 12 respectively. Looking to the trend, we observe that NAV of this scheme is volatile. Suppose there are two investors: Mr. A and Mr. B. Both have invested Rs. 6000 in this scheme. Mr. A has invested Rs. 6000 on January 1, at a unit price of Rs. 24 and he has been allotted 250 units.

Mr. B has invested Rs. 1000 on the first of each month for six months. He has acquired 289.41 units at an average cost of Rs. 20.73 each. The investment's value at the end of the period would be Rs. 6077.61 (289.41*21) (Box 15.4) much higher than that of Mr. A's investment value which is Rs. 5250 (250 units *21).

Now, SIPs come with free life insurance cover to investors. Through this, mutual fund houses aim to induce a long-term savings habit among investors. To earn higher returns, investors need to choose the right scheme. Investment through SIP will lose value if invested in a wrong scheme.

Some mutual fund houses such as UTI Asset Management, SBI Mutual Fund, ICICI Prudential, and Bharti AXA have started micro SIPs in their bid to reach out to the large masses who cannot afford Rs. 500 SIP. The SBI Mutual Fund offers a 'chota SIP' starting at Rs. 100 targeting farmers and daily wage earners. This scheme will create an awareness of the benefits of savings and financial planning among low-income groups.

Mutual funds also give facilities of systematic withdrawals and systematic transfer of funds to investors. Depending on an investor's needs for monthly or quarterly income, he can then choose to withdraw either a fixed sum per month or quarter, or the capital appreciation in the Net Asset Value of his investment. A **systematic withdrawal plan (SWP)** enables an investor to take money out of a fund account according to a regular schedule that he chooses. If the investor desires to transfer money from one scheme to another, then there is another plan available known as **Systematic transfer plan (STP).** An STP enables an investor to switch or transfer a fixed amount of money at regular intervals from his fixed income scheme investments to designated equity and balanced schemes. In effect, this is similar to a systematic investment plan, except that in a SIP the investment flows from a bank account into the fund and here it flows from one scheme to another.

- SIP—An investor commits to invest in a scheme at regular intervals
- STP—An investor transfers a fixed amount of money or appreciation on the unit value in one scheme to another at regular intervals for profit booking or exposure to a new asset class
- SWP—An investor redeems a fixed sum or specific number of units at regular intervals without getting exposed to timing risk

SEBI GUIDELINES RELATING TO MUTUAL FUNDS

The mutual funds are registered and regulated under the SEBI (MF) regulations, 1996. These regulations deal with launching of schemes, disclosures in the offer document, advertisements, investment objectives, pricing of units and other related aspects. SEBI regulates structure, market and investor-related activities of mutual funds. But issues concerning the ownership of the AMCs by banks fall under the regulatory preview of the RBI.

Mutual Fund Schemes

1. All the schemes to be launched by the AMC need to be approved by the trustees and copies of offer documents of such schemes are to be filed with the SEBI. The offer document shall have two parts: Scheme Information Document (SID) and Statement of Additional Information (SAI). SID shall incorporate all information pertaining to a particular scheme. SAI shall incorporate all statutory information on mutual fund.
2. The offer documents shall contain adequate disclosures to enable the investors to make informed decisions including the disclosure on maximum investments proposed to be made by the scheme in the listed securities of the group companies of the sponsor.
3. The SEBI may in the interest of investors require the asset management company to carry out such modifications in the offer document as it deems fit. In case no modifications are suggested by it in the offer document within 21 workingdays from the date of filing, the asset management company may issue the offer document. The offer document shall contain the disclosure regarding the prior in principle approval obtained from the recognised stock exchange(s), where units are proposed to be listed in accordance with these regulations.
4. Advertisements in respect of schemes should be in conformity with the SEBI prescribed advertisement code, and shall be submitted to the regulator within 7 days from the date of issue. The advertisement for each scheme shall disclose investment objective of each scheme. The offer document and advertisement materials shall not be misleading or contain any statement or opinion which are incorrect or false.
5. The listing of close-ended schemes, other than an equity linked savings scheme, is mandatory and every close-ended scheme should be listed on a recognised stock exchange within within such time period and subject to such conditions as specified by the SEBI. However, listing is not mandatory in case the scheme provides for monthly income or caters to the special classes of persons like senior citizens, women, children, and the physically handicapped; if the scheme discloses details of repurchase in the offer document; if the scheme opens for repurchase within six months of closure of subscription. if the scheme provides for periodic repurchase facility to all the unitholders with restriction, if any, on the extent of such repurchase; if the scheme is a capital protection oriented scheme.
6. Units of a close ended scheme, other than those of an equity linked savings scheme, launched on or after the commencement of the Securities and Exchange Board of India (Mutual Funds) (Amendment) Regulations, 2009 shall not be repurchased before the end of maturity period of such scheme. The units of close ended schemes may be open for sale or redemption at fixed predetermined intervals if the maximum and minimum amount of sale or redemption of the units and the periodicity of such sale or redemption have been disclosed in the offer document.
7. The units of close ended scheme may be converted into open-ended scheme:
    a. if the offer document of such scheme discloses the option and the period of such conversion; or
    b. the unitholders are provided with an option to redeem their units in full *and*
    c. the initial issue expenses of the scheme launched prior to commencement of the Securities and Exchange Board of India (Mutual Funds) (Amendment) Regulations, 2008 have been amortised fully in accordance with the Tenth Schedule.
8. A close ended scheme shall be fully redeemed at the end of the maturity period provided that a close-ended scheme may be allowed to be rolled over if the purpose, period and other terms of the roll over and all other material details of the scheme including the likely composition of assets immediately before the roll over, the net assets and net asset value of the scheme, are disclosed to the unitholders and a copy of the same has been filed with the regulator.

    Provided further that such roll over will be permitted only in the case of those unitholders who express their consent in writing and the unitholders who do not opt for the roll over or have not given written consent shall be allowed to redeem their holdings in full at net asset value based price.
9. No scheme of a mutual fund other than the initial offering period of any equity linked savings schemes shall be open for subscription for more than 45 days.
10. The asset management company shall specify in the offer document:
    a. the minimum subscription amount it seeks to raise under the scheme; and
    b. in case of oversubscription the extent of subscription it may retain:

        Provided that where the asset management company retains the oversubscription referred to in clause (*b*), all the applicants applying upto five thousand units shall be given full allotment subject to the oversubscription mentioned in clause (*b*).

The mutual fund and asset management company shall be liable to refund the application money to the applicants:

i. if the mutual fund fails to receive the minimum subscription amount referred to in clause (*a*);
ii. if the moneys received from the applicants for units are in excess of subscription as referred to in clause (*b*).

Any amount refundable shall be refunded within a period of six weeks from the date of closure of subscription list, by Registered post with acknowledgement due and by cheque or demand draft marked 'A/c payee' to the applicants.

In the event of failure to refund the amounts within the period specified, the asset management company shall be liable to pay interest to the applicants at a rate of fifteen per cent per annum from the expiry of six weeks from the date of closure of the subscription list.

11. The asset management company shall issue to the applicant whose application has been accepted, a statement of accounts specifying the number of units allotted to the applicant as soon as possible but not later than thirty days from the date of closure of the initial subscription list and/or from the date of receipt of the request from the unit holders in any open ended scheme:

    Provided that if an applicant so desires, the asset management company shall issue the unit certificates to the applicant within thirty days of the receipt of request for the certificate.

    An applicant in a close ended scheme whose application has been accepted shall have the option either to receive the statement of accounts or to hold units in dematerialised form and the asset management company shall issue to such applicant, a statement of accounts specifying the number of units allotted to the applicant or issue units in dematerialised form as soon as possible but not later than thirty days from the date of closure of the initial subscription list.

    The asset management company shall issue units in dematerialised form to a unitholder in a close ended scheme listed on a recognised stock exchange within two working days of the receipt of request from the unitholder.
12. No guaranteed return shall be provided in a scheme:
    a. unless such returns are fully guaranteed by the sponsor or the asset management company;
    b. unless a statement indicating the name of the person who will guarantee the return, is made in the offer document;
    c. the manner in which the guarantee is to be met has been stated in the offer document.
13. A close-ended scheme shall be wound up on the expiry of duration fixed in the scheme on the redemption of the units unless it is rolled over for a further period.

    A scheme of a mutual fund may be wound up, after repaying the amount due to the unit holders,—
    a. on the happening of any event which, in the opinion of the trustees, requires the scheme to be wound up; or
    b. if 75 per cent of the unit holders of a scheme pass a resolution that the scheme be wound up; or
    c. if the regulator so directs in the interest of the unitholders.

    Where a scheme is to be wound up, the trustees shall give notice disclosing the circumstances leading to the winding up of the scheme:
    i. to the regulator; and
    ii. in two daily newspapers having circulation all over India, a vernacular newspaper circulating at the place where the mutual fund is formed.

Investment Objective

1. Subject to other provisions of these regulations, a mutual fund may invest funds collected under any of its schemes only in
    a. securities;
    b. money market instruments;
    c. privately placed debentures;
    d. securitised debt instruments, which are either asset backed or mortgage backed securities;
    e. gold or gold related instruments;
    f. real estate assets.
2. Any investment made shall be in accordance with the investment objective of the relevant mutual fund scheme. Funds collected under any money market scheme of a mutual fund shall be invested only in money market instruments. Funds collected under any gold exchange traded fund scheme shall be invested only in gold or gold related instruments. Funds collected under a real estate mutual fund scheme shall be invested in accordance with SEBI regulation.

3. The mutual fund shall not borrow except to meet temporary liquidity needs of the mutual funds for the purpose of repurchase, redemption of units or payment of interest or dividend to the unitholders:

   Provided that the mutual fund shall not borrow more than 20 per cent of the net asset of the scheme and the duration of such a borrowing shall not exceed a period of six months.
4. The mutual fund shall not advance any loans for any purpose.
5. A mutual fund may lend and borrow securities and enter into short selling transactions on a recognised stock exchange, in accordance with the SEBI specified framework relating to short selling and securities lending and borrowing.
6. The funds of a scheme shall not in any manner be used in carry forward transactions:

   Provided that a mutual fund may enter into derivatives transactions on a recognised stock exchange, subject to the SEBI specified framework.
7. Mutual funds may enter into underwriting agreement after obtaining a certificate of registration in terms of the Securities and Exchange Board of India (Underwriters) Rules and Securities and Exchange Board of India (Underwriters) Regulations, 1993 authorising it to carry on activities as underwriters. The underwriting obligation will be deemed as if investments are made in such securities and the capital adequacy norms for the purpose of underwriting shall be the net asset of the scheme:

   Provided that the underwriting obligation of a mutual fund shall not at any time exceed the total net asset value of the scheme.
8. Every mutual fund shall compute and carry out valuation of its investments in its portfolio and publish the same in accordance with the SEBI specified valuation norms.

Pricing of Units

1. The price at which the units may be subscribed or sold and the price at which such units may at any time be repurchased by the mutual fund shall be made available to the investors.
2. The mutual fund, in case of open-ended scheme, shall at least once a week publish in a daily newspaper of all India circulation, the sale and repurchase price of units.
3. While determining the prices of the units, the mutual fund shall ensure that the repurchase price is not lower than 93 per cent of the Net Asset Value and the sale price is not higher than 107 per cent of the Net Asset Value:

   Provided that the repurchase price of the units of close ended scheme launched prior to the commencement of the Securities and Exchange Board of India (Mutual Funds) (Amendment) Regulations, 2009 shall not be lower than ninety five per cent of the Net Asset Value:

   Provided further that the difference between the repurchase price and the sale price of the unit shall not exceed 7 per cent calculated on the sale price.
4. Where a mutual fund repurchases units in a close ended scheme launched prior to the commencement of the Securities and Exchange Board of India (Mutual Funds) (Amendment) Regulations, 2009, it shall deduct an amount representing proportionate initial issue expenses or part thereof remaining unamortised, from the repurchase proceeds. The term 'proportionate initial issue expenses or part thereof remaining unamortised' refers to such proportion of the expenses of the scheme as are attributable to the units being repurchased.

Settlement System T+1 settlement system for liquid schemes of domestic mutual funds was implemented from October 16, 2006. As per this new settlement cycle, the payment for redemption of scheme units by an investor will happen only the next day. The settlement system is in line with the settlement system in the government securities market.

Investment by Schemes

Investments by Index Funds Investments by index funds shall be in accordance with the weightage of the scrips in the specific index as disclosed in the SID. In case of sector or Industry specific scheme, the upper ceiling on investments may be in accordance with the weightage of the scrips in the representative sectoral index or sub index as disclosed in the SID or 10% of the NAV of the scheme, whichever is higher.

Investments by Liquid Schemes and Plans The 'liquid fund schemes and plans' shall make investment in/purchase debt and money market securities with maturity of upto 91 days only. This shall also be applicable in case of inter scheme transfer of securities.

Investments by Close Ended Debt Schemes Close ended debt schemes shall invest only in such securities which mature on or before the date of the maturity of the scheme.

Stock Lending Scheme The following guidelines are issued to facilitate lending of securities by Mutual Funds through intermediaries approved by the SEBI in accordance with the Stock Lending & Borrowing Scheme.

Disclosure Requirements

The following information shall be disclosed in the SID to enable the investors and unit holders to take an informed decision:

1. Intention to lend securities belonging to a particular Mutual Fund scheme in accordance with the guidelines on securities lending and borrowing scheme issued by SEBI from time to time.
2. Exposure limit with regard to securities lending, both for the scheme as well as for a single intermediary.
3. Risks factors such as loss, bankruptcy etc. associated with such transactions.

Reporting Requirement

The AMC(s) shall report to the Trustees on a quarterly basis about the level of lending, in terms of value, volume and intermediaries and also earnings and/or losses, value of collateral security etc.

The Trustees shall periodically review the securities lending contract and take reasonable steps to ensure that the same is not, in any way, detrimental to the interests of the unit holders of the scheme. The Trustees shall offer their comments on the above aspects in the Half Yearly Trustee Report filed with the SEBI.

Existing Schemes

In case an existing Scheme Information Document (SID) does not provide for lending of securities, Mutual Funds may still lend securities belonging to the scheme, in accordance with the SEBI Guidelines, provided approval is obtained from the Trustees and the intention to lend securities is conveyed to the unit holders.

Approval for Investment in Unrated Debt Instruments Mutual Funds may, for the purpose of operational flexibility, constitute committees to approve investment proposals in unrated instruments. However, detailed parameters for investment in unrated debt instruments have to be approved by the Board of the AMC and Trustees.

Details of such investments shall be communicated by the AMCs to the Trustees in their periodical reports, along with clear indication as to how the parameters set for investments have been complied with. Prior approval of the Board of the AMC and Trustees shall be required in case investment is sought to be made in an unrated security falling outside the prescribed parameters.

Investments in Units of Venture Capital Funds Mutual Fund schemes can invest in listed or unlisted securities or units of Venture Capital Funds within the prescribed investment limits as applicable.

Investment Limits for Government Guaranteed Debt Securities Prudential investment norms as per Regulations stipulating limits for investments in debt securities issued by a single issuer are applicable to all debt securities issued by public bodies or institutions such as electricity boards, municipal corporations, state transport corporations etc. guaranteed by either State/Central Government. Government securities issued by Central and/or State Government or on its behalf, by the RBI are however exempt from these limits.

Investments in Short Term Deposits of Scheduled Commercial Banks The guidelines for deployment of funds in short term deposits of commercial banks for schemes are as under: “Short Term” for parking of funds by Mutual Funds shall be treated as a period not exceeding 91 days. Such deposits shall be held in the name of the concerned scheme.

Mutual Funds shall not park more than 15% of their net assets in short term deposits of all scheduled commercial banks put together. This limit however may be raised to 20% with prior approval of the Trustees. Also, parking of funds in short term deposits of associate and sponsor scheduled commercial banks together shall not exceed 20% of the total deployment by the Mutual Fund in short term deposits. Mutual Funds shall not park more than 10% of the net assets in short term deposits with any one scheduled commercial bank including its subsidiaries.

Trustees shall ensure that funds of a particular scheme are not parked in short term deposit of a bank which has invested in that scheme.

In case of liquid and debt oriented schemes, AMC(s) shall not charge any investment management and advisory fees for parking of funds in short term deposits of scheduled commercial banks. Half Yearly portfolio statements shall disclose all funds parked in short term deposit(s) under a separate heading. Details shall also include name of the bank, amount of funds parked, percentage of NAV. Trustees shall, in the Half Yearly Trustee Reports certify that provisions of the Mutual Funds Regulations pertaining to parking of funds in short term deposits pending deployment are complied with at all points of time. The AMC(s) shall also certify the same in its Compliance test reports (CTRs). Investments made in short term deposits pending deployment of funds shall be recorded and reported to the Trustees including the reasons for the investment especially comparisons with interest rates offered by other scheduled commercial banks.

Other Aspects

- In order to check unethical practices like 'late trading', SEBI has fixed the daily schedules for mutual funds for NAV-based sales and redemption of their schemes. Sale and redemption requests for all schemes except liquid funds, made before 3 p.m. shall be at the closing NAV of the same day. For all outstation instruments, the next day's NAV shall be applicable. For liquid schemes, all requests received till 10 a.m. should be at the previous day's NAV and thereafter, at the day's closing NAV. For purchases in these schemes, the NAV of the day immediately previous to the day on which the funds were received by the MF should be used. In case, the funds are received after 1 p.m., the day's closing NAV should be used. These rules for cut-off timings are not applicable to funds with substantial exposure to stocks traded in international markets and funds traded on the stock exchange.
- The SEBI found that many mutual fund schemes were tailor made for corporates, or high net worth individuals who were using the mutual fund investment route to save on income tax. These norms were issued in November 2003, to check the abuse of the mutual fund vehicle by large corporate investors for tax benefits. The new norms stipulate that each mutual fund scheme should have atleast 20 investors and no single investor should hold more than 25 per cent of the total corpus of the scheme.
- The PAN is now the sole identification for all market participants with appropriate affix or suffix to identify the nature of investment product , irrespective of the amount of transaction, effective July 2, 2007.
- Every mutual fund should be and sell securities on delivery basis. A mutual fund many engage in short-selling of securities and enter into derivatives transactions in accordance with the framework specified by the SEBI.

Overseas Investments by Mutual Funds

Mutual Funds were permitted to invest in ADRs/GDRs/foreign securities in September 2005 subject to a ceiling of US $1 billion. The aggregate ceiling for the mutual-fund industry to invest in ADRs/GDRs issued by Indian companies, equity of overseas companies listed on recognised stock exchanges overseas and rated debt securities (foreign securities) was raised from US $1 billion to US $2 billion in the Finance Bill

1. Applicable Limits
   a. The aggregate ceiling for overseas investments is US $7 billion.
   b. Within the overall limit of US $7 billion, mutual funds can make overseas investments subject to a maximum of US $300 million per mutual fund.
2. Mutual Funds can invest in permissible investments
   a. ADRs/ GDRs issued by Indian or foreign companies
   b. Equity of overseas companies listed on recognised stock exchanges overseas
   c. Initial and follow on public offerings for listing at recognised stock exchanges overseas

d. Foreign debt securities in the countries with fully convertible currencies, short term as well as long term debt instruments with rating not below investment grade by accredited/registered credit rating agencies
e. Money market instruments rated not below investment grade
f. Repos in the form of investment, where the counterparty is rated not below investment grade; repos should not however, involve any borrowing of funds by mutual funds
g. Government securities where the countries are rated not below investment grade
h. Derivatives traded on recognised stock exchanges overseas only for hedging and portfolio balancing with underlying as securities
i. Short term deposits with banks overseas where the issuer is rated not below investment grade
j. Units/securities issued by overseas mutual funds or unit trusts registered with overseas regulators and investing in
    i. aforesaid securities,
    ii. Real Estate Investment Trusts (REITs) listed in recognised stock exchanges overseas or (c) unlisted overseas securities (not exceeding 10% of their net assets).

3. Limits for Investment in Overseas Exchange Traded Funds (ETFs) The overall ceiling for investment in overseas ETFs that invest in securities is US $ 1 billion subject to a maximum of US $50 million per mutual fund.
4. Other Conditions: Apart from applicability of SEBI (Mutual Funds) Regulations, 1996 and guidelines issued from time to time, the mutual funds shall adhere to the following specific guidelines for making overseas investments by the mutual fund schemes:
    a. Appointment of a Dedicated Fund Manager: The Mutual Fund shall appoint a Dedicated Fund Manager for making overseas investments stipulated under para 2 (i) (ix) above.
    b. Due Diligence: Boards of Asset Management Companies (AMCs) and Trustees shall exercise due diligence in making investment decisions. They shall make a detailed analysis of risks and returns of overseas investment and how these investments would be in the interest of investors. Investment must be made in liquid actively traded securities/instruments. Boards of AMCs and Trustees may prescribe detailed parameters for making such investments which may include identification of countries, country rating, country limits, etc. They shall satisfy themselves that the AMC has experienced key personnel, research facilities, and infrastructure for making such investments. Other specialised agencies and service providers associated with such investments e.g. custodian, bank, advisors, etc. should also have adequate expertise and infrastructure facilities. Their past track record of performance and regulatory compliance record, if they are registered with foreign regulators, may also be considered. Necessary agreements may be entered into with them as considered necessary.
    c. Disclosure Requirements: The following disclosure requirements shall be mandatory for mutual fund schemes proposing overseas investments.
        i. Intention to invest in foreign securities/ETFs shall be disclosed in the offer documents of the schemes. The attendant risk factors and returns ensuing from such investments shall be explained clearly in offer documents. The mutual funds shall also disclose as to how such investments will help in the furtherance of the investment objectives of the schemes. Such disclosures shall be in a language comprehensible to an average investor in mutual funds.
        ii. The mutual funds shall disclose the name of the Dedicated Fund Manager for making overseas investments.
        iii. The mutual funds shall disclose exposure limits i.e. the percentage of assets of the scheme they would invest in foreign securities/ETFs.
        iv. Such investments shall be disclosed while disclosing half-yearly portfolios in the prescribed format by making a separate heading 'Foreign Securities/overseas ETFs.' Scheme-wise percentage of investments made in such securities shall be disclosed while publishing half-yearly results in the prescribed format, as a footnote.
    d. Investment by Existing Schemes: Existing schemes of mutual funds where the offer document provides for investment in foreign securities and attendant risk factors but which have not yet invested, may invest in foreign securities, consistent with the investment objectives of the schemes, provided that for making overseas investments stipulated a dedicated Fund Manager has been appointed. Additional disclosure as specified above shall be included by way of addendum and unit holders will be informed accordingly. In case the offer document of an existing scheme does not provide for overseas investment, the scheme, if it so desires, may make such investments in accordance with these guidelines, provided that: prior to overseas

investments for the first time, the AMC shall ensure that a written communication about the proposed investment is sent to each unitholder and an advertisement is given in one English daily newspaper having nationwide circulation as well as in a newspaper published in the language of the region where the Head Office of the mutual fund is situated. The communication to unitholders shall also disclose the risk factors associated with such investments.

Indian mutual funds have invested only $1.5 bn (Rs. 6,000 crore) in overseas markets so far. Among the eight mutual funds which have launched special schemes for investment in overseas securities, the largest is DSP World Gold Fund that has assets under management of over Rs. 1,760 crore. Many mutual fund houses have launched hybrid funds which invest about 65 per cent in India and the balance 35 per cent in overseas securities because of tax considerations. Investment in overseas markets helps investors diversify their portfolio and deliver better returns.

THE ASSOCIATION OF MUTUAL FUNDS IN INDIA

The Association of Mutual Funds in India (AMFI) was established in 1993 when all the mutual funds, except the UTI, came together realising the need for a common forum for addressing the issues that affect the mutual fund industry as a whole. The AMFI is dedicated to developing the Indian mutual fund industry on professional, health, and ethical lines and to enhance and maintain standards in all areas with a view to protecting and promoting the interests of mutual funds and their unit holders.

Objectives of AMFI

- To define and maintain high professional and ethical standards in all areas of operation of the mutual fund industry.
- To recommend and promote best business practices and code of conduct to be followed by members and others engaged in the activities of mutual fund and asset management, including agencies connected or involved in the field of capital markets and financial services.
- To interact with the SEBI and to represent to the SEBI on all matters concerning the mutual fund industry.
- To represent to the government, the RBI, and other bodies on all matters relating to the mutual fund industry.
- To develop a cadre of well-trained agent distributors and to implement a programme of training and certification for all intermediaries and others engaged in the industry.
- To undertake nationwide investor awareness programme so as to promote proper understanding of the concept and working of mutual funds.
- To disseminate information on mutual fund industry and to undertake studies and research directly and/or in association with other bodies.

AMFI continues to play its role as a catalyst for setting new standards and refining existing ones in many areas, particularly in the sphere of valuation of securities. Based on the recommendations of the AMFI, detailed guidelines have been issued by the SEBI for valuation of unlisted equity shares.

A major initiative of the AMFI during the year 2001–02 was the launching of registration of AMFI Certified Intermediaries and providing recognition and status to the distributor agents. More than 30 corporate distributors and a large number of agent distributors have registered with the AMFI. The AMFI Guidelines and Norms for Intermediaries (AGNI) released in February 2002, gives a framework of rules and guidelines for the intermediaries and for the conduct of their business.

AMFI maintains a liaison with different regulators such as the SEBI, the IRDA, and the RBI to prevent any over-regulation that may stifle the growth of the industry. AMFI has set up a working group to formulate draft guidelines for pension scheme by mutual funds for submission to IRDA. It holds meetings and discussions with the SEBI regarding matters relating to the mutual fund industry. Moreover, it also makes representations to the government for removal of constraints and bottlenecks in the growth of the mutual fund industry.

AMFI recently launched appropriate market indices which will enable investors to appreciate and make meaningful comparison of the returns of their investments in mutual funds schemes. While in the case of equity funds, a number of benchmarks like the BSE Sensex and the S&P CNX Nifty are available, there was a lack of relevant benchmarks for debt funds. AMFI took the initiative of developing eight new indices jointly with *Crisil.com* and ICICI Securities. These indices have been constructed to benchmark the performance of different types of debt schemes such as liquid, income, monthly income, balanced fund, and gilt fund schemes. These eight new market indices are the Liquid Fund Index (Liqui fex), the Composite Bond Fund Index (Compbex), the Balanced Fund Index (Balance EX), the MIP Index (MIPEX), the Short Maturity Gilt Index (Si-Bex), the Medium Maturity Gilt Index (Mi-Bex), the Long Maturity Gilt Index (Li-Bex), and the Composite Gilt Index.

In the case of liquid funds, the index comprises a commercial paper (CP) component with a 60 per cent weightage and an inter-bank call money market component with a 40 per cent weightage. The CP component of the index is computed using the weighted average issuance yield on new 91 days CPs issued by top rated manufacturing companies. In the case of bond funds, the index comprises a corporate bond component with a 55 per cent weightage, gilts component with a 30 per cent weightage call component with a 10 per cent weightage and commercial paper with a 5 per cent weightage. The index's 55 per cent bond component is split based on a 40 point share of AA rated bonds, and 15 points share of AA rated bonds.

Mutual funds have now to disclose also the performance of appropriate market indices alongwith the performance of schemes both in the offer document and in the half-yearly results. Further, the trustees are required to review the performance of the schemes on periodical basis with reference to market indices. These indices will be useful to distribution companies, agents/brokers, financial consultants, and investors.

AMFI conducts investor awareness programmes regularly. AMFI also conducts intermediaries certification examination.

The Association of Mutual Funds in India (AMFI) has in principle agreed to become a self regulatory organisation (SRO) with limited regulatory responsibilities relating to sales practices and codes of conduct. AMFI is in the process of becoming a self-regulatory organisation (SRO). It has set up a committee to set the norms for the AMFI to become an SRO. AMFI should act as an SRO in limited areas such as valuation, disclosures and also in regulating distributors of agents registered with it.

UNIT TRUST OF INDIA

The Unit Trust of India (UTI) is India's first mutual fund organisation. It is the single largest mutual fund in India which came into existence with the enactment of the UTI Act in 1964.

The economic turmoil and the wars in the early 1960s depressed the financial markets, making it difficult for both existing and new entrepreneurs to raise fresh capital. The then Finance Minister, T. T. Krishnamachari, set up the idea of a Unit Trust which would mobilise savings of the community and invest these savings in the capital market. His ideas took the form of the Unit Trust of India, which commenced operations from July 1964 'with a view to encouraging savings and investment and participation in the income, profits and gains accruing to the corporation from the acquisition, holding, management and disposal of securities'. The regulations passed by the Ministry of Finance (MoF) and the parliament from time to time regulated the functioning of UTI. Different provisions of the UTI Act laid down the structure of management, scope of business, powers and functions of the trust as well as accounting, disclosures, and regulatory requirements for the trust.

UTI was set up as a trust without ownership capital and with an independent board of trustees. The board of trustees manages the affairs and business of UTI. The board performs its functions, keeping in view the interest of the unit holders under various schemes.

UTI has a wide distribution network of 54 branch offices, 266 chief representatives and about 67,000 agents. These chief representatives supervise agents. UTI manages 72 schemes and has an investor base of 20.02 million investors. UTI has set up 183 collection centres to serve investors. It has 57 franchisee offices which accept applications and distribute certificates to unit holders.

UTI's mission statement is to meet the investor's diverse income and liquidity needs by creation of appropriate schemes; to offer best possible returns on his investment, and render him prompt and efficient service, beyond normal customer expectations.

UTI was the first mutual fund to launch India Fund, an offshore mutual fund in 1986. The India Fund was launched as a close-ended fund but became a multi-class, open-ended fund in 1994. Thereafter, UTI floated the India Growth Fund in 1988, the Columbus India Fund in 1994, and the India Access Fund in 1996. The India Growth Fund is listed on the NYSE. The India Access Fund is an Indian Index Fund, tracking the NSE 50 index.

UTI's Associates

UTI has set up associate companies in the fields of banking, securities trading, investor servicing, investment advice, and training, towards creating a diversified financial conglomerate and meeting investors' varying needs under a common umbrella.

UTI Bank Limited UTI Bank was the first private sector bank to be set up in 1994. The bank has a network of 121 fully computerised branches spread across the country. The bank offers a wide range of retail, corporate, and forex services. UTI Bank is now rechristened as Axis Bank.

UTI Securities Exchange Limited UTI Securities Exchange Limited was the first institutionally sponsored corporate stock broking firm incorporated on June 28th, 1994, with a paid-up capital of Rs. 300 million: It is wholly owned by UTI and promoted to provide secondary market trading facilities, investment banking, and other related services. It has acquired membership of the NSE, the BSE, the OTCEI, and the Ahmedabad Stock Exchange (ASE).

UTI Investor Services Limited UTI Investor Services Limited was the first institutionally sponsored registrar and transfer agency set up in 1993. It helps UTI in rendering prompt and efficient services to the investors.

UTI Institute of Capital Markets UTI Institute of Capital Market was set up in 1989 as a non-profit educational society to promote professional development of capital market participants. It provides specialised professional development programmes for the varied constituents of the capital market and is engaged in research and consultancy services. It also serves as a forum to discuss ideas and issues relevant to the capital market.

UTI Investment Advisory Services Limited UTI Investment Advisory Services Limited, the first Indian investment advisor registered with SEC, US, was set up in 1988 to provide investment research and back office support to other offshore funds of UTI.

UTI International Limited UTI International Limited is a 100 per cent subsidiary of UTI, registered in the island of Guernsey, Channel Islands. It was set up with the objective of helping in the UTI offshore funds in marketing their products and managing funds. UTI International Limited has an office in London, which is responsible for developing new products, new business opportunities, maintaining relations with foreign investors, and improving communication between UTI and its clients and distributors abroad.

UTI has a branch office at Dubai, which caters to the needs of NRI investors based in six Gulf countries, namely, UAE, Oman, Kuwait, Saudi Arabia, Qatar, and Bahrain. This branch office acts as a liaison office between NRI investors in the Gulf and UTI offices in India.

UTI has extended its support to the development of unit trusts in Sri Lanka and Egypt. It has participated in the equity capital of the Unit Trust Management Company of Sri Lanka.

The strategic investments of UTI include UTI's equity holdings in IL & FS where it has a stake of 26.98 per cent, the NSE where it is a founder-promoter, and the credit rating agencies—CRISIL and ICRA where its holding is below 10 per cent. UTI-I also houses the equity holding of 33 per cent in UTI Bank. Most of the assured return schemes of the erstwhile UTI have been redeemed by UTI-I. This leaves UTI-I with management of subsidiaries and investment as mentioned above.

Promotion of Institutions

The Unit Trust of India has helped in promoting/co-promoting many institutions for the healthy development of financial sector. These institutions are:

- Infrastructure Leasing and Financial Services (ILFS)
- Credit Rating and Information Services Limited (CRISIL)
- Stock Holding Corporation of India Limited (SHCIL)
- Technology Development Corporation of India Limited (TDCIL)
- Over the Counter Exchange of India Limited (OCEI)
- National Securities Depository Limited (NSDL)
- North-Eastern Development Finance Corporation Limited (NEDFCL)

US-64

UTI launched its first scheme, Unit Scheme 1964 (US-64), with the aim of inculcating the habit of saving among households. The initial sponsors of the scheme were the RBI, Life Insurance Corporation (LIC), State Bank of India (SBI), and other scheduled banks, including a few foreign banks. They contributed to its initial capital of Rs. five crore. In February 1976, RBI's contribution was taken up by the Industrial

Development Bank of India (IDBI). These institutions were provided representation on the Board of the Trustees of UTI. The US-64 is the flagship scheme of UTI which commands around one-fifth of UTI's total assets. Around 20 million investors have invested in the scheme. This scheme ran into trouble in 1998.

The US-64 was launched as a debt fund as the equity markets were not developed in the sixties. Its repurchase and sale price are administered, i.e., fixed by UTI at the beginning of its financial year (July for UTI). Both the repurchase and sale price used to consistently increase by the end of the year, irrespective of the actual returns generated and assets under management. This administered pricing was not a problem in a bullish market but if the markets turned bearish, this high price was paid out of reserves. Thus, arbitrary fixing of rates and repurchase of the units combined with high dividend payments depleted the reserves and turned them negative to the tune of Rs. 1,098 crore. The government came up with a bailout package in the form of Special Unit Scheme (SUS-1999). In 1999, the UTI issued to the government special units of SUS-99 worth the book value. In turn, the government issued dated securities worth Rs. 3,300 crore to take over the scrips of public sector undertakings (PSUs) from the US-64 scheme. The government lost Rs. 1,000 crore due to the depreciation in the value of public sector undertakings stocks that were exchanged during the bailout under the SUS-99. This bailout improved the NAV of US-64 but highlighted the inherent problems of UTI such as political interventions in the investment decisions of UTI and a total lack of accountability.

UTI is governed by a special act and hence did not come under the purview of the SEBI. There was no regulator to ensure the soundness of UTI's investment decisions. The small investors' interest in the scheme was mainly due to the higher returns it generated and dividends it declared and, above all, backed by the government. They were never bothered about the functioning of UTI. UTI never made it a practice to disclose any qualitative information to the investors. In fact, UTI continued to float a series of schemes with assured returns and followed liberal dividend policies. These assured return schemes with high dividend pay-out were no longer practical.

In 1993–94, the income from the US-64 scheme was Rs. 3,538 crore while the dividend outflow was Rs. 3,128 crore. However, the dividend outflow started exceeding its income from the financial year 1994–95 and continued till 1996–97. In 1994–95, the dividend outflow was Rs. 3,973 crore as against the income of Rs. 3,287 crore. This depleted the reserves of UTI which dropped from Rs. 5,842 crore in 1993–94 to Rs. 1,778 crore in 1996–97 and finally turned negative by Rs. 1,098 crore in 1998. With a view to building up reserves, UTI reduced its dividend rate from 20 per cent to 13.5 per cent in 1998–99. The 10 per cent dividend that UTI declared in 2001 was the least dividend, it had declared in the last two decades. The scheme's equity investment had increased to 64 per cent in the late 1990s from a mere 26 per cent in 1990. Both the primary and secondary segments of the capital market were in a depressed state, which reduced the chances of generating good returns to pay high dividends.

The government appointed a high-level committee under the chairmanship of Deepak Parekh, Chairman of HDFC, for restructuring UTI. The committee came up with 19 suggestions which included increasing the debt component in investments of the scheme, bringing the scheme under the purview of the SEBI, and the most prominent being to convert the US-64 into an NAV-driven scheme within a period of three years. UTI failed to tap the opportunity of converting this scheme into NAV driven during 1999–2000 when the capital market was bullish. The failure of UTI to implement the recommendations of Deepak Parekh Committee led to an eruption of another crisis in 2001.

UTI freezed the repurchase and sale of US-64 units in July 2001, shattering investors' trust. On the NSE, the fund was trading far below the repurchase price of Rs. 13.20 and dipped to a low of Rs. 9.60 within a week. The corporates had anticipated this well in advance and withdrew their funds before the crisis struck. To help out the small investors, the government provided Rs. 300 crore support to bridge the gap between NAV and the administered repurchase price of US-64 units.

The government set up a committee under the Chairmanship of former RBI Deputy Governor, S. S. Tarapore, to investigate the commercial aspects and investment decisions of the fund. The Tarapore Committee called for an inquiry into more than 19 investment decisions of the trust. It suggested creating three AMCs to handle growth funds, income funds, and Units Scheme-64, and introducing performance-linked management. According to the committee, the UTI Bank could hold 49 per cent of the capital of the three AMCs and this would, over time, enable greater private participation in UTI. It further recommended that only individual investors should be allowed to invest in US-64. Corporations and institutions should not be allowed to invest in US-64.

The Malegam Committee, which was formed by the board of trustees of UTI at the instance of the government, recommended a three-tier structure in line with the SEBI regulations comprising a sponsor, a trustee company, and an AMC. It suggested that the government should limit its stake through IDBI, SBI, and other government-backed financial institutions to 40 per cent and the rest 60 per cent could be offered to a sponsor or strategic partner. The trustee company should be a fully-owned subsidiary of sponsor company and shareholding of sponsor company in the AMC should be restricted to 40 per cent with the balance to be offered to public. The committee further recommended that the UTI Act should be repealed and replaced by a new enactment. The government must be completely distanced from UTI. US-64 should be NAV based before restructuring of UTI is attempted. Provisions should be made for contingent liabilities, if any, arising out of the gap between the available assets of US-64 and guaranteed price to individual unit-holders owning upto 3,000 units.

In view of these recommendations, UTI took a decision to skip dividend for the first time in 2001–02 (Table 15.2) and to incorporate professionals on its board. The US-64 scheme moved to the NAV basis on January 1st, 2002. The US-64 NAV was hovering around Rs. 6 a unit which eroded the investors' confidence in the scheme.

In the year 2002, problems of liquidity and redemption pressures on the schemes surfaced again. Earlier it was US-64, the new problems related to 17 assured monthly income plans (MIPs) of UTI which had negative reserves. For instance, MIP 97 III had negative reserves of Rs. 260.1 crore, MIP 97IV had negative reserves of Rs. 296.8 crore, MIP 97 V had negative reserves of Rs. 170 crore, while MIP 98 had negative reserves of Rs. 296.8 crore. UTI met the redemption of the first MIP 97, which matured in June by dipping into its reserves. MIP 97 alone had a shortfall of Rs. 402 crore due to the large gap between its assured redemption price of Rs. 10 and the March 31st, 2002, NAV of Rs. 6.39. The development reserve fund which guarantees its assured return schemes was pegged at about Rs. 1,800 crore and the gap in its assured return schemes was in excess of Rs. 3,000 crore. Seeing the financial strain of UTI, the government provided it a partial guarantee for Rs. 1,000 crore. On the basis of this guarantee, UTI borrowed Rs. 1,500 crore from the State Bank of India (SBI) to meet its payment obligation on two monthly income plans.

The finance minister, Jaswant Singh, announced another bailout package for UTI. This package amounted to Rs. 14,561 crore and led to UTI bifurcating into UTI-I and UTI-II. On February 1st, 2003, the Unit Trust of India, the largest mutual fund was bifurcated into two—Specified Undertaking of the UTI (UTI-I) and UTI Mutual Fund (UTI-II). UTI-I took over all the assured return schemes, including US-64, while all the other schemes were taken up by UTI MF. The UTI Mutual Fund came under the full regulatory ambit of the SEBI. The government handed over one part, comprising the 43 net asset value based schemes (UTI-II) to a company floated by LIC, SBI, Punjab National Bank, and the Bank of Baroda. UTI-II started operations from February 1st, 2003. UTI-II has become a SEBI-compliant mutual fund with a three-tier structure, comprising a board of trustees, sponsors, and an asset management company with a paid-up capital of Rs. 10 crore. The four players have invested Rs. 2.5 crore each. The government will continue to run the Rs. 31,000 crore worth UTI-I, comprising the flagship scheme US-64 and other assured return schemes. The government has appointed one administrator and four advisors for the ailing UTI-I.

The government repealed the UTI Act through an ordinance. The government issued 10-year, tax-free bonds to banks and financial institutions to raise Rs. 10,000 crore to meet the shortfall in the NAV and declared the repurchase price of US-64. Those bonds carried a coupon rate of 7 to 7.5 per annum and could be redeemed in the last three years before maturity. Dividend reinvestment option under the income plan of US-64 was discontinued. Investors had the option either to encash their holdings at the declared,

TABLE 15.2 Dividend History of US-64

Date	*Dividend (In %)*	*Rights/Bonus*
30.6.91	19.50	
30.6.92	25.00	Preference Offer@11.20 (July 1992)
30.6.93	26.00	2:5 Rights@12.80 (July 1993)
30.6.94	26.00	1.5 Rights@14.80 (September 1994)
30.6.95	26.00	1:10 Bonus Issue
30.6.96	20.00	
30.6.97	20.00	
30.6.98	20.00	
30.6.99	13.50	
30.6.00	13.75	
30.6.01	10.00	

Source: Capital Market, July 9–22, 2001.

predetermined price or to convert the existing units with assured repurchase price into NAV-based prices or to invest in the tax-free bonds. The government assured a repurchase price of Rs. 12 per unit in respect of holding upto 5,000 units and Rs. 10 per unit in respect of holding above 5,000 units. Dividend income from Unit-64 was tax free and profit on the sale of US-64 units was exempted from capital gains tax and dividend received in UTI-I from its investments was passed on to the investors after administrative expenses.

This bailout package aimed at distancing UTI from the government and making it a market-driven entity. The Unit Trust of India announced a fresh package on 28th January 2003, for US-64 investors. This package gave an option to US-64 unit-holders to convert their units to 5-year, tax-free tradeable bonds that would effectively offer higher returns than other bonds of a similar tenure. Investors eligible to convert units to tax-free, tradeable bonds included those holding upto 5,000 units, these holding above 5,000 units (both classes have different assured returns from the government), and also those who bought the units from the secondary market. Units purchased between November 11th, 2002 and January 22nd, 2003, continued to be traded and repurchased at the net asset value based price and were not offered these bonds. This package had not prompted investors to stay back even after the centre-sponsored guaranteed returns package expires on May 31st, 2003.

UTI met the shortfall of its assured return schemes by taking loans from banks, offering the Development Reserve Fund as collateral and on the basis of the guarantee by the Government of India. The stock market rally in October 2003 enabled the US-64 scheme to wipe out its entire shortfall—the difference in unit capital and net asset value—estimated at nearly Rs. 4,500 crore in June 2002. UTI MF continued to hold the third largest market share even after the split till 2008.

The government has decided to liquidate the shares it holds in blue-chip Indian companies through the Specified Undertakings of UTI (UTI-I) and wind-up this entity.

GROWTH AND PERFORMANCE OF MUTUAL FUNDS IN INDIA

The Indian mutual fund industry has grown tremendously in the last decade. There are 39 mutual funds with average assets under management of around Rs. 8 lakh crore as on May 30, 2010. (Table 15.1). Assets under management (AUM) crossed Rs. 1,00,000 crore during the year 1999–2000 recording a growth rate of 65 per cent. Besides, vast majority of equity schemes out-performed the market. However, in the subsequent year, i.e., 2000–01, AUM sharply declined by about 20 per cent to Rs. 90,587 crore due to extreme volatility in the market and depressed equity market conditions. The mutual fund industry witnessed such a sharp decline for the first time in the last two decades. There was a turnaround in the year 2001–02. The AUM grew by 11 per cent to Rs. 1,00,594 crore. During the year 2001–02 while there was an increase in AUM by around 11 per cent, UTI lost more than 11 per cent in AUM. It is evident that UTI is losing out to other private sector players. The AUM of private sector mutual funds rose by around 60 per cent during the year 2001–02. Assets under management grew by 22 per cent in 2003–04 and amounted to Rs. 1,49,554 crore in 2004–05.

The year 2003 was a high growth consolidation phase for mutual funds. The process was initiated by Franklin Templeton and HDFC mutual, which acquired Pioneer ITI and Zurich Mutual respectively.

The mutual fund industry was involved in a series of scams in the year 2003–04. These included running certain schemes such as portfolio management with a single investor, dividend stripping, declaring dividends in growth schemes, trading beyond regular hours at artificial NAVs to please corporate clients and transferring provident fund money into equities.

UTI MF completed one full year of existence on February 2004. In the year 2003–04, UTI Mutual Fund garnered over Rs. 3,000 crore in terms of assets. With Rs. 80,000 crore worth of AUM, it is now the fourth largest fund house in the country once again, despite the restructuring. UTI Mutual Fund was acquired by one of its sponsors, the State Bank of India.

The mutual fund industry is slowly catching the fancy of retail investors in India and the evidence is the growing IPO collections, rising equity markets and an increasing perception of mutual funds as a safe and convenient route to investing in the capital markets. Franklin India Flexi Cap fund collected a record Rs. 1,950 crore in its IPO that closed on February 9, 2005. This is the largest collection ever by an open-ended fund. JM Mutual Fund launched an equity and derivative fund to generate market neutral returns with the help of derivatives. This is the first time that such a fund is being launched in India. It is based on the concept of buying in the equity cash market and selling in the equity futures market and earning the cost of carry. The fact that a new and complicated concept has received an overwhelming response from investors shows the coming of age of the MF industry.

Foreign banks like HSBC, ABN Amro, and Deutsche have started their AMCs in India. Several global fund houses such as Already, and Aegon have shown interest in entering the Indian MF industry. This industry has been seeing consolidation as a number of global funds like Zurich, Alliance Capital, and Sun F&C have exited the country. Some funds have sold out because they could not compete in a fiercely competitive industry. Pioneer ITI, earlier Kothari Pioneer Mutual Fund, was sold out to Templeton India when it was arguably India's best fund house in terms of both performance and assets management. Zurich India when it was sold was amongst the best performing funds. It was sold by its Swiss parent as a part of its global restructuring strategy. Birla Sunlife Mutual Fund acquired Alliance Capital. Zurich's mutual fund business was acquired by HDFC mutual fund, UTI Mutual Fund bought IL & FS Mutual Fund and Principal India Mutual Fund took-over PNB's mutual fund and Sun F&C's operations.

In the year 2007–08, the largest number of new schemes-612 in all, were launched which was a record. The amount mobilised by the new schemes at over Rs. 1,60,733 crore was also a new record. The gross amount garnered was as high as Rs. 44.64 lakh crore—up by 130 per cent over the previous year. But the net accretion was only Rs. 1,53,801 crore. The net inflows and the AUM increased by 63 per cent and 55 per cent, respectively. The industry witnessed for the first time since 2000, a net outflow of funds for the year 2008–09 on account of the global financial turmoil. However, there was a sharp increase in the assets under management with an I, provement in the global financial markets scenario.

Investors preferred mutual funds as mutual funds offer tax benefits in the form of exemption on tax on both dividends and long-term capital gains. The assets under management rose sharply to Rs. 8 lakh crore in November 2009 from Rs. 80,000 crore in March 2003. This significant rise was on account of the buoyant stock markets which enabled mutual funds to distribute higher dividends and raise NAVs. Reliance Capital Asset Management Ltd. is the leader in the mutual fund industry going by the assets under its management as on November 30, 2009.

Mutual funds offered improved quality of service with AMFI making it mandatory for MF agents to undergo and pass its training programme for enabling them to explain the schemes to the customers properly. They introduced innovative and customer friendly products—Birla Mutual's cheque writing facility for the customer upto 75 per cent of the clear balance or Rs. 2 lakh, whichever is lower and IL&FS offer of improved liquidity by offering redemption facility on a T+0 (on the same trading day of application) basis while some other funds offered T+1 facility (on the next trading day of application).

Out of a total of 4.77 crore investor accounts holding units of Rs. 6,16,966.72 crores in the mutual fund industry, 1.65 crore or 34.59 per cent of the individual investors are in UTI mutual fund and other public sector mutual funds. The UTI mutual fund has the largest number of small individual investors who contribute 77.26 per cent to UTI's total net assets.

However, the private sector mutual funds manage 77.97 per cent of the net assets whereas public sector mutual funds manage only 22.03 per cent of the total net assets. Corporates and Institutions who form only 0.95 per cent of the total number of investor accounts are the largest contributors (54.75 per cent) to the total net assets in the mutual fund industry (Table 15.3).

The mutual fund industry has been remarkably resilient over the last decade inspite of varying economic conditions, capital market scams, and increasing competition. A steep fall in stock prices on account of the global economic crisis and investor panic exerted redemption pressure on mutual funds during 2008–09 (Table 15.4). The net resources mobilised by private sector mutual funds and UTI turned negative. The stock market revival and availability of easy liquidity enabled mutual funds to garner larger resources. At present, 85.7 schemes are offered (Table 15.5) but this number is a miniscule fraction of the 13,000 odd schemes offered by the mutual funds in the US. Moreover, in the US, there is more money in mutual funds than in bank deposits. In the US, individuals have 47 per cent of their household financial assets in mutual funds.

TABLE 15.3 Unitholding Pattern of Mutual Funds Industry (As on March 31, 2010)

Category	*Number of Investors Accounts*	*% to Total Investors Accounts*	*Net Assets (Rs.Crore)*	*% to Total Net Assets*
Individuals	4,63,27,683	97.07	2,45,390.28	39.77
NRIs	9,43,482	1.98	27,428.86	4.45
FIIs	216	0.00	6,335.00	1.03
Corporates/Institutions/ Others	4,52,330	0.95	3,37,812.58	54.75
TOTAL	**4,77,23,711**	**100.00**	**6,16,966.72**	**100.00**

The mutual fund in Brazil is over $600 bn and China over $300bn. AUM as a percentage of GDP in the US is 79 per cent, 39 per cent in Brazil, while in India only 8 per cent. Mutual funds in India have tapped only 2 per cent of the urban population and rural penetration is negligible. In urban areas, the mutual fund activity is more concentrated in the eight metros.

Debt funds are emerging as the most preferred investment option (Table 15.4). Debt funds can have edge over banks as banks cannot offer attractive rates on deposits due to statutory reserves and priority sector lending. Debt funds are characterised as low-risk and high liquidity investments. Mutual funds worldwide have mobilised savings more through income funds than equity funds. This is so because mutual funds are able to offer diverse products based on the investors' risk return appetite. For example, there are liquid funds, government securities funds, and AAA rated bond funds. The government securities funds have no credit risk but interest rate risk. The liquid funds which are invested in the overnight call market carry a very low risk element compared to bond funds with both credit and interest rate risk. It is expected that returns from debt funds will increase in the future in view of the RBI's medium-term objective of reducing the cash reserve ratio (CRR) to 3 per cent.

The business of mutual funds is profitable in India, with operating profits at 32 basis points (bps) as a percentage of average AUM. In the US market it is 18 bps and in UK it is 12bps. In developed markets, there are too many products for retail investors, fierce competition and thus, reduced fees. Moreover, the developed markets being highly efficient, the fund managers cannot deliver returns above market returns. Hence, they adopt a passive management strategy by offering low cost exchange traded funds. The Indian fund managers are active fund managers whereby each mutual fund manager builds up his own portfolio and have been in a position to beat the index, thereby delivering returns in excess of market returns. This industry has grown 47 per cent annually since 2003 and the assets under management as at the end of December 2007 being $92 bn. Thus the Indian mutual fund industry has a huge potential. According to a study by McKinsey, an international consulting firm, the Indian mutual fund industry will grow atleast 33 per cent annually in the next five years. the main drivers of this growth will be the retail segment, expected to grow at 36-42 per cent annually on account of rising incomes and increasing demand for wealth management services, and the institutional investor segment expected to grow at 29 per cent annually. This will make the size of the assets under management (AUM) $440 billion by 2012.

Mutual funds are expanding to various parts of the country with a large number of collection centres and franchise offices.

Takeovers in Indian MF Industry

Acquirer—Target
- Franklin Templeton MF—Pioneer ITI
- HDFC MF—Zurich India
- UTI MF—IL & FS MF
- Canbank MF—GIC MF
- Tata MF—Bank of India MF
- Birla Sunlife MF—Alliance MF
- Principal PNB MF—Sun F & C MF
- Sahara MF—First India MF
- IDFC—Stan C MF
- Religare Aegon—Lotus MF

Conclusion

In India, mutual funds have a lot of potential to grow. Mutual fund companies have to create and market innovative products and frame distinct marketing strategies. Product innovation will be one of the key determinants to success. The mutual fund industry has to bring many innovative concepts such as high yield bond funds, principal protected funds, long short funds, arbitrate funds, dynamic funds, and precious metal funds. The penetration of mutual funds can be increased through investor education, providing investor-oriented value added services, and innovative distribution channels. Mutual funds have failed during the bearish market conditions. To sell successfully during the bear market, there is a need to educate investors about risk-adjusted return and total portfolio return to enable them to take an informed decision. Mutual funds need to develop a wide distribution network to increase its reach and tap investments from all corners and segments. Increased use of internet and development of alternative channels such as financial advisors can play a vital role in increasing the penetration of mutual funds. Mutual funds in order to increase their reach need to pump larger capital. They need to become more transparent and investor friendly.

The retail participation in mutual funds is still low on account of incorrect positioning of MF products, industry's focus on wholesale market, investor's preference for guaranteed return products and industry's inability to make in roads into smaller towns. There is a need to improve retail participation. Selling mutual funds requires competence in identifying and matching investors' needs. Moreover, they need to educate investors that mutual funds help to build capital, not to be become rich overnight. Mutual funds are dominant shareholders in portfolio companies. They can influence corporate governance by questioning the actions of company management, exercising voting rights, and using the proxy route to influence decisions by voting against the management. In India, mutual funds play a passive role in their portfolio companies and seldom exercise their voting rights. Mutual funds in India need to play a bigger role in corporate governance of public listed companies to restore faith and protect the interests of investors. Mutual funds have come a long way, but a lot more can be done.

TABLE 15.4 Schemewise Resource Mobilisation by Mutual Funds

Schemes	*2000–01*			*2005–06*			*2006–07*		
	Sale	*Purchase*	*Net*	*Sale*	*Purchase*	*Net*	*Sale*	*Purchase*	*Net*
A. Income/Debt Oriented Schemes	59,955	67,046	7,091	10,08,129	9,91,508	16,621	18,39,668	17,75,601	64,068
i. Liquid/Money Market	33,648	36,212	2,564	8,36,859	8,32,654	4,205	16,26,790	16,21,805	4,985
ii. Gilt	4,472	4,161	–312	2,479	4,040	–1,560	1,853	2,816	–964
iii. Debt (Other than Assured Return)	20,173	26,060	5,887	1,68,791	1,54,814	13,977	2,11,026	1,50,980	60,046
B. Growth/Equity Oriented Schemes	18,955	18,211	–745	86,014	50,783	35,231	94,351	66,145	28,206
i. Equity Linked Saving Scheme	656	214	–442	3,935	343	3,592	4,669	216	4,453
ii. Others	18,299	17,997	–303	82,079	50,440	31,639	89,683	65,929	23,753
C. Balanced Schemes	4,919	7,701	2,782	4,006	3,079	927	4,473	2,762	1,711
D. Exchange Traded Fund									
i. Gold ETF									
ii. Other ETFs									
E. Fund of Funds Investing Overseas									
TOTAL (A+B+C+D+E)	**83,829**	**92,957**	**9,128**	**10,98,149**	**10,45,370**	**52,779**	**19,38,493**	**18,44,508**	**93,985**
Open-ended	78,788	91,106	12,318	10,57,118	10,31,334	25,783	18,00,158	17,76,258	23,900
Close-ended	5,042	1,851	–3,190	41,032	14,036	26,996	1,38,335	68,250	70,085
TOTAL	**83,829**	**92,957**	**9,128**	**10,98,149**	**10,45,370**	**52,779**	**19,38,493**	**18,44,508**	**93,985**

(Rs.'in Crores)

2007–08			2008–09			2009–10		
Sale	*Purchase*	*Net*	*Sale*	*Purchase*	*Net*	*Sale*	*Purchase*	*Net*
43,17,263	42,13,396	1,03,867	53,83,367	54,15,528	–32,161	99,44,693	98,63,485	81,208
34,32,737	34,17,761	14,976	41,87,977	41,91,576	–3,599	70,44,818	7,05,681	–12,074
3,180	2,746	434	14,696	11,090	3,606	3,974	7,271	–3,297
8,81,346	7,92,889	88,457	11,80,694	12,12,862	–32,168	28,95,901	27,99,323	96,578
1,26,286	79,353	46,933	32,805	32,805	4,024	64,714	62,565	2,149
6,448	297	6,151	3,324	356	2,969	3,600	2,046	1,554
1,19,839	79,056	40,782	29,481	28,425	1,055	61,114	60,519	595
11,488	5,720	5,768	2,695	2,634	61	4,693	5,386	–693
9,339	12,106	–2,767	5,719	6,718	–998	3,534	2,752	783
433	156	276	271	187	84	997	194	803
8,906	11,950	–3,043	5,448	6,531	–1,083	2,537	2,558	–20
			1,767	989	778	1,387	1,754	–367
44,64,376	**43,10,575**	**1,53,802**	**54,26,353**	**54,54,650**	**–28,296**	**1,00,19,023**	**99,35,942**	**83,080**
43,37,042	42,03,588	1,33,454	52,61,429	52,33,301	28,127	99,76,363	98,69,736	1,06,627
1,27,335	1,06,987	20,348	1,11,008	1,45,199	–56,424	25,551	61,683	–36,131
44,64,376	**43,10,575**	**1,53,802**	**54,26,353**	**54,54,650**	**–28,296**	**1,00,19,023**	**99,35,942**	**83,080**

TABLE 15.5 Number of Schemes Launched by Mutual Funds

	2000–01	*2001–02*	*2002–03*	*2003–04*	*2004–05*	*2005–06*	*2006–07*	*2007–08*	*2008–09*	*2009–10*	*Cumulative Assets Under Management as on 31-03-2010 (Rs.' in Crore)*
A. Income/Debt Oriented Schemes											
i. Liquid/Money Market	27	30	32	36	39	45	55	58	56	56	76,839.33
ii. Gilt	19	29	31	30	30	29	28	30	34	35	3,191.06
iii. Debt (Other than Assured Return)	95	120	118	131	159	251	367	505	509	367	4,46,752.17
iv. Debt (Assured Return)	34	26	21	0	0	–	–	–	–	–	–
Sub Total	**175**	**205**	**202**	**197**	**228**	**325**	**450**	**593**	**599**	**458**	**5,26,782.56**
B. Growth/Equity Oriented Schemes											
i Equity Linked Saving Scheme	77	63	47	43	37	37	40	43	47	48	23,491.74
ii. Others	110	115	121	126	151	194	227	270	293	307	1,74,133.38
Sub Total	**187**	**178**	**168**	**169**	**188**	**231**	**267**	**313**	**340**	**355**	**1,97,625.12**
C. Balanced Schemes	32	34	36	37	35	36	38	37	35	33	17,529.00
D. Exchange Traded Fund											
i. Gold ETF	–	–	–	–	–	–	–	5	5	7	1,590.46
ii. Other ETFs	–	–	–	–	–	–	–	8	12	14	1,070.80
Sub Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**15**	**17**	**21**	**2,661.26**
E. Fund of Funds Investing Overseas	–	–	–	–	–	–	–	–	10	15	2,927.59
Grand Total										**882**	**7,47,525.53**

CASE STUDY 1

Ajit is 30, newly married and a successful actor in the Indian film industry. Right from his struggling days, Ajit always saved a part of his income and invested in safe instruments like fixed deposits. However, during the internet boom in the late 90's and early 2000, he successfully invested in equities and mutual funds. Ajit thought that he was always well-diversified but when the internet stock bubble burst in 2002, Ajit lost a majority of his stock portfolio. A major mistake he made was that even though he was diversified, he invested only in tech-stocks. Ajit has always had a penchant for technology from his young age and thus he usually ended up buying tech stocks and funds. Currently, Ajit suffers from the snake-bite effect and thus he is not willing to participate in the equity market at all. Ajit, now misses the high returns that his portfolio had earned during the internet boom days. He has come to you to seek your suggestions to help his portfolio generate higher returns.

Q1. What do you think is Ajit's ability and willingness to take risk?
Q2. Will you recommend a stock only portfolio to Ajit or a mutual funds only portfolio for Ajit?
Q3. What kind of mutual funds will you recommend to Ajit?
Q4. Explain to Ajit how his new mutual fund portfolio achieves diversification. Why is this diversification important?
Q5. Recommend a portfolio mix for Ajit. Explain to Ajit why investments in equities improves the risk profile of the portfolio.

CASE STUDY 2

Amar Patel, aged 35, lives with his wife Mona, their 5 year old son Ankit and 10 year old daughter Mita. His parents also live with him in a flat in Puna. He had taken a housing loan on a floating interest rate three years ago to purchase the flat. He is a software engineer and he earns around Rs. 18,00,000 per annum. His net worth and cash flows are given below.

Net Worth

Assets:	
Savings account and fixed deposits	Rs. 5,00,000
National savings certificates and bonds	Rs. 2,00,000
Life insurance and Pension plans	Rs. 100,00,000
Stocks (at cost)	Rs. 30,00,000
House (flat)	Rs. 25,00,000
Car	Rs. 5,00,000
Liabilities	
Housing loan	Rs. 20,00,000
Cash flows (Annual)	
Inflows:	
Salary income	Rs. 18,00,000
Other income in the form of perks and bonus	Rs. 2,00,000
Outflows:	
Household expenditure	Rs. 3,00,000
Insurance premium	Rs. 60,000
Taxes	Rs. 5,00,000
Other lifestyle expenses	Rs. 1,00,000
Travel and holidays	Rs. 2,00,000
Home loan installment	Rs. 2,40,000
Surplus	Rs. 6,00,000

Amar has a term life insurance policy with a sum assured of Rs. 70 lakhs, in addition to a Rs. 20 lakh group life insurance cover from his employer. He also has a family health insurance policy worth Rs. 5,00,000. His parents are covered under a government medical scheme as his father retired as a government officer. In the current year, he took an additional Rs. 10 lakh cover for his entire family.

Amar is interested in stock markets and in his spare time discusses new IPOs, stock news, and market scenario. He has an above average risk appetite and is not afraid of risk. He has invested in stocks based on tips or advise received from friends and has around 30 stocks in his portfolio. The market was on a bull rally during the last four years and he booked profits on sale of some stocks. Suddenly, in January 2008, stock markets started sliding down and this freefall continued. He became frantic and looked for news and tips which would give some sign of hope. When he reviewed his portfolio, he found that around 50 per cent of his portfolio consisted of 'dud' shares of little value. He sold stocks in a panic in this falling market and as a result, he sold off good stocks too soon and held on to 'duds'. He loves investing in stocks and will continue to do so even if he incurs losses.

As he lacks the skills and time to monitor and adjust his portfolio, Amar seeks your help and advise. Please advise him on the following specific points.

1. Are Amar and his family adequately insured?
2. Is the asset allocation of Amar's portfolio optimal, considering his age and family position? If no what are the changes he should make?
3. Keeping in view Amar's risk appetite, how should he go about investing?

16
Insurance

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *Meaning and principles of insurance*
2. *Origin and development of insurance*
3. *Opening up of the insurance sector in India*
4. *Insurance Regulatory and Development Authority*
5. *Health insurance*
6. *Insurance intermediaries*
7. *Risk management in insurance*
8. *General insurance*
9. *Reinsurance*
10. *Micro insurance*
11. *General Insurance Corporation of India*
12. *Non-life insurance sector*
13. *Life insurance*
14. *Life Insurance Corporation of India*
15. *Life insurance industry*

INTRODUCTION

Life is full of risks. Being a social animal and risk averse, man always tries to reduce risk. An age-old method of sharing of risk through economic cooperation led to the development of the concept of 'insurance'.

Insurance may be described as a social device to reduce or eliminate risk of loss to life and property. Insurance is a collective bearing of risk. Insurance spreads the risks and losses of few people among a large number of people as people prefer small fixed liability instead of big uncertain and changing liability. Insurance is a scheme of economic cooperation by which members of the community share the unavoidable risks. The risks which can be insured against include fire, the perils of sea, death, accidents, and burglary. The members of the community subscribe to a common pool or fund which is collected by the insurer to indemnify the losses arising out of risks. Insurance cannot prevent the occurrence of risk but it provides for the losses of risk. It is a scheme which covers large risks by paying small amount of capital. Insurance is also a means of savings and investment.

Insurance and mutual funds are fundamentally different in their objectives. The objective of insurance is to cover the eventuality of death and therefore, is more long-term in its outlook while, mutual funds are purely investment gain vehicles.

Insurance can be defined as a legal contract between two parties whereby one party called the insurer undertakes to pay a fixed amount of money on the happening of a particular event, which may be certain or uncertain. The other party called the insured pays in exchange a fixed sum known as premium. The insurer and the insured are also known as assurer, or underwriter, and assured, respectively. The document which embodies the contract is called the policy.

An insurance policy is a special type of contract. It is synallagmatic and aleatory in character. A synallagmatic contract is one by which each of the contracting parties binds himself to the other. It is aleatory because the insurer's obligation to pay a loss (claims) is distant and often uncertain, while the insured must pay a fixed premium during the policy period. Thus while the sacrifice (premium) is certain and immediate, the benefits (claims) are distant and contingent for the insured. This makes it a unique financial product, requiring a broader understanding of pure and speculative risks to which an individual or enterprise is exposed, in order to take an informed buying decision.

The insurance companies are *distinct financial institutions (intermediaries)* in the financial system.

1. Insurers collect insurance premiums by issuing insurance policies which are debt instruments (claims) and invest these premiums in financial assets and markets to generate cash flows to pay future claims. Thus, insurers are liability-driven financial intermediaries.
2. Unlike other intermediaries, insurers have to hold risk capital or solvency capital to ensure their obligations to the insured. Insurers demonstrate their financial strength to the insured by holding risk capital which provides a cushion against unexpected losses. Another unique feature of the industry is the distinct principles such as uberrimae fidei, indemnity, subrogation, causa proxima and insurable interest of which underwriters (insurers) are more aware of than the insured.

3. Also, insurance pricing differs from the pricing of other products. In case of other products, the producer knows the costs of production and the profit he wants to earn. Insurance is a different activity from most other kinds of business activities. Insurers are in the business of risk. It is very difficult to price risk. In case of insurance, the actual cost of risk coverage can be known only at the expiry of the contract or when the event occurs whereas the premium rate is determined at the beginning of the contract. The determination of premium rate involves a lot of statistics, use of probability theories and study of demographic trends and market trends.
4. Marketing of insurance products is a challenging task. Insurance is sold, never bought. The seller (agent) should possess expert knowledge of the insurance products, have the skill in making people listen carefully and strive to establish a long-term relationship with the clients to get repeat business. Only those who are open to new ideas, able to plan their activity well and willing to face challenges can succeed in marketing insurance products.

Role of Insurance in Economic Growth

With the growth of a country's economy, there is an increase in the facilitating role played by the financial services sector. Financial Services play a supportive role in the basic activity of production. Insurance frees industries from the worries of unforeseen losses and uncertainties. Insurance helps the process of the country's growth in various ways:

1. Insurance covers many economic risks. It protects entrepreneurs against the risk of damage to or loss of the goods and other assets, which they employ in manufacturing, marketing, transport, and other related activities. This protection offers a kind of stability to business.
2. With the cover of insurance on their assets, businessmen and industrialists are able to take bold decisions in enlarging their field of activity, and take financial risks which they cannot otherwise take. Hence, insurance plays a promotional role in nation-building and also increasing the number of jobs for the people.
3. Again, there is life insurance, which plays the most useful role in the lives of individuals. Life insurance offers economic safety at reasonable cost to millions of families in the country. In a way, this helps the government also as it lightens the government's burden of providing social welfare to affected families.
4. Insurance companies collect premium from policyholders and invest this money in government bonds, corporate securities and other approved channels of investment. In this way, insurance companies are helpful in providing capital for new ventures or expansion of old units. Moreover, these funds are also used for financing the infrastructure projects with long gestation period. Also, this lending of funds for infrastructure and other development favourably influences the decision-making process in the government.

Thus insurance aids in the growth of modern economy. By promoting safety against personal losses not only improves the individual's quality of life but also provides smoothness in the working of the affairs of business and industry.

Principles of Insurance

An insurance contract is based on some basic principles of insurance.

- Principle of 'uberrima fides' or principle of utmost good faith.
- Principle of indemnity.
- Doctrine of subrogation.
- Principle of *causa proxima*.
- Principle of insurable interest.
- *Principle of utmost good faith* It means 'maximum truth'. All material information regarding the subject matter of insurance should be disclosed by both the parties—the insurer and the insured. This duty of full disclosure rests more heavily on the insured than the insurer. The insurer has a right to avoid the contract if the insured fails to make the full disclosure. In case of misrepresentation—innocent or fraudulent, the contract becomes voidable if the representation is substantially false and it is concerned with facts which are material to the risk. The contract becomes voidable on the grounds of non-disclosure when a fact is known to one party and it is not known to the other and moreover, is such that may influence the underwriter's decision if disclosed.

- *Principle of indemnity* This means that if the insured suffers a loss against which the policy has been made, he shall be fully indemnified only to the extent of loss. In other words, the insured is not entitled to make a profit on his loss. For instance, marine insurance policy is a contract of indemnity which protects against physical and other losses to movable property and associated interests, as well as against liabilities arising during the course of a sea voyage.
- *Doctrine of subrogation* This means the insurer has the right to stand in the place of the insured after settlement of claims in so far as the insured's right of recovery from an alternative source is involved. The right may be exercised by the insurer before the settlement of the claim. In other words, the insurer is entitled to recover from a negligent third party any loss payments made to the insured. The purposes of subrogation are to hold the negligent person responsible for the loss and prevent the insured from collecting twice for the same loss.
- *Principle of causa proxima* The cause of loss must be direct and an insured one in order to claim for compensation.
- *Principle of insurable interest* The assured must have insurable interest in the life or property insured. Insurable interest is that interest which considerably alters the position of the assured in the event of loss taking place and if the event does not take place, he remains in the same old position. One who has to lose as a result of loss may be said to have insurable interest in the life or property insured. If this principle is absent, the insurance contract degenerates into a wagering contract. It is taken as given that an individual has insurable interest in his/her own life or property. Cases where no proof of insurable interest is required are that of a husband's interest in his wife's life and wife's interest in her husband's life. In cases of business and family relationships, proof of insurable interest is required.

ORIGIN AND DEVELOPMENT OF INSURANCE

The concept of insurance is believed to have emerged almost 4,500 years ago in the ancient land of Babylonia where traders used to bear risk of the caravan by giving loans, which were later repaid with interest when the goods arrived safely. In order to protect against the risk of loss of goods in transit, piracy and natural calamities like storms and so on, medieval guilds (trade associations) formed a common pool of funds, which was used as support in times of sickness and death and sometimes even offered as ransom for members held captive by pirates. The first insurance contract was entered into by European maritime nations in 1347 to accept marine insurance as a practice.

The concept of insurance as we know today took shape in 1688 at a place called Lloyd's Coffee House in London where risk bearers used to meet to transact business. This coffee house became so popular that Lloyd's became the one of the first modern insurance companies by the end of the eighteenth century.

Marine insurance companies came into existence by the end of the eighteenth century. These companies were empowered to write fire and life insurance as well as marine. The Great Fire of London in 1966 caused huge loss of property and life. With a view to providing fire insurance facilities, Dr Nicholas Barbon set up in 1967 the first fire insurance company known as the Fire Office.

The oldest life insurance company in existence today is the Society for the Equitable Assurance of Lives and Survivorship, known as 'Old Equitable'. It was established in England in 1756.

The 'law of large numbers' discovered by Jakob Bernoulls around 1700 forms the basis of modern insurance. Insurers consider their clients as large groups to predict future risk and loss. The larger the group, the closer the average loss will approach a definite value. This law helps the insurer to predict total annual loss for the group which is then distributed among all the insured and recovered in the form of premium.

The mortality tables were constructed in the seventeenth century. The first mortality table was constructed by an astronomer Edmund Haley in 1693. This table provided a link between the life insurance premium and average lifespans based on statistical laws of mortality and compound interest. In 1756, Joseph Dodson reworked the table, linking insurance premium rate to age.

The infamous New York Fire and the great Chicago Fire in 1835 and 1871, respectively, created an awareness and need for insurance. The concept of reinsurance emerged to deal specifically for such situations. Industrialisation and urbanisation popularised the concept of insurance and growth in insurance led to the development of new insurance products.

History of Insurance in India

The early history of insurance in India can be traced back to the Vedas. The Sanskrit term '*Yogakshema*' (meaning well being), the name of Life Insurance Corporation of India's corporate headquarters, is found in the Rig Veda. Some form of 'community insurance' was practised by the Aryans around 1000 BC. The joint family system prevalent in India was an important form of social cooperation.

Life insurance in its modern form came to India from England in 1818. The Oriental Life Insurance Company was the first insurance company to be set up in India to help the widows of the European community. The insurance companies, which came into existence between 1818 and 1869, treated Indian lives as subnormal and charged an extra premium of 15 to 20 per cent. The first Indian insurance company, the Bombay Mutual Life Assurance Society, came into existence in 1870 to cover Indian lives at normal rates. Moreover, in 1870, the British Government enacted for the first time the Insurance Act, 1870. Other companies, such as the Oriental Government Security Life Assurance Company, the Bharat Insurance Company, and the Empire of India Life Insurance Company Limited, were set up between 1870 and 1900.

The Swadeshi movement of 1905–07, the non-cooperation movement of 1919, and Civil Disobedience Movement of 1929 led to an increase in number of insurance companies. In 1912, the first legislation regulating insurance, the Life Insurance Companies Act, 1912, was promulgated. The growth of life insurance was witnessed during the first two decades of the twentieth century not only in terms of number of companies but also in terms of number of policies and sum assured. *The Indian Insurance Year Book* was published for the first time in 1914.

The Insurance Act, 1938, the first comprehensive legislation governing both life and non-life branches of insurance was enacted to provide strict state control over the insurance business. This amended insurance act looked into investments, expenditure, and management of these companies. An office of the Controller of Insurance came into existence. The Controller of Insurance had wide ranging powers, which included directing, cautioning, advising, prohibiting, inspecting, investigating, searching, seizing, prosecuting, penalising, authorising, registering, amalgamating, and liquidating insurance companies.

By the mid-1950s, there were 154 Indian insurers, 16 foreign insurers, and 75 provident societies carrying on life insurance business in India. Insurance business flourished and so did scams, irregularities, and dubious investment practices by scores of companies. As a result, the government decided to nationalise the life assurance business in India. The Life Insurance Corporation of India (LIC) was set up in 1956 to take over 245 life companies. The nationalisation of life insurance was followed by general insurance in 1972. The General Insurance Corporation of India and its subsidiaries were set up in 1973. Most of the powers of the Controller of Insurance were taken away and vested in state-owned LIC and GIC for operational convenience. These nationalised companies enjoyed monopoly for decades. They did a commendable job in extending the distribution network and successfully handled a large volume of business. But with only 20 per cent of the population insured there was a vast potential untapped. Besides, as a sequel to the reform process and to tap the insurance sector as a source of longterm funds, the government decided to introduce reforms in the insurance sector.

The government set up, in 1993, a committee under the chairmanship of R. N. Malhotra, the former insurance secretary and the RBI governor to evaluate the Indian insurance industry and recommend its future direction. This committee submitted its report in 1994 and suggested the re-opening up of the insurance sector to private players. This sector was finally thrown open to the private sector in 2000. The Insurance Regulatory and Development Authority (IRDA) was set up in 2000 as an autonomous insurance regulator. The government has entrusted the IRDA with the responsibility for carrying out the reforms in this sector.

OPENING OF THE INSURANCE SECTOR

The insurance industry till August 2000 had only two nationalised players: Life Insurance Corporation (LIC) and General Insurance Corporation (GIC) and its four subsidiaries. These two players had a monopolistic control over the market. These nationalised insurance companies did a commendable job in terms of high growth in volume of business and reach. However, they were not consumer-oriented, unwilling to adopt modern practices and technology to upgrade technical skills, and inefficient in operations. The growth in volume was mainly driven by income tax considerations and hence a major portion of the vast rural area was untapped.

Moreover, with a population of more than one billion and savings rate of around 24 per cent, India has a vast market which is untapped. The foreign insurance companies' external influence and pressure to open up the Indian insurance sector was high.

In 1993, the committee under the chairmanship of R. N. Malhotra, set up to evaluate the Indian Insurance industry and recommend its future direction, submitted its report in 1994 and its major recommendations revolved around the structure and regulation of insurance industry. The main recommendations were as follows.

- The government should bring down its stake in the insurance companies to 50 per cent.
- Private companies with a minimum paid-up capital of Rs. 100 crore should be allowed to enter the industry.

- No single company should be allowed to transact business in both the life and general insurance business. The number of entrants should be controlled.
- Foreign companies may be allowed to enter the industry in collaboration with domestic companies. The committee did not favour foreign companies operating in India through branches.
- Postal Life Insurance should be allowed to operate in the rural markets.
- The mandatory investments of LIC Life Fund in government securities need to be reduced from 15 per cent to 50 per cent.
- The GIC and its subsidiaries should not hold more than 5 per cent in any company.
- The promoters' holding in a private insurance company should not exceed 40 per cent of the total. However, if the promoters wish to start with a higher holding, they should be permitted to do so provided their holding is brought down to 40 per cent within a specified period of time through public offering. No person other than the promoters should be allowed to hold more than one per cent of the equity. Promoters should, at no time, hold less than 26 per cent of the paid-up capital.
- Regulatory and prudential norms as well as conditions for ensuring level-playing field among insurers should be finalised early so that intending entrants into the insurance business would be aware of the stipulations they would have to comply with. These conditions should aim to ensure that life insurers do not neglect the small man or the rural business and that the general insurers have balanced portfolios.
- Though nationalised insurance companies are in a position to face competition, it is essential that they quickly upgrade their technology, reorganise themselves on more efficient lines, and are enabled to operate as board-run enterprises.
- As an interim measure, the office of Controller of Insurance should be restored its full functions under the Insurance Act and it should be set up as a separate office as a matter of high priority.
- Legislation and government notifications through which LIC and GIC were exempted from several provisions of the Insurance Act should be withdrawn.
- A strong and effective insurance regulatory authority in the form of a statutory autonomous board on the lines of the SEBI should be set up.
- The state-level cooperatives should be allowed to set up cooperative societies for transacting life insurance business in the state. There will not be more than one society for each state which will be subject to the regulations of the Insurance Regulatory Authority.
- GIC should cease to be the holding company for its subsidiaries and the exclusive function of GIC should remain that of reinsurer.
- When GIC ceases to be holding company of the four subsidiary companies, then the government should acquire GIC's stake, which is Rs. 40 crore in every company. This share, then should be raised to Rs. 100 crore for every company, the government holding 50 per cent and the rest being held by the public at large.

Recognising the global trend of competitive, market-driven insurance industry and the recommendations of the Malhotra Committee, the insurance industry was opened up in August 2000. There are at present 23 life insurance and 23 general insurance companies operating in India with more players expected to come in. The IRDA, constituted in April 2000 under the IRDA Act, 1999, is vested with the power to regulate and develop the insurance and reinsurance business (Figure 16.1).

Most of the foreign insurers have preferred to form joint ventures with Indian companies. Banks, financial institutions, and non-banking finance companies (NBFCs) are permitted to enter the insurance sector. The RBI has issued guidelines regulating the degree of participation of banks, financial institutions and non-banking finance companies in the insurance business depending on balance sheet strength.

The Reserve Bank of India has given NBFCs blanket permission to take up insurance agency business on a fee basis and without risk participation, without the approval of the central bank. However, the risks involved in insurance agency cannot be transferred to the business of the NBFC and they need to obtain permission from the IRDA.

The Insurance (Amendment) Act, 2002, has allowed cooperative societies to carry on insurance business with a view to enhancing coverage in rural areas. This act deals in four broad areas, namely, broker regulation, corporate agent regulations, Section 64VB that deals in payments to be made through credit card and the Internet, and Section 49 that deals with the distribution of acturial surpluses between the shareholder and the policyholder. Corporates acting as corporate agents will have to surrender their licence to be brokers, as there is a conflict of interest between two parties. Banks will co ntinue to be corporate agents and non-brokers. The designated person, acting on behalf of the corporate agent (like a bank) after leaving their jobs can be an agent without having to take further exams mandated by the regulator. The amended insurance act would form the future legal base for making the regulation on intermediaries.

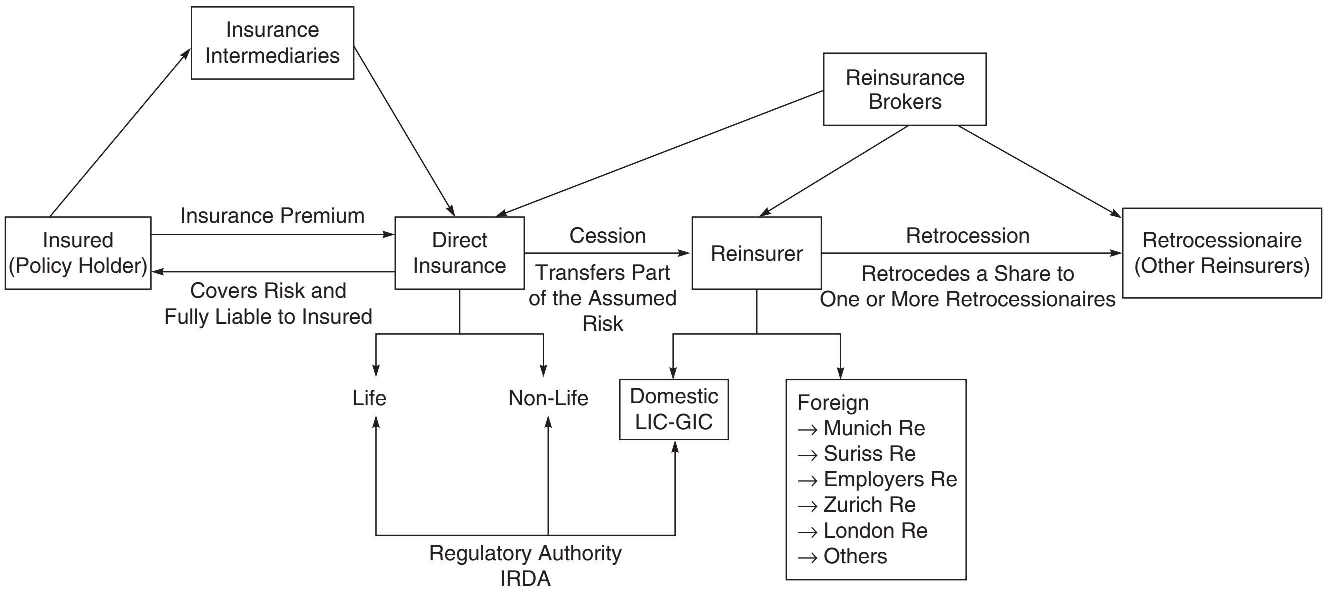


Figure 16.1 The Insurance Industry

The Indian insurance industry is governed by the Insurance Act, 1978, the General Insurance Business (Nationalisation) Act, 1972, Life Insurance Corporation Act, 1956, and Insurance Regulatory and Development Authority Act, 1999.

INSURANCE REGULATORY AND DEVELOPMENT AUTHORITY

The IRDA was constituted as an autonomous body to regulate and develop the business of insurance and reinsurance in India. The authority was constituted on April 19, 2000, vide Government of India's notification no. 277.

The IRDA Act, 1999, was enacted by parliament in the fiftieth year of the Republic of India to provide for the establishment of an authority to protect the interests of holders of insurance policies, to regulate, promote and ensure orderly growth of the insurance industry, and for matters connected therewith or incidental thereto and further to amend the Insurance Act, 1938, the Life Insurance Corporation Act, 1956, and the General Insurance Business (Nationalisation) act, 1972. The Act was approved in the parliament in December 1999 and the insurance sector was thrown open for private licensees on August 15, 2000. The IRDA was constituted in terms of the IRDA, 1999, as the regulator of the Indian insurance industry.

Box 16.1 Insurance Industry at a Glance

Size of market-life and non-life	Rs. 2,52,143.10 crore
(Total Premium)	US Dollar 54.375 billion
Global insurance market	US Dollar 4066 billion
Inflation adjusted growth in total	19.2 per cent
premium in India:	(35.0 per cent in 2006–07)
Growth in premium (world)	Life: 5.4 per cent
underwritten 2007–08	Non-life: 0.7 per cent
Geographical restriction for new players	None
Equity restriction	Foreign promoter can hold up to 26 per cent of the equity
Registration restriction	Composite registration not available
Market opening	August 2000 with invitation for application for registration

(Continued)

Box 16.1 (*Continued*)

Number of registered companies

Type of business	Public Sector	Private Sector	Total
Life Insurance	1	22	23
General Insurance	6	17	23
Reinsurance	1	0	01
Total	**8**	**39**	**47**

Names of registered companies:

Life Insurance

Public Sector: Life Insurance Corporation of India

Private Sector

1. Bajaj Allianz Life Insurance Company Limited
2. Birla Sun-Life Insurance Company Limited
3. HDFC Standard Life Insurance Company Limited
4. ICICI Prudential Life Insurance Company Limited
5. ING Vysya Life Insurance Company Limited
6. Max New York Life Insurance Company Limited
7. Metlife India Insurance Company Pvt. Limited
8. Kotak Mahindra Old Mutual Life Insurance Limited
9. SBI Life Insurance Company Limited
10. TATA AIG Life Insurance Company Limited
11. Reliance Life Insurance Company Limited
12. Aviva Life Insurance Company Limited
13. Sahara India Life Insurance Company Limited
14. Shriram Life Insurance Company Limited
15. Bharti AXA Life Insurance Company Limited
16. Future Generali India Life Insurance Company Limited
17. IDBI Fortis Life Insurance Company Limited
18. Canara HSBC Oriental Bank of Commerce Life Insurance Company Limited
19. Aegon Religare Life Insurance Company Limited
20. DLF Pramerica Life Insurance Company Limited
21. Star Union Dai-ichi Life.
22. India First Life Insurance Company limited

General Insurance

Public Sector

1. Oriental Insurance Company Limited
2. New India Assurance Company Limited
3. National Insurance Company Limited
4. United India Insurance Company Limited
5. Export Credit Guarantee Corporation of India Limited
6. Agriculture Insurance Company of India Limited

Private Sector

1. Royal Sundaram Alliance Insurance Company Limited
2. Reliance General Insurance Company Limited
3. IFFCO Tokio General Insurance Company Limited
4. TATA AIG General Insurance Company Limited
5. Bajaj Allianz General Insurance Company Limited
6. ICICI Lombard General Insurance Company Limited
7. Cholamandalam MS General Insurance Company Limited
8. HDFC- ERGO General Insurance Company Limited
9. Star Health and Allied Insurance Company Limited
10. Apollo DKV Insurance Company Limited
11. Future Generali India Insurance Company Limited
12. Universal Sompo General Insurance Company Limited
13. Shriram General Insurance Company Limited
14. Bharti AXA General Insurance Company Limited
15. Raheja QBE General Insurance Company Limited
16. SBI General Insurance Company Limited
17. Max Bupa Health Insurance Company Limited

Reinsurance **General Insurance Corporation of India**

Source: IRDA, *Annual Repot*, 2007–08.

INSURANCE REGULATORY AND DEVELOPMENT AUTHORITY

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The IRDA was set up in 1996 but it was formally constituted as a regulator of the insurance industry in April 2000. The regulator was initially known as the Insurance Regulatory Authority but was subsequently rechristened as Insurance Regulatory and Development Authority as it was provided that it had a broader role to perform in the Indian insurance market. It has not only to frame and issue statutory and regulatory stipulations, guidelines, and clarification but it has also to perform a developmental and promotional role. The developmental and promotional role of the regulator include facilitating the growth of the market by attracting a large number of players, integrating of the insurance market with the domestic financial services market, and synchronising the Indian insurance market with that of global insurance market. Thus, the objectives of the IRDA are twofold: policyholder protection and healthy growth of the insurance market.

Objectives of IRDA

- Policy holder protection
- Healthy growth of the insurance market

The IRDA has a chairman and four full-time and four part-time members. IRDA has constituted the Insurance Advisory Committee and in consultation with this committee has brought out seventeen regulations. A leading consumer activist has also been inducted into the Insurance Advisory Committee. In addition, representatives of consumers, industry, insurance agents, women's organisations, and other interest groups are a part of this committee. It has also formed a Consumer Advisory Committee and a Surveyor and Loss Assessors Committee. It has a panel of eligible chartered accountants to carry out investigation, inspection, and so on.

The IRDA has issued seventeen regulations in the areas of registration of insurers, their conduct of business, solvency margins, conduct of reinsurance business, licensing, and code of conduct intermediaries. It follows the practice of prior consultation and discussion with various interest groups before issuing regulations and guidelines.

Duties of IRDA

To regulate and develop the insurance and reinsurance business

Mission Statement of the IRDA

- To protect the interest of and secure fair treatment to policyholders.
- To bring about speedy and orderly growth of the insurance industry (including annuity and superannuation payments) for the benefit of the common man, and to provide long-term funds for accelerating growth of the economy.
- To set, promote, monitor, and enforce high standards of integrity, financial soundness, fair dealing, and competence of those it regulates.
- To ensure that insurance customers receive precise, clear, and correct information about products and services and make them aware of their responsibilities and duties in this regard.
- To ensure speedy settlement of genuine claims, to prevent insurance frauds, and other malpractices and put in place effective grievance redressal machinery.
- To promote fairness, transparency, and orderly conduct in financial markets dealing with insurance and to build a reliable management information system to enforce high standards of financial soundness amongst market players.
- To take action where such standards are inadequate or ineffectively enforced.
- To bring about optimum amount of self-regulation in day-to-day working of the industry, consistent with the requirements of prudential regulation.

Duties, Powers, and Functions of the IRDA

Section 14 of the IRDA Act, 1999, lays down the duties, powers, and functions of the IRDA.

Subject to the provisions of this act and any other law for the time being in force, the authority shall have the duty to regulate, promote, and ensure orderly growth of the insurance business and reinsurance business. Without prejudice to the generality of the provisions contained in Sub-section (1), the powers and functions of the authority shall include the following

- Issuing to the applicant a certificate of registration, renew, modify, withdraw, suspend, or cancel such registration.
- Protection of the interests of the policy holders in matters concerning assigning of policy, nomination by policy holders, insurable interest, settlement of insurance claim, surrender value of policy, and other terms and conditions of contracts of insurance.
- Specifying requisite qualifications, code of conduct and practical training for intermediary or insurance intermediaries and agents.
- Specifying the code of conduct for surveyors and loss assessors.
- Promoting efficiency in the conduct of insurance business.
- Promoting and regulating professional organisations connected with the insurance and reinsurance business.
- Levying fees and other charges for carrying out the purposes of this act.
- Calling for information from, undertaking inspection of, conducting inquiries and investigations, including audit of the insurers, intermediaries, insurance intermediaries, and other organisations connected with the insurance business.
- Control and regulation of the rates, advantages, terms and conditions that may be offered by insurers in respect of general insurance business not so controlled and regulated by the Tariff Advisory Committee under Section 64U of the Insurance Act, 1938 (4 of 1938).
- Specifying the form and manner in which books of account shall be maintained and statement of accounts shall be rendered by insurers and other insurance intermediaries.
- Regulating investment of funds by insurance companies.
- Regulating maintenance of margin of solvency.
- Adjudication of disputes between insurers and intermediaries or insurance intermediaries.
- Supervising the functioning of the Tariff Advisory Committee.
- Specifying the percentage of premium income of the insurer to finance schemes for promoting and regulating professional organisations referred to in Clause (f).
- Specifying the percentage of life insurance business and general insurance business to be undertaken by the insurer in the rural or social sector; and exercising such other powers as may be prescribed.

Operations of the IRDA

- The IRDA has developed its internal parameters to assess the promoters' credentials. The promoters' long-term commitment to stay in the market, their ability to bring in new techniques in insurance underwriting and administration are some of the parameters, which are assessed in the first phase. Subsequent to this preliminary assessment, the IRDA conducts an in-depth assessment of the business plans submitted by the promoter.

  The IRDA is the sole authority for awarding licenses. There is no restriction in the number of licenses it can issue, but licenses for life and non-life business are to be issued separately. Licenses are issued only on a national basis. The new players should commence business within 15 to 18 months of getting the license. A new applicant has to pay a registration fee of Rs. 50,000. At the time of renewal of registration every year, a fee of 0.20 per cent of one per cent of the gross premium or Rs. 50,000 whichever is higher, is levied on the insurers carrying out insurance business in India. The IRDA has prescribed a 'file and use' procedure, according to which every insurer is required to file the product and pricing details along with copies of standard terms, conditions, and literature. In case of tariff products, the Tariff Advisory Committee is required to file product and pricing details with the IRDA, like any other insurance company.
- All insurance intermediaries, such as agents and corporate agents, have to undergo compulsory training prior to their obtaining a license. The IRDA also specified the minimum educational qualifications for these intermediaries. It conducts examinations and then issues licenses to these agents. It believes that well trained and informed intermediaries can service the consumers better. The IRDA insured or renewed 1,18,154 agents licenses by the end of March 2001. The licensing of Insurance Agents Regulations have specified the qualifications for an insurance agent: hundred hours prelicensing training, followed by an examination. In addition, for new agents 25 hours training to keep knowledge updated has also been prescribed at the time of renewal of license.
- The Insurance Association and Life Insurance and General Insurance Councils have been revived and they are responsible for setting the norms for market conduct, ethical behaviour of the insurers, and breach of regulations. Continuous training has been stipulated to enhance the efficiency of the intermediaries. New players have set up call centres which are functioning on a 24/7 basis.

- The IRDA has recognised the Actuarial Society of India and Insurance Institute of India as nodal organisations responsible for actuarial and insurance education. IRDA has drafted separate bills of the Actuarial Society of India and the Institute of Surveyors and Loss Assessors in order to grant them statutory status.
- The IRDA has also entered into an MoU with the Indian Institute of Management, Bangalore, to further its objective of insurance research and education. It has set up a risk management resource centre in Bangalore.
- The IRDA has come out with the Insurance Advertisement and Disclosure Regulations to ensure that the insurance companies adhere to fair trade practices and transparent disclosure norms while addressing the policy holders or the prospects.

Steps Taken to Strengthen the Self-regulatory Mechanism in the Insurance Sector

- The IRDA has laid down the requirements of investment committee, internal audit committee, and joint statutory auditors being appointed for not more than a specified period.
- The Insurance Association of India and the Life Insurance and General Insurance Councils were revived in February 2001 and have membership drawn from the industry.
- A code of conduct for agents and the insurance intermediaries has been laid down to ensure that the affairs of insurance intermediaries are conducted in such a manner as to safeguard the interests of the various stakeholders.

Steps Taken by the IRDA to Protect the Interests of the Policy Holders

- The IRDA notified the protection of Policyholders' Regulations in April, 2002, which provide for the policy proposal documents being made available in an easily understandable language, outlines the claims procedure in both life and non-life segments, setting up of grievance redressal machinery, speedy settlement of claims and policy holders' servicing. These regulations also provide for interest on delayed payment of the claims and a free lock-in period of 15 days by the prospects/policy holders.
- IRDA has also specified the file and use procedure wherein all insurers are required to file the insurance products with it before their launch in the market so that it can verify that the interest of policy holders is protected, under the terms of the policy document.
- Constitution of a cell within the authority headed by the executive director to receive complaints/ grievances from the holders of insurance policies. The cell looks into genuine cases of delay in the settlement of public grievances. However, the cell does not function as an underwriter nor does it decide on issues like the adoption of underwriting practices, the claims procedure etc., by the insurers.
- Making it compulsory for every life insurer to make available the premium rates with a facility of a premium calculator on its web-site, for the information of public.
- Representatives of the Chambers of Commerce have been nominated on the Insurance Councils and the Tariff Advisory Committee (TAC), to ensure that the views of the consumers are considered, while taking policy decisions.
- Insurers are required to have a consumer representative on their board.
- It is obligatory on the part of the insurance companies to disclose clearly the benefits, terms and conditions under the policy document.
- Advertisements issued by the insurers are required to make proper disclosures in order to ensure that they do not mislead the insuring public.
- Insurers are required to set up proper grievance redressal machinery at their head office and at the other offices in the country.
- Third party administrators have been introduced in the health sector, to provide improved health insurance services viz., cashless cover, and other add-on facilities.
- To serve better the interests of the insured public in general and insurance industry in particular, brokers have been licensed as intermediaries. The broker renders advice on appropriate insurance cover and terms thereof, keeps up to date on the variety of available insurance products and submits quotations received from insurers for consideration of the client.

International Presence of the IRDA

The IRDA is a member of the International Association of Insurance Supervisors, (IAIS) headquartered at Basel, Switzerland. The IAIS is an organisation set up by regulators and supervisors of insurance industry. The aims and objectives of the IAIS are to bring in prudential regulations, to prescribe guidelines for the insurance supervisors to observe the industry, to promote international cooperation and understanding among the supervisors, and to represent before world forums the cause of the insurance industry and the matter of its functioning and regulation. The IRDA is a member of the Emerging Markets and Technical Committees. Its chairman is also a member of the Accounting Sub-Committee and the Insurance Frauds Committee. The IRDA is putting in efforts to bring the Indian insurance market to international standards in areas of financial viability, competence, technology and prudential regulations.

Policy Holder's Grievances Redressal System

Grievance arises when the insurer's services do not match with the costumer (policyholder's) expectations. This gap may arise on account of delay in claims settlement, delay in issuance of policies and non-availability of policies (insurers refusing to cover health risk of the aged), unclear policy wordings, wrongful repudiation/rejection of claims and inadequate material information about the products sold. The policy holder's grievances redressal system has been put in place for redressal of Policy holder's grievances. The system consists of: (i) The in-house grievance redressal cells of the insurers (ii) consumer courts and (iii) civil courts (Figure 16.2).

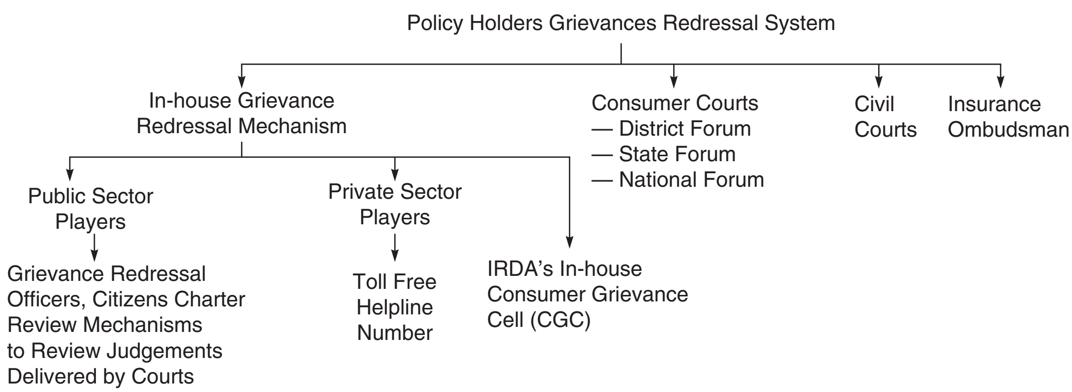

Figure 16.2 Policy Holder's Grievances Redressal System

Policy Holder's Grievances Redressal System

- Insurance Ombudsman provides a forum for resolving disputes and complaints from the aggrieved insured public or their legal heirs against insurance companies

The Insurers have recognised the importance of retention of customers as this business is based on trust which ultimately helps in building long-term relationships between the contracting parties. In order to deliver value to the customer, insurers have set up internal grievance redressal cells to reduce and address consumer grievance. Public sector players like LIC and GIC have set up their own internal grievance redressal machinery—nominating grievance redressal officers and adoption of customer relationship management (CRM) culture in its operations. The Government has prescribed a citizens' charter for all public offices to address some of the complaints. LIC has set up review committees consisting of retired judges to review the judgments delivered by courts. The private sector companies have provided a toll free helpline number to the customers.

A policy holder can take recourse to the judicial frame to address his grievance. The Consumer Protection Act, 1986 was enacted to provide a simpler and quicker access to redressal of consumer grievances. The Act for the first time defined 'consumer' and provided machinery whereby consumers can file their complaints against erring suppliers which will be entertained by Consumer Forums with special powers. This Act providers three–tier Courts–District, State and National- for adjudication of consumer disputes. The district forum is the lowest level court situated in the district headquarters. It can hear cases involving amounts of Rs. 20 lakh. Above the district forum are state-level consumer courts known as state commission situated in the capital of the state. They can hear cases involving an amount more than Rs. twenty lakhs and up to rupees one crore. It has also jurisdiction to hear appeal against the orders of District Forum of that particular state. The national commission is on the top hierarchy of consumer courts and is situated in Delhi. It can hear cases involving amounts above rupees one crore and also hear appeals against the order of state commission.

There is a three-tier system of civil courts in India. At the lowest level are the district courts presided over by a district judge administering justice at a district level. These courts are under administrative and judicial control of the high court of the state to which the district concerned belongs. High courts are the principal civil courts of original jurisdiction in the state or a union territory. At the apex of the hierarchy of the judicial system in India is the Supreme Court of India.

The judicial process is a costly and time-consuming mechanism for redressal of disputes. To provide the insured a speedy and inexpensive grievance redressal system, the Government of India promulgated

Redressal of Public Grievances (RPG) Rules 1988 (under the Insurance Act 1938) to setup an institution of ombudsman. The office of Insurance Ombudsman is a step in building up the confidence of the policy holders in insurers. The Insurance Council is the administrative body of this institution and it has appointed 12 ombudsmen across the country since 1999. The objective of Insurance Ombudsman is to provide a forum for resolving disputes and complaints from the aggrieved insured public or their legal heirs against insurance companies operating in general insurance business and life insurance business in public and private sector. The insurance ombudsman is empowered to receive and consider written complaints in respect of insurance contracts on personal lines where the insured amount is less than Rs. 20 lakh. Insurance on 'personal lines' means a policy taken or given in an individual capacity, e.g., life insurance, personal accident insurance, insurance of property of the individual such as motor vehicle, household articles, mediclaim insurance, etc.

The complaints can relate to:

1. Grievance against insurer
2. Partial or total repudiation of claims by the insurer
3. Dispute in regard to premium paid or payable in terms of the policy
4. Dispute on the legal construction of the policy in so far as such dispute relate to claims.
5. Delay in settlement of claims.
6. Non-issue of any insurance document to customers after receipt of premium.

For a complaint to be admissible, it is essential that:

1. Before approaching the ombudsman, the complainant should have made a representation to the insurer who had either rejected the complaint or the complainant had not received any reply within one month or the complainant is not satisfied with the reply given by the insurer.
2. The complaint is made within one year after the insurer had rejected the complaint or sent his final reply on the complainant's representation.
3. The subject matter of complaint should not be pending or considered by any Court or Consumer Forum or Arbitrator.
4. Compensation/relief claimed should not exceed Rs. 20 lakh.

An ombudsman is entrusted with two functions—conciliation and award making. The awards passed by an ombudsman are binding on insurers and they are required to honor the awards within three months.

The Insurance Ombudsman Scheme is complementary to the regulatory functions of IRDA. Till March 2008, out of the 12,812 complaints received, the ombudsman dismissed 1,156 cases , disposed 88.92 per cent complaints through 2,664 awards, and recommended to the companies 352 cases for settlement at their end.

Business to be Done by an Insurer in the Rural Sector

In order to spread insurance to rural areas, the IRDA has made it mandatory for every insurer to undertake business in social and rural sectors.

- The rural sector (where the population is not more than 5,000, population density not more than 400 per sq km, and at least 75 per cent of male working population is engaged in agriculture).

The IRDA relaxed stringent rural sector obligations in September 2002. It removed the strict rural sector definition that was acting as an impediment for new private sector insurance companies to meet their compulsory rural sector obligations. With this, the insurance companies will be allowed to follow the census of India style for identifying and tapping the rural business market. Henceforth, anything that is not urban will be rural.

Census Year	*Population (In Crore)*		*Percentage of Rural to Total*
	Rural	*Total*	
1961	36.0	43.9	82.0
1971	43.9	54.8	80.1
1981	52.4	68.3	76.6
1991	62.9	84.6	74.3
1991	*37.7	84.6	44.5

* As per the IRDA.
Source: The Economic Times, September 27, 2002, p.8.

Every insurer, who carries an insurance business after the commencement of the IRDA Act, 1999, is required to ensure that the following obligations are undertaken during the first ten financial years, in respect of the following:

In respect of a life insurer:

- Five per cent in the first financial year.
- Seven per cent in the second financial year.
- Ten per cent in the third financial year.
- Twelve per cent in the fourth financial year.
- Fifteen per cent in the fifth and sixth financial years.
- Eighteen per cent in the seventh financial year.
- Nineteen per cent in the eighth and ninth financial years.
- Twenty per cent in the tenth financial year of total policies written direct in that year.

In respect of a general insurer:

- Two per cent in the first financial year.
- Three per cent in the second financial year.
- Five per cent in the seventh financial year.
- Six per cent in the eighth financial year.
- Seven per cent in the ninth and tenth financial years, of total gross premium income written direct in that year.
- Social Sector (includes unorganised sector, informal sector, economically vulnerable or backward classes, and other categories of persons, both rural and urban areas) in respect of all insurers.
- Five thousand lives in the first financial year.
- Seven thousand five hundred lives in the second financial year.
- Ten thousand lives in the third financial year.
- Fifteen thousand lives in the fourth financial year.
- Twenty thousand lives in the fifth and sixth years.
- Twenty-five thousand lives in the seventh financial year.
- Thirty-five thousand lives in the eighth financial year.
- Forty-five thousand lives in the ninth financial year.
- Fifty-five thousand lives in the tenth financial year.

The obligations of the insurer towards the rural and social sectors for the tenth financial year shall also be applicable in respect of the financial years thereafter.

The obligations of public sector insurance companies:

1. Life Insurance Corporation of India:
   a. Rural sector
      i. Twenty-four per cent in the financial year 2007–08
      ii. Twenty-five per cent in the financial years 2008–09 and 2009–10 of the total policies written direct in that year
   b. Social sector: Twenty lakh lives in the financial years 2007–08, 2008–09, and 2009–10
2. General Insurers;
   a. Rural sector:
      i. Six per cent in the financial year 2007–08
      ii. Seven per cent in the financial years 2008–09 and 2009–10 of the total gross premium income written direct in that year
   b. Social sector:
      i. For the financial year 2007–08, the average of the number of lives covered by the respective insurer in the social sector from the financial years 2002–03 to 2004–05 or 5.50 lakh lives, whichever is higher
      ii. For the financial year 2008–09, the obligations of the existing insurers shall increase by 10 per cent over the number of persons prescribed for the financial year 2007–08
      iii. For the financial year 2009–10, the obligations of the existing insurers shall increase by 10 per cent over the number of persons prescribed for the financial year 2009–09

The obligations of the insurers, towards the rural and the social sectors, for the financial year 2009–10 shall also be applicable in the financial years thereafter.

Rural and Social Sector Obligations for New Entrants

Provided that in cases where an insurance company commences operations in the second-half of the financial year and is in operation for less than six months as at March 31st of the relevant financial year (i) no rural or social obligation shall be applicable for the said period and (ii) the annual obligations as indicated in the regulations shall be reckoned from the next financial year which shall be considered as the first year of operations for the purpose of compliance. In cases, where an insurance company commences operations in the first-half of the financial year, the applicable obligations shall be 50 per cent of the obligations as specified in these regulations.

INSURANCE INTERMEDIARIES

Distribution is a vital link in the insurance value chain. Its history could be as long as the history of insurance itself. Even in this information age, insurers have found it difficult to do away with distribution channels. A large chunk of insurance business in the world is still being brought by distribution channels. This is because insurance still remains under-sold. Despite the publicity and the increasing awareness, it continues to be a chance affair for the layman. Therefore, this knowledge gap between the insurer and the insured has to be bridged.

Intermediaries are a vital link between the insurer and the insured. They act as a bridge between the insurer and insured and thereby help in increasing the breadth and depth of the insurance market. They are a key distribution channel to an insurer.

The intermediaries associated with the insurance business are agents and surveyors and loss assessors, brokers, third party administrators and banks.

Agents

Agents are just like the retailers of any consumer product who help in selling and distributing the product. An agent is a person licensed by the Controller of Insurance to do insurance business. After obtaining the license, agents have to enroll with the insurance company to be authorised to work as agents. Agents get the license to sell policies of only one life insurance company and one non-life insurance company at a time. They form a vital link between the insurer and the customer. They are paid a commission on every policy they sell. An agent is now viewed as a financial advisor who is responsible for understanding the customer's needs, recommending and selling policies, and providing any further support. LIC has a network of around 11.93 lakh agents while the private sector insurers have a network of 13.26 agents. As on March 31, 2008, there were over 25.20 lakh agents and 2,415 corporate agents. According to the IRDA guidelines, the applicant for a corporate agency should normally be a company whose principal business should be other than distribution of insurance products. Insurance business should be a subsidiary activity. However, in exceptional cases, grant of corporate agencies for exclusively doing insurance intermediation can be considered by an insurer. In respect of such cases, the corporate agent should be a public limited company with a minimum share capital of Rs.15 lakh. The capital should be kept in the form of a deposit in a bank account to be utilised for setting up the office, or be invested in assets, subject to approval by the insurer. Persons who are not regulated by the RBI are not eligible for corporate agency license, unless they have a substantial client base of their own or access to data to identify the prospective policy holders and have a turnover, assets or income of atleast Rs. 15 crore. Only those persons which are part of a group having Indian Insurance company or a scheduled commercial bank within the group shall be eligible for issue of corporate agency license to do insurance business as the principal business provided this shall be the only corporate agency amongst all the entities in the group. Corporate agencies, including bancassurance, contributed over three-fourths of the business mobilised through all the new channels during 2008–09.

Insurance is a financial product requiring technical and product knowledge. In order to develop agents as independent and competent financial advisors, the IRDA has stipulated compulsory training of 100 hours followed by an eligibility test for agents. Those who successfully complete the test and training are granted a license by the IRDA. The IRDA permits companies, banks, and non-banking finance companies (NBFCs) to become insurance agents. Corporate agents will be tied to a single insurance company and will represent the insurance company in selling insurance product to prospective customers.

Requirements for an Agent

- Educational qualification: Class X examination (in rural areas) Class XII (urban areas)
- Formal qualification: 100 hours of training for life/general insurance. 150 hours training for both
- Licensing qualification: Examination to be conducted by the Insurance Institute of India

Surveyors and Loss Assessors

• Surveyors and Loss Assessors are independent professionals who assess the loss or damage when a claim is notified under a policy issued

Surveyors and loss assessors are independent professionals appointed by an insurance company to assess the loss or damage when a claim is notified under a policy issued by them. An insurance surveyor must be duly licensed by the IRDA which has a laid down code of conduct for them. It has also classified them into three categories—A, B, and C—based on their skill and experience. Insurance companies allot them work depending on their competence in the relevant fields. In other words, the selection of the surveyor by the insurance company depends on his qualification and the estimated loss involved.

The duties of a surveyor are to investigate and confirm the cause of loss, assess the quantum of loss, determine the liability of the insurers, advise the insured to take necessary steps to contain the loss, and act on behalf of the insurance company in disposal of salvage to realise maximum value. The surveyor also serves as risk advisors to the general insurance companies. They advise these companies on how the risk can be minimised, based on their technical knowledge and practices.

A surveyor is an independent professional who is impartial and objective in his assessment. The IRDA has laid down the financial limits for categorised surveyors to carry out a survey. The total number of categorised surveyors under Categories A, B, and C are 2,209; 9,824, and 12,326 respectively.

Brokers

Brokers are just like agents but with a difference. Unlike agents, they can sell policies of several life and non-life insurance companies at a time.

Insurance brokers are professionals who assess risk on behalf of their clients, provide advice on mitigation of the said risk, identify the optimal insurance policy structure, bring together the insurer and the insured, carry out the preparatory work for entering into the insurance contracts, and facilitate processing where claims arise. The brokers are retained by the insureds, and are thus primarily responsible to them.

The IRDA has allowed brokers to enter the insurance industry. To ensure the quality of service provided to the end customer, the IRDA has created four categories of brokers and specified the minimum capital requirement for each of the category.

The IRDA has made it mandatory for every insurance broker to take a professional indemnity insurance cover with an insurer in India, to indemnify him against breach of duty, libel, slander, loss of money, or other property for which he is legally liable in consequence of any financial or fraudulent act, legal liability incurred by reason of loss of documents, and costs and expenses incurred in replacing such documents, or any financial penalty imposed on him.

The functions of brokers are specified by the IRDA and include provision of technical advice, advice on developments in the insurance market and the law, providing written acknowledgments and progress reports, and assisting in the negotiation of claims. The play a key role in designing the insurance cover and documentation of the insurance policy to ensure that all terms agreed at the time of striking the deal are covered in the policy.

Category of Insurance Broker	*Type of Broker*	*Minimum Capital Required (Rs. in Lakhs)*
Category I	Direct General Insurance Broker	50
Category II	Direct Life Insurance Broker	50
Category III	Reinsurance Broker	200
Category IV	Composite Broker	250

The functions of brokers are quite distinct from that of agents—the traditional intermediary. Agents are the representatives of the insurers through whom they sell their insurance products while brokers _are representatives of the insurance buyer to whom they provide the service of comparing the policies offered by different insurers with expertise. Brokers are free to source the best product, service and price arrangement from any insurance company in India. They are also free to deal with multiple insurance companies.

The remuneration of direct life and direct general insurance cannot exceed 17.5 per cent of the premium payable on a policy, while that of reinsurance and composite brokers is determined by the market forces.

The IRDA has opened the doors of PSUs to insurance brokers. The brokerage/commission will be payable to all the brokers who intend to service the non-tariff business of public sector entities and only the tariff portion of the business shall continue to remain out of the scope of the activities of an insurance broker.

TABLE 16.1 New Business Premium (Individual and Group) of Life Insurers for 2008–09 Channel Wise

(Figures In Per Cent)

Life Insurer	*Individual Agents*	*Corporate Agents*		*Brokers*	*Direct Selling*	*Total Business (Individual & Group)*	*New Referrals*
		Banks	*Others**				
Private Total	54.94	20.78	10.92	2.00	11.37	100.00	9.27
LIC#	97.34	1.70	0.49	0.47	–	100.00	0.03
Industry Total	**79.57**	**9.69**	**4.86**	**1.11**	**4.76**	**100.00**	**3.90**

*Any entity other than banks but licensed as a corporate agent.
Does not include its overseas new business premium.

Note: 1. New business premium includes first year premium and single premium.
2. The leads obtained through referral arrangements have been included in the respective channels.

Source: IRDA, *Annual Report,* 2008–09.

There are 281 insurance brokers approved and registered by the IRDAs—242 are direct brokers, 33 are composite brokers, and 6 are reinsurance brokers.

The entry of brokers, has increased competition and made insurance a market-driven industry. Introduction of this intermediary in the insurance market is likely to result in improvement in customer service, transfer of international know-how on insurance into the country, increase insurance penetration, and improve the retention levels within the country. The role of the broker will increase in the de-tariff market.

Table 16.1 reveals the use of channels of distribution by the life insurers during the year 2008–09. Individual agents account for the maximum business in insurance in the case of both LIC and private sector companies.

Third Party Administrators

Third party administrators (TPAs) are the middlemen in the healthcare delivery chain, which links physicians, hospitals, clinics, home health, long-term care facilities and pharmacies. In the US, most insurance companies have their own TPAs, while, in India, TPAs are separate external entities. These TPAs serve more than one insurer at a time. TPAs get a licence for a period of three years and after three years they have to get the licence renewed.

- TPAs are licensed by IRDA for the provision of health cover

Third party administrators (TPAs) are distributors of insurance products in the health insurance sector. They facilitate the smooth operation of a health cover by acting as a link between the insurance companies and their clients and hospitals. The IRDA has set up the minimum cap of Rs. one crore for TPAs. The IRDA has also prescribed a qualified medical doctor as one of the corporate directors to obtain a licence. TPAs are engaged for post-claims management. They enable cashless payment of claims to the insured wherein they settle claims with hospital instead of insurers.

In October 2002, the four state-owned non-life insurance companies—National Insurance, New India Assurance, Oriental Insurance and United India Insurance appointed third-party administrators to perform the task of networking with hospitals and screening health insurance claims. The TPAs were given a commission of 5.6 per cent of the mediclaim insurance premium for providing this service. The four state owned general insurers have empanelled over two dozen third party administrations (TPAs) for managing the 'mediclaim' policy. All new mediclaim policies will be serviced by TPAs. Insurers have allocated divisions falling under each regional office to an external TPA. The data, in respect of all new policies, will be forwarded to the TPAs who, within seven days will issue an identity card and guidebook detailing claim procedures. The TPAs will man 24-hour call centres and direct the insured to a suitable hospital, with which they have a tie up, in the event of an ailment. The TPAs will also be provided with float funds by insurance companies to settle claims with hospitals. Insurers will pay a fee of around 5.5 per cent of the premium which will be passed on to the insured.

- Only a company with a minimum paid up capital of Rs. 1 crore and working capital of not less than Rs. 1 crore can function as a TPA. Atleast one of the directors of the TPA shall be a qualified medical doctor.

The TPAs empanelled by the four insurers have a network ranging from expensive hospitals to small nursing homes. They are offering cashless hospitalisation services since October 2002, through their extensive network. The cashless facility offers the policy holder a distinct benefit of not having to pay the hospital. The policy holder has to merely quote the policy number and display the health card which frees him from the cumbersome reimbursement procedures of a traditional policy. Table 16.2 reveals that there has been a marked improvement in the time taken to settle claims by the TPAs. However, the companies received a lot of complaints from policyholders regarding the functioning of TPAs.

TABLE 16.2 Third Party Administrators Claims Data

Claims Received	*Claims Settled*			
	Within 1 Month	*Within 1–3 Months*	*Within 3–6 Months*	*More than 6 Months*
2003–04	2,54,823	1,20,846	39,975	9,160
4,74,939	(53.65)	(25.44)	(8.42)	(1.93)
2004–05	5,11,794	1,83,171	30,531	9,621
8,07,114	(63.41)	(22.69)	(3.78)	(1.19)
2005–06	7,30,269	2,91,766	36,051	1,04,740
11,26,895	(64.80)	(25.89)	(3.20)	(9.29)
2006–07	14,06,815	3,67,298	44,711	10,291
18,40,298	(76.44)	(19.96)	(2.43)	(0.56)
2007–08	15,13,375	3,02,830	48,908	12,660
19,86,859	(76.17)	(15.24)	(2.46)	(0.64)
2008–09	18,47,212	3,60,173	61,022	12,0934
24,46,713	(75.5)	(14.72)	(2.50)	(0.53)

Note: Figure in brackets indicates ratio (in per cent) of claims settled to the total claims received.
Source: IRDA, *Annual Report,* 2008–09.

TABLE 16.3 Third Party Administrators (Infrastructure) 2007–08

Sl. No.	*Name of TPA*	*Hospitals Added in the Network*	*Number of Offices/ Branches Opened*	*Manpower Including Doctors/ Professionals Added*
1	Medi Assist India Pvt. Ltd.	1,567	15	379
2	MD India Healthcare Services (P) Ltd.	401	24	254
3	Paramount Health Services	247	–	–
4	Heritage Health TPA Pvt. Ltd.	574	2	47
5	Medicare TPA Services (I) Pvt. Ltd.	833	4	29
6	Family Health Plan	–	(2)	(164)
7	Raksha TPA Pvt. Ltd.	655	5	92
8	TTK Healthcare Services Ltd.	756	1	46
9	East West Assist Pvt. Ltd.	155	–	28
10	Med Save Health Care Ltd.	443	3	3
11	Genins India Ltd.	847	5	62
12	Alankit Healthcare	1,322	–	29
13	Health India TPA Services Pvt. Ltd.	539	3	63
14	Good Health Plan Ltd.	2,745	5	75
15	Vipul Medcrop Private Ltd.	97	2	86
16	Park Mediclaim Consultants Pvt. Ltd.	190	1	21
17	Rothshield Healthcare (TPA) Services Ltd.	976	4	11
	Total	**12,347**	**72**	**1,061**

Source: IRDA, *Annual Report,* 2007–08.

As on March 31, 2008, there were 28 empanelled TPAs and nationalised insurance companies were using the services of about 17 TPAs (Table 16.3). The growth of this particular line of business is hampered due to multiple complaints about servicing the insured, including repudiation of claims due to conditions/exclusions in the policy; non-settlement of claim/delay in settlement of claim; cancellation of policy without giving any notice; settlement of claim for lesser amount; refusal to renew policy in case of adverse claims experience; non-issue of list of hospitals; improper guidance by 24-hour help lines; inaccessibility of toll-free numbers; non-receipt of settlement cheques within the stipulated time; nonreceipt of photo identity cards; wrong insertion of photos/names in the identity cards; loading at the time of renewals (whether claim/no claim); and hike in premium for introduction of TPAs.

Bancassurance

Bancassurance is insurance companies tying up with banks to sell insurance products. Bancassurance is an innovative distribution channel in India. In France, over half of the insurance products are sold through banks, while the share of bancassurance in Hongkong is 25 per cent, UK 18 per cent, and Singapore 15 per cent. In the US, banks lease space to insurers and retail products of multiple insurers just similar to a retailer selling different products of different companies under one roof.

- Bancassurance is an innovative distribution channel involving banks to sell insurance products of insurance companies

The RBI, in recognition of the symbiotic relationship between banking and insurance industries, identified three routes of participation in the insurance business, namely, (i) providing fee-based insurance services without risk participation, (ii) investing in an insurance company for providing infrastructure and services support, and (iii) setting up of a separate joint venture insurance company with risk participation. Bancassurance emerged as a preferred route for banks as other routes involve compliance to stringent entry norms. Moreover, banks can increase their profits without setting aside additional capital. Banks have, of late, realised that they have to leverage their distribution strengths to increase their fee-based income for survival. Over 20 banks have tied up with public and private sector insurance companies to sell their products. The synergy between some products (such as insurance cover for housing loans) makes banks ideal partners of insurance companies. In addition, through this partnership, new insurance companies get a readymade consumer data-base and higher reach to compete with public sector insurance companies.

Cooperative banks, cover more than 65 per cent of the rural population. These banks can serve as important vehicles for distributing insurance products in rural areas. The private and foreign banks are aggressive sellers of insurance products as commissions are over 35 per cent of the first year premium. Looking to the attractive margins in bancassurance, the public sector banks are focusing on this business.

In order to expand their reach, life insurance companies are coming up with **alternate distribution channels**.

Direct Marketing The insurance company gets a data base of potential customers, contacts them on the telephone to market different policies of the company. Companies are increasingly targeting customers of foreign banks as they are accustomed to tele marketing. ICICI Prudential Life Insurance Company sent 50,000 direct mailers to office-goers in Mumbai through their lunch boxes.

Automobile Manufacturer Tie-ups Non-life insurers have tied up with automobile manufacturers to provide 'free insurance' through their authorised car dealers for all new cars sold. Under the scheme of free insurance the insured does not pay the first premium but it is paid by the car dealer who is then compensated by the manufacturer.

Forex Dealers Large travel-related relationship services such as Thomas Cook and Western Union who have wide distribution networks are tapped by insurance companies to canvass and sell overseas travel insurance policies.

Worksite Marketing Insurance companies through their skilled marketing sell tailor-made insurance policies to individual employees of large organisations.

Internet Insurance companies sell products such as motor insurance, home insurance and personal accident insurance over the net.

Departmental Stores/Retailers of White Goods Insurance companies tie up with large departmental chains such as Shoppers' Stop or Westside to sell their products.

Marine Cargo Insurance Through Clearing and Forwarding (C&F) Agents/Transporters/Carrier Companies Insurance companies provide these agents technology support which enables them to issue marine policies anywhere and anytime.

RISK MANAGEMENT

The term 'risk' is generally used to refer to a situation which bears a probability of some financial loss. It indicates uncertainty about a situation or a circumstance. However, it is only those circumstances or the part of a circumstance that bears the possibility of a 'loss', that is referred to as risk. Thus risk can be said to mean an uncertainty that has a likelihood of imposing some loss generally financial loss. Going further, in the insurance world, the term risk is used to refer to a property or an individual (in case of life insurance) insured. Technically the subject matter insured is called the 'exposure unit'. Risk is also used interchangeably with perils like fire, earthquake, explosion, etc. In fact, operation of perils involves the risk of loss. Again risk is also used to describe a hazardous situation like storage of inflammable material. Presence of a 'hazard' increases the risk of loss. Thus notwithstanding the context in which it is used, risk would mean simply 'a probability of loss'. Risk management as a branch of knowledge deals with entire gamut of issues relating to risks, starting from understanding the nature of risks and going up to methods of handling risks and financing risks. Risk management may be defined as the process of planning, organising, directing and controlling the resources and activities of an organisation in order to minimise the adverse effects of potential losses at the least possible cost.

Increasing number of natural disasters, changes in demographic structure, volatility in financial markets, rapid growth of financial services, regulatory changes, information explosion, and de-tariffing of premium structures are just some of the factors aggravating the risk profile of insurance companies. They have come to terms with these changes and have started considering risk management as one of the strategic functions.

In addition to the pure risks of property, liability, and manpower, insurers have to counter certain risks peculiar to the business of insurance. These risks are: Portfolio risks, solvency risks, marketing risks, market risks, and operational risks.

Risks in Insurance Business

- portfolio
- solvency
- marketing
- market
- operational

- **Portfolio risks:** Portfolio for an insurer means the mix of business done by an insurer. For example, in case of life insurance, portfolio consists of term policies, endowment policies, unitlinked plans, etc. In case of non-life it could be fire, motor, health, etc. In order to optimise profitability, it is essential for an insurer to maintain the right balance in its business portfolio. Any distortion in portfolio is likely to expose the insurer to losses. Proper portfolio planning and constant monitoring and control over operations is the key to control this risk.
- **Solvency risks:** The more is the business of the insurer, the higher is the risk exposure in terms of expected losses. How much loss can an insurer bear on his own? This depends on the backup in terms of capital represented by assets of the insurer. This also involves valuation of outstanding liability in respect of policies issued by the insurer. In case of life insurance, such a valuation is done by actuaries. The capital has to be commensurate with the outstanding liability otherwise the insurer runs the risk of going insolvent in the event of huge losses. The IRDA has prescribed stringent norms in respect of capital adequacy to ensure that the risk of insolvency is addressed in right earnest. Thus with increase in business of an insurer, either the capital has to be raised or the excess risk exposure has to be transferred through reinsurance.
- **Marketing risks:** Insurance is a business of volumes and in order to reach out to the targeted segments of customers, marketing plays a pivotal role. Any change in demographic structure including consumer preference gives rise to marketing risks. Changes in demographic structure such as decrease in death rates, change in life styles and new killer diseases like SARS and AIDS have altered the demographic composition of the population. The rapid growth of financial services has led to development of more and varied alternate channels of distribution, tie-ups, and alliances. The deregulation of insurance industry has led to the entry of private sector players which in turn, has increased competition. A well-defined marketing strategy and positioning is critical to overcome all these risks.
- **Market risks:** Investment income is a crucial source of revenue for insurers. The revenue mix in insurance business is largely dominated by investment incomes. In order to maintain profitability, insurers have to be aggressive in investing their funds in high risk, high return securities which gives rise to market risk. The volatility in financial markets has made management of investible funds challenging. Market risk cannot be completely eliminated by diversification. Hedging tools like futures and options and prudent investment management help in mitigating this risk.
- **Operational risk:** Insurance is a service-intensive business. Policy and claims servicing are backbones of insurance business. These days in order to raise service standards, information technology is being used in operations in a big way. Centralised servers storing the entire data of the insurer and wider area networks (WAN) pose a definite operational risk while enhancing the service standards. Any accident or calamity of the server site can lead to a total breakdown of operations countrywide resulting in loss of business. Business continuity planning, remotely located proxy servers, proper back-up of data, and effective contingency plans are some of the steps towards operational risk management.

The insurance companies need to institutionalise risk management culture for successfully implementing risk management.

GENERAL INSURANCE

General (non-life) insurance provides a short-term coverage, usually for a period of one year. General insurers transact fire insurance, motor insurance, marine insurance, and miscellaneous insurance business. Among these categories fire and motor insurance business are predominant. Motor vehicle insurance is compulsory in India and the motor insurance portfolio constitutes around 40 per cent of the total gross premium collected by the general insurance industry. Moreover, motor insurance due to third party liability claims has substantially contributed to underwriting losses.

- General or non-life insurance is insurance for a period of one year

The government nationalised the general insurance business on January 1, 1973, by passing the General Insurance Business (Nationalisation) Act, 1972. Prior to nationalisation, the general insurance business was concentrated in urban areas catering to the needs of trade and industry.

There are four nationalised and nine private sector general insurance companies. The government notified the General Insurance Corporation of India (GIC) as an Indian reinsurer in November 2000. With this, the four public sector companies which were subsidiaries of GIC have been delinked from it and are now broadly run as board-managed companies. The four public sector companies are: The Oriental Insurance Company Limited, The New India Assurance Company Limited, The National Insurance Company Limited, and The United India Insurance Company Limited.

The Oriental Insurance Company Limited The Oriental Insurance Company Limited (OICL) is one of the oldest insurance companies established in the year 1947. It was earlier known as The Oriental Fire and General Insurance Company Limited. It transacts all kinds of non-life insurance business, ranging from insurance covers for very big projects to small rural insurance covers. The company has 23 regional offices, 311 divisional offices, and 635 branch offices in various cities of the country. The company has overseas operations in Nepal, Kuwait, and Dubai. It has reinsurance connections spread all over the world.

The company was a pioneer in many areas and products. It was the first to start motor third party conciliating proceedings and front office computerisation. In addition, it was the first to issue tailormade cover for cellular communication systems, directors and officers liability policy, advance loss of profits policy, a package policy under mega risk to PSU oil grants and underwrite the biggest grass root refinery project of Reliance at Jamnagar. It has designed special covers for large projects like power plants, petrochemicals, steel, and chemical plants.

The New India Assurance Company Limited The New India Assurance Company Limited was established by Sir Dorab Tata on July 23, 1919. New India was the first fully-owned insurance company in India which was set up to provide insurance protection to Indians. It was nationalised in 1973 with merger of over 23 Indian companies. It commenced overseas operations in 1920.

It has 26 regional offices, 397 divisional offices, and 688 branch offices. It commenced overseas operations in 1920. It has overseas presence in 27 countries like Japan, UK, Middle East, Fiji, and Australia. It has a network of 18 branches, 12 agencies, two associate companies, and two subsidiary companies. Its overseas premium was Rs. 937 crore in 2005–06, which accounted for more than 90 per cent of the total overseas premium in India. It has a strong operating performance and market position. It is one of the largest non-life insurer in the Afro-Asian region excluding Japan.

It is a pioneer among the Indian companies on various fronts. It was the first to set up an Aviation Insurance Department in 1946, to handle the hull insurance requirements of the Indian Shipping Fleet, to establish its own training school, to introduce the concept of 'model offices training', to create technical departments in Engineering, and to start satellite insurance—INSAT 2E.

National Insurance Company Limited National Insurance Company Limited (NIC) was incorporated in the year 1906. In 1972, 22 foreign and 11 Indian insurance companies were amalgamated with National Insurance Company Limited, Headquartered in Kolkata. NIC's network of over 964 offices with around 20,077 trained workers is spread all over the country. NIC has a strong presence in northern and eastern India. The company carries out its foreign operations from its branch offices in Nepal and Hong Kong.

It caters to the diverse requirements of more than 7.5 million policy holders by offering them more than 180 policies. It has paid a constant annual dividend to government at 25 per cent, amounting to Rs. 5,450 million, since nationalisation.

National Insurance Company Limited ranks among the top global business insurers.

United India Insurance Company Limited Headquartered in Chennai, United India Insurance Company Limited is the second largest insurer by size of premium and market share. The company's major thrust areas are fire, marine, motor, and miscellaneous. It has a countrywide presence through a vast network of 22 regional offices, 313 divisional offices, and 789 branch offices, and manpower of 21,000 employees.

Two new public sector entrants in the general insurance business are:

- Agriculture Insurance Company of India Ltd
- Export Credit Guarantee Corporation Limited

Agriculture Insurance Company of India A well-designed institutional arrangement such as insurance has to be put in place to avoid risks in agriculture, covering all farmers and crops. The Agriculture Insurance Company of India Limited was setup on December 20, 2002 under the Companies Act, 1956 with authorised and paid-up capital of Rs. 1,500 crore and Rs. 200 crore, respectively. NABARD'S contribution in the equity is 30 per cent, while the contribution from GIC is 35 per cent and 8.75 per cent each from four public sector general insurance comparable.

The Agricultural Insurance Company (AIC) has been granted a license on October 29, 2003, to transact crop insurance business. The NAIS scheme is now implemented by AIC. National Agricultural Insurance Scheme (NAIS) is basically in the nature of group insurance schemes aimed at farmers taking crop loans from banks. The National Crop Insurance Scheme aims at providing insurance coverage and financial support to the farmers in the event of natural calamities, pests and diseases, besides encouraging the farmers to adopt progressive farming practices, high value inputs and higher technology in cultivation in order to help stabilise farm incomes, particularly in disaster years. The crop insurance has come under the purview of the Agriculture Insurance Company of India since October 2003. At present, the National Agricultural Insurance Scheme (NAIS) covers about 17 per cent of all farmers and 20 per cent of the cropped area. The Government is striving to increase the penetration by encouraging the States to bring more crops under crop insurance. The Government also directed the banks to insure all eligible crop loans under NAIS.

Agriculture Insurance Company of India Limited is the largest crop insurance provider in the world in terms of the number of farmers insured annually. AIC underwrites two types of insurance products:

Government supported products, viz., National Agricultural Insurance Scheme (NAIS) where AIC is the implementing authority. The scheme provides risk insurance for yield losses due to natural fire, storms, drought, and pests diseases. The scheme covers food crops (cereals, millets, and pulses), oilseeds and annual commercial/annual horticultural crops (sugarcane, cotton, potato, onion, ginger, coriander, chilli, jute, etc).The total sum insured under the scheme is Rs. 20,000 crore, with premium income of Rs. 562.32 crore.

Customised Products It has been designing need-based insurance products to cater to the specific needs of different farmers. These products are:

1. Weather and Index insurance products such as Varsha Bima, Coffee insurance, Wheat insurance and Mango insurance. Weather based Crop Insurance Scheme (WBCIS) is a unique Weather based Insurance Product designed to provide insurance protection against losses in crop yield resulting from adverse weather incidences. It provides payout against adverse rainfall incidence (both deficit & excess) during Kharif and adverse incidence in weather parameters like frost, heat, relative humidity, un-seasonal rainfall etc. during Rabi. It is not yield guarantee insurance like crop insurance. Crop Insurance specifically indemnifies the cultivator against shortfall in crop yield, Weather based Crop Insurance is based on the fact that weather conditions affect crop production even when a cultivator has taken all the care to ensure good harvest.

   These products cover weather-based perils and operate on 'Area Approach' basis for the purposes of compensation. Under this basis. a 'Reference Unit Area (RUA)' shall be deemed to be a homogeneous unit of Insurance. This RUA shall be notified before the commencement of the season by the State Government and all the insured cultivators of a particular insured crop in that Area will be deemed to be on par in the assessment of claims. Each RUA is linked to a Reference Weather Station (RWS), on the basis of which current weather data and the claims would be processed. The National Agricultural Insurance Scheme (NAIS) is not available for the locations and crops selected for Weather Based Crop Insurance Scheme (WBCIS).
2. Traditional and Named Peril Insurance Products such as potato insurance, bio-fuel tree/plant insurance and poppy insurance. Named Peril insurance policy is one which covers only those losses which arise on account of perils specifically listed in the contract. These products operate at individual farm level with losses being on individual basis.

AIC aims at providing financial security to person engaged in agriculture and allied activities through insurance products and other support services.

Export Credit Guarantee Corporation Credit plays a vital role in expanding export trade but it also increases the payment risks in export transactions. Hence the need for export credit insurance is felt. To fulfill this need, the Export Credit Guarantee Corporation (ECGC) of India offers a range of credit risk insurance covers to exporters against loss in export of goods and services, guarantees to banks/financial institutions to enable exporters obtain better facilities, provides overseas investment insurance to Indian companies investing in joint ventures in the form of equity/loan. These schemes enable the exporters to develop their business, explore new markets and products, and get timely and adequate export finance. The Reserve Bank of India has permitted banks to write off in addition to claims settled by ECGC the out standing export bills settled by other insurance companies which are regulated by the IRDA. This directive of the RBI gives private insurance companies a large opportunity in this business and puts them on par with ECGC.

The private sector general insurance companies are:

- Royal Sundaram Alliance Insurance Company Limited
- Reliance General Insurance Company Limited
- IFFCO Tokio General Insurance Company Limited
- TATA AIG General Insurance Company Limited
- Bajaj Allianz General Insurance Company Limited
- ICICI Lombard General Insurance Company Limited
- Cholamandalam General Insurance Company Limited
- HDFC- ERGO General Insurance Company Limited
- Star Health and Allied Insurance Company Limited
- Apollo DKV Insurance Company Limited
- Future Generali India Insurance Company Limited
- Universal Sompo General Insurance Company Limited
- Shriram General Insurance Company Limited
- Bharti AXA General Insurance Company Limited
- Raheja QBE General Insurance Company Limited

The minimum paid-up capital of the general insurance companies was raised to Rs. 100 crore under the modified Insurance Act. The four nationalised general insurance companies enhanced their paid-up capital from Rs. 40 crore to Rs. 100 crore.

The general insurance market is not as big as the life insurance market. While life insurance accounts for 81 per cent of the insurance market in India, general insurance accounts for the remaining 19 per cent.

General Insurance Products

Fire Insurance This covers the following:

- Building or flat.
- Furniture fixtures and other contents.
- Loss of profit, that is, consequential loss.

Fire insurance is a comprehensive policy which covers loss on account of fire, earthquake, riots, floods, strikes, and malicious intent. It can be taken only by the owner of the premises to be insured. A tenant cannot insure rented premises but he can insure the contents of the premises. Though fire insurance is not compulsory, lending institutions and housing finance companies insist on the premises being insured against fire. Fire rates were revised twice after nationalisation, in 1979 and 1987. Fire insurance segment is the most lucrative as fire rates are governed by tariff. The competition is maximum in this segment. Bulk of the premium comes from corporate clients with large industrial assets. Fire insurance today accounts for a fifth of business for non-life insurance companies and brings in most of their profits.

Motor Insurance This covers the following:

- Various types of cars, trucks, two-wheelers, and three-wheelers.
- There are two types of motor insurance, namely:

- Third party insurance which only insures the party/parties other than the owner in an accident. It is mandatory for all registered vehicles plying on the Indian roads, under the provisions of the Motor Vehicle Act, 1988 which require every motor vehicle in a public place to insure against third party risk.
- Comprehensive insurance which insures the owner as well as the third party involved.

- Motor insurance constituted 44% of the total industry premium (volume) during 2008–09
- Motor insurance has two district covers: (i) Own Damage (ii) Liability to third party which is compulsory by law

In motor insurance, the rates were revised upwards twice, once in 1982 and then in 1990 as the high cost of repairs coupled with third party claims had adversely affected the incurred loss ratio. Motor insurance is mandatory leading to good amount of premium collection but it is not being fancied upon as it could lead to litigation problem. Still, motor insurance is the single largest and the fastest growing business line for insurance companies. It accounts for over 40 per cent of the premium income of non-life insurance companies.The motor insurance segment was de-tariffed from January 1, 2007.

IRDA adopted a phased approach to detariffing in motor insurance.

- With a view to pre-empting a rate war in motor insurance, the regulator has asked companies not to offer vehicle cover at rates lower than 10 per cent of the tariff.
- If the companies want to offer higher discounts after January 2007, they would have to explain their pricing rationale.
- Insurers are allowed to marginally increase the rates for third party insurance.
- The third party premium would go into a special pool which will be managed by General Insurance Council and all claims will be paid out of this pool.
- If the premium in the pool is inadequate to meet all claims, the claims shortfall (losses) be shared by the insurers in proportion of their overall business size (market share).
- Insurance companies will receive 10 per cent of the premium as management expenses, while General Insurance Council will get 2.5 per cent for managing the pool.
- In the first phase, companies will issue policies and settle claims through their branches. The claims shortfall would be shared by the industry at the end of the year.

Marine Cargo Insurance This covers the following:

- Cargo in transit.
- Cargo declaration policy.

Marine Hull Insurance Inland vessels, ocean going vessels, fishing and scaling vessels, freight at risk, construction of ships, voyage insurance of various vessels, ship breaking insurance, oil and energy in respect of onshore and offshore risks, including construction risk. The IRDA removed the price control on insuring marine hulls from April 1, 2005. Now these classes of insurance come within the purview of the 'file and use' regulations, as applicable to non-tariff products. The marine hull portfolio is a Rs. 400 crore business and with detariffing, the competition among general insurers to offer cheaper prices will increase. As a result, the shipping industry will be the major beneficiary.

Non-traditional/Rural Cattle/hens, crop, water pump for agriculture, hut, other livestock.

Besides the traditional products, general insurers introduced longer term contracts such as deferred health insurance and project insurance including contractor's all-risk cover and the marine-cumerection risk cover and credit insurance.

At present only fire and motor insurance premium rate are governed the by IRDA while in case of marine, engineering and liability covers, the premium rates are determined through negotiation.

All classes of marine, hull insurance were de-tariffed with effect from April 1, 2005. With de-tarrifing, marine insurance now falls within the purview of the 'file and use' regulations, as applicable to non-tariff products of the IRDA. This measure will benefit large Indian shipping companies to negotiate and attract the best rates and select terms and conditions for themselves from the underwriters primarily because of the size of their fleets. This will result in lower insurance costs and improved operating efficiency, thus enabling Indian ship owners to compete internationally.

New products introduced by the non-life insurers include Mutual Fund Package Policy providing cover in respect of the assured's legal liability to third parties for claims towards financial loss caused by negligent act, negligent error or negligent omission on the part of an officer/employee; Third Party Liability and Asset Protection covers are available in respect of mutual fund covering their business operations; Pollution Liability Package Policy intended to cover damage costs of the insured due to slow and gradual pollution activities; Even Insurance Policy indemnifies the insured against the loss or damage due to cancellation of event. Weather insurance cover has been launched for the farming community, which suffers high losses year after year due to vagaries of nature. The specific products introduced by the insurers, which were aimed at the rural markets include Weather Insurance, Farm Income Insurance Scheme, *Varsha Bima* (rainfall insurance), and Farmers' Package Policy.

Development of General Insurance

British and other foreign insurance companies transacted general insurance business in India through their agents. Subsequently, they established their companies in India. The Triton Insurance Company Limited was the first general insurance company established in Calcutta in 1850. Foreign companies had a monopoly in the insurance business upto the close of the nineteenth century. The first Indian company to transact general insurance business was Indian Mercantile Insurance Company Limited in Bombay in 1907. In 1957, the General Insurance Council framed a code of conduct for insuring fair transactions of general insurance business. A Controller of Insurance was appointed to implement this code of conduct.

In 1956, insurers floated a reinsurance company, India Reinsurance Corporation Limited, for retention of the general insurance business in India. In 1961, the Indian Guarantee and General Insurance Company Limited, a government company along with India Reinsurance Corporation were notified as Indian reinsurers. The insurance companies voluntarily ceded to each of them 10 per cent of their gross direct premium. In 1961, the Government of India made it mandatory for every insurer to cede 20 per cent in fire and marine cargo, 10 per cent in marine hull and miscellaneous insurance, and 5 per cent in credit and solvency business to these two reinsurers.

In 1966, Indian reinsurance companies formed the Reinsurance Pools in Fire and Hull departments for retention of higher premiums in the country. The member companies ceded a specified percentage of premium to the respective pools which were managed by the two statutory reinsurers.

A number of insurance companies indulged in unfair practices and hence the Insurance Act was amended in 1968. This provided for regulation of investment of assets, setting up of the Tariff Advisory Committee (TAC) under the chairmanship of the Controller of Insurance, minimum solvency margin, licensing of surveyors and payment of premium before commencement of risk. The general insurance business was concentrated in urban areas catering to the needs of trade and industry.

The government nationalised the general insurance business in 1972 by passing the General Insurance Business (Nationalisation) Act, 1972. One hundred and seven insurers including branches of foreign companies operating in India were amalgamated and grouped into four companies, namely, The National Insurance Company Limited, The New India Assurance Company Limited, The Oriental Insurance Company Limited, and The United India Assurance Company Limited. The General Insurance Corporation was incorporated as a holding company of these four companies in November 1972.

The general insurance industry in India is smaller than the life insurance industry. The total market size in annual premiums is about half that of life insurance. The general insurance industry in India has currently about Rs. 20,000 crore of premium income with a five year compounded annual growth rate in the 16 per cent range. The demand for general insurance is still generated by some form of mandatory or regulatory requirements. Motor vehicle insurance is compulsory and hence motor insurance premium dominates the total premium portfolio.

The growth of the general insurance business is hampered by lack of product innovation. Lack of quality data on risks and associated parameters handicaps product innovation.

Tariff Advisory Commitee

The Tariff Advisory Committee is a statutory body created under the Insurance Act, 1938. The Tariff Advisory Committee looks into the pricing of non-life insurance products. The TAC determines the tariffs of the insurance industry except for marine cargo and various personal lines of business. The tariff mechanism provides floor rates for various products. It prevents uneconomic competition and facilitates classification of risks according to their special characteristics. The TAC has now been broad based with representatives from various faculties besides the insurance industry. It has revised fire insurance and engineering tariffs.

- Tariffs are documents that prescribe the rates as well as policy coverage and conditions pertaining to a class of insurance

The TAC controls and regulates the rates, advantages, terms and conditions that may be offered by insurers in respect of general insurance business relating to fire, marine (hull), motor, engineering, and workmen compensation. With effect from May 1, 2000, a simplified fire tariff with a significant reduction in premium rates was introduced. Large risks where the threshold limit of probable maximum loss (PML) is Rs. 1,054 crore or above, at any one location, or where the sum insured at any one location is

Rs. 10,000 crore or above have been de-tariffed. These risks are beyond the tariff regime and would be guided by rates available in the international markets, which are considerably cheaper than the tariff rates.

Moreover, these mega risks require customisation of products which are not available in the Indian market. As a result, insurers can now issue comprehensive insurance package policies for mega risk on reinsurance driven rates, terms and conditions.

The tariff regime will be gradually phased out. In view of this, the IRDA has prepared a vision TAC document to spell out the future role of the TAC. The tariff advisory committee will perform the following functions:

- Collection of data on premium and claims, analysis of such data, and dissemination of the results to the insurers.
- Report to IRDA on the underwriting health of the market and any aberrations in market behaviour.
- Constitution of expert groups at the request of the General Insurance Council, to look into underwriting issues and recommend necessary action.
- Organise training of underwriters at the market level, and
- Attend to public grievances on non-availability of insurance and try to resolve the issues by discussion with insurers.

De-tariffing in Non-life Insurance

- De-tariffing is pricing of insurance products driven by market forces

Most of the non-life insurance business transacted in India was governed by tariffs. Tariffs are documents that prescribe the rates as well as policy coverage and conditions pertaining to a class of insurance. This had resulted in a very little room for competition in these areas. This also left very little incentives for rating better-managed risks, thus resulting in avoidable claim costs for the insurers. To add fuel to fire, features like adverse selection and moral hazard ensured that bottom lines of insurance always remained under pressure regardless of volume of business.

With effect from January 01, 2007 price restrictions from all tariff classes of business viz. motor, engineering, fire and workman's compensation were removed. However uniform pricing continued for motor third party risks for which a pool was created which was to be managed by GIC. In other words, insurers were allowed to rate the risk according to their own perception and experience instead of going by the fixed price mentioned in erstwhile tariffs. This opened up the price wars among the insurers and premium rates for profitable classes of business like fire and engineering have fallen substantially. Presently, the discount rates on the tariff rates for these classes range from 50 to 80 per cent. This development has been a boon in disguise for the consumers, particularly the industrial clients. For them the total outgo on insurance premium of their assets has gone down drastically. On the other hand, this has meant lower margins for insurers and lower commissions for intermediaries. Today after almost one and half years of price liberation insurers have got themselves divided into two broad categories. Those who have built substantial volumes established a sound customer base are going steady on discounts and are concentrating on picking up better risks in order to increase profitability. On the other hand, insurers who are relatively new in the market and are yet to establish themselves are concentrating on their toplines by offering heavy discounts. Price de-tariffing has also opened opportunities for public sector insurers to do their bit. They are huge entities with substantial reserves and thus can accumulate huge risks at a relatively cheaper price. Due to this, many of the large corporate accounts that had shifted to private sector insurers are now back with their old PSU insurers.

The second phase of de-tariffing was liberalising policy wordings. The erstwhile tariffs not only specified the premium rates but also defined the coverage, exclusions and conditions for each product governed by tariffs. While de-tariffing the price, it was indicated by IRDA that full de-tariffing in respect of price as well as policy wordings will be done with effect from April 01, 2008. This was a crucial move since this would have meant that not only the insurers will be charging the price at their discretion but will also be able to customise the products as per the client's requirements. For this, the IRDA had requested the General Insurance Council to draft standard policy wordings for all tariff classes of business. The insurers on the other hand were requested to file the innovative products they wanted to sell as per the 'file and use' procedure. For this the insurers were required to carry out detailed actuarial exercise for rating and drafting the policy wordings.

However this did not happen as expected. While the General Insurance Council did draft standard policy wordings, very few insurers could file their products before the deadline. Carving out new products was a new thing for the industry and despite the enthusiasm the exercise turned out to be ticklish. On the other hand the market was under going heavy to very heavy discounting on tariff rates which left very little margin for innovation. The market was so used to tariff products that even from the demand side very little inclination was shown for innovation in product design. As a result the deadline of April 01, 2008 for full de-tariffing could not be met and as of now the decision to liberalise policy wordings has been put on hold.

Heavy discounting in price has, on the other hand, started showing results for insurers. Insurers have started feeling the heat of reduced price cushions in terms of exposed bottom lines. Prices have gone remarkably down but losses haven't. As a result, claims servicing has come under pressure and already there are unconfirmed reports of some insurers resorting to shoddy tactics for not paying claims.

General Insurance Council

The Executive Committee of the Council comprises, of the nominees of IRDA [viz. Member (Non-Life) as Chairman and Executive Director (Non-Life) and the Secretary General of the Council], and the Chief Executive Officers of all the Non-life insurance companies licensed by IRDA. The Council organises meetings of the Executive Committee, Chief Underwriters, Heads of Health Insurance Departments, CFOs, etc. from time to time.

The Council's mission is expanding and deepening non-life insurance penetration in India and promoting a responsible, responsive and disciplined pro-consumer service regime imbibing best global practices through a self-regulatory mechanism. The Council focuses on issues relating to (a) promoting non-life insurance market (b) promote consumer education and awareness of nonlife insurance products (c) development of intermediaries i.e., Agents and Brokers.

Further, the council puts forward the industry's view to the Government, IRDA, and other policy makers on problems confronting the industry as also to promote increased cohesion and cooperation between them. The Council also deliberates on ensuing level playing field between life and non-life insurers in Health portfolio and putting in places best global practices in the management of Health portfolio.

The functions of the General Insurance Council include aiding and advising the insurers carrying on general insurance business in the matters of setting up standards of conduct and sound practice and in the matter of rendering efficient service to holders of policies of general insurance The Council has helped in building up an integrated data base for dissemination of information to serve specific operational needs identified by the industry, address the issue of fraud against insurance companies and to identify areas of growth and develop solutions to common challenges faced by the insurance companies. The council has deliberated on issues relating to de-tariffing of the motor insurance business, review of the Motor Vehicles Act and structure of compensation/remuneration payable to agents.

Pattern of Investments

The policy holders' money has to be invested judicially keeping in view liquidity, yield and safety.

Income received from investments is not only a key determinant in the calculation of premium rates but also compensates underwriting losses. Every insurer has to submit to the IRDA its investment policy before the start of an accounting year. The IRDA has mandated the pattern of investments to be followed by the insurance companies (Tables 16.4 and 16.5).

Every insurer in general insurance or the reinsurance business shall invest and at all times keep invested the total assets in the manner set out below.

All investments in assets/instruments which are capable of being rated shall be based on a rating by an independent recognised Indian or foreign rating agency.

TABLE 16.4 Pattern of Investments Specified by the IRDA

General Insurance and Reinsurance	
Type of Investment	*Percentage*
(i) Central Government Securities Being Not Less Than	20%
(ii) State Government Securities and Other Guaranteed Securities Including (i) Above Being Not Less Than	30%
(iii) Housing and Loans to the State Government for Housing and Fre Fighting Equipment, Being Not Less Than	5%
(iv) Investments in Approved Investments	
(a) Infrastructure and Social Sector.	Not Less Than 10%
(b) Others, to be Governed by Exposure Norms. However, that Investments in Other than in Approved Investments in No Case Exceed 25 Per Cent of the Assets.	Not Exceeding 55%

Source: IRDA.

TABLE 16.5 Investments of Non-life Insurers: Fund-wise

(Rs. Crore)

Pattern of Investments	2005–2006 Total	2005–2006 % to Fund	2006–07 Total	2006–07 % to Fund	2007–08 Total	2007–08 % to Fund	2008–09 Total	2008–09 % to Fund
1. Other Approved Securities Incl. Govt. Sec	16740	40	18866	37	20187	35.87	20668	35.1
Of which Central Govt. Securities	11670	28	13231	26	14054	24.97	14591	24.8
2. Housing and Fire Fighting Equipments	3107	7	3742	7	3891	6.91	4244	7.21
3. Infrastructure and Social Sector	4980	12	6102	12	7660	13.61	8980	15.25
4. Investment Subject to Exposure Norms	17492	41	21671	43	24543	43.61	25002	42.45
5. Other than Approved Investments	4078	10	3884	8	4342	7.71	3971	6.74
TOTAL	**42319**	**100**	**50382**	**100**	**56281**	**100**	**58893**	**100**

Note: AIC of India has not been included.
Source: IRDA, *Annual Report,* 2008–09.

Approved Investments for General Business

'Approved Investments' for the purposes of Section 27B of the act shall be as follows.

All approved investments specified in Section 27B of the act except

- Clause (b) of Sub-section (1) of Section 27A of the act;
- immovable property situated in other country as stated in Clause (n) of Sub-section (1) of Section 27A of the act; and
- first mortgages on immovable property situated in other country as stated in Clause (m) of Subsection (1) of Section 27B of the act.

In addition the authority under powers given vide clause (j) of sub-section (1) Section 27B of the act declares the following investments as approved investments:

- All secured loans, deposits, debentures, bonds, other debt instruments, shares and preference shares rated as 'very strong' or more by a reputed and independent rating agency (e.g; AA of Standard and Poor).
- Loans to state government for Housing and Fire Fighting Equipment.
- Deposits with banks (e.g., in current account, call deposits, notice deposits, term deposits, certificates of deposits, and so on) and with primary dealers recognised by the RBI included for the time being in the second schedule to the Reserve Bank of India Act, 1934 (2 of 1934).
- Commercial papers issued by a company having a 'very strong' or more rating by a reputed and independent rating agency.
- Treasury bills issued by the RBI, Inter Bank Repo of RBI, and Bills Rediscounting.
- Investments in venture capital funds of such companies/organisations which have a proven track record and have been rated 'very strong' or more by a reputed and independent rating agency (e.g., AA of Standard and Poor).

Explanation: For this purpose any investment in the shares or debentures or short- or medium- or longterm loans or deposits with private limited companies shall not be treated as 'approved investments'.

Exposure/Prudential Norms

The IRDA has specified the exposure/prudential norms relating to investment. Every insurer shall limit his investments based on the following exposure norms:

Social Sector:

1. For the financial year 2007–08, the average of the number of lives covered by the respective insurer in the social sector from the financial years 2002–03 to 2004–05 or 5.50 lakh lives, whichever is higher.

2. For the financial year 2008–09, the obligations of the existing insurers shall increase by 10 per cent over the number of persons prescribed for the financial year 2007–08.
3. For the financial year 2009–10, the obligations of the existing insurers shall increase by 10 per cent over the number of persons prescribed for the financial year 2008–09.

The obligations of the insurers, towards the rural and the social sectors for the financial year 2009–10 shall also be applicable in the financial years thereafter.

Rural and Social Sector Obligations for New Entrants

Provided that in cases where an insurance company commences operations in the second-half of the financial year and is in operation for less than six months as at March 31st of the relevant financial year (i) no rural or social obligation shall be applicable for the said period and (ii) the annual obligations as indicated in the regulations shall be reckoned from the next financial year which shall be considered as the first year of operations for the purpose of compliance. In cases, where an insurance company commences operations in the first half of the financial year, the applicable obligations for the first year shall be 50 per cent of the obligations as specified in these regulations.

Maintenance of Solvency Margins of General Insurers

Solvency margins are prescribed to ensure the ability of insurance companies to discharge liability to customers in time and in adequate measure. Just as the RBI prescribed a minimum capital adequacy ratio for banks, the IRDA has prescribed a minimum solvency margin requirement. This margin can be described as the ratio of free capital to the total business done by a company. If the losses are higher than what a company has set aside in its reserves for anticipated claims, then a company ends up paying claims out of its free capital which brings down a company's solvency ratio. If the solvency margin of an insurer declines, the regulator can ask the company to bring in additional capital. Every general insurer is required to maintain a minimum solvency margin of Rs. 50 crore (Rs. 100 crore in the case of a reinsurer) or a sum equivalent to 20 per cent of net premium income or a sum equivalent to 30 per cent of net incurred claims whichever is highest, subject to credit for reinsurance in computing net premiums and net incurred claims.

• Solvency margin is an amount in excess of the value of insurer's assets over the amount of liabilities. This amount is prescribed by IRDA

In addition, at the time of registration all the new insurers have been required to maintain a solvency ratio of 1.5 times the normal requirements. All general insurers except Star Health complied with the stipulated solvency ratio of 1.5 (Table 16.6).

Funds to be set aside as reserves by General Insurance companies.

- General insurers are required to set aside funds towards claims under 'unexplored risks' and 'incurred but not reported' (IBNR) claims. These reserves are part of an insurance company's technical reserves and the funds are treated as policy holders' funds, Reserves for unexplored risks are funds set aside for claims under policies that continue to be valid even after the end of the financial year IBNR claim reserves are those created to meet claims that have taken place during the financial year but not reported to the company.
- IRDA has asked general insurers to create a new reserve for claims that have been 'incurred but not reported enough' (IBNRE) claims. This new reserve portions to claim that have been incurred during the year but the amount set aside by the company is lower due to lower reporting by the claimant.

Non-life Insurance Industry

There are, at present, twenty three players in the non-life insurance industry—six in the public sector and seventeen in the private sector. The four public sector undertakings—New India, United India, National Insurance and Oriental Insurance Companies are competing aggressively with these new players. These PSUs and two private insurers—ICICI Lombard General Insurance and Bajaj Allianz General Insurance—account for 90 per cent of the non-life market. The non-life industry grew by 9.09 per cent during 2008–09. This growth was driven by health insurance and motor insurance. The number of policies underwritten by the private sector non-life insurance companies has steadily increased (Tables 16.7 and 16.8).

TABLE 16.6 Solvency Ratio of Non-life Insurers in India

(As on March 31st)

Sr.No.	*Insurer*	*2009*	*2008*	*2007*	*2006*
	Private				
1	Bajaj Allianz	1.62	1.55	1.56	1.22
2	Bharti AXA	2.11	NA	NA	NA
3	Cholamandalam	1.02	2.00	2.63	2.51
4	Future Generali	1.83	2.61	NA	NA
5	HDFC ERGO	2.48	2.02	1.69	1.78
6	ICICI Lombard	2.03	2.03	2.08	1.29
7	IFFCO Tokio	1.77	1.51	1.70	1.95
8	Reliance	1.59	1.64	1.95	3.04
9	Royal Sundaram	1.64	1.59	1.64	1.66
10	Shriram	1.94	NA	NA	NA
11	Tata AIG	1.97	1.91	1.85	1.68
12	Universal Sompo	4.23	4.68	NA	NA
	Public				
13	New India	3.41	4.00	3.57	3.09
14	United	3.32	3.24	3.00	2.23
15	Oriental	1.66	1.91	2.17	1.97
16	National	1.56	2.22	1.76	1.08
	Specialised Insurers				
17	ECGC	16.42	18.90	11.41	9.39
18	Star Health	1.38	1.97	1.91	NA
19	Apollo DKV	1.82	1.39	NA	NA
20	AIC	4.58	3.27	2.05	2.16
21	GIC	3.67	3.36	4.10	3.41

NA: Not Applicable.
Source: IRDA, *Annual Report*, 2008–09.

TABLE 16.7 Policies Issued: Non-life Insurers

Insurer	*2008–09*	*2007–08*	*2006–07*	*2005–06*	*2004–05*	*2003–04*	*2002–03*
Public Sector	4,51,37,181 (17.09)	3,85,47,040 (13.47)	3,39,72,092 (–19.48)	4,21,93,079 (–5.47)	4,46,34,047 (16.15)	3,84,27,204 (–8.26)	4,18,85,005 (96.15)
Private Sector	2,19,22,906 (17.21)	1,87,03,219 (47.36)	1,26,92,053 (41.85)	89,47,516 (73.92)	51,44,755 (55.96)	32,98,827 (96.72)	16,76,907 (3.85)
Total	**6,70,60,087 (17.13)**	**5,72,50,259 (22.69)**	**4,66,64,145 (–8.75)**	**5,11,40,595 (2.74)**	**4,97,78,802 (19.3)**	**4,17,26,031 (–4.21)**	**4,35,61,912**

Note: Figures in bracket indicates the growth over the previous year.
Source: IRDA, *Handbook on Indian Insurance Statistics,* 2008–09.

TABLE 16.8 Non-life Insurers Gross Premium Underwritten (Within and Outside India) Upto The Month of March, 2009

(Rs. Crore)

Insurer	*April–March*		*Growth Over the Corresponding Period of Previous Year*
	2008–09	*2007–08**	
Private Total	12,321.09	10,991.89	12.09
Public Total	19,107.31	17,813.71	7.26
Grand Total	31,428.40	28,805.60	9.11

(*Continued*)

Insurer	April–March		Growth Over the Corresponding Period of Previous Year
	2008–09	2007–08*	
Specialised Institutions:			
1.Credit Insurance			
ECGC	744.67	668.37	11.25
2.Health Insurance			
Star Health & Allied Insurance	509.86	168.19	204.38
Apollo DKV	48.14	2.98	1542.11
Health Total	**560.88**	**171.17**	**227.67**
3.Agriculture Insurance			
AIC	833.44	835.11	–2.77

Source: IRDA, *Annual Report*, 2008–09.

TABLE 16.9 Premium Underwritten by Non-life Insurers (Within India)

(Rs.Crore)

Insurer	*2006–07*	*2007–08*	*2008–09*
Public	16,258.90 (8.41)	16,831.84 (3.52)	18,030.75 (7.12)
Private	8,646.57 (61.24)	10,991.89 (27.12)	12321.09 (12.09)
Total	**24,905.47 (22.33)**	**27,823.74 (11.72)**	**30,351.84 (9.09)**

Note: Figure in brackets indicate growth in per cent.
Source: IRDA, *Annual Report,* 2008–09.

TABLE 16.10 Premium Underwritten (Within India) by Nonlife Insurers—Segment-wise

(Rs.Crore)
(Rs. in Crore)

Department	*2001–02*	*2002–03*	*2003–04*	*2004–05*	*2005–06*	*2006–07*	*2007–08*	*2008–09*
Fire	2,929 (23.02)	3,268 (21.45)	3,150 (20.20)	3,331 (19.05)	3,774 (18.54)	4,132 (16.59)	3,459 (12.43)	3,383 (11.14)
Marine	8,704 (68.41)	10,704 (70.25)	1,118 (7.17)	1,228 (7.03)	1,284 (6.31)	1,628 (6.54)	1,799 (6.47)	1,957 (6.45)
Misc	1,090 (8.57)	1,264 (8.30)	11,327 (72.63)	12,922 (73.92)	15,301 (75.16)	19,146 (76.87)	22,565 (81.10)	25,012 (82.41)
Total Premium	**12,723**	**15,236**	**15,595**	**17,481**	**20,359**	**24,905**	**27,823**	**30,352**

Note: Figures in parentheses indicate the ratio (in per cent) of the respective segment.
Misc. includes motor, health, and others. Motor business is the largest general insurance segment with a share of 44% in the total non-life premium.
Source: IRDA, *Annual Report*, 2008–09.

Upto the financial year 2008–09, the non-life insurers underwrote a premium of Rs. 30,601 crore recording a growth of 9 per cent. The private non-life insures witnessed higher growth of 12 per cent by underwriting premium to the tune of Rs.12,571 crore . Non-insurance companies reported underwriting losses, higher incurred claims ratio and operating and management expenses. Despite these, they managed to register profits on account of higher investment income (Tables 16.9, 16.10, 16.11 and 16.12)

TABLE 16.11 Underwriting Experience and Profits of Public Sector Non-life Insurers (Rs. Lakh)

Particulars	*All Companies*							
	2008–09	*2007–08*	*2006–07*	*2005–06*	*2004–05*	*2003–04*	*2002–03*	*2001–02*
Net Premium	15,89,946	13,86,159	13,01,640	11,75,197	11,11,795	10,32,800	9,63,813	8,74,492
Incurred Claims (Net)	13,63,778	12,12,481	10,53,875	10,56,985	9,07,539	8,25,330	7,69,114	7,88,900
	85.78%	87.47%	80.97%	89.94%	81.63%	79.91%	79.80%	90.21%
Commission, Expenses of Management	5,52,667	4,58,406	4,27,906	4,70,113	4,22,112	4,05,154	2,97,461	2,59,167
	34.76%	33.07%	32.87%	40.00%	37.97%	39.23%	30.86%	29.64%
Increase in Reserve for Unexpired Risk	96,189	45,331	64,971	31,763	40,082	24,164	40,962	27,555
	6.05%	3.27%	4.99%	2.70%	3.61%	2.34%	4.25%	3.15%
Underwriting Profit/Loss	(4,22,690)	(3,30,059)	(2,45,112)	(3,83,664)	(2,57,938)	(2,21,848)	(1,43,724)	(2,01,130)
	–28.30%	–24.62%	–19.82%	–33.55%	–23.20%	–21.48%	–14.91%	–23.00%
Gross Investment Income	4,79,978	6,24,751	5,78,423	5,61,063	4,33,018	3,81,820	2,51,988	2,18,848
Other Income Less other Outgo	529	(15,292)	(11,337)	(19,112)	(2,169)	(3,113)	(24,088)	(31,173)
Profit Before Tax	57,818	2,79,400	3,21,974	1,58,286	1,72,911	1,56,859	84,176	(13,455)
Income Tax Deducted at Source and Provision for Tax	7,985	58,851	31,238	26,358	55,751	21,027	21,660	7,015
Net Profit After Tax	**49,833**	**2,20,548**	**2,90,736**	**1,31,928**	**1,17,160**	**1,35,832**	**62,516**	**(20,470)**

Note: Figure in bracket represents negative value.
Source: IRDA, *Annual Report*, 2008–09.

TABLE 16.12 Underwriting Experience and Profits of Private Sector Non-life Insurers (Rs. Lakh)

Particulars	*All Companies*								
	2008–09	*2007–08*	*2006–07*	*2005–06*	*2004–05*	*2003–04*	*2002–03*	*2001–02*	*2000–01*
Net Premium	8,51,199	7,15,871	4,67,316	2,84,226	1,78,202	1,06,603	56,145	18,333	44
Claims Incurred (Net)	6,07,967	4,24,631	2,50,289	1,54,822	91,173	54,336	29,225	4,224	2
	71.42%	59.31%	53.56%	54.47%	51.16%	50.97%	52.05%	23.04%	4.55%
Commission, Expenses of Management	2,92,694	2,23,178	1,28,337	77,740	48,687	29,617	19,765	12,725	2,492
	34.39	31.18%	27.46%	27.35%	27.32%	27.78%	35.20%	69.41%	5,663.64%
Increase In Reserve for Unexpired Risk	60,459	1,27,951	99,333	56,651	38,092	29,023	16,987	14,140	
	7.10%	17.87%	21.26%	19.93%	21.38%	27.23%	30.26%	77.13%	
Underwriting Profit/Loss	(1,09,921)	(59,890)	(10,642)	(4,987)	250	(6,373)	(9,832)	(12,756)	(2,534)
	–13.9%	–10.19%	–2.89%	–2.19%	0.14%	–5.98%	–17.51%	–69.58%	–5759.09%
Gross Investment Income	1,09,120	74,205	41,504	26,947	18,442	15,432	11,694	6,747	1,458
Other Income Less other Outgo	(4,109)	1,204	975	123	(682)	(494)	54	(730)	(170)
Profit Before Tax	(4,910)	15,519	31,837	22,085	18,010	8,565	1,916	(6,739)	(1,281)
Income Tax Deducted at Source and Provision for Tax	5,216	11,136	8,863	6,645	5,820	1,861	1,241	(564)	95
Net Profit After Tax	**(10,126)**	**4,383**	**22,974**	**15,438**	**12,190**	**6,704**	**675**	**(6,176)**	**(1,376)**

Note: Figure in bracket represents negative value.
Source: IRDA, *Annual Report,* 2008–09.

With increase in competition, new products have been introduced to expand the general insurance market. ICICI Lombard offered Indian farmers a newly designed product ‘weather insurance’. This product was designed in association with the World Bank and micro finance institution—Basix. This product insures farmers against losses due to vagaries of weather relating to monsoons, humidity or temperature. Weather insurance does not suffer from the moral hazard and adverse selection problems. Also, the administrative costs are lower than those of traditional crop insurance. Thus, it is beneficial to both farmers and insurers. Moreover, it is easier for the insurer to transfer the risk to international financial markets through reinsurance. ICICI Lombard has executed around 90 weather insurance deals across 13 states and these deals have provided weather insurance solutions to about 2,00,000 farmers covering an area of about 2,50,000 acres.

With more joint ventures with foreign players and more innovations, the Indian investor will benefit. Branches and offices in the rural areas have been set up and rural sector products have been introduced by the non-life players. The non-life insurance companies are now focusing on retail business as opposed to corporate business. The nationalised companies have constituted an informal organisation called General Insurance Public Sector Association (GIPSA) to suggest measures to expand the market coverage.

The year 2007 witnessed a switch over to a tariff free pricing regime for non-life insurance. This brought about hectic competition in pricing of non-life insurance products. However, only premium rates have been freed and that too subject to comprehensive underwriting exercise. Thus, while real competition will have to wait till full ‘de-tariffing’ it will be interesting to see how the industry responds to this limited deregulation.

Conclusion

All the public sector general insurance companies have done well in achieving the objective of market retention consistent with safety.

The four state general insurance companies contributing to over Rs. 30,000 crore of insurance premium have identified three crucial functional areas including IT, marketing, and HR to fight competition.

The general insurance market in India is smaller in comparison with the huge market for life insurance. There are about 150 products on offer in this industry but only 30 of them contribute about 80 per cent of premium income. There is ample scope for development of general insurance business in India.

The needs of small and medium enterprises have not been assessed or addressed adequately. Hence, the new and public sector entities should target this segment to expand the market.

Most general insurance purchases in India are driven by mandatory requirements. In case of motor insurance, only third-party liabilities are bought instead of comprehensive coverage. In case of house insurance, there is a fear of wealth watching and lack of sales push. Health insurance, which forms second largest pool of business from individuals, is still in its infancy. There is lack of awareness on part of consumers regarding the benefits of Mediclaim product. The general insurers should redefine their product and marketing strategies to make these products profitable.

HEALTH INSURANCE

Human resource is the real wealth of a nation. An increase in national income does not always lead to human welfare. Economic development coupled with human development should be the primary objective of a nation. India is one of the success stories of globalisation with an average GDP growth rate of 8 per cent since 2002–03. Despite high growth rate, it ranks 134 on human development index. The human development index provides a composite measure of three dimensions of human development: living a long and healthy life, being educated and having a decent standard of living. India spends 4.8 per cent of GDP on health, of which the public health expenditure is 1.2 per cent of GDP and private health expenditure is 3.6 per cent of GDP. The total health expenditure per capita in India is USD 82. This is quite low in comparison to other developed and developing countries. On one hand, the country is gripped with communicable and non-communicable diseases resulting out of changing life styles, while on the other hand, health care costs are escalating making access to quality health care difficult. With government expenditure on health declining, health insurance has emerged as an alternative mechanism for financing health care.

- Health insurance grew from Rs. 1002 crores to Rs. 6,625 in terms of premium, a growth rate of 561% during the period 2002–03 to 2008–09. The average premium per insured person was Rs. 1,218 while the average claim size also was Rs. 1,218

Health insurance, or health cover, is defined in the Registration of Indian Insurance Companies Regulations, 2000, as the effecting of contracts which provide sickness benefits or medical, surgical, or hospital expense benefits, whether in-patient or out-patient, on an indemnity, reimbursement, service, prepaid, hospital or other plans basis, including assured benefits and long-term care.

Both life and non-life insurers registered with the IRDA can transact health insurance business. Star Health and Allied Insurance Company is the first company to focus exclusively on healthinsurance. It offers health insurance as a stand alone product. Star Health is capitalised at Rs. 105 crore and has a non-life insurance license. It has a reinsurance arrangement with General Insurance Corporation (GIC). All claims below the claims ratio of 90 per cent will be picked up by GIC. Apollo DKV Insurance Company Limited is the latest entrant in the health insurance segment. Both the companies have receivedcertificate of registration to carry on general insurance business to underwrite exclusively in the health, personal accident, and travel insurance segment.

For stand alone health insurance contracts, expertise in health product design and pricing, and efficient claim settlement procedures are required.

- A rider is an additional benefit that is offered with the base policy at a nominal price

The IRDA has encouraged both life and general insurance companies, old and new, to go in for rider policies offering health covers. Many new companies have gone in for riders offering a variety of health products. Riders are add-on benefits attached to the main life policy. To attract players to health insurance, life insurance companies will have no cap on health riders. While the relaxation has been given on the health riders, the 30 per cent cap on the premium of the base policy continues for other riders.

The general insurance industry has taken initiatives in standardising a uniform definition of 'Pre-Existing Diseases' and its exclusion wording . This uniform definition has come into effect from June 1, 2008. It is expected that such standardisation of terminology will increase clarity of the insured by minimising ambiguity in policy wordings and also help comparability of health insurance products across insurers.

Health Insurance Policies

- Health Insurance Policies
  - Standard Health
  - Reimbursement and Cashless
  - Floater
  - Group Mediclaim
  - Cancer Medical Expenses
  - Health riders
  - Other Health Insurance covers

Health policies available in India can be broadly classified in to:

Indemnity based—Mediclaim, health guard, healthwise, etc.—are the examples of indemnity based policies. These policies provide for re imbursement of expenses incurred necessarily as a direct result of hospitalisation necessitated by a covered disease, illness or injury.

Benefit type-daily allowance, hospital cash, critical illness (standalone), or as a rider with the life insurance policy. Such policies provide for lump-sum payment on happening of an event insured against by the policy.

(1) Standard Health Insurance Policy Most of the health insurance policies available in the market provide cover against the risk of hospitalisation. While this has been the basic structure of the product right since its inception in late 1980s, some changes have taken place as regards the fringe benefits and exclusions, with the advent of private players in the insurance market.

The operative clause of a standard health insurance policy offers to indemnify the insured against hospitalisation expenses incurred by him at a hospital or nursing home upon the advice of a duly qualified medical practitioner as a result of an illness, disease or injury contracted during the policy period.

(2) Reimbursement and Cashless Policies

Reimbursement policies: This is the conventional method of indemnity in almost all non-life insurance policies. The insured initially bears all the expenses which is later on reimbursed by the insurance company, provided the claim is admissible as per the policy. Preliminary notice of claim with particulars relating to policy number, name of insured person in respect of whom claim is made, nature of illness/injury and name and address of attending medical practitioner/hospital/nursing home has to be given by the insured to the Company within 7 days from the date of hospitalisation.

In a reimbursement claim, although the insured gets his money eventually in the form of the claim proceeds, he has to shell out money initially to get treated. to some extent this defeats the very purpose of insurance which is to provide monetary support at the time of peril. Due to this the industry went for a novel concept that has commonly come to be known as the 'cashless' system. This system has been in vogue in foreign countries and was replicated in India after the insurance sector was opened for private players.

Cashless policies: Cashless model of hospitalisation is a novel concept in India that allows a policyholder to avail medical treatment at any of the network hospitals of the insurer without paying cash. Insurers have a panel of third party administrators (TPAs), who typically offer services across cities. Thus, a TPA is a point of contact for a settlement of claims. They facilitate the smooth operation of a health cover by acting as a link between the insurance companies and their clients and hospitals. They enable cashless payment of claims to the insured wherein they settle claims with hospital instead of insurers. The hospital bills are paid by the TPA directly to the hospital, thus relieving the insured from the hassle of arranging funds in the event of a major hospitalisation.

- The introduction of cashless servicing of claims under the mediclaim policies in 2001 fuelled the growth of health insurance

(3) Floater Policy This is again a new feature introduced post-liberalisation. As per the standard health insurance product, separate sums had to be specified for each member of the family even in cases where the entire family was opting for insurance. While a common policy was issued, specific sum insured was to be mentioned against the names of each member. This system ignored the internal diversification of risk among the family and the consequent risk reduction. Since standard premium rates were being applied to all family members, every member was considered to be an independent exposure unit. However in reality, the probability of all family members in a family falling ill in a single year is very low. Due to this phenomenon, people used to either exclude their family members from coverage or go for a lesser sum insured for spouse and children. As a matter of fact, where the working member of a family is a male, the probability of him falling ill is more than his spouse and children. Due to this indirect adverse selection, insurers were deprived of the benefit of internal diversification in terms of reduced loss frequency.

A family floater policy attempts to solve all these aberrations. This policy provides for a common sum insured for the entire family. The sum insured or the coverage amount can be used for the principal insured or together for the family members. Thus, having a family floater would imply that the entire family could claim up to the sum insured amount during the policy period. Technically, a family floater policy considers the family as a single exposure unit as against the individual family members. Because of this the premium chargeable for a family floater policy is much less than a conventional policy with individual sum insured. Due to the reduced premium more families are attracted to buy this policy. On the other hand since entire family is covered, the scope for adverse selection within the family is eliminated.

(4) Group Mediclaim Policy The Group Mediclaim policy is available to any Group/Association/Institution/Corporate body of more provided it has a central administration point and subject to a minimum number of persons to be covered.

The coverage under the policy is the same as under Individual Mediclaim with the following differences:

1. Cumulative bonus and Health Check up expense are not payable
2. Group discount in the premium is available
3. Renewal premium is subject to Bonus/Malus clause.
4. Maternity benefit extension is available at extra premium.

(5) Cancer Medical Expenses Insurance Policy Two types of policies are devised for covering medical expenses in relation to treatment of cancer. One policy is available to members of Indian Cancer Society and another one for members of Cancer Patients Aids Association.

(6) Health Riders Under Life Insurance Health insurance is a common area between life and non-life insurance. In fact the regulatory framework for insurance companies encourages them to launch health insurance products. In developed insurance markets, health insurance is the exclusive domain of life insurance companies. In India, unfortunately life insurers have not shown much keenness towards standard health insurance. The IRDA has encouraged both life and general insurance companies, old and new, to go on for rider policies offering health covers. Riders are add-on benefits attached to the main policy. In most cases whatever is offered in form of 'health riders' is nothing but critical illness or hospital daily cash allowance covers. The indemnity cover providing for reimbursement of hospitalisation expenses is nowhere to be seen. The salient features of health riders available with life insurance policies are summarised below:

- This rider is added to a life insurance policy to protect the insured in the event of a **critical illness.**
- Generally, the **extra cover is equal to the sum assured** on the base policy and is paid upon diagnosis of the illness.

- The plan is also renewable till the age of 65 years, without any medical examination, with premiums increasing only once in every five years.
- While the **illnesses covered and the premiums vary among insurers**, most insurers cover cancer, coronary artery bypass, heart attack, kidney/renal failure, major organ transplant, and paralytic stroke.
- Before adding this rider one must check illnesses covered and the exclusions.
- And, **a few insurers terminate the base policy once a claim is made on the rider**. Thus, a plan that continues to give you life cover, at marginally higher premium on the rider, is preferable.
- Under a Critical Illness policy, the amount of insurance has to be selected by the client. It is at 4 levels—Rs. 5 lakhs, Rs.10 lakhs, Rs. 20 lakhs, and Rs. 25 lakhs.
- The premium paid for this rider qualifies for **tax deduction under section 80D** of the IT Act.

Other Health Insurance Covers The health insurance vanilla products provide only for the expenses wholly and necessarily incurred due to disease, illness or injury covered under the policy. But, the exclusions contained there in create the biggest gap in the cover by omitting from the scope of cover pre-existing disease and conditions, and limiting the cover for payment of pre-hospitalisation expenses up to 30 days and post-hospitalisation expenses up to 60 days (this period may differ from product to product). Even congenital diseases and defects, whether known or not known are excluded from the scope of cover. It is estimated that in any hospitalisation the percentage of direct (hospitalisation) expenses and indirect or incidental expenses is in the ratio of 65 & 35, which clearly indicates the gap that exists in the coverage under a standard health insurance policy. Thus it is evident that many gaps are still there in the standard health insurance covers available in the market waiting to be addressed.

Health is of the prime concern not only for a person but also for the society as ideally the health insurance should not limit itself to the expenses or the pecuniary losses sustained by a person. Health insurance needs to have a holistic view to address not only the loss aspect but to actively engage in the prevention of the prevalence of diseases. The national goal of health for all can only be achieved by congruence of all the state, the agencies, stakeholders on a common platform to ensure affordable, transparent and accountable healthcare to the whole society. It is not that no steps have been taken in that direction, but either it was early or they did not get the right vehicle to reach the masses. The insurers have tried to bridge the gap by several permutations, combinations in an effort to provide better coverage. Separate benefit type covers like hospital cash (daily allowance), critical care, and overseas travel insurance have been introduced. Low budget health insurance schemes like Jan Arogya, Universal health insurance were introduced at the government's behest. Nagreek Suraksha—a combination of Personal Accident and Injury related hospitalisation is available in the market, so is Rasta Aapati- a personal accident and road accident triggered hospitalisation cover.

Hospital Cash Policies The private players, in a bid to gain entry in to the health insurance market, came out with innovative products to address the growing need for increasing the options for more depth in coverage. One of the first Hospital Cash or Daily Allowance policies was launched in the year 2001. The need for this policy was felt as the regular policy/ies did not cover the increased financial burden caused by hospitalisation of a family member. The policy aims to provide cover against the additional expenses such as, transport, lodging and boarding, charges levied by the hospital for attending family member, hiring of personal attendant etc. This cover is available as standalone cover with some companies and as an in-built benefit in the health insurance cover with others. It should always be taken as an addition/extension of the regular health insurance rather than being considered as a substitute.

The policy provides for cash allowance per day ranging from Rs. 500 to Rs. 5,000 per day in case of hospitalisation due to disease, illness, or injury suffered by the insured person. For this purpose hospitalisation means a continuous stay in the hospital as an in-patient for 24 hours. Certain policies have provisions for paying twice the daily limit per day in case of admission in ICU or ICCU for a period not exceeding seven days. The cover can be taken for the entire family, i.e. the proposer, spouse and dependant children in the age band of 3 months to 21 years.

Critical Illness Covers (a) In the contemporary work environment which exerts very high stress levels coupled with more materialistic lifestyle, the prevalence of lifestyle diseases is very high. We have grown more accustomed to luxuries that offer all the comforts and overall our lives have become more sedentary. The result is that India is fast becoming the world capital of Diabetes and Cardio-vascular diseases. Even the cancer prevalence is very high in India.

The onset of critical illness does not come alone i.e. medical and hospitalisation expenses, but can also have an adverse effect on the persons life in many ways. It can result in to (1) temporary loss of income, (2) reduced mobility affecting the quantum of income, (3) necessity to modify the house (4) need for constant and specialised attention in certain cases. These and the other financial implications associated with the persons ability to work as he used to before being afflicted with the life threatening disease such as Heart Attack or Cancer can be suitably addressed by way of a Critical Illness policy. Although these are considered life threatening, the modern medical science has been able to help patient survive, if treated proactively. Thus critical illness cover should be viewed as a tool by which people affected get the necessary financial support to better manage their changed circumstances of life.

The critical illness cover provides for a lump sum payment on the onset of the listed diseases. The number of diseases covered varies according to the market and the provider. depending upon the type of policy the number of diseases covered may vary from 5 to 35 in the policies available in the Indian market.

There also are some disease specific policies like cancer insurance, diabetes insurance, available in the market. The basic critical illness policy covers the following listed diseases: (1) Cancer (2) Coronary Artery Bypass Graft/Surgery (3) First Heart Attack (4) Kidney Failure (5) Major Organ Transplant (as a recipient) (6) Stroke.

The critical illness policies are sold either on standalone basis or as a rider to the Life insurance policy, hence, there are some basic differences in the sense that the standalone critical illness policies marketed by the non-life companies are single year policies whereas the plans sold by the life companies are long term plans. In both the types the operative part is that the benefit under the policy accrues on the positive diagnosis of the existence of the listed disease and survival following the diagnosis for a stipulated period which varies according to the plan and the provider but is usually 30 days.

Jan Arogya Bima Policy The Mediclaim policy was launched in the year 1986. Initially the scheme was based on categories with fixed benefits under various heads. Later on the same was changed to Sum Insured based and cover was offered from Rs. 15,000 to Rs. 3, 00,000 in multiples of Rs. 5,000. It was argued that the premium was very high and that the weaker sections of the society could not afford such high premiums. Low levels of penetration were also attributed to this reason. The General Insurance Corporation of India introduced Jan Arogya Bima policy in the year 1998 , a toned down version of the Mediclaim policy.

As the scheme is based on the structure of Mediclaim, the terms, conditions and exclusions are similar to the basic policy. The scheme can be differentiated by its only feature which does not provide for either the cumulative bonus or the free health check-up feature available under the regular Mediclaim policy. The coverage is available to individual or for the entire family on the line of the basic policy. The sum insured per person is limited to Rs. 5000/=. A very salient feature of the policy was that there was no agency commission payable and the policy was intended to be sold through NGO's, government agencies, self-help groups and such other organisations. The premium for the scheme is as low as Rs. 70 for adult male or female and Rs. 50 for the dependant son/daughter up to the age of 25 years. As the scheme was supposed to be sold directly without intermediary and as the companies did not have the focus or will for direct marketing, it did not take off as desired.

Community-based Universal Health Insurance Scheme The scheme offers health protection and easy access to good health services to the weaker sections .It was announced in the Union Budget 2003–04 and the responsibility for implementing it is given to the New India Assurance Company Ltd. Under this scheme, a premium of Re 1 per day for an individual, Rs. 1.50 per day for a family of five (including the first 3 children) and Rs. 2 per day for a family of seven (including the first 3 children and dependent parents) will entitle eligibility to get reimbursement of medical expenses up to Rs. 30,000 towards hospitalisation, a cover for death due to accident up to Rs. 25,000 and compensation due to loss of earning at the rate of Rs. 50 per day up to a maximum of 15 days after a waiting period of 3 days. For below poverty line (BPL) families, the government will contribute Rs. 100 per year towards their annual premium.

Many states have recently initiated large scale health insurance programmes in association with non-life insurers to protect their vulnerable groups from such health-related financial needs. Some prominent schemes are Rajiv Aarogyasri scheme in AP, and the centrally-sponsored Rashtriya Swasthya Bima Yojana (RSBY) which has been launched in many states across the country.

Nagrik Suraksha Policy An accidental insurance cover providing compensation for accidental injuries and/or reimbursement of expenses incurred at hospital as a result of accidental injuries subject to limits.

This cover is for any citizen of India in the age group of 5 years to 70 years for family package and 18 years to 70 years for individual/group cover. The term for cover of individual policies range between one year to four years and for group policies—12 months. The minimum sum insured is Rs. one lakh and maximum is Rs. five lakhs with an option of enhancement of minimum limit of sum insured in multiples of Rs. 25,000/- upto a maximum of Rs. 5,00,000/-.

Personal Accident Policy This policy offers compensation in case of death or bodily injury to the insured person, directly and solely as a result of an accident, by external, visible and violent means. The policy operates worldwide and is a 24 hours cover. It provides comprehensive cover covering death, permanent disablements and temporary total disablements. Family Package cover is available to individuals whereby the proposer, spouse and dependent children are covered under a single policy Group personal accident policies are also available for specified groups.

Overseas Medical Insurance All the health covers, which provide for the hospitalisation expenses, are bound by the geographical limits of India. Hence, any person traveling out of India and contracting any illness or disease or sustains injury, can not claim under his health insurance for the expenses incurred out of India. To address this anomaly and looking to the increasing foreign travel undertaken by Indian Public in the wake of liberalisation of Indian economy, the need for overseas medical insurance was felt. This policy covers medical expenses whilst traveling abroad for business/holiday/employment/studies. The premium payable is in rupees and claims settled abroad are in foreign currency. As the number of persons traveling abroad has increased , this segment has become lucrative for the insurers.

Tax Benefits In order to cover a large number of people in the health insurance net, there are tax benefits available under Section 80D. Medical cover premium is tax-deductible up to Rs. 15,000, with an additional deduction of up to Rs. 5,000 if the policy is in the name of a senior citizen (65 years or older) and the premium is paid by him. If someone below 65 buys a plan for his dependents, he can avail benefit upto Rs. 15,000. Mediclaim policies attract tax benefits under Section 80D. Deduction under this section is available if the premium is paid by cheque. The maximum amount of deduction available under this section is Rs. 15,000. This limit stands enhanced to Rs. 20,000 in case an individual is a senior citizen. Tax benefits are also available in case individuals pay for their parents and children who are dependant on them.

Conclusion

Health insurance is the fastest growing segment in the non-life insurance industry in India .The premium from health insurance products grew from Rs. 675 crore in 2001–02 to Rs. 5,100 crore in 2007–08. It is also emerging as an increasingly significant line of business for life insurance companies, and many prominent life insurance companies now have health insurance products.

There is rich potential in the health insurance market. The insurance companies have been unable to exploit the potential of the health insurance market due to factors such as lack of awareness of the need, nonviability of the stand alone health insurance businesses at Rs. 100 crore equity, and a supply and demand mismatch, where quality hospitals are few on account of high infrastructure costs.

The growth of heath insurance in India is sluggish looking to its mammoth potential. Ideally, health insurance should be the first thing to come to one's mind after life insurance. But it is bought only when it is urgently pressing. There is a general tendency of people to buy heath insurance after they reach middle age. Moreover, in an Indian family, it is usually the head of the family, or the breadwinner, or person most prone to disease who is proposed for insurance or a higher sum insured. These features lead to the building of a skewed health portfolio instead of healthy portfolio. Besides, delay in claims settlement and customer dissonance on account of exclusion of pre-existing diseases have led to customer reluctance in buying the product. Large amount of claims on account of inefficient underwriting have limited the number of stand-alone players in the health insurance market. The overall claims incidence is a whopping 6.36% which is too high for health insurance. The average claim size is about Rs. 19,000. The claims ratio has increased from 83% in 2003–04 to 103% in 2008–09. The age bracket of 41–60 years ended up with highest number of claims. The absence of actuarial support and credible database on health trends of sufficiently large demographic samples coupled with non-standardisation of healthcare costs have made it difficult to control claims costs. Heath insurers need to design proper pre-acceptance medical exams backed by actuarial rating to avoid high cost of claims.

- The claims ratio is around 6.4% which means that in a group of 1000 health insured people, only 64 claims are lodged. As the health claims ratio is 100%, 6.4% of claimants take away 100% of the insured money

The government is planning to substantially relax the entry norms, including paid-up capital requirement. The minimum capital requirement for health insurance companies is expected to be slashed from the current level of Rs. 100 crore to around Rs. 25 to 30 crore. Currently, health insurance comes under the scope of general insurance. A separate classification is proposed for insurance companies to distinguish them from life and non-life insurance business.

With barely 3.27 crores people (less than 3% of the population) covered, health insurance commands a humble share in the business transacted by non-life insurers. Notwithstanding this nano-presence, health insurance has had a much larger share in associated controversies. Whether it is the pathetic service offered by some Third Party Administrators (TPAs) or hike in premium for higher age brackets by some insurers, health insurance always tends to remain in the news. The real malaise however lies in the fact that a highly regulated insurance industry is struggling against a much bigger and highly organised but unregulated healthcare industry. Also, the insurers have failed to promote the concept of insurance in right earnest and introduce products that induce people to buy health insurance at young age. However, with TPAs aggressively negotiating with hospitals in an effort to ensure standard treatment protocols and standardised cost structures on one hand and the expanding outreach of health insurance on the other have made it a commercially viable proposition. A comprehensive healthcare regulation can increase the pace of growth of health insurance.

REINSURANCE

In insurance, the insured transfers his risk to the insurer. This primary insurer transfers a part or all of the risks he has insured to another insurer to reduce his own liability (the risk that he has assumed). This is known as reinsurance. Reinsurance is primarily an insurance of risks assumed by the primary insurer known as the ceding company. This risk is shifted to another insurer known as the reinsurer. The ceding company may shift part or all of the insurance originally written to the reinsurer. The amount of the insurance retained by the ceding company for its own account is called the retention. Retention is the amount of risk that an insurer is prepared to take on his own account. The amount of the insurance ceded to the reinsurer is known as the cession. The proportion of risk to be retained by the ceding company depends on factors such as company's assets and investment income, portfolio of the risks premium levels, inflation, and reinsurance market conditions. Reinsurance operates on the same principle as direct insurance, i.e., to spread sharing of risks as widely as possible. The insurers seek protection of their own risk by reinsuring with reliable reinsurers. Reinsurance evolved as a natural corollary to insurance. Reinsurance is used for several reasons:

- Reinsurance is insurance for direct insurance companies

- To increase the company's underwriting capacity which, in turn, would help to render improved service to the reinsured and expand the market.
- To spread the risks with as many insurers as possible.
- To obtain valuable advice and assistance with respect to pricing, underwriting practices, retention, and policy coverages.
- To stabilise profits by leveling out peak risks/losses.
- To provide protection against catastrophic losses arising due to natural disasters, individual explosions, airline diasters and so on.
- To retire from the business or class of business or territory.

The reinsurance business assumes greater importance in the event of war and natural calamities when the smaller insurance firms find themselves unable to take on the full risk due to their lower capital base.

Figure 16.3 provides an overview of reinsurance.

Types of Reinsurance

There are two types of reinsurance: (i) Facultative and (ii) Treaty.

1. Facultative Reinsurance

Facultative reinsurance is a reinsurance in which the reinsurer can accept or reject any risk presented by the ceding company (insurance company seeking reinsurance). This means that it is not mandatory for the reinsurer to accept the cover and he will accept it after naming his price terms and conditions. The reinsurer has the freedom to reject sub-standard risks if it so desires. The reinsurer retains the flexibility

- Facultative reinsurance is reinsurance of large individual risks

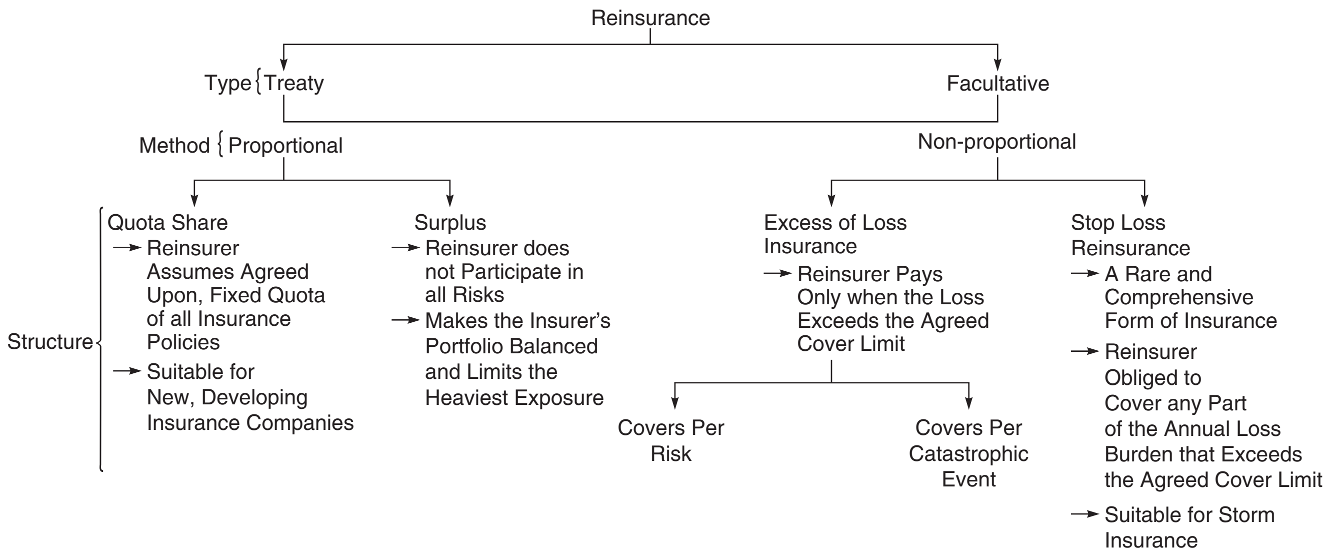

Figure 16.3 Reinsurance: Type, Method, and Structure

to accept or reject each application for reinsurance. The ceding company also gets freedom in respect of the portions of the risk to be reinsured and the choice of the reinsurer. Before underwriting any insurance, the ceding company determines whether reinsurance can be obtained. It contacts several reinsurers and if a willing reinsurer is found, both (ceding company and reinsurer) enter into a valid contract. The ceding company must disclose full information relating to the risk concerned to ensure validity of the contract. Facultative insurance offers several advantages such as increasing flexibility and the underwriting capacity of the ceding company. It is frequently used when a large amount of insurance is to be written. It stabilises the insurer's profits by shifting large losses to the reinsurer.

However, it creates a sense of insecurity as the ceding company may not always be successful in insuring its business. This uncertainty leads to a delay in the issue of policy. Facultative reinsurance is used to cover large individual risks such as car factories, large departmental stores and product liability for pharmaceutical firms.

2. Treaty Reinsurance

- Treaty reinsurance is reinsurance of specified types of risks that are automatically ceded and accepted

Treaty reinsurance means the ceding company is obliged to cede and the reinsurer is obliged to accept an agreed share of all reinsurance of the type defined in the contract. Treaty insurance is automatic and certain as business that falls within the scope of the agreement is automatically reinsured, according to the terms of the treaty. The ceding company has not to shop around for reinsurance before the policy is written. This system is beneficial also to reinsurers as they are assured of a regular flow of business. However, reinsurers could incur losses if the ceding company writes bad business or charges inadequate rates.

Reinsurance Treaties

- Quota-share treaty
- Surplus-share treaty
- Excess-of-loss treaty
- Reinsurance pool

Reinsurance Treaties Reinsurance treaties can be of different types such as quota-share treaty, surplus-share treaty, excess-of-loss treaty, and reinsurance pool.

Under a quota-share treaty, the ceding company and the reinsurer agree to share a fixed proportion of premium and losses. The ceding company retains, for its own account, a certain percentage of such risk. In other words, the ceding company's retention limit is stated as a fixed percentage. This treaty is popular among new and unknown insurers.

Under a surplus-share treaty, the reinsurer agrees to accept insurance in excess of the retention with the ceding company upto some maximum amount. The ceding company has complete discretion in respect of retention. The ceding companies which are financially sound can afford to have substantial retentions. The premiums and losses are shared based on the fraction of total insurance retained by the ceding company and the reinsurer.

Under an excess-of-loss treaty, losses in excess of the retention limit are covered by the reinsurer upto some maximum limit. It is a blanket agreement where all the claims made on local companies, above a certain limit, are reimbursed by the reinsurers. This treaty is useful for protection against catastrophic losses. At the beginning of every financial year, non-life insurance companies have to renew their excess of loss reinsurance treaties in the international market.

A reinsurance pool is a pool of reinsurers who jointly underwrite insurance as it may not be possible for a single insurer alone to write large amounts of insurance. Huge exposure arise in nuclear power and aviation which cannot be underwritten by a single insurance and reinsurance company and hence a reinsurance pool reinsures the risk.

Both facultative and treaty reinsurance may be either proportional or non-proportional in type. In proportional reinsurance, the direct insurer, and reinsurer divide premiums and losses between them at a pre-determined ratio. Proportional treaty insurance offers direct insurer protection against major deviations such as risk of random fluctuation, risk of change due to economic cycles, new laws and regulations, or social change. With non-proportional reinsurance, there is no contractually defined ratio for dividing losses and premiums between the direct insurer and reinsurer. Non-proportional treaty insurance offers direct insurer cover for catastrophe risk such as windstorm, earthquake and flood as well as large road, aviation and marine accidents.

The pricing and terms and conditions of a reinsurance contract are based largely on the underwriting capacity in the international market.

The two largest reinsurance companies Munich Re and Swiss Re, have combined stock market value of USD 50 billion (£33 billion) and are seen as bell-wethers for the reinsurance industry. Munich Re has its presence in India through two ventures with Paramount Healthcare who are in the business of third party administration and healthcare management.

Reinsurance Business in Life and General Insurance

Reinsurance of the life insurance business is less complex as compared to the general insurance business. The Life Insurance Corporation of India (LIC) has the financial strength and capacity to absorb risks fully. The number of life policies reinsured as well as the total sum of risk reinsured is quite insignificant.

The need for reinsurance is higher in the case of general insurance as it involves complex risks. In the post-independence period, Indian general insurers obtained the reinsurance cover from foreign reinsurance companies. This led to a drawing of foreign exchange. Hence, to maximise retention and to minimise the drain of foreign exchange, the general insurance business was nationalised.

In 2000, the outgo of premium money by way of reinsurance was around Rs. 10 billion. In order to increase the retention of premia in India, the role of General Insurance Corporation of India (GIC) was reinforced as the official reinsurer by making an obligatory cession of 20 per cent of insurance business by the private insurance companies, written in India, to GIC. This percentage was reduced to 15 per cent for the financial year 2007–08 and 10 per cent for 2008–09. Thus, the General Insurance Corporation of India, which has been designated as the 'Indian reinsurer', is entitled to receive obligatory cessions of 10 per cent from all the direct general insurers in 2008–09.

The IRDA has also issued regulations relating to both life and non-life reinsurance in 2000. To develop domestic reinsurance market capacity, the IRDA stipulated that insurers should offer an opportunity to other Indian insurers to participate in facultative and treaty surpluses before placement of such cessions outside India.

Life Insurance-Reinsurance Regulations, 2000

- Every life insurer shall draw up a programme of reinsurance in respect of lives covered by him.
- The profile of such a programme, which shall include the name(s) of the reinsurers with whom the reinsurer proposes to place business shall be filed with the authority (IRDA) at least forty-five days before the commencement of each financial year, by the insurer. Provided that the authority may, if it considers necessary, elicit from the insurer any additional information, from time-totime, and the insurer shall furnish the same to the authority forthwith.
- The authority shall scrutinise such a programme of reinsurance as referred to in Sub-regulation (2) and may suggest changes, if it considers necessary, and the insurer shall incorporate such changes forthwith in his programme.
- Every insurer shall retain the maximum premium earned in India commensurate with this financial strength and volume of business.
- The reinsurer chosen by the insurer shall enjoy a credit rating of a minimum of BBB of Standard and Poor or equivalent rating of any international rating agency.

Provided that placement of business by the insurer with any other reinsurer shall be with the prior approval of the authority, provided further that no programme of reinsurance shall be on an original premium basis unless the authority approves such programme.

Provided further that no life insurer shall have a reinsurance treaty arrangement with its promoter company or its associate/group company, except on terms which are commercially competitive in the market and with the prior approval of the Authority, which shall be final and binding.

Every insurer shall submit to the authority statistics relating to its reinsurance transactions in such forms as it may specify, together with its annual accounts.

LIC traditionally reinsures a small component of its business and it ceded Rs. 87.95 crore during 2007–08 as reinsurance premium . Similarly, private insurers reinsured a small component of the business with group business forming the major component of the reinsurance cessions. The private insurers together ceded Rs. 231.23 crore as premium towards reinsurance.

Non-life Reinsurance Regulations

The IRDA has constituted the Reinsurance Advisory Committee consisting of five persons having special knowledge and experience of business of reinsurance. The Reinsurance Advisory Committee has pegged the compulsory cession to the Indian reinsurer by the insurers carrying on general insurance business at 10 per cent subject to limits in fire, engineering, and the energy business. Cessions in respect of public and product liability business have also been pegged at 10 per cent on a quota share basis without any limits. The committee has also specified commissions and profit commissions for each class of business besides outlining the procedures for maintenance and settlement of accounts. Profit commissions shall be applicable on the aggregate results of statutory cessions portfolio at the rate of 20 per cent.

- Every insurer who wants to write inward reinsurance business shall adopt a well-defined policy for underwriting inward reinsurance business. The reinsurance programme of every insurer should have the approval of its Board of Directors.
- An insurer shall ensure that decisions on acceptance of reinsurance business are made by persons with adequate knowledge and experience, preferably in consultation with the insurer's appointed actuary.
- An insurer shall file with the authority, at least 45 days before the commencement of each financial year, a note on its underwriting policy indicating the clauses of business, geographical scope, underwriting limits, and profit objective. The insurer is further required to file the treaty slips or cover notes relating to the reinsurance arrangements with the Authority within 30 days of the commencement of the financial year. These measures highlight the existence of adequate and efficient reinsurance arrangements for an insurer because its solvency is assessed on a 'net of reinsurance' basis.

The Regulations require that every insurer should maintain the maximum possible retention commensurate with its financial strength and volume of business. The IRDA has issued the necessary directions for the reinsurance programme of every insurer.

They are:

- The reinsurance programme of every general insurer, carrying on general insurance business, shall be guided by the following objectives.
- To maximise retention within the country.
- To develop adequate capacity.
- To secure the best possible protection for the reinsurance costs incurred.
- To simplify the administration of business.
- Every insurer shall offer an opportunity to other Indian insurers, including the Indian reinsurer to participate in its facultative and treaty surpluses before placement of such cessions outside India.
- Insurers shall place their reinsurance business outside India with only those reinsurers who have over a period of the past five years enjoyed a rating of at least BBB (with Standard and Poor) or equivalent rating of any other international rating agency. Placements with other reinsurers shall require the approval of the IRDA. Insurers may also place reinsurance with Lloyd's Syndicates after taking care to limit placements with individual syndicates commensurate with the capacity of the syndicate.
- Surplus over and above the domestic reinsurance arrangements classwise can be placed by the insurer independently subject to a limit of 10 per cent of total reinsurance premium ceded outside India being placed with any one reinsurer. Where it is necessary to cede a share exceeding such limit to any particular reinsurer, the insurer may seek the specific approval of the IRDA.

The Regulations also require the Indian Reinsurer to organise domestic pools for reinsurance surpluses in consultation with all insurers.

All the non-life insurance companies came together to form a Pool for Terrorism risks when the international reinsurance markets withdrew the cover after September 11, 2001 terrorists strikes in New York. On April 1, 2007, a Pool for motor insurance risks was formed which was eventually transformed into a pool for all commercial vehicles third party insurance. The share of GIC in the multilateral reinsurance arrangement is same as the share of statutory cessions. The balance of pooled business is shared by all other member insurers. GIC is the Administrator of the Pool and is being paid a fees of 2.5 per cent plus service tax on the total premium of the pooled business. These pools help to maintain the national retention levels of around 70 per cent of gross direct premium.

Reinsurance placed within India as a percentage of gross direct premium declined during the year 2008–09 (Table 16.13) while net retentions increased during the year 2008–09 (Table 16.14).

TABLE 16.13 Reinsurance Placed Within India and Outside India as Percentage of Gross Direct Premium in India (Excl. GIC)

(Per Cent)

Segment	*2008–2009*		*2007–2008*	
	Placed in India	*Placed Outside India*	*Placed in India*	*Placed Outside India*
Fire	27.99	20.47	34.89	18.58
Marine Cargo	18.49	15.04	23.79	10.95
Marine-Others	34.6	57.58	31.53	60.93
Motor	28.07	0.27	32.93	0.36
Aviation	43.73	50.7	40.21	53.76
Engineering	44.38	18.77	40.22	15.10
Miscellaneous	13.42	5.07	21.15	5.40
Total	**23.44**	**7.59**	**29.58**	**7.75**

Source: IRDA, *Annual Report,* 2008–09.

TABLE 16.14 Net Retention of Non-life Indian Market (Incl. GIC)

(Per Cent)

Department	*2008–09*	*2007–08*	*2006–07*	*2005–06*	*2004–05*	*2003–04*
Fire	77.35	75.65	65.72	85.76	76.00	80.46
Marine Cargo	88.59	84.43	77.10	91.77	85.07	89.46
Marine Hull	31.26	20.01	18.30	39.76	25.55	26.68
Engineering	71.26	77.52	72.89	91.55	75.78	81.29
Motor	99.99	100.00	96.15	100.00	99.64	99.02
Aviation	23.71	24.21	21.93	48.53	23.53	25.98
Miscellaneous	96.95	97.11	89.63	94.47	88.35	94.70
Total	**94.45**	**91.26**	**83.41**	**92.58**	**86.45**	**87.90**

Source: IRDA, *Annual Report*, 2008–09.

GENERAL INSURANCE CORPORATION OF INDIA

The government nationalised the general insurance business in 1972. One hundred and seven insurers, including branches of foreign companies operating in India, were amalgamated and grouped into four companies, namely, The National Insurance Company Limited, The New India Assurance Company Limited, The Oriental Insurance Company Limited, and The United India Assurance Company Limited with head offices at Calcutta, Bombay, Delhi, and Chennai. The General Insurance Corporation (GIC) was incorporated as a holding company of these four general insurance companies in November 1972. The Government of India subscribed to the capital of GIC which, in turn, subscribed to the capital of the four companies. All the four companies are government companies registered under the Companies Act. The GIC commenced business on January 1, 1973. GIC was formed for the purpose of superintending, controlling and carrying on the business of general insurance. The GIC was expected to generate competition among the four subsidiary companies. It was also entrusted to write directly the Aviation (Hull and Liability) insurance of the national carriers (Indian Airlines and Air India), Hindustan Aeronautics Limited, and the International Airport Authority of India.

The main objectives of GIC were superintending, controlling, and carrying on the business of general insurance.

The functions of GIC as mentioned in the Act were as follows:

- The carrying on of any part of general insurance business as deemed desirable.
- Aiding, assisting and advising the companies in the matter of setting up of standard of conduct and sound practice in general insurance business and in rendering efficient customer service.
- Advising the acquiring companies in the matter of controlling the expenses including the payment of commission and other expenses.
- Advising the acquiring companies in the matter of investment of funds.
- Issuing directions to acquiring companies in relation to the conduct of general insurance business.

In November 2000, the government notified the General Insurance Corporation of India as the 'Indian Reinsurer' under Section 101A of the Insurance Act, 1938. Insurance companies spread their risk by an arrangement with other underwriters or reinsurance companies known as reinsurers. The IRDA has prescribed that 20 per cent of the gross premium would have to be ceded compulsorily to GIC—as a reinsurer by all insurers. GIC has turned into a full reinsurer barring crop insurance which it manages for the time being on behalf of the government. GIC administers on behalf of the government, the Crop Insurance Scheme for areas and crops notified under it. GIC has to draw a reinsurance programme for the reinsurance industry every year and get it cleared by the IRDA. GIC also underwrites inward reinsurance business from Afro-Asian and Gulf nations.

- GIC has turned into a full reinsurer providing reinsurance to the direct general insurance companies in India

It was designated as the Indian Reinsurer under Section 101A of the Insurance Act to which all the domestic insurers were obliged to cede 20 per cent of the gross direct premium in India which was reduced to 10 per cent in 2008–09. The objective was to retain maximum business in India and also to secure the best terms from foreign reinsurers through GIC for itself and all the four public sector companies. The national re-insurer, General Insurance Corporation, reported solvency ratio of 3.67 as on March 31, 2009 as against 3.36 as on March 31, 2008.

The corporation's reinsurance programme has been designed to meet the objectives of optimising the retention within the country ensuring adequate coverage for exposure and developing adequate capacities within the domestic market. The reinsurer has taken advantage of the prevailing competitive conditions to increase reinsurance support by participating/leading the reinsurance treaties of the insurers and extending facultative support. It has also developed vertical capacity to cover risks upto Rs. 1,500 crore PML (probable maximum loss) for the benefit of the Indian market. GIC has also made reinsurance arrangements to provide automatic cover to peak risks up to Rs. 3,000 crore probable maximum loss (PML) under the peak risk facility. Further, since GIC does not have the aggregate exposures for each area/state, it has purchased an additional earthquake perils protection for Rs. 500 crore.

GIC has diversified its operations to provide life reinsurance during 2003–04. A separate department has been set up for this purpose. Treaties have been entered into with both domestic and foreign insurers. Inward requests for reinsurance support have also been received from Asian and African countries.

The General Insurance Corporation of India is one of the largest financial institutions in the country. Figure 16.4 shows how the activities of GIC are organised.

The General Insurance Corporation has a high reach with a strong distribution network which consists of regional offices, divisional offices, branch offices, and agents. The regional head office undertakes underwriting, reinsurance and investment functions. The regional offices look into the administration and provide support to divisional offices. The divisional offices consist of divisional managers and development officers who also look into the training and development of agents. The divisional offices procure business, underwrite new business, and settle claims. Under divisional offices there are branch offices, which also procure new business. This multi-layered distribution system impedes quick decision-making and is a major contributor to the high expense ratio. The major incentive is on premium collection and not on account profitability.

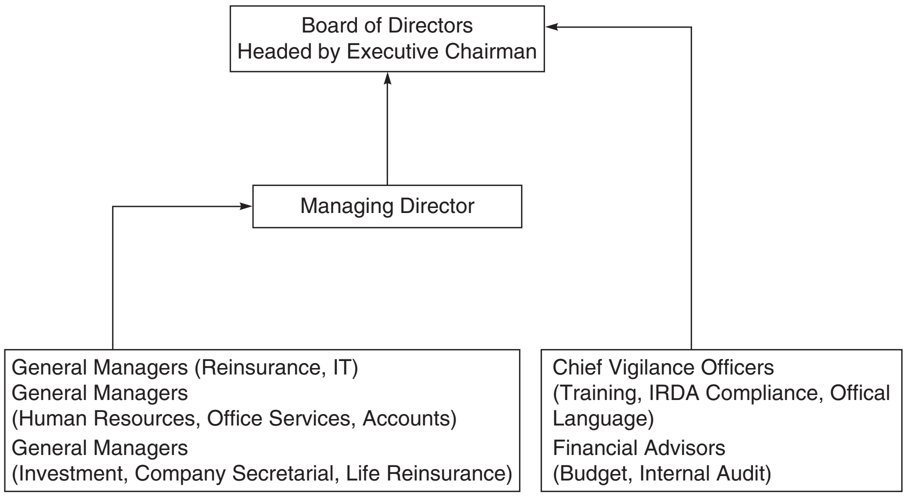

Figure 16.4 GIC's Organisational Structure

Operations of GIC

GIC manages marine hull pool and the terrorism pool on behalf of the Indian insurance industry. It also provides war cover, catastrophic peril cover, earthquake peril cover, marine cover and protection for personal accident business, and oil and energy business. It provides support to the Indian insurance industry in the form of obligatory cessions, company surplus treaties market surplus treaties, excess of loss protection to direct insurers in India. It has started leading the reinsurance programmes of several insurance companies in SAARC countries, South East Africa, Middle East, and Africa.

The income of GIC comprises of premium accepted under obligatory cessions, inward reinsurance arrangements by the non-life insurers and premium on reinsurance accepted from the international market.

GIC derives its risks from the claims liability of the direct insurers, inability to benefit from prompt payment of premiums upfront, running credit risks and currency fluctuation risks, and hazards of blind treaties.

GIC used to join term-lending institutions such as IDBI and IFCI in consortiums for lending mediumand long-term loans. It has opted out of loan consortium route for investments. Instead, it will lend directly to the infrastructure sector by investing in bonds and securitised instruments. GIC is concentrating its efforts on repackaging existing policies, launching new products, and development of existing policies.

GIC opened a full-fledged branch in Dubai and representative offices in London and Moscow as a step towards increasing foreign insurance business. About 23 per cent of the total inward business of GIC is from the Middle East, 33 per cent from Asia, 14 per cent each from Africa and West Europe, and 12 per cent from Mediterranean, East Europe, and CIS.

In order to concentrate exclusively on its core business—reinsurance, GIC 'moved' out of the mutual fund business.

GIC invests in units of UTI, equities of private and public sector undertakings, and approved government securities. GIC is an active player in the secondary market for shares and government securities.

GIC has now diversified into life reinsurance business to avail of the opportunities in the Indian life market.

GIC should focus on marketing to sell its reinsurance services in a competitive market.

GIC is manager of the third party motor pool.

Conclusion

The reinsurance market in India is estimated at Rs. 3,000 crore, with the GIC having a 40 per cent share. The domestic insurance companies reinsure the remaining 60 per cent in the global market through a reinsurance broker. The largest domestic reinsurance clients include ONGC, IOC, Indian Airlines, and Air India.

Foreign insurance companies are not interested in doing reinsurance business as they can do business in India by holding a maximum equity of 26 per cent either through a joint venture or by setting up their own subsidiary. Moreover, with a Rs. 200 crore paid-up capital, a domestic reinsurance company will not be able to underwrite reinsurance business of even a medium-sized project and would be required to retrocede the risk to an international company. The IRDA needs to infuse competition in reinsurance segment.

LIFE INSURANCE

Life insurance is a contract between two parties, the assured and the assurer, whereby, the latter for consideration promises to pay a certain sum of money to the former (or failing him/her, to the person entitled to receive the same) on the happening of the event insured against. The life insurance contract provides for the payment of an amount on the date of maturity of the contract or at specified dates at periodic intervals or at untimely (prematured) death. The contract also provides that the insured shall pay premium periodically to the insurer.

There are five needs that life insurance can satisfy: dying young, living too long, disability, care for children, and wealth generation.

Life insurance is generally a long-term contract which provides a sense of security to the assured and his family. Life insurance is concerned with basically two hazards in the life of a person: that of dying prematurely leaving behind a dependent family and that of living to old age without financial support. Today, the nuclear family has replaced the joint family system, lifestyles have changed, needs and wants have increased and, above all, uncertain future adversities of life have increased. All these factors have led to an increasing demand for life insurance globally.

The life insurance business in India is still being dominated by the single monolith, Life Insurance Corporation of India (LIC). Besides LIC, there are twenty-one new entrants in the life business .The total number of players in the life insurance business are 23 (one public sector and 22 private sector companies).

Benefits of Life Insurance

Life insurance

- safeguards the insured's family against an untimely death and provides for a secured income;
- is a means of compulsory savings;
- is a source of income during old age;
- helps in meeting certain periodic financial needs, either for a child's education or marriage;
- improves the lifestyle of the insured and his family;
- takes care of disabilities and uncertain future adversities of life; and
- brings in tax-benefits under Section 80C of the Income Tax Act.

Life Insurance Products

There are four broad types of insurance policies to choose from—endowment, money-back, whole-life, and term insurance.

- **Endowment plan:** Under this plan, insurance cover is available for a specific period or term. The sum assured is payable even if the assured dies during this tenure period. In other words, the sum assured together with bonus is payable on the date of maturity or in the event of the death of the insured, whichever is earlier. The endowment policies are the most popular of all the life policies not only in India but world over they are perceived as savings instrument.
- **Money-back policies:** Money-back policies are also popular in India. Under this policy, the sum assured is returned as lumpsum after defined intervals of time. In other words, the assured receives a fixed sum at fixed intervals during the term of the policy. Both endowment and moneyback policies are by far the most expensive products.
- **Whole-life policy:** As the name suggests, it covers risk for whole life and is an insurance cover against death. It primarily caters to protection of a policyholder's entire life. The policyholder pays premium throughout his life and on his death, the money is handed over to his family. This policy is not so popular as it does not take into consideration the increasing needs of the insurer during his post-retirement years. Moreover, the cost of insurance is higher. For instance, the annual premium is Rs. 3,000 per annum for a sum assured of Rs. 1 lakh. To balance this high cost, insurance firms combine this policy with other types of policies.
- **Term insurance policy:** Term Insurance is a pure risk product. This policy is like a whole-life policy but offers risk cover for defined periods. This policy comes at a very low premium as the sum assured is payable only if the policyholder dies within the policy term. If he survives, he is not entitled to

any payment on maturity, irrespective of premium payments made earlier. In case of term insurance, reserves are not accumulated and the premium is meant for offering protection alone. Therefore, the product offers high cover on payment of a small premium. Typically, the premium ranges between Rs. 250 to Rs. 500 annually for a term policy of Rs. 1 lakh.

Term insurance is the cheapest form of insurance. A term policy is taken either by young people as a life cover or as a security of their family against a long-term outstanding loan. This policy is not popular among investors as there are no maturity benefits available on survival until the end of the term. To increase its popularity, some private sector life insurers are offering a variant of the plain-vanilla term insurance policy called 'premium-back term insurance'. As the name suggests, at the end of the term, the insured gets back in full whatever premiums he has paid. However, this policy carries higher premiums than simple term insurance plan.

The life insurers now offer money-back options, pension plans, and unit-linked insurance, often with health insurance riders with premium collected through either lumpsum payments or in multiple instalments.

Unit-linked Insurance Policies These policies are becoming increasingly popular. Unit-linked policies are those where part of the premium is invested in a fund (similar to a mutual fund) and the return is linked to the performance of the fund. The investors are given a choice of three funds—a debt fund, a balanced fund, and an equity fund for investment. Unit-linked plans are more flexible and transparent compared to traditional insurance plans. Combining the protection and tax advantages of life insurance with the prospect of investing in securities, unit-linked plans dominate a large chunk of the insurance companies' portfolio. Unit-linked products are sold both under the individual single premium and non-single premium segments. Some common types of funds available in ULIPs are Bond Fund, Protector Fund, Secure Fund, Balanced Fund, Growth Fund, Index Fund, and Enhancer Fund. The choice of the fund depends on the risk appetite of the investor as the risk is to be borne by the investor. The investor also has to bear certain charges such as premium allocation charges, mortality charges, fund management charges, policy/administration charges, surrender charges, fund switching charges, and service tax.

- Unit-linked insurance policies are those where a part of the premium is charged for the risk cover and the rest is invested in select mutual funds as per the choice of the investor

Unit linked insurance policies are like mutual funds. When you pay the premium, the company after deducting stipulated charges, invests the amount in stock market instruments like equity and debenture. Here also the investors are given the choice whether they prefer to go for high risk (more investment in equity), medium risk and low risk. Thus, the major benefits to investors in ULIP is to have the benefit of appreciation of the investment, benefits of tax rebate as provided under section 80CC of the IT Act and above all, a life cover. Insurance companies are required to declare the NAV of various ULIPs on a daily basis.

There has been a surge in the demand for ULIPs on account of varied benefits such as flexibility to choose sum assured and premium amount, option to change level of premium and asset allocation by switching between funds, transparency in the net amount invested, tracking of investment performance on a daily basis and option to withdraw money after five years.

- ULIPs contribute more than 50 per cent of the new business premium of life insurance companies

Despite the growing popularity of ULIPs , policy holders rely heavily on the advice rendered by the distributors and agents. The complicated design of the policies makes them less aware of the product features and chances of mis-selling by agents are high. Agents withhold certain information that causes the most damage. They do not tell the buyer that if he exercises the option to stop paying premium after a few years, the rate of return will fall on account of high front loading charges in the initial three to four years of the policy and the investor will get his money after deduction of all charges only after five years. Investor needs to stay long-term to reap the benefits. To protect the interest of the customers, IRDA has taken the following initiatives.

- **Lock in period increased to five years:** IRDA has increased the lock-in period for all unit-linked products from three years to five years, including top-up premiums, thereby making them long-term financial instruments, which basically provide risk protection.
- **Level paying premiums:** Further, all regular premium/limited premium ULIPs shall have uniform/level paying premiums. Any additional payments shall be treated as single premium for the purpose of insurance cover.
- **Even distribution of charges:** Charges on ULIPs are mandated to be evenly distributed during the lock in period to ensure that high front ending of expenses is eliminated.
- **Minimum premium paying term of five years:** All limited premium unit-linked insurance products, other than single premium products shall have premium paying term of at least five years.
- **Increase in risk component:** Further, all unit-linked products, other than pension and annuity products shall provide a mortality cover or a health cover thereby increasing the risk cover component in such products.

- **Minimum guaranteed return for pension products:** As regards pension products, all ULIP pension/annuity products shall offer a minimum guaranteed return of 4.5% per annum or as specified by IRDA from time to time. This will protect the life time savings for the pensioners from any adverse fluctuations at the time of maturity.
- **Rationalisation of cap on charges:** With a view to smoothening the cap on charges, the capping has been rationalised to ensure that the difference in yield is capped from the 5th year onwards. This will not only reduce the overall charges on these products, but also smoothen the charge structure for the policyholder.
- **Discontinuance of charges:** IRDA has also addressed the issue of discontinuance of charges for surrender of ULIPs. The IRDA (Treatment of Discontinued-Linked Insurance Policies) regulations brought out by IRDA in this regard ensure that policyholders do not get overcharged when they wish to discontinue their policies for any emergency cash requirement. The regulations stipulate that an insurer shall recover only the incurred acquisition costs in the event of discontinuance of policy and that these charges are not excessive. The discontinuance charges have been capped both as percentage of fund value and premium and also in absolute value. The regulations also clearly define the grace period for different modes of premium payment. Upon discontinuance of a policy, a policyholder shall be entitled to exercise an option of either reviving the policy or completely withdrawing from the policy without any risk cover. Further, the regulations also enable IRDA to order refund of discontinuance charges in case they are found excessive on enquiry.

Group Insurance Policies Individual life insurance business is divided into three main business segments—individual regular business, single premium business, and individual pension business. The group insurance segment mainly comprises of regular group insurance, corporate gratuity and superannuation plans. Regular group insurance policies cover groups of people such as employees in a firm. Corporates purchase these policies to cover their employees. These policies are popular as the premium per employee turns out to be low. The group gratuity and superannuation plans are a result of statutory obligation.

New Players in the Life Insurance Market

Life insurance business is now a sophisticated business in India.

The deregulation of the insurance sector increased the number of players in the life insurance market. There are 22 new private sector players in the life insurance market. They are:

Bajaj Allianz Life Insurance Company Limited
Birla Sun-Life Insurance Company Limited
HDFC Standard Life Insurance Company Limited
ICICI Prudential Life Insurance Company Limited
ING Vysya Life Insurance Company Limited
Max New York Life Insurance Company Limited
Metlife India Insurance Company Pvt.Limited
Kotak Mahindra Old Mutual Life Insurance Limited
SBI Life Insurance Company Limited
TATA AIG Life Insurance Company Limited
Reliance Life Insurance Company Limited
Aviva Life Insurance Company Limited
Sahara India Life Insurance Company Limited
Shriram Life Insurance Company Limited
Bharti AXA Life Insurance Company Limited
Future Generali India Life Insurance Company Limited
IDBI Fortis Life Insurance Company Limited
Canara HSBC Oriental Bank Of Commerce Life Insurance Company Limited
Aegon Religare Life Insurance Company Limited
DLF Pramerica Life Insurance Company Limited
Star Union Dai-ichi Life.
India First Life Insurance Company Limited

The Life Insurance Corporation of India (LIC), which had a monopolistic control over the market, faced a stiff competition from the new entrants (Table 16.15). Competition led to the adoption of distinct marketing strategies and alternative distribution channels.

Among the private sector players, ICICI Prudential is the market leader. ICICI's success is driven by aggressive distribution, leveraging existing customer base, and detailed implementation planning. All new entrants have expanded rapidly and have presence in about all cities across the country, represented by more than 13 lakh agents. They have introduced a large number of new products and collectively spent about Rs. 200 crore on advertising.

To compete and survive in this highly competitive environment, insurers are offering insurance solutions which are customised to match with individual needs. In order to provide better services to the customers, the insurers have set up national level call centres, interactive voice response systems and websites that provide interactive tools to help customers to plan their needs. To increase their reach, insurers have tapped alternative distribution channels such as tie-ups with banks and retail giants like Shoppers' Stop. Insurers are also using their existing customer database and database of the distributors to cross-sell the products. These strategies have increased customer awareness of insurance which has led to a growth in the life insurance business.

There is a large market for insurance untapped in rural areas. With 74 per cent of India's population living in rural areas and contributing 40 per cent to national income, insurance companies are looking at rural markets as an opportunity rather than obligation. The private sector life insurance companies are designing innovative insurance products and marketing strategies for the rural market. Many of the companies have tied up with non-government organisation and social activists agencies for promoting and distributing their products.

The private sector life insurance companies have been a in a position to capture more than 25 per cent of the market share in a short span of nine years. This reflects that they have succeeded in building faith among the Indian investors. Moreover, their success is also due to smart pricing and tailor-made design of the products.

Private life insurance companies have brought in robust risk management and fund management practices.

TABLE 16.15 Market Share of Life Insurers

		(Per Cent)	
Insurer	*2006–07*	*2007–08*	*2008–09*
Regular Premium			
LIC	65.89	47.77	38.77
Private Sector	34.11	52.23	61.23
Total	**100.00**	**100.00**	**100.00**
Single Premium			
LIC	86.96	86.99	90.44
Private Sector	13.04	13.01	9.56
Total	**100.00**	**100.00**	**100.00**
First Year Premium			
LIC	74.32	64.02	61.12
Private Sector	25.68	35.98	38.88
Total	**100.00**	**100.00**	**100.00**
Renewal Premium			
LIC	89.02	83.42	77.24
Private Sector	10.98	16.58	22.76
Total	**100.00**	**100.00**	**100.00**
Total Premium			
LIC	81.90	74.39	70.92
Private Sector	18.10	25.61	29.08
Total	**100.00**	**100.00**	**100.00**

Source: IRDA, *Annual Repot,* 2008–09.

With the entry of new players, the monolith LIC was forced to adopt better marketing strategies. In fact, LIC's business grew tremendously after deregulation of the insurance sector. It could further strengthen its brand equity inspite of the entry of some reputed private sector players. LIC has adopted a market savvy approach and introduced new products and policies. LIC has to aggressively explore new untapped markets to meet the challenge of private sector players.

The IRDA has made it compulsory for life insurers to provide premium rates with a facility of a premium calculator on their websites. This move is towards improving transparency and allowing customers to compare rates across companies.

Changing Trends in Life Insurance

Insurance contracts in India are typically sold rather than bought. Before deregulation, life insurance policies were sold as tax-saving products by LIC. Insurance purchase decision was driven by a shortterm motive to invest a small sum as premium to reduce tax liability. The two most popular products of LIC were Endowment and Money-Back Policies—the saving products. They dominated the Indian insurance market, accounting for nearly 99.5 per cent of the policies sold and nearly 99.9 per cent of the premium income before deregulation. The mindset of the Indian consumer is changing. The Indian consumer no longer views insurance as a tax-benefit induced exercise. This change has been due to the following reasons.

- The efforts of the private sector players who could successfully create an awareness that the primary focus for any insurance cover is protection, savings is only a spin-off benefit. The entry of private sector companies has brought about a paradigm shift in the definition of the word insurance.
- A substantial drop in insurance prices, which created a preference for insurance products. Moreover, consumers have realised that there are several options for deploying savings but there is no substitute for life insurance as a means of protection.

This changing trend has led to an increase in demand for insurance products which offer protection. The insurance companies are aggressively marketing whole life and term plans.

Another trend is an increase in the awareness about purchasing the correct amount of risk cover commensurate with one's age, income, and profile. This has led to an increase in the size of the policy. Before deregulation, the policy sizes were restricted to the premium levels under which one would receive tax benefits. Life insurance companies are offering tailor-made products to suit the differing needs of the consumers. Life insurance products are designed to adjust protection levels within the same policy. Moreover, these companies are providing the clients with innovative, flexible, and attractive riders. Joint ventures with renowned foreign insurance companies have provided an added advantage in product innovation.

After opening up of the insurance sector, Unit-linked insurance policies (ULIPs) have become increasingly popular.

Analysis of figures in the Table 16.16 reveals that the growth of insurance premiums is driven by unit linked insurance plans and the private sector players are aggressively selling ULIPs.

TABLE 16.16 Trends in Life Insurance Business—Unit Linked Insurance Plans

	Unit Linked Business (%)			*Non-linked Business (%)*		
	2005–06	*2006–07*	*2007–08*	*2005–06*	*2006–07*	*2007–08*
Private	82.30	88.75	90.33	17.70	11.25	9.67
LIC	29.76	46.31	62.31	70.24	53.69	37.69
Industry	41.77	56.91	70.30	58.23	43.09	29.70

Source: IRDA, *Annual Report*, 2007–08.

Investments

Life insurance is a long-term contract, which generates investible surplus. Life insurance premiums are received in advance by the life insurance companies. These premiums should be judiciously invested until they are needed to pay claims and expenses. The income received from investment is paid in the form of dividends to policyholders, which reduces the cost of life insurance. Moreover, these premiums, if invested in infrastructure and social sectors, lead to higher economic growth of the country. In view of the above, the IRDA has mandated the pattern of investments to be followed by the life insurance companies. It has also specified that every insurer carrying on the business of life insurance shall invest and at all times keep invested his controlled fund (other than funds relating to pension and general annuity business and unit-linked life insurance business) in the following manner.

Type of Investment	*Percentage*
1. Government securities	25%
2. Government securities or other approved securities (including (i) above)	Not less than 50%
3. Approved investments as specified in schedule I	
a. Infrastructure and social sector	Not less than 15%
b. Others to be governed by exposure norms (investments in 'Other than Approved Investments' in no case can exceed 15% of the fund)	Not exceeding 35%

Prior to the notification of the Investment Regulations, 2000, by the IRDA, the investments of LIC were as per the directions of the government. Both the new players and LIC are trying to comply with the new investment regulations.

Approved Investments for Life Business 'Approved Investments' for the purposes of Section 27 A of the act shall be as follows.

- All approved investments specified in Section 27 A of the act except
- Clause (b) of Sub-section (1) of Section 27 A of the act;
- first mortgages on immovable property situated in other country as stated in Clause (m) of Sub-section (1) of Section 27 A of the act;
- immovable property situated in other country as stated in Clause (n) of Sub-section (1) of Section 27 A of the act.

In addition, the IRDA has declared the following investments as approved under vide clause (s) of (1) of Sub-section (1) of Section 27A.

- All secured loans, deposits, debentures, bonds, other debt instruments, shares and preference shares rated as 'very strong' or more by a reputed and independent rating agency (e.g., AA of Standard and Poor).
- Deposits with banks (e.g., in current account, call deposits, notice deposits, term deposits, certificates of deposits) and with primary dealers recognised by the RBI included for the time being in the second schedule to the Reserve Bank of India Act, 1934 (2 of 1934).
- Commercial papers issued by a company having a 'very strong' or more rating by a reputed and independent rating agency (e.g., AA of Standard and Poor).
- Investments in venture capital funds of such companies/organisations which have a proven track record and have been rated 'very strong' or more by a reputed and independent rating agency (e.g., AA of Standard and Poor).

The life insurers have to invest their life, pension and general annuity, group and unit-linked funds as per Regulation 3 of the IRDA (Investment) Regulations, 2000. These funds are to be invested in central government securities, state government securities, other approved securities and infrastructure/social sector. The total investible funds of life insurance industry stood at Rs. 9,16,365 crore at end- March 2009 representing a growth of 19.63 per cent over the previous year (Table 16.17). About 61 per cent of these funds were invested in government securities much higher than the stipulated rate of 50 per cent. Of all

TABLE 16.17 Investments of Life Insurer: Fund Wise

(As on March 31st)(Rs. Crore)

Insurer	*Life Fund*		*Pension and General Annuity Fund & Group Fund*		*Unit-Linked Fund*		*Total of All Funds*	
	2008	2009	2008	2009	2008	2009	2008	2009
LIC	522985	606487	87744	107135	67674	85972	678403	799593
Private Sector	18645	23163	3518	6817	65404	86792	87567	116772
Total	**541630 (70.71)**	**629650 (68.71)**	**91262 (11.91)**	**113952 (12.44)**	**133077 (17.37)**	**172763 (18.85)**	**765969 (100.00)**	**916365 (100.00)**

Note: 1. The figures for 2008-09 are based on provisional returns filed with IRDA.
2. Figure in brackets is percentage of respective funds to the total funds.

Source: IRDA, *Annual Report,* 2008–09.

TABLE 16.18 Total Investments: Instrument-wise

(Rs.Crore)

Investments from Traditional Products	2005–06 Amount	2005–06 Percentage to Total	2006–07 Amount	2006–07 Percentage to Total	2007–08 Amount	2007–08 Percentage to Total	2008–09 Amount	2008–09 Percentage to Total
1. Approved Securities Incl. Central Govt. Securities	2,96,377.00	64.25	3,35,187.00	62.40	3,81,855.57	60.62	4,23,199.34	56.91
2. Of which, Central 'Govt. Securities	2,38,089.00	51.62	2,75,099.00	51.22	2,96,687.46	46.88	1,07,189.54	42.50
3. Infrastructure and Social Sector	49,638.50	10.76	69,837.00	13.00	63,262.13	10.00	66,673.33	8.97
4. Investment Subject to Exposure Norms Including other than Approved Investments	1,15,247.00	24.99	1,32,106.00	24.59	1,87,744.15	29.66	2,53,727.36	34.12
5. Of which, other than Approved Investments	26,698.60	5.79	30,049.00	5.59	42,190.44	6.67	51,260.39	6.89
A Total (1+3+4)	**4,61,263.00**	**100.00**	**5,37,130.00**	**100.00**	**6,32,891.85**	**100.00**	**7,43,602.02**	**100.00**
ULIP Funds								
6. Approved Investments	23,401.00	90.39	57,587.24	85.89	1,11,629.43	83.88	1,51,489.89	87.69
7. Other than Approved Investments	2,487.12	9.61	9,462.56	14.11	21,448.05	16.12	21,272.87	12.31
B Total (6+7)	**25,888.10**	**100.00**	**67,049.80**	**100.00**	**1,33,077.48**	**100.00**	**1,72,762.76**	**100.00**
Grand Total (A+B)	**4,87,151.10**		**6,04,179.80**		**7,65,969.33**		**9,16,364.78**	

Source: IRDA, *Annual Report*, 2008–09.

the players, the LIC was the biggest contributor with total investible funds of Rs. 7,99,593 crore which was 87 per cent of the total invested funds. The private sector share of invested funds almost doubled during 2007–08 as compared to the previous year.

An analysis of Tables 16.16 and 16.18 reveals that around 61 per cent of the premiums from traditional products such as endowment plans is invested in approved securities (government securities, corporate bonds and the money market) while a significant shift has taken place in case of investment pertaining to ULIP funds. There has ben an increasing trend of investing ULIP funds in other than approved investments. The growth in investment of ULIP funds in equities was on account of buoyant stock markets.

Maintenance of Solvency Margins of Insurers

Life insurers are custodians and managers of investments of individuals. Every life insurer is required to maintain an excess of value of its assets over the amount of its liabilities of not less than Rs. 50 crore (Rs. 100 crore in the case of a reinsurer) or a sum equivalent based on a prescribed formula; as determined by regulations not exceeding 5 per cent of the mathematical reserves and a percentage not exceeding one per cent of the sum at risk for the policies on which the sum at risk is not negative, whichever is the highest.

In addition, at the time of registration all the new insurers have been required to maintain a solvency ratio of 1.5 times the normal requirements. All life insurers complied with the stipulated solvency ratio of 1.5 during 2008-09 (Table 16.19).

Life Insurance Council

The Life Insurance Council was set up in 2004, under the aegis of the Insurance Development and Regulatory Authority (IRDA), to put forward common issues of life insurance to the IRDA and the government. It was formed as per Section 64 C of the Insurance Act, all registered life insurance companies are the members of this council. There are two nominees from the IRDA, one of whom is the Chairman of the Council. The Secretary General functions as the chief executive of the Council.

- Life insurance council of India is the industry body of registered life insurers in India

The council has taken up issues such as income tax, service tax, monitoring of management expenses, strict rules of market conduct, insurance education research and setting up of a new entity—Mortality and Morbidity Investigation Bureau (MMIB) for effective data management.

TABLE 16.19 Solvency Ratio of Life Insurers in India

(As on March 31st)

S.No	Name of the Insurer	2009	2008	2007	2006
	Private				
1	Aegon Religare	1.93	–	–	–
2	Aviva	5.91	4.29	6.31	2.80
3	Bajaj Allianz	2.62	2.34	2.45	2.80
4	Bharti Axa	2.07	2.73	1.96	NA
5	Birla Sun	2.44	2.37	1.80	2.00
6	Canara HSBC	5.74	–	–	–
7	Future Generali	3.17	2.94	–	–
8	DLF Pramerica	1.71	–	–	–
9	HDFC Standard	2.58	2.38	2.05	2.90
10	ICICI Prudential	2.31	1.74	1.53	1.60
11	IDBI Fortis	6.11	3.45	–	–
12	ING Vysya	2.26	2.36	2.87	2.30
13	Max New York	3.04	2.25	2.08	2.00
14	Met Life India	2.27	1.70	1.73	1.70
15	Om Kotak Mahindra	2.69	2.41	1.64	1.80
16	Reliance	2.50	1.65	1.62	2.00
17	Sahara India	3.60	4.32	2.68	2.70
18	SBI Life	2.92	3.30	1.78	2.90
19	Shriram	3.05	2.85	2.74	2.20
20	Star Union Dei-ichi	2.53	–	–	–
21	Tata AIG	2.51	2.50	2.59	2.70
	Public				
22	LIC of India	1.54	1.52	1.50	1.30

Source: IRDA, *Handbook on Indian Insurance Statistics*, 2009.

Box 16.2 'Human Life Value'—A Tool to Know Your Worth

The first thought that comes in mind to provide financial security for our family is life Insurance. Life insurance is the most efficient way of furnishing security & it offers people methods of achieving economic security. But, how much your family needs in your absence would is a question, which you find difficult to answer. While there are several ways to arrive at the right amount of cover you need to provide the financial security to your family, the most efficient way is through calculating 'Human Life Value'.

Human Life Value (HLV) is a methodology to determine the appropriate amount of sum assured you need to have at present in case of future loss of income. In simple words, it is that amount, which can ensure that the standard of living of the family is not affected even if the earning member is not there. HLV calculation is a tool that is used very effectively for financial planning around the world. It is a systematic way of understanding the gaps in the financial planning.

How do you determine your Human Life Value? Human Life Value is determined by three main factors:

1. Your age
2. Current and future expenses.
3. Current and future income

How to Calculate:

Approach 1: This approach focuses on income of the individual and family while arriving at the HLV. This approach is based on the simple reasoning that the value of one's life is equal to his earning capacity. In the event of death of the breadwinner in a family, it is the current as well as prospective income of the family member which is the real financial loss to the family. Hence the sum insured should take care of loss of income rather than anything else.

Let see an example, where HLV is calculated for Mr Vivek Rao based on the present needs and income. Mr. Vivek Rao aged 41 years has an annual income of Rs.10 lakhs, spends Rs.3 lakhs on his personal expenses (including Taxes). He has Fixed Deposits of Rs. 6 lakhs. He also has a loan of Rs.10 lakhs and plans to spend Rs.10 lakhs each on his son's education and his daughter's marriage. His human life value will be as follows.

(Continued)

Box 16.2 (*Continued*)

Annual Gross Income	10,00,000
Less Expense on Self including taxes	300,000
Contribution to Family Standard of Living	700,000
Multiplying factor	15
Gross Human Life Value	1,05,00,000
Less Liquid Assets	600,000
Add Liabilities	1,000,000
Add Amount to fulfill family needs like daughter's marriage & son's education	2,000,000
Human Life Value	1,29,00,000

Expenditure on self-maintenance is 1/3 of gross income for people. This also includes varying tax liabilities. Liquid assets would be available to the family in the event of the death of the breadwinner. It does not include the value of other assets like property or jewellery since it is assumed that the family would continue using these assets.

A fixed multiplier is applied on the annual income. Multipliers based on the age of the individual are given in the table below.

Age	Multiplying Factor
Upto 35 years	25 times
36 to 40 Years	20 times
41 to 45 years	15 times
46 to 50 years	12 Times
51 to 60 years	10 Times
61 to 65 years	5 Times

The multiplying factors given above are just thumb rules. Ideally they are supposed to reflect the "working life' of the individual at the time of taking insurance. In order to customise HLV the age at which one would like to retire has to be fixed. The multiplier may be worked out accordingly.

Approach 2: The basic flaw with the income approach is that because it focuses on income the sum insured works out to be too high. Taking insurance for such a high HLV may become expensive and unaffordable at times.

An alternative and perhaps a more logical approach is the expenditure approach. Insurance is ideally supposed to put the insured family in the same position as they were before the unfortunate event of death. This can be done more properly if the underlying variable is expenditure and not income.

Moreover, expenditure is something which needs to be incurred over a period of time and not at a time and hence the proceeds of life insurance should ideally provide enough capital to the family that yields a risk free return that is sufficient to defray expenses at a given standard of living. The objective here is to ensure that family sustains at the same standard of living.

The following steps may be followed.

1. Calculate the annual expenditure on the family which is required to maintain their current standard of living.
2. Add expenses like expenses on children's education and marriage to this amount.
3. If the period for which insurance is planned is more than 10 years, the expenditure amount has to be suitably adjusted for inflation. The annual expense figure which is based on current prices need to be loaded to the extent of inflation. Instead of loading it for 15 or 20 years it may be loaded for 10 years only. This is because loading it for 20 years would result in a very high figure and secondly the peak of an individual's financial responsibility curve would be attained in next 10 years. After this the curve would anyway start declining.
4. Estimate the risk free rate of return into which the life insurance proceeds would be invested by the family.

Example

Annual household expenditure including loan instalments	240,000
Expenses on higher education for children	10,00,000
Risk free rate of return	8%
Amount that will yield a return equivalent to annual household expenditure.	30,00,000
Add education expenses	10,00,000
HLV	40,00,000

(*Continued*)

Box 16.2 *(Continued)*

The Human Life Value is just indicative and a starting point in reference to a person's current ability to set aside money for him and his family's future financial security. There are ready calculators available for calculating the HLV based on current and future income and expenses as well.

Once a prospect is convinced with the amount, he can choose various life insurance plans for covering yourself.

Source: HDFC News letter.

The life insurance industry made a first move towards self regulation from August 23, 2003. The industry set up a 'Life Insurance Self Regulation Standards of Conduct and Sound Practice. Life insurers can no longer sell policies by generating irrational expectations. All insurance companies will have to use a standardised rate of return set out by the Life Insurance Council in consultation with the Actuarial Society of India. Clients must be informed that rates of return are not guaranteed. Illustrations should project both optimistic and conservative views. All policy changes need to be stated explicitly. Insurers cannot force customers to buy add-on benefits. An insurance company has to inform client of policy status atleast once a year.

LIFE INSURANCE CORPORATION (LIC) OF INDIA

On January 19, 1956, 154 Indian insurers, 16 non-Indian (foreign) insurers, and 75 provident societies operating in India, were taken over by the central government and then nationalised on September 1, 1956. The Life Insurance Corporation of India came into existence on September 1, 1956, as an autonomous body with five zonal offices, 33 divisional offices, and 212 branches and sub-offices all over India at 97 centres.

The Life Insurance Corporation of India was set up with the objective of spreading life insurance much more widely and, in particular, to the rural areas and to the socially and economically backward classes with a view to reaching all insurable persons in the country and providing them adequate financial cover against death at a reasonable cost. The role of LIC was to maximise mobilisation of people's savings by way of premia and ensuring the welfare of the country including the policy holders by investing and directing the funds in activities which contribute to the economic prosperity of the country.

In the era of liberalisation, privatisation, and globalisation, it has redefined its vision, mission and objectives broadly.

Vision A trans-nationally competitive financial conglomerate of significance to societies and pride of India.

Mission Explore and enhance the quality of life of people through financial security by providing products and services of aspired attributes with competitive returns, and by rendering resources for economic development.

Objectives of LIC

- Spread life insurance much more widely and in particular to the rural areas and to the socially and economically backward classes with a view to reaching all insurable persons in the country and providing them adequate financial cover against death at a reasonable cost.
- Maximise mobilisation of people's savings by making insurance-linked savings adequately attractive.
- Bear in mind, in the investment of funds, the primary obligation to its policyholders, whose money it holds in trust, without losing sight of the interest of the community as a whole; the funds to be deployed to the best advantage of the investors as well as the community as a whole; keeping in view national priorities and obligations of attractive return.
- Conduct business with utmost economy and with the full realisation that the money belongs to the policy holders.
- Act as trustees of the insured public in their individual and collective capacities.
- Meet the various life insurance needs of the community that would arise in the changing social and economic environment.
- Involve all people working in the corporation to the best of their capability in furthering the interests of the insured public by providing efficient service with courtesy.
- Promote amongst all agents and employers of the corporation a sense of participation, pride, and job satisfaction through discharge of their duties with dedication towards achievement of corporate objectives.

The Life Insurance Corporation of India is still a monolith. It enjoys a tremendous brand equity and a high reach with a strong distribution network which consists of eight zonal offices, 106 divisional offices, 323 satellite offices 2,048 branch offices, and 11.93 lakh agents (See Figure 16.5). The zonal offices look into the development, planning and review of business valuations, recruitment, training of staff, and supervision of divisional offices. The divisional office procures new business, plans and executes various new business operations, underwrites new business as well as securities, and settles claims. Under each divisional office, there are a number of branch offices which procure new business.

Source: LIC

Figure 16.5 Organisational Set-up of LIC

LIC has a three-tier marketing set up with the agent at the base who is recruited, trained and supervised by a development Officer. An assistant branch manager (sales) normally supervises the development officers. These development officers strive to develop and increase the production of new life insurance business in the areas allotted to them by developing a suitable agency force.

LIC Subsidiaries

LIC has three subsidiaries: Life Insurance Corporation (International) EC , LIC Mutual Fund, and LIC Pension Fund

Life Insurance Corporation (International) EC It was established in 1989 as an offshore company by Life Insurance Corporation of India, in partnership with M/s International Agencies Co. Ltd, a leading business enterprise in Bahrain. The share capital of the company is BD 1,100,000 out of which 90 per cent is held by Life Insurance Corporation of India.

The objectives of the company are to cater to the life insurance needs of non-resident Indians and to help non-resident Indians obtain housing loans for purchase/construction of houses/flats in India through LIC Housing Finance Limited, India.

It is also operating in Saudi Arabia, Kuwait and the UAE through chief agents and in Qatar through a broker arrangement.

LIC Mutual Fund The LIC Mutual Fund was set up in June 1989 as a separate trust by LIC of India with a view to providing accessibility of various investment media, including the stock markets to all sections of investors, particularly the small investors in rural and semi-urban areas.

For LIC Mutual Fund schemes, Jeevan Bima Sahayog Asset Management Company Limited (IBS AMC) incorporated on April 20, 1994, acts as investment manager.

LIC Pension Fund Limited It is the first company incorporated in India to manage pension funds under the new pension plan.

Overseas Ventures LIC's overseas ventures include LIC (Nepal) which begun operations in December 2001 and LIC (Lanka) Limited, a joint venture between LIC and Bartlect group was set up in 2002.

LIC received Rs. 100 crore from the government for expanding further into foreign markets. LIC set up a full-fledged offshore unit at Mauritius which acts as a holding company for its forays into Africa. LIC has set up a joint venture in Nepal—LIC (Nepal) Limited, with the Vishal Group of Companies, a leading industrial house of Nepal. LIC has offices in UK, Fiji, Bahrain, Saudi Arabia, Kenya, Qatar, Oman, Kuwait, and the UAE.

LIC Products

LIC offers variety of insurance plans to both individuals and groups. It now offers pension plans also to individuals.

Individual Plans

- Whole life schemes
- Endowment schemes
- Term assurance plan
- Periodic money-back plans
- Plan for high-worth individuals and keymen
- Medical benefits linked insurance
- Plans for the benefit of handicapped
- Plans to cover housing loans
- Joint life plan- Jeevan Saathi Plan
- Plans for children's needs
- Capital market linked plan—Unit linked plan—Money Plus I, Fortune Plus, and Profit Plus
- Special Money Back Plan for women

Group Schemes These schemes are ideal for employers, associations, and society. They enable individuals to enjoy benefits at low cost.

- Group term insurance scheme
- Group insurance scheme in lieu of EDLI, 1976
- Group insurance scheme in corporation with superannuation scheme
- Group gratuity scheme
- Group superannuation
- Group savings linked insurance scheme
- Group leave encashment scheme
- Group mortgage redemption assurance scheme
- Gratuity Plus
- Group Critical Illness Rider

Social Security Group Insurance Schemes

- Landless Agricultural Labourers Group Insurance Scheme (LALGI).
- Janashree Bima Yojana (JBY) for the rural and urban poor persons below the poverty line and marginally above the poverty line. This scheme was launched on August 10, 2000, and is implemented with the help of non-governmental organisations and self-help groups who help in identifying the groups of persons to be covered. During 2000–01, 3,35,052 new lives were covered under the 40 approved occupations pertaining to the Social Security Scheme and JBY.
- Krishi Shramik Samajik Suraksha Yojana, 2001.
- Shiksha Sahayog Yojana.
- Aam Aadmi Bima Yojans
- Jeevan Madhur- a microinsurance policy for the under privileged sections.

Pension Plans

- Jeevan Nidhi
- Jeevan Akshay V
- New Jeevan Dhara I
- New Jeevan Suraksha I

Special Plans

- New Bima Gold
- Bima Nivesh 2005
- Jeevan Saral
- Health Plus

LIC commands a 97 per cent market share in endowment and money-back policies.

LIC has introduced a group insurance scheme for workers engaged in khadi and village industries. Under this scheme, the beneficiary pays only one-third the amount of premium and the balance is shared equally by the government and the employers.

LIC administers two of the world's largest social security schemes, viz., Lalgi under which 1.2 crore landless agricultural labourers derive benefits of life insurance and the social security scheme for IRDP beneficiaries covering 1.30 crore people. Besides LIC has nearly 24 social security group insurance schemes for occupation groups like *beedi* worker, carpenter, cobbler, tailors, and *papad* workers.

Achievements of LIC

The Life Insurance Corporation had a monopoly over the life insurance market till 2000. But its market share started declining with the entry of private sector players. Its market share declined to 71 per cent in 2004. It regained its market share through aggressive marketing of its insurance products and expanding the distribution channel. For efficient customer servicing, it has connected all the branches through a Metro Area Network. LIC has tied up with some banks and service providers to offer on-line premium collection facility in selected cities.

LIC has set up Wide Area Network (WAN), which enables policy holders to view their policy details and make payment of premium from any branch office. It has also provided Interactive Voice Response System (IVRS) to provide basic information about policies to policy holders on telephone and fax. It has installed on line kiosks in prominent places of big cities to provide information regarding LIC's products and the organisation. These on-line kiosks also provide facility of depositing the cheques. The website of the corporation has been made more interactive and informative. LIC launched Corporate Active Data Warehouse (CADW) in 2006 which will house the entire IT infrastructure relating to all core applications of LIC. LIC has emerged as the second largest user of computers and information technology in India.

LIC's corporate magazine 'Yogakshema' won the first prize in the 'Internal Magazines' category in the year 2000 by the Association of Business Communicators of India (ABCI). LIC won Awaaz Consumer Award 2006 in the insurance category as the most preferred brand of insurance companies. It was also awarded the NDTV Profit Business Leader in Insurance.

LIC is one of the largest life insurance companies in the world with in-force policy base of over 200 million. It issued over one crore policies during 2005. LIC is the top ranking company in the world in number of claims settled. It settles 1.43 claims every second. Its percentage of outstanding claims is the lowest. LIC is a market leader with a commanding share of over 74 per cent in policies sold and 82 per cent in permium levels among all life insurance players. (Table 16.20)

TABLE 16.20 New Policies Issued: Life Insurers

Insurer	*2007–08*	*2006–07*	*2005–06*	*2004–05*	*2003–04*	*2002–03*
LIC	3,76,12,599	3,82,29,292	3,15,90,707	2,39,78,123	2,69,68,069	2,45,45,580
	(–1.61)	(21.01)	(31.75)	(–11.09)	(9.87)	(96.75)
Private Sector	1,32,61,558	79,22,274	38,71,410	22,33,075	16,58,847	8,25,094
	(67.40)	(104.64)	(73.37)	(34.62)	(101.05)	(3.25)
Total	**5,08,74,157**	**4,61,51,566**	**3,54,62,117**	**2,62,11,198**	**2,86,26,916**	**2,53,70,674**

Source: Handbook on Indian Insurance Statistics, 2008.

THE LIFE INSURANCE INDUSTRY

There are 22 players in the life insurance industry—one public sector (LIC) and the remaining twenty are private sector players. The LIC is the largest insurer followed by ICICI Prudential Life Insurance and SBI Life. New business premium for the industry as a whole was around Rs. 87,108 crore during 2008–09 as compared to Rs. 92,989 crore during 2007–08. The market share of private players increased from 36.4 per cent (2007–08) to 39.2 per cent in 2008–09. However, Life Insurance Corporation's market share increased to 67 per cent in new business in the first five months of 2009–10, a rise of about 45 per cent over the same period last year.

The size of the life insurance market has grown over the nine years of opening up of the sector. The growth of the life insurance industry in India was the fastest in the world in 2006. The industry growth rate was a remarkable high of 163 per cent during 2006. The individual single premium segment was the dominant accounting for 60 per cent of the new business growth. The unit-linked insurance plans were a hot favourite among investors. Investors chose growth plans which invest in equity followed by balanced funds which invest in mix of equity and debt. The size of the life insurance market increased on the strength of the growth of the economy, increase in per capita income and buoyant stock markets.

LIC's performance was record breaking (184 per cent) in 2006 which pushed the industry's growth rate to 163 per cent. The life insurance business (measured in the context of first year premium) registered a growth of 23.88 per cent in 2007–08, (94.96 per cent achieved in 2006–07). Insurance penetration or premium volume as a ratio of GDP, for the year 2008 stood at 4.00 per cent for life insurance and 0.60 per cent for non-life insurance. Private insurers have improved their market share from 18.10 per cent in 2006–07 to 39 per cent in 2007–08 in the total premium collected during the year.

There has been a shift in favour of pension products and an increase in the renewal premium. This reflects quality of business underwritten by the insurers and an increase in persistency ratio which, in turn, enables insurers to bring down the overall cost of doing business.

Majority of the private sector players have not been able to report profits as this industry is capital intensive in nature. Insurers are required to inject capital at frequent intervals to achieve growth in premium incomes. Moreover, high commission charges, training costs, maintaining the solvency margin and other costs eat up the revenues generated. During 2007–08, four of the private sector companies reported net profits. The SBI Life insurance company was the first private company to report net profit of Rs. 2.02 crore in 2005–06. It reported higher net profit of Rs. 3.83 crore in 2006–07 and further increased its net profit level to Rs. 34.38 crore in 2007–08. The company succeeded in achieving an early break even on account of its lower cost of operations due to the large network of its Indian partner, the State Bank of India.

As per the data compiled for 2008 by Swiss Re, the world insurance industry grew at an inflation adjusted rate of −1.96 per cent while India's life insurance industry grew at over 0.13 per cent after adjusting for inflation. World wide insurance premiums underwritten in 2008 were USD 4,270 billion—USD 2,490 bn in life and USD 1,780 bn in non-life insurance. The real premium growth in the industrialised countries fell by 3.4 per cent while the growth rate was higher at 11.1 per cent for emerging markets. The fall in life premium related to single premium business and products linked to equity markets. The US subprime mortgage crisis took a toll on financial markets especially in the second half of 2008 which affected the sales of unit linked business. The non-life premium declined due to slower demand for cover and softening of premium rates. The industrialised countries spent about 8.5 per cent of the GDP on insurance in 2008, while in the emerging market this ratio varies from 6 per cent in the Middle East and Central Asia to 3.6 per cent in Africa. Life insurance accounted for 58.3 per cent of the world total. On a per capita basis, an average of USD 3,655 was spent on insurance in the industrialised countries in 2008. Of this amount, USD 2175 was spent on life and USD 1,481 on non-life premium.

The growth in life insurance industry in India gained momentum with the entry of new players. Rather than taking away the market share of the existing public sector player, the private sector players have helped expand this market by aggressive marketing and new product offerings. But the industry focus has been largely on 'selling' insurance rather than creating a risk management culture amongst individuals. This is also why the share of insurance in overall GDP is a frugal 4.0 per cent for life insurance and 0.6 for non-life insurance. The outreach of insurance is equally modest at 20 per cent of the insurable population in case of life and just around one per cent for health insurance.

While the basic premise governing life insurance is risk coverage, an additional feature of savings has traditionally accompanied insurance. In order to stimulate long-term savings with insurance, tax concessions were made an integral part of life insurance. Due to this, the limited returns on life insurance policies appeared lucrative in comparison to other investments like bank deposits, because of the tax breaks. However, post liberalisation with more and more productive investment channels opening up for the retail investor, many of them with equivalent tax benefits, endowment products have lost their shine off-late.

The changing investment profile in the country gave birth to the concept of Unit Linked Insurance Plans (ULIPs). These new generation insurance products combine the modern high risk high return investment objectives with insurance. Accordingly, a part of the premium (known as mortality premium) is charged for the risk cover and the rest is invested in select mutual funds as per the choice of the investor. While ULIPs offer transparency, flexibility, and liquidity—something that was missing in endowment products—certain issues like inadequate disclosure of charges, posing them as short-term investment options, encouraging non-payment of premiums after few initial instalments have tended to undermine the vitality of these innovative products. Moreover, the mutual fund industry response to the needs of retail investors through simple, transparent and cost effective mechanisms like Systematic Investment Plans (SIPs) have given a stiff alternative to ULIPs. The aggressive selling of ULIPs by insurers often without regard to the basic tenets of insurance and investing, prompted the insurance regulator (IRDA) to issue stringent guidelines on ULIPs in December 2005. Since then, things appear to have fairly stabilised.

Whether ULIPs or endowment policies, life insurance has been sold more as an investment tool rather than a crucial risk transfer mechanism. This blend of risk (protection) and return (investment) has not quite worked in favour of the layman insured investor. What is expected from the insurance industry in the years to come is a more cohesive effort in expanding the outreach of insurance per-se and not the spurious message of protecting life as well as offering high return on investment.

MICRO INSURANCE

- Micro insurance is provision of insurance to poor

The use of insurance as a cover on risks is very poor in India. Even after the entry of private companies in the insurance market, though one sees some improvement in the share of insurance in the overall GDP, the number of policies taken on life and health is low looking to the insurable population of India. In fact, the focus of marketing insurance products has always been prosperous individuals in case of life and industry for the non-life sector. Very little effort is made to reach the large low income population, particularly in the rural areas.

The poor have greater risks of life, income and the standard of living than that of the rich. Due to absence of savings, these risks can push families to poverty and indebtedness. A death of a breadwinner or an illness in a poor family is a much severe blow to the family as compared to a rich family. Insurance provides financial support to individuals and families in such times which happen rarely but are very hard blows to low-income families. So looking at it from a social security point of view, the families that need insurance the most are often least served.

Micro insurance tries to find answers to the above questions. It aims at building mechanisms for insuring the poor against various risks.

Micro Insurance Products A micro insurance product is an insurance policy with a small sum insured and low premium. It is designed to reduce the fundamental risks of life, living and livelihood.

Risk	*Product (Kind of Policy)*
Life	Term Life Insurance, Accidental Death Insurance
Living	Heath Insurance, Catastrophe (Sudden Calamity) Insurance
Livelihoods	Asset Insurance, Weather Insurance

The essential feature of an ideal micro insurance product that makes it successful is the right balance between insurability (capacity to take a policy) and saleability (possibility on the insurer's side to offer it). Consideration of risk involves frequency and severity. Frequency means the probability of risk arising at individual level. Higher the frequency of risk, higher will be the response to the product. That is because people always like protection against the risks that strike frequently. But its insurability will be reduced by higher frequency as claims-processing costs will increase. And that would increase premium. A high premium will act as a disincentive for people, who will in turn prefer not to buy insurance. This will result in insured people having to pay a higher premium. And if the frequency is too low, but the risk is high and insurable, people will hardly find insurance against such risk worth buying. In nutshell, the frequency has to be high enough to be credible but low enough to keep claims processing costs within reasonable limits.

Severity is the likely size of the loss. It is derived from expected losses of the group likely to buy a policy. In simple terms, it is the average (mean) of losses suffered by members of a common group divided by the expected number of members of the group. In addition to expected losses, the variability (standard deviation) around the mean also plays a role in arriving at the severity factor. In fact, variability in a loss distribution is the real 'risk'. It is because one has to assume that expected losses would occur in the long run. Expected losses and their deviation would provide the Probable Maximum Loss (PML) of loss distribution that is the severity factor. High-severity risks (like flood, earthquake, etc) are bound to incite interest among the people and thus result in high saleability. Very high probable maximum loss is likely to affect insurability. Thus while the severity of risk has to be sufficiently threatening for the people, it has to be low enough to keep PML within limits to be insurable.

In order to see an impact on the risk profile of an insured population, it is necessary to see that the micro insurance product is durable. Insurance, as a risk distribution tool, is useful only if pursued for a long term. Too much activity, with insured persons moving in and out, will not only prevent impact on the risk profile of the community but also make the product volatile. Thus a sustainable micro insurance programme presupposes the existence of an optimally priced product with frequency and severity factors carefully balanced. If the risks covered do not naturally fall within the limits discussed above, they have to be manually adjusted through underwriting and marketing interventions.

Micro Insurance Distribution

The role of intermediary in micro insurance is much wider. The focus here is the community, not an individual. So it is essential to have very good ability to manage community risk and educate the masses on the concept and benefits of insurance. The various functions performed by an intermediary (deliverer) are:

(i) Risk Identification and Assessment Identification and assessment of risk is the key starting point to a sustainable micro insurance programme. The risks faced by the poor are diverse and vary according to the geographical and demographic profiles. Apart from this, affordability is the biggest deterrent. Hence, proper risk assessment is a pre-requisite to the development of a balanced and sustainable insurance product. For this, the experience of an intermediary is vital. The intermediary in order to perform this function should have good understanding of social and economic factors surrounding the masses.

(ii) Education and Awareness Insurance is always sold never bought. The concept of insurance as a risk-transfer tool has yet to be understood by the affluent segment. The task of the intermediary becomes more difficult with micro insurance. This calls for a concerted effort in educating the masses on the concept as well as the benefits. Popularising the concept of insurance is necessary to ensure success in the form of large enrolment among the people.

(iii) Enrolment This is one of the conventional roles of an intermediary. Proper enrolment of the insured into the programme involves accurate documentation of relevant details about the insured and delivery of policy documents. This stage marks the beginning of the relationship with the insured and thus warrants due care.

(iv) Controlling Adverse Section and Moral Hazard Underwriting forms the crux of insurance business. Underwriting is the process of selecting, classifying and rating (pricing) risk in consonance with the insurance coverage offered. Intermediaries are field underwriters and thus in a better position to take notice of instances of adverse selection and moral hazard. Adverse selection refers to a situation where people with higher expected losses enter the insured population. It is either not possible or too costly for the insurers to identify such clients a priori. For example, a person having blood pressure or diabetes taking a health insurance policy. Moral hazard is phenomenon whereby having insured a property, the insured lacks the incentive to reduce his expected losses despite having some control over them. For example an insured not caring to lock his vehicle because the insurer is going to pay for the loss in the event of a theft. The deliverer's role is to try to control both these features at the field level itself. They are gatekeepers for insurers. It is they who decide whether to accept the insurance proposal, on what terms and conditions and at what price.

- Adverse selection occurs when individuals who are prone to a particular risk, purchase insurance against it. It is more common in health insurance

(v) Marketing The intermediary needs distinct skills to market micro insurance products. He needs to build up confidence in the poor by making them aware of the ground-level realities. For doing this, he has to develop a credible image of himself and the system.

- Moral hazard occurs when the insured lacks the incentive to reduce his expected losses having some control over them and takes advantage of insurance to make claims for loss that he has helped incur

(vi) Claim Servicing This again is a conventional role of the intermediary. It includes collecting claim documents in time, explaining the basis of claims settlement and payment of claims. The intermediary can reduce the time and effort in claim servicing if he clarifies the claim settlement process during earlier stages.

It is clear from the role defined above that service delivery function in micro insurance calls for an intermediary with multi-faceted traits. He should have a strong link with masses especially rural and poor population, sound administrative capability, strong understanding of the principles and practice of risk management and insurance, and a long-term commitment.

Micro insurance aims at improving the risk profile of the community. Hence it is essential for the intermediary to focus on various risks faced by the masses and offer solutions in terms of insurance products. These functions put together involve a sizeable transaction cost in the entire delivery process. And cost recovery is often a major irritant in micro insurance delivery. In most cases, this is possible only after a gestation period of about three to five years. This calls for very careful financial planning by the intermediary before initiating a micro insurance programme.

- A new distribution mechanism is required for selling micro insurance

Micro Insurance Delivery Models The micro insurance movement begun by Non-Governmental Organisations (NGOs), Micro-Finance Institutions (MFIs) and Community-based Organisations (CBOs) may not have taken off in a big way but has definitely made a serious attempt in increasing the spread of insurance in the country.

In India, following distribution models have emerged in the evolution of micro insurance (Figure 16.6):

(i) Partner–Agent Model Among the distribution models in micro-insurance, this is the common insurance delivery model where the intermediary merely acts as a product-deliverer. Here, the insurance company bears the risk and the NGO acts as an agent . This model is useful for delivering simple insurance products like term life insurance. Examples of the partner-agent model in India include Shepherd and United India Insurance Company, and Karuna Trust and National Insurance Company.

(ii) Community-based/Mutual Model This is a self-insurance scheme where the community itself pools the contributions and acts as an insurer. Members/clients are both the insured and the insurers as the group is involved both in management and underwriting the risk collectively. This is particularly helpful in managing low severity risks like primary healthcare. People's Rural Health Promotion Scheme (PRHPS) introduced by People's Rural Education Movement (PREM) in Orissa, Arthik Samata Mandal-Vijaywada,, Yashaswini Health Farmer Scheme introduced by the Karnataka Government are successful community-based models.

- In addition to the common partner-agent model, Tata-AIG developed a model of microagents

(iii) Full-service Model This model has a much wider role for the intermediary. The insurer simply carries the risk and all the remaining functions including claims-processing are taken up by the deliverer. This model is useful for complicated and service intensive covers like health and weather insurance. Vimo SEWA is an integrated insurance program aiming to provide social protection for SEWA members to cover their life cycle needs and the various risks they face in their lives, through an insurance organisation in which they themselves are users, owners and managers of all services. It offers three different integrated insurance packages, which include coverage for death, sickness, and loss of assets. The three packages have varying levels of premium and corresponding sums insured.

(iv) Provider-driven Model This is the new addition in the micro insurance space. It aims at integrating services like healthcare with insurance. The healthcare provider assumes the risk thereby eliminating a tier in the value chain. Service providers like hospitals who are anyway involved in the service-delivery chain, integrate themselves fully by assuming the risk themselves.

These models have a good potential in health insurance.

Micro Insurance Regulation

An insurer transacting life insurance business shall be permitted to provide life micro insurance products as well as general micro insurance products provided it ties up with an insurer transacting general insurance business for the general micro insurance products, and vice versa. The tie-up can be either at product level or distribution level.

The IRDA has set out the objectives and salient features of the Micro Insurance-Regulations.

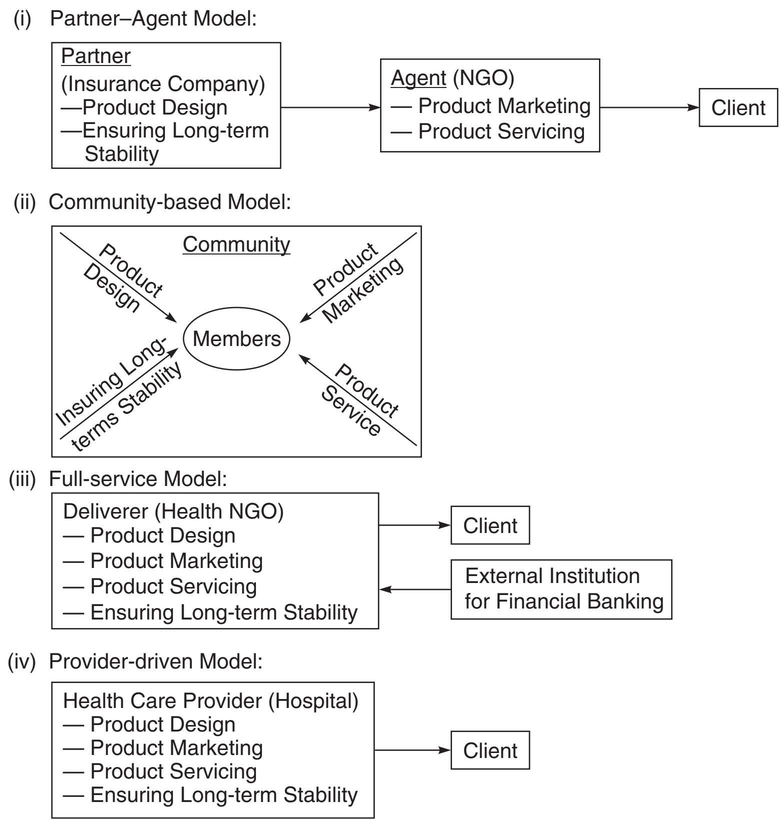

Figure 16.6 Delivery Models in Micro-insurance

Box 16.3 People's Rural Health Promotion Scheme: A Successful People-managed Health Programme in India

People's Rural Education Movement (PREM) is a non-profit making voluntary organisationin Orissa since 1984. In 1992 it extended its operations to Andhra Pradesh and in 2004 to Tamil Nadu, Jharkhands, and Chhattisgarh.

The primary objectives of PREM's development programmes are to spread education, improve healthcare, and implement livelihood and good governance initiatives among marginalised communities. Through PREM's direct intervention approximately 1,350,000 people in 6,500 communities have benefitted from a wide range of development initiatives.

PREM, with its network partnership of 152 independent voluntary and people's organisations, reaches more than 5,000,000 people in 23 districts of Orissa through various developmental programmes and campaigns Traditionally Adivasi, Dalit and fisher people are socially excluded in Orissa. Poverty, lack of awareness, and non-availability of facilities has resulted in non-accessibility of healthcare for such marginalised communities.

This has left members of the communities vulnerable to ill health and diseases such as malaria, which is endemic to parts of PREM's project area (and affects approximately 35% of the project population). Historically, infant and maternal mortality rates have been high due to a lack of pre-natal and delivery services, while TB, Sickle Cell anaemia, and water-borne diseases, such as diarrhoea and typhoid, are major health hazards among the Adivasi and Dalit people.

PREM's experience in providing referral medical care to approximately 10,000 foster children, along with their siblings and family members, between 1996 and 2001 provided the organisation with critical data on annual healthcare need and expenditure among its project population and enabled it to develop a vision for the wide-scale provision of healthcare facilities and services The challenge for the organisation was to provide medical care in inaccessible areas and at the same time raise funds to support the treatment. In addressing this challenge PREM took the initiative to launch an experimental and innovative micro-insurance health scheme through village committees, called the People's Rural Health Promotion Scheme (PRHPS). The approach to operating the scheme was based on collecting a small annual premium fee from each and every member of the project population and use the collected funds to provide necessary healthcare.

(Continued)

Box 16.3 (*Continued*)

A three-tier delivery system was formulated to provide healthcare in each village, at local Public Health Centres and, in referral cases, at district hospitals, medical colleges and private nursing homes as per necessity.

The pilot project was initiated in 500 villages with a target membership of 100,000 people, with each person, including children, paying Rs. 20 per for annual membership. In the process a sum of Rs. 2,000,000 was collected in the first year. Approximately Rs. 1,500,000 was spent in providing healthcare facilities to the project population and a sum of Rs. 500,000 per year, along with the returns from the investments, contributed to the corpus. It has been estimated that, long-term, PRHPS will become self-sustaining.

In the three-tiered delivery approach, village level pharmacies were developed in each of the 500 villages. Local young men were trained as para-medical activists to distribute medicines deposited at village pharmacies for the treatment of common ailments. Each village has a committee that makes decisions on cases requiring referral to Public Health Centres or local hospitals and management of the funds available. Those who need further treatment are helped to attend Public Health Centres and hospitals which are run by the government.

The results of the pilot project showed that about 75% of reported ailments were cured though first line intervention at village pharmacy level, where 15 to 20 types of medicines are available. In cases where illness continued for two to three days, the patients visited Public Health Centres where another 15%–20% of cases were cured. Only 5–10 per cent of the cases were referred to district level hospitals, medical colleges, or private nursing homes as per the necessity. The scheme bears the expenditure incurred for purchase of medicines and fees for hospitalisation to a maximum level of Rs. 3,600 per member per year.

In 2007 the International Labour Organisation (ILO) conducted a study on a number of people-managed healthcare projects, including PRHPS. In its report ILO described PRHPS as 'one of the best case studies' in Asia.

Subsequently, PREM was invited by the Ministry of Labour, Government of India, to make a presentation about the programme to policy makers. In April 2008, the Government of India implemented a similar programme on a massive scale.

Source: http://prem.org.in/

- Bajaj Allianz launched the savings-linked micro insurance scheme Swayam Shakti Suraksha, in April 2008 with SKS microfinance. Now it is a global micro insurance product sold in Indonesia, Egypt, Columbia and nine African Nations

Development Goal To enable micro insurance to be an integral part of the country's wider insurance system, it is necessary to

- adapt insurance companies to the requirements of the micro-insurance;
- link them as wholesale institutions to self-help groups (SHGs) as retailers; and
- upgrade SHGs to the level of financial cooperatives or village banks.

The functions that need to be focused on include: providing guidance to members, collecting premium instalments from members, insurance service to members, communication and exchange of experience, providing linkages with banks, NGOs or donors, supporting the proposals of individual members to insurance companies through recommendations.

Micro Insurance Product A 'life micro insurance product' means any term insurance contract with or without return of premium, any endowment insurance contract or health insurance contract, with or without an accident benefit rider, either on individual or group basis, as per terms stated in Table 16.21 and Table 16.22 below. Fifteen life insurers have launched 30 micro-insurance products of which 16 are individual products and the remaining 14 are group micro-products.

- Some micro-insurance products
  - Bajaj Allianz Jana Vikas Yojana
  - Bajaj Allianz Alp Vishesh Yojana
  - ICICI Pru Sarv Jana Suraksha
  - LIC's Jeevan Madhur and Mangal
  - SBI Life Grameen Shakti

Distribution of Micro Insurance Products Micro insurance products may be distributed by individual insurance agents or corporate insurance agents or insurance brokers or micro insurance agents.

A 'micro insurance agent' shall be an NGO or an SHG.

- A Non-Government Organisation (NGO) shall be registered non-profit organisation under the Society's Act, 1968 with a proven track record of working with marginalised groups with clearly stated aims and objectives, transparency, and accountability outlined in its memorandum, rules and regulations, and demonstrates involvement of committed people.
- An SHG may be an informal group or registered under the Societies Act, State Cooperative Act or as a partnership firm, consisting of 10 to 20 members with a proven track record of working with marginalised groups with clearly stated aims and objectives, transparency, and accountability outlined in its memorandum, rules and regulations and demonstrates involvement of committed people.
- The minimum number of members comprising a group should be atleast ten for insurance of individuals, and atleast twenty for group insurance.

TABLE 16.21 Type of Cover for Micro Insurance

Type of Cover	*Minimum Amount of Cover Rs.*	*Maximum Amount of Cover Rs.*	*Term of Cover Minimum Years*	*Term of Cover Maximum Years*	*Minimum Age at Entry*	*Maximum Age at Entry*
Term Insurance with or without Return of Premium	10,000	50,000	5	15	18	60
Endowment Insurance	10,000	50,000	5	15	18	60
Health Insurance Contract	10,000	15,000	1	15	18	60
Accident Benefit as Rider	10,000	50,000	1	15	18	60

Source: IRDA.

TABLE 16.22 Type of Cover for Micro Insurance

Type of Cover	*Minimum Amount of Cover Rs.*	*Maximum Amount of Cover Rs.*	*Term of Cover Minimum Years*	*Term of Cover Maximum Years*	*Minimum Age at Entry*	*Maximum Age at Entry*
Hut or Live Stock or Tools or Implements or other Assets Against All Perils	10,000	20,000	1	1	18	70
Health Insurance Contract	10,000	15,000	1	1	18	60
Personal Accident	10,000	50,000	1	1	18	60

Source: IRDA.

TABLE 16.23 Micro Insurance Agents—Life Insurers

Insurer	*As on April 1, 2008*	*Additions*	*Deletions*	*As on March 31, 2009*
Private	418	281	96	603
LIC	4,166	2,482	1	6,467
Total	**4,584**	**2,763**	**2**	**7,250**

Source: IRDA, *Annual Report*, 2009.

The number of micro insurance agents as on end March 2009 was 7,250 (Table 16.23).

Other Salient Features of the Regulations Include

- The model adopted for micro-insurance is the principal/agent model.
- Micro-insurance sold would be recognised while reckoning the social and rural sector obligations.
- The minimum qualification for appointment as an insurance agent is removed and the requirement of hundred hours of training followed by an examination is waived.
- The insurance company has to impart twenty-five hours of training to micro insurance agent as part of capacity building'
- All products designed to be sold as micro insurance products have to be cleared by the Authority and have to clearly identify themselves as micro insurance products when launched in the market.
- The insurance contracts are to be delivered in local language to the policy holders
- All micro insurance product will necessarily be underwritten by insurance companies only.

Future of Micro Insurance

Insurance outreach in India is quite modest—to say the least. A large section of the insurable population is still waiting to be insured for something as elementary as life. In such a situation, the potential appears to be lucrative. However, issues like transaction costs, balancing scale and diversity and capacity-building of deliverers and masses remain. Better operational efficiency, convergence with other activities like micro finance and adherence to neatly designed business plans could be possible answers but they are by no means easy to implement at the ground level.

A regulatory frame work also has a role in development of nascent areas like micro insurance. Presence of a regulation aimed at policy holders' protection can go a long way in promoting micro insurance. As a first step, the Insurance Regulatory and Development Authority (IRDA) came up with IRDA (Micro insurance) Regulations in 2005 but much more needs to be done.

On the positive side, increasing competition in the insurance sector offers good news for micro insurance. Commercial factors coupled with rural and social sector obligations of insurers are driving them to underwrite the hither denied 'bad' risks. Instead of pushing standard products, flexibility in terms of customised products is creeping in. Urban markets are fast getting saturated. Due to the congestion in urban markets, service providers are compelled to think of rural-centric solutions. So, micro insurance, as a sector is going to be the obvious beneficiary of this trend.

All in all, the outlook for micro insurance looks good despite its problems. In the coming years, we might see marketing of micro insurance being highly successful as it has taken place in micro finance.

Conclusion

With deregulation, competition has increased in the insurance sector. The entry of private sector players has brought about a paradigm shift in the definition of the word insurance. There is no doubt that the insurance market is growing. The rate of annual growth is an average of 20 per cent for life and 15 per cent for non-life. Despite this growth rate, India is under-insured when compared to other countries. As per the survey conducted by Federation of Indian Chambers of Commerce and Industry (FICCI), the Indian insurance market is one of the least insured markets in the world. India has a population of 1,044.15 million out of which only 100 million Indians have a life insurance policy. Almost 300 million people in the country can afford to buy life insurance but of this only 20 per cent have an insurance cover. A huge chunk of the population is yet to be tapped. India's life insurance premium as a percentage of the Gross Domestic Product (GDP) is 5 per cent as against 12.8 per cent in the UK, 8 per cent in the US, and 12.5 per cent in South Africa. Indian insurance is ranked 31 in the world with a low insurance penetration of 4.6 per cent and a paltry 5 per cent being spent on insurance out of the average savings rate of 35 per cent. The ratio of sum assured to an individual's annual income is around 0.5 in India, while in developed countries, it averages around three.

The percentage of premium income to GDP—moved up from 2.32 per cent in 2000–01 to 4.6 per cent-4.0 per cent in life and 0.6 per cent in non-life-in 2008. These growth rates are nowhere near the world average of 7.1 per cent (Table 16.24).

India's insurance sector has a long way to catch up with the rest of the world. The current size of the Indian insurance market is USD 56 billion, while the global insurance market is around USD 4,270 billion. India accounts for just 1.32 per cent of the global insurance market, while the per capita insurance premium in India is USD 47.4, it is USD 3,699 in Japan, USD 1,969 in South Korea, USD 3,179 in Singapore and USD 345 in Malaysia. The ratio of premium to GDP for India stands at only 4.6 per cent against 8.7 per cent in the US, 15.7 per cent in UK and 11.8 per cent in South Korea.

The untapped potential reveals that our human and physical assets are unprotected and neglected. Insurance penetration can be achieved by tapping the neglected rural markets. There is vast potential for insurance growth in the rural sector. A recent survey by the Foundation for Research, Training and Education in Insurance (FORTE) suggests that insurance can be sold profitably to rural communities in India. The survey revealed the following.

- There is a distinct hierarchy of needs in rural areas.
- Rural people find security in groups.
- The saving habit is very strong in rural areas.
- Average savings across the three most important socio-economic strata comes to 30–35 per cent of annual income or about Rs. 13,500 annually which is significant.
- There is a high level of awareness about life insurance and a fairly high level—about 36 per cent—already own life insurance.
- Fifty-one per cent of those who own life insurance would like to buy more.
- Amongst the savers, a significant percentage does not save through formal financial modes or institutions.
- Rural buyers of insurance prefer a half-yearly mode of premium payment to coincide with the time of harvest.

TABLE 16.24 International Comparison (Insurance Penetration and Insurance Density)

Countries	*Insurance Penetration (Premiums as % of GDP 2008)*				*Insurance Density (Premiums Per Capita in USD-2008)*			
	Total	*Life*	*Non-life*	*Rank*	*Total*	*Life*	*Non-life*	*Rank*
United States	8.7	4.1	4.6	13	4,078.0	1900.6	2177.4	9
Canada	7.0	3.2	3.8	20	3170.8	1442.7	1728.0	17
Bahamas	10.2	2.6	7.6	7	2299.1	593.4	1706.7	21
Brazil	3.0	1.4	1.6	48	244.5	115.4	129.1	51
Mexico	1.7	0.8	1.0	68	176.5	77.3	99.2	58
Chile	4.0	2.4	1.6	37	344.2	205.8	138.4	47
United Kingdom	15.7	12.8	2.9	2	6857.8	5582.1	1275.7	1
Netherlands	12.9	4.5	8.4	4	6849.5	2366.0	4483.5	2
France	9.2	6.6	2.6	11	4131.0	2791.9	1339.1	8
Switzerland	9.9	5.5	4.5	8	6379.4	3551.5	2827.9	3
Russia	2.3	0.0	2.3	55	273.5	5.4	268.1	50
Japan	9.8	7.6	2.2	9	3698.6	2869.5	829.1	13
Taiwan	16.2	13.3	2.9	1	2787.6	2288.1	499.5	20
South Korea	11.8	8.0	3.1	5	1968.7	1347.7	621.0	24
PR China	3.3	1.8	1.5	43	105.4	71.7	33.7	66
India	4.6	4.0	0.6	31	47.4	41.2	6.2	78
Malaysia	4.3	2.8	1.5	33	345.4	225.9	119.5	46
South Africa	15.3	12.5	2.8	3	870.6	707.0	163.6	35
Australia	7.3	4.4	2.9	19	3386.5	2038.0	1348.6	14

Source: Swiss Re, Sigma 3, 2009.

India and China have been picked as the 'most promising insurance markets' in a recent study by Swiss Re, one of the world's largest life and health reinsurers. Although China and India accounted for just 4.62 per cent of the global insurance premiums, their huge economies and population size are supposedly capable of creating 'ample opportunities for insurance'. The Swiss Re study ranked India in the tenth position among the life insurance market and twenty-eighth in the non-life insurance market in the world.

A faster growth of insurance in the rural sector can be achieved by insurance companies if they tie up with cooperative societies, regional rural banks, Kisan credit cardholders, self-help groups, NGOs, panchayats, and agents to distribute insurance products. This tie-up would help the insurance companies achieve insurance penetration in a cost-effective manner.

KEY TERMS

Insurance, Life Insurance, General Insurance, Health Insurance, Principle of Uberrima Fides, Principle of Indemnity, Doctrine of Subrogation, Principle of Causa Proxima, Principle of Insurable Interest. Bancassurance, Reinsurance, Micro Insurance, Self-Help Groups, Endowment Insurance Plan, Money-back Insurance Plan, Whole-life Insurance Plan, Term Insurance Unit-Linked Insurance Policies and Solvency Margin.

REVIEW QUESTIONS

1. Why was the insurance sector opened up in India?
2. What is reinsurance? State the different types of reinsurance.
3. 'Intermediaries are a key distribution channel to an insurer.' State the different types of intermediaries in the insurance sector.
4. 'Life Insurance Corporation is still a monolith.' Do you agree? Why?
5. Discuss the changing trends in life insurance in India.
6. Why is the general insurance market smaller than the life insurance market in India?
7. What is health insurance? Briefly describe the health insurance products available in the market.
8. What is micro-insurance? Describe the new distribution mechanism that has evolved in micro insurance.
9. Distinguish between
   a. Life insurance and non-life insurance
   b. Endowment plan and term plan
   c. Weather insurance and crop insurance
   d. Insurance and reinsurance
   e. Facultative reinsurance and treaty reinsurance
10. What is life insurance? State the benefits of life insurance? State the advantages and disadvantages of the different types of life insurance?

11. State the pattern of investments specified by IRDA for both life and non-life companies?
12. State the rural and social sector obligations of both life and non- life companies?
13. What are solvency margins? Why are they prescribed by the IRDA?
14. What is de-tariffing in non-life insurance?
15. What are the different kinds of risks that insurers have to counter in the business of insurance?
16. What are the factors inhibiting the growth of health insurance?
17. Why have unit linked insurance policies become popular?

CASE STUDY 1

Sandip aged 32 lives with his wife Shweta, 30 and two children, Ayush, 6 and Arohi, 3. Sandip is a software professional and works with a leading software company as a Senior Systems Analyst. His annual gross salary is Rs. 8,00,000. Shweta is a homemaker. The family lives in a rented house but plans to buy a house shortly. His expenses per month are given below.

Expense Head	*Amount (Rs.)*
House Rent	6,000
School Fees	4,000
Food	5,000
Fuel, Telephone, and Conveyance	5,000
Healthcare	1,000
Entertainment	2,000
Car Loan Instalment	4,000

Sandip is currently covered under the group insurance scheme of his employer under which there is a life insurance cover of Rs. 5,00,000 and health insurance cover of Rs. 1,00,000. Sandip is wondering whether he requires any further life insurance and health insurance cover. Please advise him suitably.

CASE STUDY 2

Arun aged 38 lives with his wife Nisha, 35 and son Pratik, 10. Arun is a practicing lawyer. His annual gross income is Rs. 10,00,000 p.a. Nisha also works in a manufacturing concern as HR Manager. Her annual salary is Rs. 4,00,000. The family bought a house 5 years back and the housing loan on the same is being paid by Arun. They still have another 10 years to completely repay their loan. Pratik studies in a boarding school away from his parents.

Expense Head	*Amount (Rs.)*
Housing Loan Instalment	10,000
School Fees	10,000
Food	5,000
Fuel, Telephone, and Conveyance	7,000
Healthcare	1,500
Entertainment	3,000

Nisha is currently covered under the group insurance scheme of his employer under which there is a life insurance cover of Rs. 2,00,000 and health insurance cover of Rs. 1,00,000 for the entire family. Arun already has a Unit Linked Insurance Plan (ULIP) that offers a life cover of Rs. 5,00,000. Arun is wondering whether his family is adequately insured. Please advise him suitably.

Part IV

Financial Services

17

Investment Banking

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Investment banks*
2 *Functions of investment banks*
3 *Types of investment banks*
4 *Investment-banking services*
5 *Merchant-banking services*

INTRODUCTION

Investment banks are financial intermediaries in the business of providing investment and financial advisory services to companies, governments and institutional investors. Investment banks issue securities on behalf of both public as well as private companies, trade securities in the primary and secondary markets on behalf of individual and institutional investors, manage portfolios for high net-worth clients and corporates, and provide financial advisory services to corporates, private equity groups, public entities, non-profit clients and institutional investors.

- Investment banks are financial intermediaries in the business of providing investment and advisory services to companies, governments and investors

Investment banking differs from commercial banking in the sense that they do not accept deposits and grant retail loans. While commercial banks mobilise savings in the form of deposits and lend these funds to individuals, corporates and government, investment banks bring both the lender as well as the borrower together and help the lenders invest directly in the business of the borrowers. The services of commercial banks are accessible by all, while investment banks serve mainly the large companies and high net-worth individuals.

Investment banks were known as merchant banks in the United Kingdom. In the United States, a commercial bank could not undertake share broking or investment in shares till late 1990s. Because of the stock-market crash of 1929 and the high risk involved in the capital-market activities, the Glass–Steagall Act, 1933 prohibited commercial banks from undertaking investment banking. Hence, the stand-alone investment-banking model was born in the United States. The five big stand-alone investment banks, called 'bulge-bracket,' in the order of their establishment, were Lehman Brothers (1850), Goldman Sachs (1869), Merrill Lynch (1914), Bear Sterns (1923) and Morgan Stanley (1935). The Glass Steagall Act, 1933, was repealed by Gramm–Leach–Bliley Act of 1999. The commercial banks in the United States could undertake investment- banking activity and are now known as 'universal banks.' Citigroup, JP Morgan Chase and Credit Suisse are examples of Universal Banks. The acquisition of the merchant banks in the United Kingdom by the investment banks of the United States and the boom in the stock markets in the 1990s popularised the concept of investment banking. In India, commercial banks and financial institutions set up subsidiaries in 1972 to undertake this activity and it was known as 'merchant banking' till late 1990s. The ANZ Grindlays Bank was the first to set up a merchant-banking division in 1969 which offered issue-management services to corporates. With the advent of foreign-investment banks in India in the late 1990s, merchant banking started being referred as 'investment banking.' Merchant-banking activity comes under the purview of the SEBI and regulations have been framed to regulate the activities of merchant bankers.

FUNCTIONS OF INVESTMENT BANKS

Investment banks perform two types of functions, as follows:

They help public as well as private corporates in issuing securities in the primary market, provide guarantee by standby underwriting and act as intermediaries in trading for clients. They help government in the disinvestment of public-sector enterprises.

They give companies advice on mergers and acquisitions (M&A)—both sell side as well as buy side, divestitures, corporate restructuring and spin-offs. They provide financial advice to investors and assist them in purchasing securities, managing financial assets and trading.

TYPES OF INVESTMENT BANKS

Types of Investment Banks

- Full service global investment banks
- Regional investment banks
- Boutique firms

There are three types of investment banks, which can be classified as:

Full-service global-investment banks which operate on a global basis and provide a complete set of services to their clients. These are large investment firms that serve large corporates, usually multinational corporations. Jefferies, Goldman Sachs, JP Morgan Chase & Co. and Kotak Investment Banking are some of the full-service investment banks.

Regional-investment banks concentrated in a particular region with specialised geographic knowledge and a variety of product offerings. These firms are also known as 'speciality investment banks.' For example, Piper Jaffray Companies is a leading, international middle-market investment bank and institutional securities firm serving the needs of middle market. Simmons & Company is the only independent investment bank specialising in the entire spectrum of the energy industry in Europe.

Boutique firms are small investment banks organised at a local level and specialise in a particular industry or product. They are independent firms whose focus is on advisory services such as M&A. Because of their expertise, they are better advisors in particular deals. They provide personalised services to their clients and try to be more of partners rather than merely being advisors. Avendus Capital, a boutique- investment-banking outfit in India, has carved a niche in the small and middle-market M&A space and private-equity transactions. Veda, a Chennai-based boutique-investment bank, provides advisory services in venture capital (VC), private equity (PE) and M&A, to emerging corporates and established groups in the manufacturing, technology, consumer products and services domains. Montague Partners is a boutique-investment bank founded in 1989 and headquartered in San Francisco. The firm works with privately-owned middle-market companies throughout the United States, in a range of industries, specialising in M&A and private placements of debt and equity.

INVESTMENT-BANKING SERVICES

(I) Fund-raising Services

Investment banks help clients to raise funds through the following:

Initial Public Offerings (IPOs).
Follow-on Public Offerings (FPOs).
Qualified Institutional Placements (QIPs).
Rights Issues.
Preferential Allotments.
Foreign-Currency Convertible Bonds (FCCBs).
Global Depository Receipts (GDRs).

The investment bank is an indispensable player in the success of the offering. It assists the issuer in a number of critical functions: analysing the industry and company to determine if there is a demand with investors for such an offer, designing the offering, pricing the offering and marketing the offering to investors. The investment bank leads and directs the issuer's team of professional advisors and coordinates their roles to ensure that the funds are successfully raised.

(II) Advisory Services

(a) Export and Project Finance

Export-credit Finance: They provide both single- as well as multi-sourced export-credit facilities by developing relationships with many of the principal export-credit agencies in different countries.

Project Advisory They provide advisory services to governments, project sponsors, contractors and special-purpose project companies in a range of industrial sectors.

Project-debt Arranging They also deliver a range of debt products, including commercial bank debt, capital-market bonds, export credit, local-currency bank debt and multi-lateral agency debt.

Forfaiting They can structure and execute the non-recourse off-balance-sheet facilities worldwide using bills of exchange, letters of credit, guarantees and formal loan agreements.

(b) Mergers and Acquisitions (M&A)

Investment banks give M&A guidance regarding strategic alternatives, financial restructurings and ownership transitions. The package of services includes strategic advice, sell-side and buy-side advisory, divestitures, recapitalisations, management and leveraged buyouts, and capital raising. Their scope of services include undertaking of legal documentation in vertical and horizontal mergers such as scheme of amalgamation, notice to shareholders, resolutions, and preparation of documents to be filed with high court. They also perform valuation of the amalgamated and amalgamating companies with a view to arrive at the ratios of equity swaps. Investment banks provide both buy-side as well as sell-side advisory services as part of their M&A advisory offering.

Investment Banking Services

- Fund raising
- Advisory
- Export and Credit Finance
- M&A
- Promoter and Acquisition Financing Advisory
- Private-equity Advisory
- Infrastructure Advisory
- Strategic Advisory
- Debt syndication and structured finance
- Financial Restructuring and Turnaround Financing
- Private client services
- Sales and Trading
- Equity Research & Broking

Buy-side Advisory They work with clients who have identified particular acquisition targets and assist them in negotiation, structuring, due diligence, financing and documentation of the transaction.

Phase 1: Target short-listing In this phase, the investment banker helps the client prioritise among the targets to create a shortlist, based on the acquisition criteria, investment parameters, and complete market analysis. It also uses its network of relationships with companies, private-equity funds and other intermediaries extensively in this phase to identify the right targets.

Phase 2: Preparing and executing term sheet After the companies are short-listed, the investment banker creates valuation and structuring models for the short-listed companies, prepares the term sheet which outlines all commercial terms and conditions of the transaction, drives deal negotiations with targets and also ensures that the client enters into a term sheet with the target company.

Phase 3: Due diligence and transaction closure Acquisitions are risky. Due diligence is investigating the deal from a commercial, financial and legal view point to confirm to the client that he is getting what he thinks he is buying. It involves verification of assets and liabilities, identification and quantification of risks, and protection needed against such risks. In this phase, the investment banker helps the client on preliminary business, due diligence on the target, and coordinates the overall due-diligence process.

Phase 4: Transaction closure Once the due-diligence process is complete, the investment banker negotiates on the final agreement with the target company to close the deal in the defined time frame. It even arranges finance for the transaction, if required.

Sell-side Advisory The investment bank helps corporates in the sale of a minority interest, a majority interest, or 100% of the stock or assets of the company, by identifying the specific qualified buyers unique to each engagement, which may include private companies, public companies, private-equity funds, hedge funds and international buyers.

Sell-side engagements have the following phases:

Phase 1: Collateral preparation An investment banker prepares a complete packet of information based on the company's business profile and its own knowledge of the market, which enables the transaction to be presented in front of potential acquirers/partners in a structured way.

Phase 2: Target short-listing After a complete market analysis and identification of potential buyers, the investment banker helps the client decide on the kind of strategic partners who will be the right partner for the client, meeting the potential partners and helping the client prioritise among the strategic partners to create a shortlist. It uses its network of relationships with companies, private-equity funds and other intermediaries, extensively in this phase to identify the right partners.

Phase 3: Preparing and executing term sheet In this phase, the investment banker helps the client analyse the various offers from potential partners, drives deal negotiations with partners and ensures that the client enters into a term sheet with the partner company, which meets the client's strategic objectives.

Phase 4: Due diligence and deal closure In this phase, the investment banker helps the client in coordinating the overall due-diligence process, and negotiates on the final agreements with the potential acquirer to close the deal.

Investment banks assist the corporates in reverse mergers such as merger of an unlisted company with a listed company and merger of a healthy company with a sick company under the provisions of Section 72 of the Income Tax Act.

(iii) Promoter and Acquisition-financing Advisory

Investment banks structure the appropriate financing solutions for client-specific needs. They arrange for: Promoter Financing and Acquisition Financing.

Promoter Financing: It is mostly done to enable promoters to raise their stake in the company. The financing is usually against collateral of shares or other securities held by the promoter in any of the group company. It can also be structured to refinance a loan raised against the same shares by the promoter earlier.

Acquisition Financing: Indian companies are now on a spree of acquisitions, both domestic as well as overseas. Acquisition financing plays a critical role in the success of inorganic growth planned by the acquirer. An investment banker advises and arranges on acquisition financing through financing structures which comprise foreign currency, senior-secured debt with a recourse to parent companies, rupee senior-secured debt with a recourse to parent companies, equity investment by the promoters, non-recourse debt and guaranteed mezzanine debt.

(iv) Private-equity Advisory

They also provide advice on private-equity funding to both the corporates as well as private-equity funds. They help the private-equity fund identify the emerging industries and firms with a good potential to invest therein. They help these investors explore transactions with target firms, help investors meet the target companies and help the investor prioritise among the targets short-listed. They also advise promoters and companies on the key considerations in a Private Equity (PE) fund-raising exercise.

(v) Infrastructure Advisory

Infrastructure development on a commercial viable basis is the need of the hour. Infrastructure advisory encompasses power generation, airport construction and transportation including air-cargo transportation and development of roads, airports, and associated infrastructures. This sector has unique financing requirements. Investment bankers provide infrastructure-project companies and developers infrastructure capital and advisory services. Infrastructure-capital services include raising capital through private equity, project equity, structured finance, and external commercial borrowings (ECBs). Their advisory services include providing specialised project services from concept to commissioning—from pre-investment feasibility studies and appraisals to development of joint ventures and company formation, assisting international companies in identifying and implementing projects in India, and providing specialised information for profitable and economic implementation of projects.

(vi) Strategic Advisory Services

Investment banks help corporates frame and implement key strategies relating to their business. These key strategies relate to entry into new geographies/services, exit from certain businesses/corporate restructuring and off-shoring for end-customers/on-shore vendors. They also help companies form strategic business alliances and assess capital-structure alternatives that create flexibility for executing on-growth opportunities.

(vii) Debt Syndication and Structured Finance

Investment banks help corporates raise debt capital and structured debt from the market, which includes cash-flow securitisation and factoring under various structured financing options for various purposes, including projects, expansions, modernisations, and in-structuring and syndicating funds for acquisitions in India and overseas. They prepare corporate profiles, financial profiles and information memoranda for loan syndication-arranging loan from a single development finance institution or a syndicate of consortium.

(viii) Financial Restructuring and Turnaround Financing

Investment banks assist sick corporates with financial turnaround objectives to structure their capital. They design innovative structures and revival plans for implementing turnaround strategies and financial restructuring of liabilities. They also assist these corporates to raise funds. Investment banks play a significant role in leveraged buyouts of companies in distress. They also work with domestic and foreign banks in India in selling as well as buying NPA portfolios.

(ix) Private-client Services

Investment banks provide financial services to corporate clients and their senior executives, private-equity firms, middle-market institutions and high net-worth individuals, including wealth management and stock-trading services. They provide a high level of client service in terms of providing valuable investment decisions and guiding the high net-worth investor to make money.

(x) Sales and Trading

Investment banks provide trade execution and liquidity services to institutional investors. Sales and trading include trading in bonds, equity, currency, futures and options, and commodities.

(xi) Equities Research and Broking

An investment bank through its research team offers research and analysis of specific industries and offers advice for equities to its clients.

- Merchant banker is a person who is engaged in the business of issue management, either by making arrangements regarding selling, buying or subscribing to securities, or acting as a manager, consultant or advisor or rendering corporate-advisory services in relation to such issue management

MERCHANT-BANKING SERVICES

Securities and Exchange Board of India (Merchant Banker) Regulations, 1992, define 'merchant banker' as any person who is engaged in the business of issue management, either by making arrangements regarding selling, buying, or subscribing to securities, or acting as a manager, consultant, or advisor, or rendering corporate-advisory services in relation to such issue management.

It is mandatory to appoint a merchant banker in case of public issues, rights issues, open offers and buy-backs. Merchant bankers facilitate the issue process by directing and coordinating the activities with underwriters, registrars and bankers, appropriately pricing and marketing the issue and complying with SEBI guidelines. Merchant bankers have been prohibited from carrying on any fund-based activity such as acceptance of deposits, leasing and bill discounting. They are not allowed to borrow funds from the market and engage in the acquisition and sale of securities on a commercial basis.

SEBI (MERCHANT BANKER) REGULATIONS, 1992

A merchant banker to carry on any activity of the issue management, which will inter-alia consist of preparation of prospectus and other information relating to the issue, determining financial structure, tie-up of financiers, and final allotment and refund of the subscription, has to get a certificate of registration from the SEBI. There are 164 merchant bankers registered with the SEBI.

The SEBI shall take into account, for considering the grant of a certificate, all matters, which are relevant to the activities relating to merchant banker and, in particular, the applicant complies with the following requirements, namely:

Some of the Leading Merchant-bankers Registered with SEBI

- SBI Capital Markets Ltd
- ICICI securities Ltd
- Kotak Mahindra Capital Company Ltd
- Reliance Securities Ltd
- IFCI Financial Services Ltd

1. The applicant shall be a body corporate other than a non-banking financial company, as defined under Clause (f) of Section 45-I of the Reserve Bank of India Act, 1934 (2 of 1934), as amended from time to time.
2. Provided that the merchant banker, who has been granted registration by the Reserve Bank of India to act as a primary dealer, may carry on such activity subject to the condition that it shall not accept or hold any public deposit.
3. a. The applicant has the necessary infrastructure like adequate office space, equipments, and manpower to effectively discharge his activities.
   b. The applicant has in his employment a minimum of two persons who have the experience to conduct the business of the merchant banker.
   c. A person directly or indirectly connected with the applicant has not been granted registration by the Board; 'directly or indirectly connected' means any person being an associate, subsidiary, inter-connected, or group company of the applicant, in case of the applicant being a body corporate.
   d. The applicant fulfils the capital-adequacy requirement, which is a net worth of not less than five-crore rupees. 'Net worth' means the sum of paid-up capital and free reserves of the applicant at the time of making application.
   e. The applicant, his partner, director or principal officer is not involved in any litigation connected with the securities market which has an adverse bearing on the business of the applicant.

f. The applicant, his director, partner or principal officer has not at any time been convicted for any offence involving moral turpitude or has been found guilty of any economic offence.
g. The applicant has the professional qualification from an institution recognised by the government in finance, law, or business management; and the applicant is a fit and proper person.
h. The grant of certificate to the applicant is in the interest of investors.

The certificate of registration granted under Regulation 8 and its renewal granted under Regulation 9, shall be valid for a period of 3 years from the date of its issue to the applicant. No merchant banker, other than a bank or a public financial institution, who has been granted a certificate of registration under these regulations, shall after 30 June 1998 carry on any business other than that in the securities market.

Appointment of Lead Merchant Bankers

The lead manager plays an important role in designing the instrument, pricing the issue, timing the issue, marketing, preparing the offer document, listing and allotment/refund. They can act as Book-running Lead Manager/Lead Manager for the IPOs/FPOs/Right issues/Debt issues.

The number of lead merchant bankers may not exceed in case of any issue of

Size of Issue	*No. of Merchant Bankers*
a. Less than rupees 50 crores	Two
b. Rupees 50 crores but less than rupees 100 crores	Three
c. Rupees 100 crores but less than rupees 200 crores	Four
d. Rupees 200 crores but less than rupees 400 crores	Five
e. Above rupees 400 crores, five or more	as may be agreed by the Board

1. All issues should be managed by at least one merchant banker functioning as the lead merchant banker:
   Provided that, in an issue of offer of rights to the existing members with or without the right of renunciation, the amount of issue of the body corporate does not exceed rupees 50 lakhs, the appointment of a lead merchant banker shall not be essential.
2. Every lead merchant banker shall before taking up the assignment relating to an issue, enter into an agreement with such body corporate setting out their mutual rights, liabilities and obligations relating to such issue and in particular to disclosures, allotment and refund.

Responsibilities of Lead Managers

1. No lead manager shall agree to manage or be associated with any issue unless his responsibilities relating to the issue, mainly, those of disclosures, allotment and refund are clearly defined, allocated and determined, and a statement specifying such responsibilities is furnished to the Board at least 1 month before the opening of the issue for subscription:
   Provided that, where there are more than one lead merchant bankers to the issue the responsibilities of each of such lead merchant banker shall clearly be demarcated and a statement specifying such responsibilities shall be furnished to the Board at least 1 month before the opening of the issue for subscription.
2. No lead merchant banker shall, agree to manage the issue made by any body corporate, if such body corporate is an associate of the lead merchant banker.

A lead merchant banker shall not be associated with any issue if a merchant banker who is not holding a certificate is associated with the issue.

Acquisition of Shares Prohibited

No merchant banker or any of its directors, partner or manager or principal officer shall, either on their respective accounts or through their associates or relatives, enter into any transaction in securities of the corporate bodies on the basis of unpublished price-sensitive information obtained by them, during the course of any professional assignment either from the clients or otherwise.

Information to the Board

Every merchant banker shall submit to the Board complete particulars of any transaction for acquisition of securities of any body corporate whose issue is being managed by that merchant banker within 15 days from the date of entering into such transaction.

Disclosures to the SEBI

A merchant banker shall disclose to the SEBI, as and when required, the following information, namely: (i) The responsibilities of the merchant banker with regard to the management of the issue; (ii) Any change in the information or particulars previously furnished, which have a bearing on the certificate granted to it; (iii) The names of the body corporate associated with at present or in the past for managing issues; (iv) The particulars relating to breach of the capital-adequacy requirement as specified in regulation; (v) Relating to any other activities as a manager, underwriter, consultant or advisor to an issue as the case may be.

Appointment of Compliance Officer

Every merchant banker shall appoint a compliance officer who shall be responsible for monitoring the compliance of the Act, rules and regulations, notifications, guidelines, instructions and so on, issued by the Board or the Central Government and for the redressal of investors' grievances.

The compliance officer shall immediately and independently report to the Board any non-compliance observed by him and ensure that the observations made or deficiencies pointed out by the Board on\in the draft prospectus or the letter of offer, as the case may be, do not recur.

PRE-ISSUE OBLIGATIONS

Merchant bankers play an important role in issue-management process. They have to comply with SEBI rules and regulations, and also guidelines for Disclosures and Investor Protection (DIP).

Pre-issue Obligation of Merchant Banker

- Submitting Offer Document
- Submitting an undertaking
- Submitting, list of promoters group
- Appointment of intermediaries
- Appointment of underwriter
- Making offer Document public
- Filing a No-complaint certificate
- Appointing Authorised collection agents
- Entering into an agreement with Depository/ies

Documents to be Submitted Along with the Offer Document by the Lead Manager

(i) Memorandum of Understanding (MOU)

Memorandum of understanding (MOU) has to be entered into between a lead merchant banker and the issuer company, specifying their mutual rights, liabilities and obligations relating to the issue. The lead merchant banker responsible for drafting of the offer documents shall ensure that a copy of the MOU entered into with the issuer company is submitted to the Board, along with the draft-offer document.

(ii) Inter-se Allocation of Responsibilities

In case a public or rights issue is managed by more than one merchant banker, the rights, obligations and responsibilities of each merchant banker shall be demarcated as specified in Schedule II. In case of undersubscription at an issue, the lead merchant banker responsible for underwriting arrangements shall invoke underwriting obligations and ensure that the underwriters pay the amount of devolvement and the same shall be incorporated in the inter-se allocation of responsibilities.

(iii) Due-diligence Certificate

The lead merchant banker shall exercise due diligence and is required to submit to SEBI a due-diligence certificate, confirming that the disclosures made in the draft prospectus or letter of offer are true, fair and adequate to enable the prospective investors to make a well-informed investment decision. The lead merchant banker shall furnish to the Board a due-diligence certificate as specified in Schedule III along with the draft-offer document. In case of a fast-track issue, the lead merchant banker shall furnish a due-diligence certificate to the Board as per the format specified in Schedule III, after including therein additional confirmations /certification to Schedule III, as specified in Schedule VI-A, along with the copy of the red-herring prospectus, prospectus or letter of offer, as the case may be. In case of a debenture issue, the lead merchant banker shall also furnish to the SEBI a due-diligence certificate given by the debenture trustee in the format specified along with the draft-offer document or in case of a fast-track issue, along with the copy of the red-herring prospectus, prospectus or letter of offer.

(iv) Certificates Signed by the Company Secretary or Chartered Accountant, in Case of Listed Companies Making Further Issue of Capital in Respect of the Following

1. All refund orders of the previous issues were despatched within the prescribed time and in the prescribed manner.
2. All security certificates were despatched to the allottees, within the prescribed time and in the prescribed manner.
3. The securities were listed on the stock exchanges as specified in the offer documents.

Undertaking

The issuer shall submit an undertaking to the SEBI to the effect that transactions in securities by the 'promoter,' the 'promoter group,' and the immediate relatives of the 'promoters' during the period between the date of filing the offer documents with the Registrar of Companies or stock exchange as the case may be and the date of closure of the issue, shall be reported to the stock exchanges concerned within 24 hours of the transaction(s).

List of Promoters' Group and Other Details

The issuer company shall submit to the SEBI the list of the persons who constitute the Promoters' Group and their individual shareholding.

The issuer company shall submit to the stock exchanges on which securities are proposed to be listed, the permanent account number, the bank account number and the passport number of the promoters, at the time of filing the draft-offer document to them.

Appointment of Intermediaries

A merchant banker shall not lead manage the issue if he is a promoter or a director or an associate of the issuer company.

Provided that a merchant banker holding the securities of the issuer company may lead manage the issue if;

1. the securities of the issuer company are listed or proposed to be listed on the Over the Counter Exchange of India (OTCEI) and
2. the market makers have either been appointed or are proposed to be appointed as per the offer document.

Provided further that a merchant banker who is an associate of the issuer company may be appointed as a merchant banker for the issue, if it is involved only in the marketing of the issue. A merchant banker shall be deemed to be an associate of the issuer if:

1. either of them controls directly or indirectly, through itself, its subsidiary or the holding company, not less than 15% of the voting power of the other; or
2. either of them, directly or indirectly, by itself or in combination with other persons, exercises control over the other; or
3. there is a common director, excluding nominee director, among the body corporate/its subsidiary or the holding company and the merchant banker.

Appointment of Other Intermediaries

The lead merchant banker shall ensure that the other intermediaries are duly registered with the Board, wherever applicable. Before advising the issuer on the appointment of other intermediaries, the lead merchant banker shall independently assess the capability and the capacity of the various intermediaries to carry out the assignment.

The lead merchant banker shall ensure that issuer companies enter into an MOU with the intermediary(ies) concerned, whenever required, and also take note of the deemed agreement with the Self-certified Syndicate Banks, as provided in the Application Supported by Blocked Amount (ASBA) process.

The lead merchant banker shall ensure that bankers to the issue are appointed in all the mandatory-collection centres.

The lead merchant banker shall not act as a registrar to an issue in which it is also handling the post-issue responsibilities.

The lead merchant banker shall ensure that;

1. The registrars to issue registered with the Board are appointed in all public issues and rights issues.
2. In case where the issuer company is a registered registrar to an issue, the issuer shall appoint an independent outside registrar to process its issue.

The registrar to an issue which is associated with the issuer company as a promoter or a director shall not act as the registrar for the issuer company.

Where the number of applications in a public issue is expected to be large, the issuer company in consultation with the lead merchant banker may associate one or more registrars registered with the Board for the limited purpose of collecting the application forms at different centres and forward the same to the designated Registrar to the Issue as mentioned in the offer document. The designated Registrar to the Issue shall be primarily and solely responsible for all the activities as assigned to them for the issue management.

Underwriting

The lead merchant banker shall satisfy themselves about the ability of the underwriters to discharge their underwriting obligations. There are 5 underwriters registered with the SEBI.

The lead merchant banker shall:

1. incorporate a statement in the offer document to the effect that in the opinion of the lead merchant banker, the underwriters' assets are adequate to meet their underwriting obligations;
2. obtain the underwriters' written consent before including their names as underwriters in the final-offer document.

In respect of every underwritten issue, the lead merchant banker(s) shall undertake a minimum underwriting obligation of 5% of the total underwriting commitment or Rs. 25 lakhs, whichever is less. The outstanding underwriting commitments of a merchant banker shall not exceed 20 times its net worth at any point of time.

In respect of an underwritten issue, the lead merchant banker shall ensure that the relevant details of underwriters are included in the offer document.

Offer Document to be Made Public

The draft-offer document filed with the SEBI shall be made public for a period of 21 days, from the date of filing the offer document with the SEBI.

The lead merchant banker shall,

1. while filing the draft-offer document with the Board can also file the draft-offer document with the stock exchanges where the securities are proposed to be listed;
2. while filing the copy of the red-herring prospectus, prospectus or letter of offer, as the case may be, with the Board, can also file the copy of the red-herring prospectus, prospectus or letter of offer with the stock exchanges on which the securities to be offered in the fast-track issue are proposed to be listed;
3. make copies of the draft-offer document available to the public, host the draft and final-offer documents on the websites of the all the lead managers / syndicate members, associated with the issue, and also ensure that the contents of documents hosted on the websites are the same as that of their printed versions; and
4. obtain and furnish to the SEBI, an in-principle approval of the stock exchanges, for listing of the securities, within 15 days of filing of the draft-offer document with the stock exchanges.

No-complaint Certificate

After a period of 21 days from the date the draft-offer document was made public, the lead merchant banker shall file a statement with the Board:

1. giving a list of complaints received by it;
2. a statement whether it is proposed to amend the draft-offer document or not, and;
3. highlight those amendments.

Mandatory-collection Centres

The minimum number of collection centres for an issue of capital shall be:

1. The four metropolitan centres situated at Mumbai, Delhi, Calcutta and Chennai.
2. All such centres where the stock exchanges are located in the region in which the registered office of the company is situated.
3. The regional division of collection centres.

The issuer company shall be free to appoint as many collection centres as it may deem fit in addition to the above minimum requirement.

In respect of issues where ASBA is ( ) applicable, all designated branches of Self-certified Syndicate Banks shall be deemed as mandatory-collection centres.

Authorised Collection Agents

The issuer company can also appoint authorised collection agents in consultation with the lead merchant banker, subject to necessary disclosures including the names and addresses of such agents made in the offer document. The modalities of selection and appointment of collection agents can be made at the discretion of the lead merchant banker. The lead merchant banker shall ensure that the collection agents so selected are properly equipped for the purpose, both in terms of infrastructure and manpower requirements.

The collection agents may collect such applications, as are accompanied by payment of application monies paid by cheques, drafts and stock invests.

The authorised collection agent shall not collect application moneys in cash.

The applications collected by the collection agents shall be deposited in the special share-application account with the designated scheduled bank, either on the same date or latest by the next working day.

The application forms, along with the duly reconciled schedules, shall be forwarded by the collection agent to the Registrars to the Issue, after realisation of cheques and after weeding out the applications in respect of cheque-return cases, within a period of 2 weeks from the date of closure of the public issue.

The offer documents and application forms shall specifically indicate that the acknowledgement of receipt of application moneys given by the collection agents shall be valid and binding on the issuer company and other persons connected with the issue.

The investors from the places other than the places where the mandatory-collection centres and authorised collection agents are located, can forward their applications along with stock invests to the Registrars to the Issue, directly by registered post with acknowledgement due.

The applications received through the registered post shall be dealt with by the Registrars to the Issue in the normal course.

Abridged Prospectus

The lead merchant banker shall ensure the following:

1. Every application form including ASBA forms, distributed by the issuer company or anyone else, is accompanied by a copy of the abridged prospectus.
2. The application form including ASBA forms may be stapled to form a part of the abridged prospectus. Alternatively, it may be a perforated part of the abridged prospectus.
3. The abridged prospectus shall not contain matters which are extraneous to the contents of the prospectus.
4. Enough space shall be provided in the application form to enable the investors to file in various details like name, address and so on.

Agreements with Depositories

The lead manager shall ensure that the issuer company has entered into agreements with all the depositories for dematerialisation of securities. He shall also ensure that an option be given to the investors to receive the allotment of securities in a dematerialised form, through any of the depositories.

POST-ISSUE OBLIGATIONS

Post-issue Monitoring Reports

Post-issue Obligation

- Submitting post-issue monitoring reports
- Redressal of investor grievances
- Maintaining a close coordination with intermediaries
- Ensuring full subscription of the issue
- Verifying Post-issue Advertisements details
- Finalising basis of allotment and allotment procedure

Irrespective of the level of subscription, the post-issue lead merchant banker shall ensure the submission of the post-issue monitoring reports, as per the formats specified by the SEBI.

These reports shall be submitted within 3 working days from the due dates.

The due date for submitting the post-issue monitoring report, in case of public issues by listed and unlisted companies:

1. A 3-day monitoring report in case of issue through book-building route, for book-built portion:
   The due date of the report shall be the 3rd day from the date of allocation in the book-built portion or 1 day prior to the opening of the fixed-price portion, whichever is earlier.
2. A 3-day monitoring report in other cases, including fixed-price portion of book-built issue:
   The due date for the report shall be the 3rd day from the date of closure of the issue.

Final post-issue monitoring report for all issues:

The due date for this report shall be the 3rd day from the date of listing or 78 days from the date of closure of the subscription of the issue, whichever is earlier.

The due dates for submitting the post-issue monitoring report in case of rights issues:

1. 3-day Post-issue Monitoring Report:
   The due date for this report shall be the 3rd day from the date of closure of subscription of the issue.
2. 50-day Post-issue Monitoring Report:
   The due date for this report shall be the 50th day from the date of closure of subscription of the issue.

Due-diligence certificate to be submitted with the final post-issue monitoring report. The post-issue lead merchant banker shall file a due-diligence certificate in the format specified, along with the final post-issue monitoring report.

Redressal of Investor Grievances

The post-issue lead merchant banker shall actively associate himself with post-issue activities, namely, allotment, refund, dispatch and giving instructions to Self-certified Syndicate Banks and shall regularly monitor the redressal of investor grievances arising there from.

Coordination with Intermediaries

1. The post-issue lead merchant banker shall maintain a close coordination with the Registrars to the Issue and arrange to depute its officers to the offices of various intermediaries at regular intervals, after the closure of the issue, to monitor the flow of applications from the collecting-bank branches and/or Self-certified Syndicate Banks, processing of the applications including application form for Applications Supported by Blocked Amount and other matters, till the basis of allotment is finalised, despatch security certificates and refund orders completed, and securities listed.
2. Any act of omission or commission on the part of any of the intermediaries noticed during such visits, shall be duly reported to the Board.

Underwriters

1. a. If the issue is proposed to be closed at the earliest closing date, the lead merchant banker shall satisfy himself that the issue is fully subscribed before announcing the closure of the issue.

   b. In case there is no definite information about the subscription figures, the issue shall be kept open for the required number of days to take care of the underwriters' interests and to avoid any dispute, at a later date, by the underwriters in respect of their liability.
2. In case there is a devolvement on underwriters, the lead merchant banker shall ensure that the underwriters honour their commitments within 60 days from the date of closure of the issue.
3. In case of undersubscribed issues, the lead merchant banker shall furnish information in respect of underwriters who have failed to meet their underwriting devolvement to the SEBI in the format specified.

Bankers to an Issue

The post-issue lead merchant banker shall ensure that moneys received a pursuant to the issue and kept in a separate bank (i.e., Bankers to an issue), as per the provisions of Section 73(3) of the Companies Act, 1956, is released by the said bank, only after the listing permission under the said Section has been obtained from all the stock exchanges where the securities were proposed to be listed as per the offer document.

Post-issue Advertisements

A post-issue lead merchant banker shall ensure that in all issues, an advertisement giving details relating to oversubscription, basis of allotment, number, value and percentage of all applications including Applications Supported by Blocked Amount, number, value and percentage of successful allottees for all applications including Applications Supported by Blocked Amount, date of completion of despatch of refund orders/instructions to Self-certified Syndicate Banks by the Registrar, the date of despatch of certificates and the date of filing of listing application is released within 10 days from the date of completion of the various activities at least in an English National Daily with wide circulation, one Hindi National Paper and a Regional language daily, circulated at the place where the registered office of the issuer company is situated.

The post-issue lead merchant banker shall ensure that the issuer company/advisors/brokers or any other agencies connected with the issue, do not publish any advertisement stating that the issue has been oversubscribed or indicating the investors' response to the issue, during the period when the public issue is still open for subscription by the public.

An advertisement stating that 'the subscription to the issue has been closed' may be issued after the actual closure of the issue.

Basis of Allotment

In a public issue of securities, the Executive Director / Managing Director of the designated stock exchange, along with the post-issue lead merchant banker and the Registrars to the Issue, shall be responsible to ensure that the basis of allotment is finalised in a fair and proper manner in accordance with the DIP guidelines.

Proportionate-allotment Procedure

An allotment shall be on a proportionate basis within the specified categories, rounded off to the nearest integer, subject to a minimum allotment being equal to the minimum application size, as fixed and disclosed by the issuer.

The above-proportionate allotments of securities in an issue, that is oversubscribed, shall be subject to reservation for the retail individual investors as described in the following:

1. A minimum 50% of the net offer of securities to the public shall initially be made available for allotment to retail individual investors, as the case may be.
2. The balance net offer of securities to the public shall be made available for allotment to:
   a. individual applicants other than retail individual investors, and
   b. other investors including corporate bodies/institutions, irrespective of the number of shares, debentures, and so on, applied for.
3. The unsubscribed portion of the net offer to any one of the categories specified in (1) or (2) shall/may be made available for allotment to applicants in the other category, if so required.

Other Responsibilities

The lead merchant banker shall ensure that the despatch of share certificates/refund orders/and demat credit is completed and the allotment and listing of documents submitted to the stock exchanges within 2 working days of the date of allotment.

The post-issue lead manager shall ensure that all steps for completion of the necessary formalities for listing and commencement of trading at all stock exchanges, where the securities are to be listed, are taken within 7 working days of the finalisation of basis of allotment.

A lead merchant banker shall ensure the payment of interest to the applicants for the delayed dispatch of allotment letters, refund orders, and so on, as prescribed in the offer document.

The post-issue lead merchant banker shall ensure that the dispatch of refund orders/allotment letters/share certificates is done by way of registered post/certificate of posting, as may be applicable.

In case of all issues, an advertisement giving details relating to oversubscription, basis of allotment, number, value and percentage of all applications received, including Applications Supported by Blocked Amount, number, value and percentage of successful allottees for all applications including Applications Supported by Blocked Amount, date of completion of despatch of refund orders/instructions to Self-certified Syndicate Banks by the registrar, date of despatch of certificates and date of filing of listing application. Such advertisement shall be released within 10 days from the date of completion of the various activities.

The post-issue lead merchant banker shall continue to be responsible for the post-issue activities, till the subscribers had received the shares/debenture certificates or refund of application moneys and the listing agreement is entered into by the issuer company with the stock exchange and listing/trading permission is obtained.

CHANGING LANDSCAPE OF INVESTMENT BANKING

Investment banking was a lucrative business till 2007. The revenues during the year 2007 were the highest for the investment-banking industry as a large number of deals worth $51 billion were struck. However, the sub-prime mortgage crisis took a toll on the global-investment banks. These investment banks were not under the control of either the Federal Reserve Bank or the US Securities and Exchange Commission (SEC), which made it easier for them to take higher risks. Wall Street's oldest and biggest investment banks collapsed in the late 2008 as a result of the financial turmoil. Bear Stearns was acquired by JP Morgan Chase in March 2008. Lehman Brothers filed for Chapter 11 Bankruptcy and was declared bankrupt in September 2008. The Asian and European operations of Lehman Brothers were bought by Nomura and the North American Lehman operations by Barclays Capital. Merill Lynch was acquired by Bank of America for $50 billion. Goldman Sachs and Morgan Stanley converted themselves into bank-holding companies or commercial banks.

The impact of the collapse of these banks has been felt on the Indian investment banks. There will be a drop in big deals and fat fees and revenues. Even in the midst of this gloomy environment, investment banks have opportunities which they can tap with properly designed strategies and go global. The growth rate of the Indian economy has slowed down but it is fairly good when compared to the growth rate of the developed countries. Even though the capital markets are in a dismal state, India is still an attractive market for investment. Even foreign investment banks have planned to start their operations in India. The Indian investment banks need to design new strategies for survival and growth, such as focusing on key business areas, exploring new and alternate markets and market segments, creating alliances with boutique firms, developing strong and long-term relationship with the existing and new clients, giving quality advice to clients and assisting them in every stage of their growth, hiring qualified staff and promoting ethical behaviour.

Some Leading International Investment Banks Operating in India

- Goldman Sachs
- Credit Suisse
- Bank of America–Merill Lynch
- City group Global Markets India Pvt Ltd
- Barclay's Bank
- Morgan Stanley

- The world's NO.1 investment bank in 2009 was JP Morgan Chase & Co.

KEY TERMS

Investment Banking and Merchant Banking.

SUMMARY

1. Investment banks are financial intermediaries in the business of providing investment and financial advisory services to companies, governments and institutional investors.
2. Investment banks perform two types of functions:
   They help public and private corporates in issuing securities in the primary market, provide guarantee by standby underwriting and act as intermediaries in trading for clients. They give companies and investors financial advice.
3. There are three types of investment banks. They can be classified as: Full-service global-investment banks, Regional-investment banks and boutique firms.
4. Securities and Exchange Board of India (Merchant Banker) Regulations, 1992 define 'merchant banker' as any person who is engaged in the business of issue management, either by making arrangements

regarding selling, buying or subscribing to securities or acting as a manager, consultant, advisor or rendering corporate advisory services in relation to such issue management.
5. Merchant bankers facilitate the issue process by directing and coordinating the activities with underwriters, registrars and bankers, appropriately pricing and marketing the issue, and complying with the SEBI guidelines.
6. They have to ensure compliance with the SEBI rules and regulations, as also guidelines for DIP.

REVIEW QUESTIONS

1. What is investment banking? How is it different from commercial banking?
2. What is the role of investment banks? State the different types of investment banks?
3. What kind of financial advisory services do investment banks provide?
4. Define merchant banker? What is the role of a merchant banker in the capital market?
5. What are the pre- and post-issue obligations of merchant bankers?

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Depositories and Custodians

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *The meaning of the depository system*

2 *The need for setting up a depository system in India*

3 *The difference between a demat share and a physical share*

4 *The benefits of a depository system*

5 *The move on the depository System in India*

6 *The depository process*

7 *Depositories such as the National Securities Depository Limited and the Central Depository Services (India) Limited*

8 *The meaning of custodians*

9 *The stock holding Corporation of India Limite*

THE DEPOSITORY SYSTEM

Technology has changed the face of the Indian stock markets in the post-liberalisation era. Competition amongst the stock exchanges, increase in the number of players, and changes in the trading system have led to a tremendous increase in the volume of activity. The traditional settlement and clearing system have proved to be inadequate due to operational inefficiencies. Hence, there has emerged a need to replace this traditional system with a new system called the 'depository system'.

Depository, in very simple terms, means a place where something is deposited for safekeeping. A depository is an organisation which holds securities of a shareholder in an electronic form and facilitates the transfer of ownership of securities on the settlement dates. According to Section 2(e) of the Depositories Act, 1996, 'Depository means a company formed and registered under the Companies Act, 1956 and which has been granted a certificate of registration under Section 12(1 A) of the Securities and Exchange Board of India Act, 1992.'

The depository system revolves around the concept of paperless or scripless trading because the shares in a depository are held in the form of electronic accounts, that is, in dematerialised form. This system is similar to the opening of an account in a bank wherein a bank will hold money on behalf of the investor and the investor has to open an account with the bank to utilise its services. Cash deposits and withdrawals are made in a bank, in lieu of which a receipt and bank passbook are given, while in depositories, scrips are debited and credited and an account statement is issued to the investor from time to time. An investor in a bank deals directly with the bank while an investor deals through a depository participant in a depository. A depository also acts as a securities bank, where dematerialised physical securities are held in custody.

An effective and fully developed depository system is essential for maintaining and enhancing market efficiency, which is one of the core characteristics of a mature capital market.

Need for Setting-up a Depository in India

- A depository is an organisation which holds securities of an investor in an electronic form through a registered depository participant.

This need was realised in the 1990s due to various reasons as outlined below.

- Large-scale irregularities in the securities scam of 1992 exposed the limitations of the prevailing settlement system.
- A lot of time was consumed in the process of allotment and transfer of shares, impeding the healthy growth of the capital market.
- With the opening up of the Indian economy, there was a widespread equity cult which resulted in an increased volume of transactions.
- Mounting fiscal deficit made the government realise that foreign investment was essential for the growth of the economy and that was being restricted due to non-availability of depositories.
- There were various problems associated with dealing in physical shares, such as
  - problems of theft, fake and/or forged transfers,
  - share transfer delays particularly due to signature mismatches; and
  - paper work involved in buying, selling, and transfer leading to costs of handling, storage, transportation, and other back office costs.

To overcome these problems, the Government of India, in 1996, enacted the Depositories Act, 1996 to start depository services in India.

Depository can be in two forms—dematerialised or immobilised. In dematerialisation, paper certificates are totally eliminated after verification by the custodians. In immobilisation, initial paper certificates are preserved in safe vaults by custodians and further movement of papers are frozen.

The depository system provides a wide range of services.

- Primary market services by acting as a link between the issuers and the prospective shareholders.
- Secondary market services, by acting as a link between the investors and the clearing house of the exchange to facilitate the settlement of security transactions through book-keeping entries.
- Ancillary services, by providing services such as collecting dividends and interests, reporting corporate information, and crediting bonus, rights, shares.

These services lead to a reduction in both time and cost which ultimately benefits the investors, issuers, intermediaries, and the nation as a whole.

Difference Between a Demat Share and a Physical Share

A demat share is held by the depository on behalf of the investor whereas a physical share is held by the investor himself. The holding and handling of a demat share is done electronically, whereas a physical share is in the form of a paper. The demat share can be converted into a physical share on request. This is referred to as the rematerialisation of the share. The interface between the depository and the investor is provided by a market intermediary called the depository participant (DP) with whom an investor has to open an account and give all instructions. The demat share does not have a folio number, distinctive number, or certificate number like a physical share. Demant shares are fungible, that is, all the holdings of a particular security will be identical and interchangeable. Though there is no stamp duty on the transfer of demat shares from one account to another, the depository participant charges a transaction fee and levies asset holding charges.

There is, however, no difference between demat shares and physical shares as far as the beneficial interests of ownership of securities are concerned. The owner is entitled to exactly the same benefits of ownership of a security no matter in what form it is maintained.

Benefits of a Depository System

Benefits of a Depository System

- Immediate allotment, transfer and registration of securities
- No stamp duty on transfer of securities
- Elimination of risks associated with physical certificates
- Reduction in paperwork and transaction costs
- Decrease in settlement risks & frauds
- Loan against the pledged demat shares at low cost

A depository system enables immediate allotment, transfer, and registration of securities, thereby increasing the liquidity of stocks. It eliminates all problems related with the holding of shares in physical form, thereby increasing investor confidence. An investor saves in terms of costs like stamp duty, postage, and brokerage charges (Table 18.1). Pledging of shares and portfolio shuffling become convenient for an investor. This system enables trading of even a single share, thereby eliminating the problem of odd-lot shares. Shares get credited into the demat holder's account in a couple of days, unlike the physical mode where it took an average of a month to transfer the shares.

Further, loans against the pledged demat shares come at interest rates that are lower by 0.25 per cent to 1.5 per cent in comparison to pledged physical shares. The limit of loan against dematerialised security as collateral is double (at Rs. 20 lakh) of that against collateralised physical security (Rs. 10 lakh). The Reserve Bank of India has also reduced the minimum margin to 25 per cent for loans against dematerialised securities as against 50 per cent for loan against physical securities. Many brokerage firms have brought down their brokerage to the extent of 0.5 per cent as the risk associated with bad delivery has reduced.

This system has facilitated the introduction of the rolling settlement system which, in turn, has led to shorter settlement cycles and a decrease in settlement risks and frauds. Lastly, this system helps in integrating the domestic capital market with international capital markets.

Cost Comparison for Trading in Physical and Demat Segments

A comparison of cost for a long term-investor who buys and trades shares worth Rs. 10,000.

An investor saves 35–100 basis points in case of demat shares without transacting and saves a higher amount, that is, 140–445 basis points when transacting 10 times a year in case of demat shares.

TABLE 18.1 (Figures in Basis Points)

	Without Transacting			With Transacting 10 Times/Year		
	Physical Shares	*Demat Shares*	*Savings*	*Physical Shares*	*Demat Shares*	*Savings*
Brokerage	75–100	50–75	25–50	750–1000	500–750	250–500
Stamp Duty	50	–	50	–	–	–
Postal Charges	10–30	–	10–30	–	–	–
Company Objection (Notarisation Etc.)	10–30	–	10–30	–	–	–
Settlement Charges	–	5–10	–(5–10)	–	50–100	–(50–100)
Custody (5 Years)	–	25–50	–(25–50)	–	5–10	–(5–10)
Total	–	–	**35–100**	–	–	**140–445**

Source: An Investor's Guide to Depositories, NSDL.

The Move on to a Depository System in India

The move on to a depository system in India was initiated by the Stock Holding Corporation of India Limited (SHCIL) in July 1992 when it prepared a concept paper on 'National Clearance and Depository System' in collaboration with Price Waterhouse under a programme sponsored by the US Agency for International Development. Thereafter, the government of India constituted a technical group under the chairmanship of R. Chandrasekaran, Managing Director, SHCIL, which submitted its report in 1993.

Subsequently, the Securities and Exchange Board of India (SEBI) constituted a seven-member squad to discuss the various structural and operational parameters of the depository system. The Government of India promulgated the Depositories Ordinance in September 1995, thus paving the way for setting up of depositories in the country.

Some features of the Depositories Ordinance are as follows.

- The depository is a registered owner of the share while the shareholder is the beneficial owner retaining all the economic and voting rights arising out of share ownership.
- Shares in the depository will be fungible.
- Transfers pertaining to sale and purchase will be effected automatically.
- Any loss or damage caused to the participant will be indemnified by the depository.
- If trades are routed through depository, there is no need to pay stamp duty.

The Depositories Act was passed by the Parliament in August 1996. It lays down the legislative framework for facilitating dematerialisation and book entry transfer of securities in a depository. The act provides that a depository is required to be a company under the Companies Act, 1956 and depository participants (DPs) need to be registered with the SEBI. The investors have the option to hold securities in physical or dematerialised form or to rematerialise securities previously held in dematerialised form.

The SEBI issued a consultative paper No. X on the draft regulations for depositories and participants in October 1995 for wide consultation and notified the regulations in May 1996. The SEBI has allowed multiple depositories to ensure competition and transparency.

The Depositories Related Laws (Amendment) Ordinance, 1997, issued in January of that year enabled units of mutual funds and UTI, securities of statutory corporations and public corporations to be dealt through depositories. The Dhanuka Panel in its draft Depository Act (Amendment) Bill, 1998 recommended empowering the SEBI to make trading in demat shares mandatory. The SEBI laid down an elaborate time schedule envisaging that beginning January 4, 1999, till March 26, 2001, 3,145 listed scrips or 40 per cent of the total listed securities would be traded compulsorily in the demat form. Besides equity, new debt issues will also be in demat form. The minimum networth stipulated by the SEBI for a depository is Rs. 100 crore.

It is mandatory for all listed companies to have their securities admitted for dematerialisation with both the depositories, viz, NSDL and CDSL. Securities include shares, debentures, bonds, commercial paper, certificate of deposits, pass through certificates, government securities and mutual fund units.

SEBI (Depositories and Participants) (Amendment) Regulations 2008 were notified on March 17, 2008, which provided for the shareholding such as

1. sponsor should at all times hold at least 51 per cent shares in the depository;
2. no person, either singly or together with persons acting in concert, can hold more than 5 per cent of the equity share capital in the depository;

3. the combined holding of all persons resident outside India in the equity share capital of the depository will not exceed, at any time, 49 per cent of its total equity share capital, subject further to the following:
   a. the combined holdings of such persons acquired through the foreign direct investment route are not more than 26 per cent of the total equity share capital, at any time;
   b. the combined holdings of foreign institutional investors are not more than 23 per cent of the total equity share capital, at any time;
   c. no foreign institutional investor acquires shares of the depository otherwise than through the secondary market.

The Depository Process

Eligibility to Join as a DP

- Public Financial Institution
- Bank included in the second schedule to the RBI Act,1934
- Foreign bank operating in India
- State Financial Corporation
- Custodian of Securities
- Clearing corporation or a clearing house of a stock exchange
- Stock Broker
- Non-banking finance company
- Registrar to an issue or share transfer agent

There are four parties in a demat transaction: the customer, the depository participant (DP), the depository, and the share registrar and transfer agent (R&T).

Opening an Account An investor who wants to avail of the services will have to open an account with the depository through a DP, who could either be a custodian, a bank, a broker, or individual with a minimum net worth of Rs. 1 crore. The investor has to enter into an agreement with the DP after which he is issued a client account number or client ID number. PAN Card is now mandatory to operate a demat account. The holder of a demat account is called 'beneficial owner' (BO). He can open more than one account with the same or multiple DPs.

Dematerialisation To convert his physical holdings of securities into the dematerialised form, the investor makes an application to the DP in a dematerialisation request form (DRF). Within seven days, the DP forwards the form, along with the security certificates, to the issuer or its registrar and transfer agent after electronically registering the request with the depository.

The depository electronically forwards the demat request to the respective issuer or its registrar and transfer agent, who verifies the validity of the security certificates as well as the fact that the DRF has been made by a person recorded as a member in its register of members.

After verification, the issuer or its registrar and transfer agent authorises an electronic credit for the security in favour of the client. Thereafter, the depository causes the credit entries to be made in the account of the client.

Rematerialisation To withdraw his security balance with the depository, the investor makes an application to the depository through its DP. He requests for the withdrawal of balance in his account in a rematerialisation request form (RRF). On receipt of the RRF, the participant checks whether sufficient free relevant security balance is available in the client's account. If there is, the participant accepts the RRF and blocks the balance of the client to the extent of the rematerialisation quantity and electronically forwards the request to the depository.

- **Dematerialisation** is conversion of physical certificates to electronic form

- **Rematerialisation** is conversion of securities in demat form into physical certificates

On receipt of the request, the depository blocks the balance of the participant to the extent of the rematerialisation quantity in the depository system. The depository electronically forwards the accepted rematerialisation application to the issuer or its registrar agent, which is done on a daily basis.

The registrar and transfer agent confirm electronically to the depository that the RRF has been accepted. Thereafter, the issuer or registrar and transfer agent despatches the share certificates arising out of the rematerialisation request within 30 days.

Distributing Dividend A company (issuer) or its registrar and transfer agent shall make known the depository of the corporate actions such as dates for book closures, redemption or maturity of security, conversion of warrants, and call money from time to time. The depository will then electronically provide a list of the holdings of the clients as on the cut-off date. The company can then distribute dividend, interest, and other monetary benefits directly to the client on the basis of the list. If the benefits are in the form of securities, the company or its registrar and transfer agent may distribute these, provided the newly created security is an eligible security and the client has consented to receive the benefits through depository.

Closing an Account A client wanting to close an account shall make an application in the format specified to that effect to the participant. The client may close his account if no balances are outstanding to his credit in the account. If any balance exists, the account may be closed in the following manner: (i) By rematerialisation of all its existing balances in his account and/or (ii) By transferring his security balances to his other account held either with the same participant or with a different participant.

The participant shall ensure that all pending transactions have been adjusted before closing such an account. After ensuring that there are no balances in the client's account, the participant shall execute the request for closure of the client's account.

Trading/Settlement of Demat Securities

The procedure for buying and selling dematerialised securities is similar to the one for physical securities. In case of purchase of securities, the broker will receive his securities in his account on the pay-out day and give instruction to its DP to debit his account and credit investor's account. Investor can either give receipt instruction or standing instruction to DP for receiving credit by filling appropriate form. In case of sale of securities, the investor will give delivery instruction to DP to debit his account and credit the broker's account. Such instruction should reach the DP's office at least 24 hours before the pay-in.

THE NATIONAL SECURITIES DEPOSITORY LIMITED

The Indian capital market took a major step in its rapid modernisation when the National Securities Depository Limited (NSDL) was set up as the first depository in India. The NSDL, promoted by the Industrial Development Bank of India, the Unit Trust of India (UTI), the National Stock Exchange of India Limited (NSE), and the State Bank of India (SBI) was registered on June 7, 1996, with the SEBI and commenced operations in November 1996. The NSDL is a public limited company formed under the Companies Act, 1956 with a paid-up capital of Rs. 105 crore.

The NSDL interacts with investors and clearing members through market intermediaries called depository participants (DPs). The NSDL performs a wide range of securities-related functions through the DPs. These services are as follows.

1. **Core services**
   a. Maintenance of individual investors 'beneficial holdings in an electronic form.
   b. Trade settlement.
2. **Special services**
   a. Automatic delivery of securities to the clearing corporation.
   b. Dematerialisation and rematerialisation of securities.
   c. Account transfer for settlement of trades in electronic shares.
   d. Allotments in the electronic form in case of initial public offerings.
   e. Distribution of non-cash corporate actions (bonus, rights, etc.).
   f. Facility for freezing/locking of investor accounts.
   g. Facility for pledge and hypothecation of securities.
   h. Demat of National Savings Certificates (NSC)/Kisan Vikas Patra (KVP).
   i. Internet based services such as SPEED-e and IDeAS.

Business Partners of the NSDL

An important link between the NSDL and an investor is a DP. A DP could be a public financial institution, a bank, a custodian, or a stock broker. Corporate entities are not allowed to become DPs nor can they set up depositories. A DP acts as an agent of the NSDL and functions like a securities bank as an investor has to open an account with the DP. The SHCIL was the first depository participant registered with the SEBI. The number of DPs operational as on March end 2010 stood at 287 as against 24 in the end of March 1997 including all custodians providing services to local and foreign institutions.

- A depository participant is an agent of the depository through which it interfaces with the investor. A DP can offer depository services only after it gets registered with the SEBI

At present, the competition among DPs has increased and, in a bid to attract and retain customers, DPs are exploring new avenues including latest technology for increasing their efficiency. For instance, many DPs have launched interactive voice response (IVR) units. They have also slashed their service charges and many of them are rendering free-market and off-market buy services to their corporate clients.

Besides DPs, other business partners of the NSDL include issuing companies/their share transfer agents, clearing corporations/houses, and clearing members. The NSDL facilitates the settlement of trades carried

Box 18.1 The NSDL at a Glance

The NSDL at a Glance (July 10, 2010)		*Demat Custody*	*Instruments*	*Value (Rs. in crore)*
Investor Accounts	1,07,17,981	Shares	8,025	45,53,333
Accounts Having		Debt/Bonds	6,774	7,69,512
Debt Instruments	2,11,546	CP	974	1,07,780
Depository Participants				
DPs	287	Settlement (5.7.2010 to 10.07.2010)		
DP Service Centres	11,684	*Equity Shares*	*Qty (in million)*	*Value (Rs. in million)*
Companies Joined	8,338	NSE	1,022	2,08,221
Demat Custody Quantity		BSE	709	63,604
(mn. securities)	3,79,012	Total	1,732	2,71,233
		Debt/Bonds Settlement		2,38,500

Source: www.nsdl.co.in

out in the book entry segment of stock exchanges. The actual settlement function is performed by the clearing corporation/houses of the stock exchanges. The NSDL has its by-laws regarding the powers and functions of board of directors, executive committee, rules of business, participants, nomination of persons of eminence, safeguards for clients, participants, and accounts by book entry. Trading in dematerialised securities commenced on December 26, 1996, in the NSE. As on June 8, 1998, 916 out of 1,010 active member brokers of the NSE opened accounts with the NSDL to be able to trade in the demat segment.

The NSDL has achieved paperless trading in perhaps the shortest time in the world—a little over three years. Today, 99.9 per cent of all equity is traded in demat form. The NSDL has more than 1 crore (Box 18.1) investor accounts and 287 DPs, making it the second largest depository in the world (Table 18.3).

The NSDL's computer system handles around eight to nine million messages (to debit and credit individual investor accounts) per day on an online basis. It links three types of data bases—a central NSDL one, those of 287 DPs as well as those of 8,338 companies. Moreover, it has the ability to monitor everything that is happening in the computers of its DPs.

The NSDL has undertaken a pilot project to dematerialise securities like National Savings Certificates and Kisan Vikas Patra at select post offices. In addition, it also manages a countrywide tax information network for the ministry of finance. It has also been appointed as central Record keeping agency for the New Pension System of the Government of India.

The NSDL has created three pioneering systems : SPEED-e, STeADY, and IDeAS. SPEED-e allows users to execute delivery instructions using the Internet. STeADY (Securities Trading—Information Easy Access and Delivery) was launched by the NSDL on November 30, 2002 and it constitutes an internet-based infrastructure for facilitating straight-through processing. It is a means of transmitting digitally signed trade information with encryption across market participants electronically, through the Internet. This facility enables brokers to deliver contract notes to custodians and/or fund managers electronically. 'IDeAS' (Internet-based Demat Account Statement) enables its account-holders including clearing members to view their account balances and transactions of the last five days. These systems reflect the continual process of sophistication of depository services being undertaken by the NSDL.

THE CENTRAL DEPOSITORY SERVICES (INDIA) LIMITED

The CDSL is the second depository set up by the Bombay Stock Exchange (BSE) and co-sponsored by the State Bank of India, Bank of India, Bank of Baroda, HDFC Bank, Standard Chartered Bank, Union Bank of India, and Centurion Bank. The BSE has a 54 per cent stake in the CDSL while the banks have a 46 per cent stake. The CDSL commenced operations on March 22, 1999. The same year, five stock exchanges established connectivity with the CDSL for offering trade in demat securities and 765 companies signed up with the CDSL to get their securities admitted for dematerialisation. The CDSL has 517 DPs in 123 cities across 286 locations (Table 18.2). With a net worth of Rs. 104 crore, CDSL plans to offer facilities like inter-depository transfer and linking of accounts through cell phones.

TABLE 18.2 Progress of Demateralisation of NSDL and CDSL

	NSDL					CDSL				
At the End of Period	Companies Live	DPs Live	DPs: Locations (Nos)	Demat Quantity (Million Shares)	Demat Value (Rs. in Crore)	Companies Live	DPs Live	DPs: Locations (Nos)	Demat Quantity (Million Shares)	Demat Value (Rs. in Crore)
2004–05	5,536	216	2,819	1,28,663	14,47,663	5,068	271	1,530	19,080	1,20,959
2005–06	6,022	223	3,017	1,74,722	24,78,941	5,479	315	2,577	27,220	2,35,829
2006–07	6,483	240	5,599	2,02,701	31,42,645	5,589	365	4,178	31,250	2,83,136
2007–08	7,354	251	7,204	2,36,897	43,76,953	5,943	420	6,372	49,820	5,90,039
2008–09	7,801	275	8,777	2,82,870	31,06,624	6,213	461	6,934	70,280	4,39,703
2009–10	8,124	286	11,170	3,51,138	56,17,842	6,801	490	8,590	77,950	8,38,928

Source: SEBI Bulletin, May 2010.

TABLE 18.3 NSDL Facts and Figures (As on May 31, 2010)

Number of Companies in Which More Than 75 Per Cent Shares are Dematted	2,733
Average Number of Accounts Opened Per Day Since November 1996	3,646
Number of Certificates Eliminated (Approx)	702 Crore
Presence of Demat Account Holders in the Country	80% of All Pincodes in the Country

Source: www.nsdl.co.in

All leading stock exchanges like the National Stock Exchange, Calcutta Stock Exchange, Delhi Stock Exchange, The Stock Exchange, Ahmedabad, have established connectivity with the CDSL.

The CDSL has been the preferred platform by the Government of India for carrying out actual share transactions. PSU disinvestments have been done through the CDSL system.

Box 18.2 CDSL at a Glance

Securities available for demat (July 12, 2010)	
Equity	5,779
Debt instruments including debentures, bonds, government securities, certificates of deposits, commercial paper and pass through certificates	4,693
Mutual fund units	1,988
Depository participants	
Number of depository participants	517
Number of branches with LIVE connectivity	264
Number of cities/ towns with LIVE connectivity	123
Number of locations with LIVE connectivity	286
Demat custody	
Number of securities in million	84,620
Value (Rs. in million)	85,88,660
Demat settlement (July 2010)	
Number of securities in million	872
Value (Rs. in million)	76,621
Investor accounts (excluding closed accounts)	67,77,960
DP service centres	8,540
Companies	6,801

Source: www.cdslindia.com

Every transaction at the CDSL is done at one e-space. The centralised system of the CDSL keeps a watch on every transaction.

The CDSL has also attained membership of the Asia-Pacific Central Securities Depository Group (ACG). The ACG is an organisation that facilitates exchange of information and promotes mutual assistance among member depositories and clearing organisations of the Asia-Pacific region. It has 22 member organisations including depositories from Japan, Hong Kong, Singapore, Malaysia, Australia's clearing organisation, and the Reserve Bank of New Zealand. Membership of the organisation is expected to help the CDSL in enhancing its knowledge base and contributing to the development of other member organisations in the best international practices, settlement risk management, cross-border linkages, and technological development. This, in turn, would help the CDSL to secure foreign institutional investors' business through their custodians.

By the end of July 2010, over 12,000 issuers admitted their securities (equities, bonds, debentures, commercial papers), units of mutual funds, certificate of deposits, etc.) into the CDSL system.

COMPARISON OF CHARGES AT THE NSDL AND THE CDSL AND GROWTH OF DEMAT ACCOUNTS

- Of 1.74 crore demat accounts, only 24% are active

With effect from January 1, 2004, the NSDL has moved from an ad-valorem variable charge structure to fixed charges which is in trend with the international practice, whereas the CDSL still follows the variable rate structure. The amount payable by the DPs to the NSDL for debit instruction has been reduced from Rs. 10 to Rs. 8 effective from January 1, 2004 (Table 18.4).

Despite a reduction in rates, the demat charges are still high. To hold shares in demat form, an investor has to pay DPs an account opening fee of Rs. 50 to Rs. 100 and an annual fee of Rs. 100 to Rs. 150. At present, investor pays an annual maintenance charge ranging from Rs. 300–500, irrespective of whether or not there are any transactions during the year. Besides, for each scrip the investor demats, he pays Rs. 2 to Rs. 3 per share. Transaction charges are 0.05 per cent of the value or Rs. 20, whichever is higher. Depositories need to make their rates more affordable to investors. The SEBI constituted a panel to recommend a demat fee structure of depositories. The committee recommended that small investors be charged fees on the basis of deal value in demat transactions, no account maintenance charges to be levied on investors, companies pay a one-time fee to depositories at 0.1 per cent of market capitalisation or number of post-issue shares, new companies to pay fees on post-issue paid-up capital or number of post-issue shares, no account closure charges to be levied on-investors, if they shift from one DP to another and a need to rationalise depository participant fees.

The SEBI has asked both the depositories to offer 'no-frills' demat accounts to retail investors who do not trade regularly.

TABLE 18.4 Comparison of Charges at the NSDL and the CDSL

Charges	*NSDL*	*CDSL*
Custody Fee	Rs. 0.50/Month	Nil
	Rs. 6 per Annum	Nil
Purchase	Nil	Nil
Sale	Rs. 10/Transaction (Rs. 8 Effective from January 1, 2004)	Rs. 6 per Transaction
Pledge Creation	Rs. 25	Rs. 12
Annual Fee	Nil	Nil
Rematerialisation	Rs. 10/Certificate	Rs. 10/Certificate
Rate Structure	Fixed	Ad-valorem

Source: The Economic Times.

Growth in Demat Accounts

As seen from Table 18.2 and Box 18.1, an impressive progress was achieved with regard to the dematerialisation process. There was an expansion in the coverage of number of companies, number of DPs, number of beneficial owners, and turnover. The number of client accounts registered with the NSDL increased from 25.3 lakh in May 2000 to 1 crore in August 2009. This increase indicates a continuing inclination for paperless trading.

- Both NSDL and CDSL have 1.74 crore investor accounts NSDL is the market leader with 1.07 crore investor accounts

The SEBI gradually added more number of scrips in the list for compulsory trading in the demat form. The SEBI increased the number of scrips from 12 in January 1999 to 2,335 in June 2001. In order to expedite the process of dematerialisation, the SEBI made the settlement of trade in certain scrips mandatory in demat form. Moreover all public issues, rights issues, and offer for sale shall be in the demat form. Delivery of underlying shares of Global Depository Receipt (GDR)/American Depository Receipt (ADR) shall compulsorily be in demat form.

The Union Budget for the year 1999–2000 did away with stamp duty on transfer of debt instruments within the depository mode to encourage the dematerialisation process further.

Investors can use their demat accounts with the NSDL and the CDSL for buying and selling mutual funds. An increasing trend in dematerialisation was witnessed in instruments such as commercial papers and bonds since 2005–06.

The spurt in demat business can be largely attributed to the fact that it is now mandatory to trade in demat shares. Almost 95 per cent of the issued capital in the market is converted into electronic firm. Moreover, the revival of the primary market after the Maruti Udyog Limited's IPO led to a rise in depository accounts of retail investors.

A large number of shares were cornered through multiple share applications and opening of benami dematerialised accounts by a few scamsters during the IPO scam that took place in April 2006. Depositories and DPs were blamed for the IPO scam. SEBI levied on depositories—both NSDL and CDSL—Rs. 116 crore as part of its disgorgement order. Disgorgement is the practice of recovering money from perpetrators of financial funds and compensating investors who have been impacted.

Since the introduction of the depository system, dematerialisation has progressed at a fast pace and has gained acceptance amongst the market participants. All actively traded scrips are held, traded and settled in the demat form. As the network of depositories expands and the proportion of securities dematerialised increases, the benefits of faster settlement of trades, short settlement cycles, reduced transaction costs, and greater protection will increase liquidity in the stock markets. The ratio of dematerialisation to floating stock in the market is around 100 per cent. The shareholders who have not participated in the demat process are passive shareholders such as government, multinational corporations and some Indian promoters. The government has not dematerialised holdings in public sector enterprises such as SBI, ONGC and BHEL, while foreign parent firms such as Unilever, Colgate, Palmolive, Procter and Gamble, and Pfizer have not dematerialised their holdings in their Indian subsidiaries as they have no intention of selling shares. The demat process has turned out to be the fastest of all programmes undertaken. At the beginning of 1997, not more than 100 stocks were available in the electronic form. By June 2002, the number rose to 4,252. The demat quantity (number of securities) increased from 16.39 billion in 2000 to 440 billion in 2010, an almost thirty-fold increase in first ten years. The Indian market has achieved this level of dematerialisation in just four years while the US market could achieve it in 20 years. Dematerialisation had a tremendous impact on liquidity and trading volumes in the equity segment.

CUSTODIANS

Custodians provide custodial services which are quite different from depositories. A custodian is an intermediary which keeps the scrips of the clients in custody or is the keeper of the accounts of its clients. A custodian is not only a safekeeper of share certificates and a trustee of the same but also provides ancillary services such as physical transfers of share certificates, collecting dividends and interest warrants, and conforming to transfer regulations. Besides these, it updates clients on their investment status. To claim benefits on behalf of its clients, a custodian keeps track of book closures, record dates, bonus and rights shares. For rendering these services, custodians charge a fee of 1 per cent of the total volume of transactions. Scope of custodial services has been enlarged to include safekeeping of gold or gold related instruments, consequent to introduction of gold and gold related instruments by the Indian mutual funds.

- A custodian is an intermediary which helps register and safeguard the securities and gold or gold related instruments of its clients.

Even though depositories have been set up, there is a need for custodians as they act as complements to depositories. The volume of transactions by fund managers is so large that custodial services are imminent. With depositories in existence, their volume of paper work has not only reduced but most of them also act as depository participants. Custodians provide the infrastructure facilities which ease the post-issue, post-trade and settlement work.

Custodians are clearing members but not trading members. They are involved in the process of clearing. They settle trades on behalf of other trading members. A trading member may assign a particular trade to a custodian for settlement. If the custodian confirms to settle that trade, then the clearing corporation assigns that particular obligation to the custodian who is then required to settle it on the settlement day.

In India, the SHCIL and the SBI Share Holding Corporation are the most prominent custodians catering to the requirements of the UTI and financial institutions. The SHCIL is the leading custodian with a 75 per cent market share. Other banks like Canara Bank and Indian Bank have promoted Canbank Computer Services and India Clearing and Depository Services Limited (ICDS). These custodians usually provide services to institutional investors.

After liberalisation, foreign institutional investors (FIIs) were allowed to invest in the Indian capital market. Most of the FIIs' business is routed through foreign banks' custodians. According to the laws governing US funds, no US fund is allowed to use a custodian that does not have a capital adequacy of USD 200 million. No Indian custodian, including the SHCIL, meets this requirements; hence, only foreign banks operate as custodians for US-based FIIs, pension funds, and corporates. Hong Kong Bank, Deutsche Bank, Citibank, and Standard Chartered Bank are some prominent foreign banks which operate as custodians. At present, there are 12 registered custodians in India.

A custodian must be registered with the SEBI. SEBI regulations provide the eligibility criteria and code of conduct to be followed by a custodian. A custodian is required to participate in the clearing and settlement process through the clearing house/clearing corporation. As on March 31, 2010, the number of custodians registered with the SEBI stood at seventeen.

THE STOCK HOLDING CORPORATION OF INDIA LIMITED

The SHCIL, promoted by seven all-India financial institutions—IDBI Bank, ICICI Bank, IFCI, UTI, L1C, GIC and its subsidiaries, was incorporated in 1986. It commenced operations in 1988.

The SHCIL was established to provide well-developed and fully automated infrastructural facilities for trading, clearance, settlement, and depository services for securities and monetary instruments. The objectives of the SHCIL are to provide services which include market operations, corporate actions, safekeeping, custodian management, registration, transfer and reporting. It facilitates timely settlement of funds and securities. It has extensive vault facility with the state-of-art technology. Support services include fund transfer and data bank information feeds. The SHCIL handles market operations and provides custodial services to financial institutions, mutual funds, banks, insurance companies, foreign institutional investors corporate venture capital companies, both domestics and foreign, and PF trusts. It acts as a security agent (in India) to Morgan Stanley Bank for India Magnum Fund. It holds more than Rs. 1,00,000 crore worth of securities and has a very sophisticated operating system. It is the largest custodian with more than 70 per cent market share of the domestic custodial business.

The SHCIL has developed software modules for on-line trade reporting, matching, clearance, and depository for online clearance settlement. The SHCIL, apart from rendering custodial services, also handles transfers and collects dividends and interest in respect of securities on behalf of sponsoring institutions, stock brokers and other investors. Its business is divided into five groups: clearing services, registration/transfer, processing, safekeeping, corporate actions and benefits collection, and management information system (MIS).

The SHCIL is a participating member of the International Society for Securities Administrators (ISSA), a specialised agency for promoting the exchange of ideas among global security administrators.

With information technology taking the centre stage, safekeeping of share certificates and other documents became irrelevant since the new technology introduced the concept of dematerialisation of share certificates. The SHCIL registered itself as the first depository participant with the NSDL and subsequently with the CDSL. It has emerged as a strongest player in the market, accounting for more than 20 per cent of the DP accounts; more than 50 per cent of its revenues are from this business. Its infrastructure encompasses more than 189 offices spread over the country, staffed with 10 officers per branch handling 6 lakh clients, both corporate and retail. VSAT links across these offices, independent system set-up, and offsite backups provide the platform for traditional servicing as also for new e-commerce applications. It has extended its DP services not only to financial institutions, but also to individual investors, corporates, non-resident Indians, cooperative banks, and non-banking finance companies. It serves a clientele close to 7,00,000 investors. The corporation has over 8,000 corporate accounts and hundreds of pledge accounts. It has taken a lead in providing demat services 'On the Net,' coupled with Internet trading.

The SHCIL has received a 'no action letter' in 2002 from the Securities Exchange Commission (SEC) of USA which renders it an eligible institution to hold assets of US-based funds.

The SHCIL is now a financial supermarket with a host of products that cater to investors across segments.

New Products Introduced by the SHCIL

The SHCIL has devised and designed new products in line with the phenomenon of information technology to meet the emerging needs of retail and institutional investors,

- **Pledge service:** This product enables commercial banks to extend loans against dematerialised securities. As a result, shareholders easily get funds against their shares.
- **Stock direct:** It is a unique investor-friendly, with multidimensional features product which aims at minimising, if not fully eliminating paper work and rendering security-related activity safer, faster, and cheaper. The product offers a one-stop-shop service for investors as it envisages a conjunction of the investors' bank, broker, stock exchange, depository, and depository participants all under one roof. This product employs a self-service machine, a kind of touch screen kiosk through which one can seek all depository related service and give buy-and-sell orders, thereby eliminating the need for intermediaries. The system is operated with the help of a smart card, a plastic card with a silicon chip that captures the subscriber's digital entity. Investors with access to an Internet connection and personal computer facilities can execute the orders without using the kiosk. This scheme is subscribed to both by resident and non-resident Indians, spread across places such as Dubai, Muscat, United States, Doha, Singapore, and Japan.
- **Sell-n-cash:** This facility enables the account holders to sell their shares through the SHCIL and realise the sale proceeds within 24 hours. This facility is available in major cities such as Mumbai, Delhi, Kolkata, Chennai, Bangalore, Hydrabad, and Ahmedabad.
- **GOI bonds**: SHCIL has been designated as one of the receiving offices by the Reserve Bank for subscription of 8 per cent taxable bonds.
- **Fund invest:** It is a basket of financial products, ranging from fixed-income securities like fixed deposits, infrastructure bonds and capital gain bonds to risky securities like IPOs and Mutual Funds offered to SHCIL's clients.

It provides clearing services for derivative segment of BSE/NSE and Commodity segment of MCX/NCDEX. It has promoted SHCIL Services Limited (SSL) as its broking arm. It offers depository services to more than 680 clearing members of various exchanges connected with NSDL and CDSL. It is a corporate agent of Life Insurance Corporation for life insurance products and New-India Assurance for non-life insurance products. It is also an AMFI registered mutual fund advisor. Moreover, it offers pension fund administration services to pension fund trusts. The Reserve Bank has selected it to market rural bonds.

Thus, it has established itself as a one-stop financial shop for institutional investors.

KEY TERMS

Depository, Demat Share, Dematerialisation, Rematerialisation, Custodial Services, Custodians.

SUMMARY

1. A depository is an organisation which holds securities of a shareholder in an electronic form and facilitates the transfer of ownership of securities on the settlement dates.
2. An effective and fully developed depository system is essential for maintaining and enhancing market efficiency.
3. The depository system provides a wide range of services such as primary market services by acting as a link between the issuers and the prospective shareholders; secondary market services by acting as a link between the investors and the clearing house of the exchange to facilitate the settlement of security transactions through bookkeeping entries, and ancillary services by providing services such as collecting dividends and interests, reporting corporate information, and crediting bonus, rights, and shares.
4. A demat share is held by the depository on behalf of the investor whereas a physical share is held by the investor himself. The holding and handling of a demat share is done electronically, whereas a physical share is in the form of a paper. The demat share can be converted into a physical share on request.
5. A depository system enables immediate allotment, transfer, and registration of securities, thereby increasing the liquidity of stocks. An investor saves in terms of costs like stamp duty, postage, and brokerage charges. Pledging of shares and portfolio shuffling become convenient for an investor.
6. There are four parties in a demat transaction: the customer, depository participant, depository, and share registrar and transfer agent (R&T).
7. The Indian capital market took a major step in its rapid modernisation when the National Securities Depository Limited (NSDL) was set up as the first depository in India.
8. An important link between a depository and an investor is a depository participant. A depository participant could be a public financial institution, bank, custodian, or a stock broker.
9. The NSDL has created three pioneering systems: SPEED-e, STeADY and IDeAS. SPEED-e allows users to execute delivery instructions using the Internet. The NSDL has achieved paperless trading in perhaps the shortest time in the world, a little over three years.
10. The CDSL is the second depository set up by the Bombay Stock Exchange (BSE) and co-sponsored by the State Bank of India, Bank of India, Bank of Baroda, and HDFC Bank.
11. With effect from January 1, 2004, the NSDL has moved from an ad-valorem variable charge structure to fixed charges which is in trend

with the international practice, whereas the CDSL still follows the variable rate structure.

12. A custodian is an intermediary who keeps the scrips of the clients in custody or is the keeper of the accounts of its clients. It also provides ancillary services such as physical transfers of share certificates, collecting dividends and interest warrants, and conforming to transfer regulations.
13. Even though depositories have been set up, there is a need for custodians as they act as complements to depositories. Custodians are clearing members but not trading members.
14. In India, the Stock Holding Corporation of India Limited (SHCIL) and SBI Share Holding Corporation are the prominent custodians catering to the requirements of the UTI and financial institutions. The SHCIL is the leading custodian with a 75 per cent market share.

REVIEW QUESTIONS

1. Explain the term 'depositories'. What type of services do depositories provide? What are the benefits of a depository system?
2. Are custodians required today when the depository system is functioning successfully?
3. Explain the functioning of the NSDL and the SHCIL.
4. Explain the depository process.
5. Answer the following in brief:
   a. Compare depository with a bank.
   b. What was the need for setting up a depository in India?
   c. State the difference between a demat share and a physical share?
   d. What is rematerialisation?
   e. Who are the business partners of NSDL?
   f. What kind of services do custodians provide?

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Credit Rating

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Meaning of credit rating*
2 *Importance of credit rating*
3 *Origin of the concept of credit rating*
4 *The growth of credit rating industry in India*
5 *Rating methodology*
6 *Credit rating agencies in India—CRISIL, ICRA, CARE, FITCH, and Brickwork Ratings.*

INTRODUCTION

In the post-reforms era, with increased activity in the Indian financial sector both existing and new companies are opting for finance from the capital market. The competition among firms for a slice of the savings cake has increased. New instruments have been designed by companies to attract investors to subscribe to their issues. The market is flooded with a variety of new and complex financial products, such as asset-backed securities and credit derivatives. These new instruments are embodied with complex features very difficult for an ordinary investor to understand and analyse. Besides this, investors no longer evaluate the creditworthiness of the borrowers by their names or size. Credit rating agencies have come into existence to assist the investors in their investment decisions, by assessing the creditworthiness of the borrowers.

Credit rating is the assessment of a borrower's credit quality. Credit rating performs the function of credit risk evaluation reflecting the borrower's expected capability to repay the debt as per terms of issue. Credit rating is merely an indicator of the current opinion of the relative capacity of a borrowing entity to service its debt obligations within a specified time period and with particular reference to the debt instrument being rated. Credit rating is not a recommendation to buy, hold or sell. It is a well-informed opinion made available to the public, and might influence their investment decisions. Credit rating, however, is not a general purpose evaluation nor overall assessment of credit risk of a firm. Ratings neither evaluate the reasonableness of the issue price or possibilities for capital gains nor take into account the liquidity in the secondary market. Ratings also do not take into account the risk of prepayment by issuer. Although these are often related to the credit risk, the rating essentially is an opinion on the relative quality of the credit risk. An agency that performs the rating of debt instruments is known as credit rating agency. At present, the scope of a credit rating agency is not limited to rating of debts. Credit rating agencies now undertake financial analysis and assessment of financial products, individuals, institutions, and governments.

The Importance of Credit Rating

- Credit rating is an opinion of the relative capacity of a borrowing entity to service its debt obligations within a specified time period and with particular reference to the debt instrument being rated

Credit rating helps in the development of financial markets. Credit rating agencies play a key role in the infrastructure of the modern financial system.

Credit rating enables investors to draw up the credit–risk profile and assess the adequacy or otherwise of the risk–premium offered by the market. It saves the investors, time and enables them to take a quick decision and provides them better choices among available investment opportunities based on their risk-return preferences. Issuers have a wider access to capital along with better pricing. Issuers with a high credit rating can raise funds at a cheaper rate thereby lowering their cost of capital. It acts as a marketing tool for the instrument, enhances the company's reputation and recognition, and enables even lesser known companies to raise funds from the capital market.

Credit rating is a tool in the hands of financial intermediaries, such as banks and financial institutions that can be effectively employed for taking decisions relating to lending and investments.

Credit rating helps the market regulators in promoting stability and efficiency in the securities market. Ratings make markets more efficient and transparent. They play a tremendous role in the growth of financial markets. It also helps in prescribing the requisite eligibility criteria for existing as well as new debt instruments, and monitoring the financial soundness of organisations. Ratings and rating changes influence the pricing of financial instruments.

Ratings have assumed a much larger role in the global financial markets. Sovereign ratings affect the quantum of financial and investment flows to a country. Fund managers, international banks, and foreign direct investors look at ratings for portfolio allocation as ratings reflect the overall health of the country's economy.

Origin of the Concept of Credit Rating

This concept originated in the US in 1909 AD when the founder of Moody's Investor Service, John Moody, rated the US Rail Road Bonds. However, the relevance of this concept was realised only after the great depression when investors lost all their money. Lack of symmetric information and high costs of collecting information increased the popularity of credit rating agencies. The world's biggest rating agencies are Moody's Investors Service and Standard and Poor's (S&P). They have been into the rating business for decades. Both Moody's and S&P have been rating bonds since 1916 and have captured the lion's share. The nearest competitor of Moody's and S&P is Fitch Investors Service, which does not even share one-fifth of the business. These three rating agencies are given official recognition by the Securities and Exchange Commission (SEC). These agencies have grown so powerful that even sovereign governments are wary of getting a poor rating from them. Journalist Thomas Friedman once said, 'There are two superpowers in the world today. There is the United States and there is Moody's Bond Rating Service. The US can destroy by dropping bombs and Moody's can destroy you by downgrading your bonds.'

- The issuer-pays model has been in vogue across the world

Initially, rating agencies in the US rated instruments and published their ratings free of charge. They financed their operations through sale of publications and related materials. But with an increase in the popularity of ratings, they began to charge issuers for ratings. US rating agencies offer both solicited and unsolicited ratings. Unsolicited ratings are made explicit with an asterisk. The rating agency is not compensated by the firm and rating is based on published information in case of unsolicited rating.

The rating giants have diversified their service portfolio in order to survive and grow. Besides rating bond issues—their core rating business—they have diversified into rating asset-backed securities, commercial papers, bank loans, and other financial products. These agencies also rate mutual funds, banks, insurance companies, financial institutions, and sovereign governments. There are specialised agencies in the US that rate only financial institutions or insurance companies. Their latest move has been in the field of risk consulting. Sovereign ratings are a new line of business for credit rating agencies. The first industrial country to be rated was France by Standard and Poor's in 1959. Both Moody's and S&P rated a non-industrial country, namely, Venezuela in October 1977. Fitch entered the business of sovereign rating only in 1975. India has been assigned sovereign ratings by Moody's and S&P over a decade. India is also being rated by Fitch, Japan Credit Rating Agency and Japan Bond Research Institute. Moody's started rating India in 1988 with an investment grade rating and S&P started rating India in August 1990. Both these agencies downgraded India's long-term sovereign credit rating to noninvestment grade during the external crisis of 1991. Recently both these agencies affirmed their positive outlook on India. They are yet to increase India's rating to investment grade.

India was first among the developing world to set up a credit rating agency—Credit Rating Information Services of India Limited (CRISIL) in 1988. Then came ICRA in 1990, followed by CARE in 1993. The credit rating function was further institutionalised in the 1990s when the Reserve Bank and the SEBI made credit rating mandatory for the issue of commercial paper (CP) and certain categories of debentures and debt instruments. For any public issue of corporate debts, credit rating has to be obtained from at least one credit rating agency with the SEBI's approval and is disclosed in the offer document. In case where ratings are obtained from more than one agency, all such ratings, including the unaccepted ones, would have to be disclosed in the offer documents. Every rating would be reviewed by registered credit rating agency and revision would have to be disclosed to stock exchange. The issuer can also list debt securities on private placement basis, provided they have been credit rated and meet other regulations. Issuer would have to redeem debt securities in terms of offer documents.

THE GROWTH OF THE CREDIT RATING INDUSTRY IN INDIA

The prominent rating agencies in India are

- CRISIL Limited
- ICRA Limited

- CARE Ratings
- Fitch Ratings India Private Limited

The Indian credit rating industry is next to the US in terms of number of ratings issued and in the number of agencies. CRISIL is the market leader in the credit rating industry with a 70 per cent market share.

The regulator's support played an important role in the development of the credit rating industry. In 1992, for the first time, the Reserve Bank introduced the requirement of rating for commercial paper. The SEBI followed up by introducing mandatory rating of bonds. The other growth drivers of the credit rating industry were declining interest rates, a shift towards market borrowings from bank loans and a steep increase in the state government borrowings through special purpose vehicles. Besides these factors the growth in the private placement market of debt increased business volume in the credit rating industry. For private placements, rating is not mandatory but banks and mutual funds ask for a rating. In 1997, the penetration of rating, that is, the number of rated issues out of the total number of issues was 35 per cent. In the year 2002, it was 97 per cent. This means that the credit rating industry has transited from a regulatory-driven market to an investor-driven market in the growing debt markets. Between fiscal 1997 and 2001, rated debt volumes increased from Rs. 13,743 crore to Rs. 52,746 crore, which is 84 per cent of the total issuance.

Rating Methodology

Rating Methodology

- Economy Analysis
- Business Analysis
- Financial Analysis
- Management Evaluation
- Fundamental Analysis

In India, the rating exercise starts at the request of the company. The process of obtaining a rating is quite lengthy and time consuming.

The rating of a financial instrument requires a thorough analysis of relevant factors that affect the creditworthiness of the issuer. The primary focus of the rating exercise is to assess future cash generation capability and their adequacy to meet debt obligations in adverse conditions. The analysis attempts to determine the long-term fundamentals and the probabilities of change in these fundamentals, which could affect the credit-worthiness of the borrower. Analysis typically involves at least five years of operating history and financial data as well as company and rating agency forecasts of future performance. Ratings are assigned after an in-depth study of both objective and subjective factors related to business, financial management and so on. Ratings are based on an indepth study of the industry and an evaluation of the strengths and weakness of the company. The analytical framework for rating consists of the following five broad areas.

1. Economy Analysis The Economic environment is assessed to determine the degree of operating risk faced by the company in a given business. Here the economy wide factors which have a bearing on the industry are taken into consideration. The strategic nature of the industry in the prevailing policy environment, regulatory oversight governing industries, etc. are also analysed.

2. Business Analysis This covers an analysis of industry risk, market position in the country, operating efficiency of the company, and legal position.

- An analysis of industry risk focuses on the prospects of the industry and the competitive factors affecting the industry. Investment plans of the major players in the industry, demand supply factors, price trends, changes in technology, international/domestic competitive factors in the industry, entry barriers, capital intensity, business cycles, etc. are key ingredients of industry risk. Industry risk covers an analysis of actual and estimated demand/supply, number of firms and potential entrants in the industry, government policies relating to the industry, the performance of the industry, its future potentiality, and other factors.
- Market position in the industry covers the study of market share of the firms (marketing strengths and weaknesses of the firm vis-a-vis its competitors), marketing arrangements, products, and customers.
- Operating efficiency is a study of production processes of the firm, its cost structure, locational advantages, labour relationships, input availability, and prices.
- Legal position covers a study of prospectus, accuracy of information, and filing of forms, returns, and so on with proper regulatory authorities.

3. Financial Analysis It involves evaluation of past and expected future financial performance with emphasis on assessment of adequacy of cash flows towards debt servicing. Financial analysis includes an analysis of accounting quality, earnings protection, cash flow adequacy, and financial flexibility.

- Accounting quality is known by the study of method of income recognition, inventory valuation, depreciation policies, auditor's remarks, and off-balance liabilities. accounts are noted. A review of accounting quality and adherence to prudential accounting norms are examined for measuring the company's performance. Prudent disclosures of material events affecting the company are reviewed. Impact of the auditor's qualifications and comments are quantified and analytical adjustments are made to the accounts, if they are material. Off-balance sheet items are factored into the financial analysis and adjustments made to the accounts, wherever necessary. Change of accounting policy in a particular year which results in improved reported performance is also analysed.
- Earnings protection is examined with reference to profitability ratios, earnings growth, and projected earnings, among others. Financial ratios are used to make a holistic assessment of financial performance of the company, as also to see the company's performance—intra-firm and inter-firm within the industry.
- Adequacy of cash flows includes a study of future cash flows, working capital needs, and capital budgets. Cash flow analysis forms an important part of credit rating decisions. Availability of internally generated cash for servicing debt is the most comforting factor for rating decisions as compared to dependence on external sources of cash to cover temporary shortfalls.
- Financial flexibility is examined in terms of whether alternative sources of liquidity are available to the company as and when required. It also examines whether financing plans have been developed and the feasibility of such plans. Company's contingency plans under various stress scenarios are considered and examined. Ability to access capital markets and other sources of funds whenever a company faces financial crunch is reviewed. Existence of liquid investments, access to lines of credits from strong group concerns to tide over stress situations, ability to sell assets quickly, defer capital expenditure, etc. are also considered.
- Validation of projections and sensitivity analysis: The projected performance of the company over the life of the instrument is critically examined and assumptions underlying the projections are validated. The critical parameters affecting the industry and the anticipated performance of the industry are identified.

In addition, a sensitivity analysis is performed through several 'what if' scenarios to assess a company's capacity to cope with changes in its operating environment. A scenario analysis is undertaken wherein each critical parameter is then stress tested to arrive at the performance of the company in a stress situation. Debt service coverage for each of the scenarios would indicate the capability of the company to service its debt, under each scenario.

4. Management Evaluation This includes a study of the track record of the management, the management's capacity to overcome adverse situations, goals, philosophy, strategies, control systems, personnel policies, and performance of group companies. An assessment of the management's plan in comparison to those of its competitors can provide important insights into the company's ability to sustain its business.

5. Fundamental Analysis This covers an analysis of liquidity management, asset quality, profitability and interest, and tax sensitivity.

- Liquidity management can be known through a study of capital structure, matching of assets and liabilities, liquid assets, maturing deposits, among others.
- Asset quality includes the company's credit management, policies for monitoring credit, composition of assets, and sector risk.
- Profitability is examined through a study of profitability ratios, spreads, reserves, and non-business income.
- Interest and tax sensitivity is in terms of exposure to interest rate charges, hedge against interest rate, tax provisions, and impact of tax law changes.

The above information is collected and then analysed by a team of professionals in an agency. Companies are asked to fill up the forms and provide the required data. If necessary, meetings with top management suppliers, and dealers, and a visit to the plant or proposed sites are arranged to collect and confirm additional data and issues relating to credit evaluation of a firm. This team of professionals/analysts submits their recommendations to the rating committee. The committee discusses this report and then assigns rating. Once the quantitative data is analysed, it is the seasoned judgement of the rating committee, which makes rating of an agency unique and sometimes controversial. Rating involves a lot of subjectivity in the process; for instance, in case of bond ratings, besides a quantitative analysis of past performance, it is the future debt servicing capacity of a company that is relevant. An analysis of the estimate of this capacity is subjective and subjectivity cannot be ruled out.

The rating assigned is then notified to the issuer and only on his acceptance, the rating is published. A rating agency assures strict confidentiality of information to its client. If the client wants to furnish additional information, he can do so and gets the rating reviewed again. Once the issuer decides to use and publish the rating, the agency has to continuously monitor it over the entire life of the instrument. The rating agency continuously monitors the corporate, and rating is monitored till the life of the instrument. This process is known as surveillance.

Rating may be upgraded, downgraded, or continue unchanged, depending upon new information or developments and their resultant effect on the debt instrument being rated. The revised ratings are also published and made public in financial dailies and newspapers.

Rating Symbols

Rating agencies use symbols such as AAA, AA, BBB, B, C, D, to convey the safety grade to the investor. Ratings are classified into three grades: high investment grades, investment grades and speculative grades. In all, risk is classified into 14 or 15 categories. Signs '+' or '–' are used to show the certainty of timely payment. The suffix + or – may be used to indicate the comparative position of the instrument within the group covered by the symbol. Thus FAA-lies one notch above FA+. To provide finer gradations, rating agencies attach plus or minus symbols to their ratings. The racing symbols for different instruments of the same company need not necessarily be the same.

High Investment Grades

AAA: Triple A denotes highest safety in terms of timely payment of interest and principal. The issuer is fundamentally strong and any adverse changes are not going to affect it.

AA: Double A denotes high safety in terms of timely payment of interest and principal. The issuer differs in safety from AAA issue only marginally.

A: denotes adequate safety in terms of timely payment of interest and principal. Changes in circumstances can adversely affect such issues.

BBB: Triple B denotes moderate safety in terms of timely payment of interest and principal speculative grades.

Speculative Grades

BB: Double B denotes inadequate safety terms of timely payment of interest and principal. Uncertain changes can lead to inadequate financial capacity to make timely payments in the immediate future.

B: Denotes high risk. Adverse changes could lead to inability or unwillingness to make timely payment.

C: Denotes substantial risk. Issue rated is vulnerable to default.

D: Denotes default in terms of timely payment of interest and principal.

These symbols are just a current opinion of an agency and they are not recommendations to invest or not to invest. The rating assigned applies to a particular instrument of the company and is not a general evaluation of the company.

Rating Fees In the credit rating business, the users of rating services, such as investors, financial intermediaries and other end-users, do not pay for it. The issuer of the financial instrument pays fees to the credit rating agency and this is the major source of revenue of the rating agency. Today, issuer's fees constitute 95 per cent of the total revenues of rating agencies. In India, rating agencies charge 0.1 per cent of instrument size as rating fees. They also charge an annual surveillance fees at a rate of 0.03 per cent to monitor the instrument during its life.

SEBI Regulations for Credit Rating Agencies

The SEBI issued regulations for credit rating agencies in 1999. These regulations are called the Securities and Exchange Board of India (Credit Rating Agencies) Regulations, 1999.

- Only commercial banks, public financial institutions, foreign banks operating in India, foreign credit rating agencies, and companies with a minimum net worth of Rs. 100 crore as per its audited annual accounts for the previous five years are eligible to promote rating agencies in India.
- Rating agencies are required to have a minimum net worth of Rs. 5 crore.

- Rating agencies cannot assess financial instruments of their promoters who have more than 10 per cent stake in them.
- Rating agencies cannot rate a security issued by an entity which is a borrower of its promoter or a subsidiary of its promoter or an associate of its promoter, if (i) there are common chairmen, directors between credit rating agency and these entities; (ii) there are common employees; (iii) there are common chairmen, directors, employees on the rating committee.
- Rating agencies cannot rate a security issued by its associate or subsidiary, if the credit rating agency or its rating committee has a chairman, director or employee, who is also a chairman, director or employee of any such entity.
- A penalty of suspension of the certificate of registration or a penalty of cancellation of registration may be imposed on the rating agency if it fails to comply with any condition or contravenes any of the provisions of the act.

In the wake of the pivotal role played by credit rating agencies in the financial system and in order to impart higher credibility to the processes and procedures associated with the credit rating, the SEBI prescribed the following transparency and disclosure norms for them on May 3, 2010.

Rating Process

A Credit Rating Agency (CRA) shall keep the following records in support of each credit rating and review/surveillance thereof:

- The important factors underlying the credit rating and sensitivity of such credit rating to changes in these factors,
- Summary of discussions with the issuer, its management, auditors and bankers which have a bearing on the credit rating,
- Decisions of the rating committee(s), including voting details and notes of dissent, if any, by any member of the rating committee, and
- If a quantitative model is a substantial component of the credit rating process, the rationale for any material difference between the credit rating implied by the model and the credit rating actually assigned.
- These records should be maintained till five years after maturity of instruments and be made available to auditors and regulatory bodies when sought by them.

Default Studies

Default studies are central to evaluating the performance of a credit rating agency and whether its ratings can predict default over a period of time. In order to promote transparency and to enable the market to best judge the performance of the ratings, the CRA, should publish information about the historical default rates of CRA rating categories (AAA, AA, A, BBB, BB, B, C) and whether the default rates of these categories have changed over time, so that the public can understand the historical performance of each category and if and how rating categories have changed, and be able to draw quality comparisons among ratings given by different CRAs.

The default rates shall be calculated in the following manner:

- **One year default rate:** It is the weighted average of default rates of all possible 1 year static pools in the 5-year period.
- **Cumulative default rate:** The cumulative default rate (CDR) represents the likelihood of an entity that was rated at the beginning of any multi-year period defaulting at any time during the multi-year period. Three-year cumulative default rate shall be computed as:

  Three-year CDR for rating category X = Number of issuers which defaulted over the three-year period/Number of issuers outstanding at the beginning of the three-year period.

For the above purposes, the following terms shall have the meaning as under:

- **Static pool:** Non-defaulted ratings that were outstanding at the beginning of any period.
- **Default:** Non-payment of interest or principal amount in full on the pre-agreed date. A CRA shall recognise default at the first instance of delay in servicing of interest or principal on the rated debt instrument.
- **Default rate:** The number of defaults among rated entities in the static pool as a percentage of the total number of entities in the static pool.
- **Averaging:** All averaging across static pools for default rate computations must be based on the weighted average method where the weights are the number of ratings in each static period.

Dealing with Conflict of Interest

A CRA shall formulate the policies and internal codes for dealing with the conflict of interests.

A CRA shall ensure:

- that its analysts do not participate in any kind of marketing and business development including negotiations of fees with the issuer whose securities are being rated,
- that the employees' involved in the credit rating process and their dependants do not have ownership of the shares of the issuer.
- prompt review of the credit ratings of the securities as and when any of its employees joins the respective issuer.

Obligations in Respect of Rating of Structured Finance Products

A CRA may undertake rating of structured finance products, namely, instruments/pay-outs resulting from securitisation transactions. In such cases, apart from following all the applicable requirements in case of non-structured ratings, the following additional requirements shall also be complied with:

1. A CRA or its subsidiaries shall not provide consultancy or advisory services regarding the design of the structured finance instrument.
2. The rating symbols shall clearly indicate that the ratings are for structured finance products.

Unsolicited Credit Ratings

In case of unsolicited credit ratings, i.e., the credit ratings not arising out of the agreement between a CRA and the issuer, credit rating symbol shall be accompanied by the word "UNSOLICITED" in the same font size.

A CRA shall monitor and disclose credit rating during the life of the rated securities, as if it were a solicited rating.

Disclosures

A CRA shall make all the disclosures stipulated below on their web sites. In case of listed securities, the CRA shall also make disclosures to the stock exchanges as specified in the SEBI (Credit Ratings) Regulations, 1999. For ratings assigned and their periodic reviews, the CRA shall issue press releases which shall also be kept on their web sites. Where a specific format has been prescribed, the disclosures shall be made in that format.

Rating Procedure

A CRA shall formulate and disclose its policies, methodology and procedures in detail regarding solicited and unsolicited credit ratings

Credit Rating History and Defaults

The SEBI has specified certain formats for providing details of the credit rating history and defaults of the companies being rated.

- A CRA shall disclose in the formats specified below
- Details of new credit ratings assigned during last six-months
- Movement of credit rating of all outstanding securities during the last six-months:
  - Movement of each credit rating
  - Movement of each credit rating from investment grade to noninvestment grade and vice versa and
  - Movement of each credit rating that has moved by more than one notch

The history of credit rating of all outstanding securities.

On annual basis, the list of defaults separately for each rating category (e.g., AAA, AA, A, BBB, BB, B, C). This shall include the initial credit rating assigned by the CRA, month and year of initial rating, month and year of default, last credit rating assigned by the CRA before the issuer defaulted, comments of CRAs, if any.

On annual basis, the average one-year and three-year cumulative default rates (based on weighted average), for the last 5 years, separately for each following category:

1. each credit rating category (e.g. AAA, AA, A, BBB, BB, B, C), separately
2. structured instruments and non-structured instruments, separately

Income

A CRA shall disclose the general nature of its compensation arrangements with the issuers.

A CRA shall disclose, in case of accepted ratings, its conflict of interest, if any, including the details of relationship—commercial or otherwise—between the issuer whose securities are being rated/any of its associate of such issuer and the CRA or its subsidiaries.

A CRA shall disclose annually

- its total receipt from rating services and non-rating services,
- issuer wise percentage share of non-rating income of the CRA and its subsidiary to the total revenue of the CRA and its subsidiary from that issuer, and
- names of the rated issuers who along with their associates contribute 10 per cent or more of total revenue of the CRA and its subsidiaries.

Structured Finance Products

While publishing the ratings of structured finance products and their movements, a CRA apart from following all the applicable requirements in case of non-structured ratings shall also disclose the track record of the originator and details of nature of underlying assets while assigning the credit rating. The track record shall include a brief description of the financials of the originator, rating migrations to speculative categories and defaults.

A CRA shall also disclose at least once in every six months, the performance of the rated pool, i.e., collection efficiency, delinquencies. A CRA shall also provide a detailed description of the underlying pools including ageing, Credit enhancements such as liquidity supports, first and second loss guarantee provided shall also be disclosed.

Unsolicited Credit Ratings

While publishing unsolicited ratings and their movements, a CRA apart from following all the applicable requirements in case of solicited ratings shall make the following disclosures:

1. the extent of participation by the issuer, its management, bankers and auditors in the credit rating process.
2. the information used and its source in arriving at and reviewing the credit rating.

A CRA shall disclose annually

1. all the unsolicited ratings carried out in the last three financial years
2. names of issuers, out of those mentioned in (i) above, which were given solicited rating in the last financial year

Shareholding

A CRA shall disclose its shareholding pattern as prescribed by stock exchanges for a listed company under clause 35 of Listing Agreement.

Compliance Status of IOSCO Code of Conduct

A CRA shall disclose the compliance status of each provision of IOSCO code of conduct.

CREDIT RATING AGENCIES IN INDIA

There are five credit rating agencies registered with the SEBI. The RBI also has accorded accreditation to five rating agencies registered with market regulator SEBI. The Reserve Bank of India has decided to review and monitor the performance of credit rating agencies, for continuation of their accreditation. The move is aimed at ensuring greater accountability in the quality of the rating process and methodologies. The five credit rating agencies are:

CRISIL Limited (Formerly the Credit Rating Information Services of India Limited)

CRISIL Limited was set up in January 1998 jointly by ICICI Limited, UTI, GIC, United India Insurance Company, LIC, and domestic and foreign banks as the first credit rating agency in India.

It rates rupee-denominated debt instruments of Indian companies, preference shares, fixed deposits, commercial paper, and structured obligations. CRISIL is the prominent provider of rating and advisory services. It provides advisory services in the areas of energy, transport, urban infrastructure, tourism, economy, corporates, capital markets, and financial services. It also undertakes credit and counter-party ratings for corporates.

CRISIL provides corporate reports regularly on public sector and private sector companies that contain information on their financial, business, and technical aspects. It also undertakes industry studies on requests covering topics, such as structure of industry, basis of competition, and demand and supply estimates.

In 1993–94, it made a public offer of 20,00,000 equity shares of Rs. 10 each at a premium of Rs. 40 per share. The offer was over subscribed by 2.47 times. Its issued and subscribed capital is Rs. 62,00,000 equity shares of Rs. 10 each, fully paid up, aggregating Rs. 6,20,00,000.

Since 1996, CRISIL has had a strategic tie-up with Standard and Poor's USA, the world's leading credit rating agency. The tie-up which was initially in the nature of a 'technical tie-up', culminated with S&P acquiring an equity stake of 9.68 per cent in CRISIL in 1996 enabling it to leverage on S&P's global rating experience. S&P acquired 3,120,948 equity shares of CRISIL from CRISIL shareholders through an open offer taking S&P holding in CRISIL to 58.46 per cent.

CRISIL is a publicly listed company on India's leading stock exchanges. About 58.46 per cent (as on March 31, 2009) of CRISIL's shareholding is owned by Standard and Poor's, the world's leading credit rating agency; 17.93 per cent is owned by banks, mutual funds, and insurance companies; and 23.61 per cent by Indian individual and foreign institutional investors.

CRISIL has provided technical assistance and training to new rating agencies, such as Rating Agency Malaysia Berhad (RAM) and MALLOT—the Israel securities rating company. It is perhaps the only rating agency outside the USA to provide technical know-how overseas.

CRISIL has launched innovative rating products for entities like banks, financial institutions, greenfield projects, and new instruments such as asset-backed securities and other structured obligations. It has also developed rating methodology for various segments, for example, real estate developers, parallel marketers of liquified petroleum gas (LPG) and debt issues of large infrastructure projects, mutual funds, and municipal bonds. CRISIL has also launched hospital grading and is currently grading a dozen healthcare institutes all over India. CRISIL publishes a journal 'rating scan', containing reviews, news, and articles related to ratings.

CRISIL offers a comprehensive range of integrated product and service offerings—real time news, analysed data, incisive insights and opinion, and expert advice—to enable investors, issuers, policy makers de-risk their business and financial decision-making, take informed investment decisions and develop workable solutions. It has emerged as a premier advisor in the infrastructure and energy sectors. It is the largest and best-regarded financial and business research and news service. It is the only ratings agency in India to operate on the basis of a sectoral specialisation.

CRISIL Ratings and Standard & Poor's collaborate on several projects in USA and East Asia, and jointly promote business and services in India.

It set up **IISL** in 1997–98, a Joint Venture between CRISIL and National Stock Exchange for undertaking index business and related activities. The new Company entered into a Consultancy and Licence Agreement with **Standard & Poor's**.

During 2001–02, it launched Mutual Fund Composite Performance Rankings (CRISIL CPRs), Fund Risk Analytics Model and CRISIL Mutual Funds Portfolio Tracker. In September 2003, Crisil Fund Services launched a rating of asset management companies (AMC), which examines, among other things, overall management quality and fund management practices of AMCs. The ratings are not only useful for retail investors but also for institutional and long-term investors such as pension funds and insurance companies for asset allocation. It also gives various quantitative ratings of mutual funds like credit rating of assets, which focuses on credit risk of mutual fund assets, and volatility rating based on the market risk of the mutual fund portfolio.

AMFI has mandated CRISIL to provide daily fund indices as benchmarking standards for the mutual fund industry. In 2008, it launched the CRISIL Complexity Levels Service—an initiative aimed at strengthening Indian capital markets through greater transparency for investors.

CRISIL'S Subsidiaries CRISIL is following the Standard and Poor's (S&P) business model, which derives 50 per cent of its revenue from ratings while the balance comes from non-rating incomes such as information services and indices.

Crisil has diversified from credit rating to other business. It has floated many subsidiaries.

- **CRIS Infac (Crisil Research and Information Services):** This focuses on the information business and provides both macro (macro economic and industry) as well as micro (companies) level information and analysis. It helps over 500 clients make better credit and investment decisions, thereby enabling them to mitigate and manage their risks. It has an extensive research base on over 80 industries, 300 commodities and 3,000 companies, and a network of over 1,200 primary sources.
- **Crisil.com:** This runs a comprehensive mutual funds research and information service for various market participants such as fund managers, fund distributors, and independent financial advisors. It has launched a slew of products, namely:
  - *CRISIL Composite Performance Ranking (CPR):* This is a quarterly ranking of mutual funds schemes based on two year's performance. The CPR ranking helps investors identify schemes that have performed consistently. Fund houses use these rankings to energise their marketing efforts. Fund distributors and financial advisors use them to offer more informed advice to their clients.
  - *Mutual Fund Indices:* This has launched four mutual fund indices called the Crisil General Equity Funds Index (Crisil Fund-ex), Crisil General Debt Funds Index (Crisil Fund-dx), Crisil Balanced Funds Index (Crisil Fund-bx), and Crisil Liquid Funds Index (Crisil Fund-lx) to benchmark the performance of various open-ended schemes.
  - *CRISIL MF Portfolio Tracker:* This tracks a monthly portfolio of over 500 schemes along with the changes over the previous period. It catches key developments such as portfolio changes over the user-defined multiple time frames over the last one year, new entrants and exits from various schemes every month, value and volume holdings for various scrips, and industrywide exposures. This is an index that captures the changing investment preference of fund managers and includes a flexible query module that also allows customised portfolio analysis.
  - *CRISIL Gilt Valuer:* This decomposes the schemes, returns, and risks in various ways. It covers various performance parameters that include Sharpe Ratio, Treynor Ratio, Jensons Alpha, Downside Risk Probability, and Sortino Risk. This helps mutual fund houses in decomposition of performance and continuous tracking and improvement of scheme performance. The Association of Mutual Funds of India (AMFI) has asked all mutual funds to value all gilt securities on their portfolio, using CRISIL Gilt Valuer thus creating a benchmark for the mutual fund industry.
- **CRISIL Market Wire (CMW):** This is a real-time information service that covers fixed income, money markets, and forex markets. The live market coverage services is currently available on the Telerate platform, across 600 terminals countrywide. CRISIL plans to expand the coverage to the mutual fund industry (as CRISIL fund wire is under the test marketing phase) and then to the equity market, thereby covering the entire financial market. It provides unique value, helping clients take pricing and investment decisions to stay ahead in their business.
- **Global Data Services of India Limited (GDS):** This company focuses on actually looking at company balance sheets under a microscope. It is an inhouse basic research company which provides company information on about 500 companies. Global Data Services launched 'CRIS Finalyssis', a product giving financial analysis of companies that is useful for analysts. It offers consistent, high quality financial data analysis to users within and outside the CRISIL group.
- **CRISIL Infrastructure Advisory:** It provides a range of policy, regulatory and transaction level advice to governments and leading organisations across sectors, including energy, oil and gas, telecom, urban infrastructure, transport, hospitality and tourism, and manufacturing. It helps its clients in the competitive bid process management for large and complex projects as well as ensures the success of projects undertaken.
- **CRISIL'S Investment and Risk Management Services:** It provides integrated risk management solutions and advice to banks and corporates. CRISIL transferred its advisory business (CRISIL Infrastructure Advisory and CRISIL Investment & Risk Management Services) into a 100 per cent subsidiary CRISIL Risk and Infrastructure Solutions Limited.
- **Gas Strategies Group Limited (Earlier known as EconoMatters Group) of Gas Information & Solutions:** CRISIL acquired the UK-based EconoMatters Group in December 2003. EconoMatters and its subsidiary companies are the leading providers of business advice and information services to the energy and gas industry, serving global majors, multilateral, leading international banks. The four subsidiaries of EconoMatters Group include Gas Strategies Consulting Limited, Alphatania Limited, Overview Conferences Limited, and Gas Matters Limited. Gas strategies focuses on

market studies, project finance, due diligence, regulation and liberalisation of markets, pipeline financial, and demand studies. Alphatania is a unique training system that builds institutional capabilities in organisations in the gas business globally. Gas Matters is a well-regarded monthly journal with electronic daily version on the global gas business.
- **CRISIL'S Centre for Economic Research:** This centre has developed path-breaking benchmarks and analysis for India's policy and business decision makers.
- **India Index Services and Products Limited (IISL):** It is a 50:50 joint venture with the NSE of India. It is the only specialised organisation in the country which provides stock index products and services.
- **Irevna Research Services Limited:** CRISIL acquired Irevna, a leading global equity research and analytics company, to provide high-end customised equity research to the world's leading financial institutions, investment banks, private equity forms and consulting companies. CRISIL's subsidiaries, CRISIL Research & Information Services Limited (CRIS), Global Data Services of India Limited, CRISIL Properties Limited, and Irevna Research Services Limited, were merged into CRISIL Limited (CRISIL) in 2007.
- **CariCRIS CRISIL** set up the world's first regional credit rating agency—Carribean Credit Rating Information Services.

CRISIL's objective behind diversification is to gain more valuable insight and give a synergistic view the rating business.

CRISIL has rated over 1,800 companies and 3,600 instruments translating into a debt volume of more than USD 62.11 billion. Today, it rates over 1,500 companies a year.

CRISIL is the market leader, with a 70 per cent share in the credit rating industry. It is globally the fourth largest and India's most influential rating agency.

ICRA Limited (Formerly Investment Information and Credit Rating Agency of India Limited)

ICRA was incorporated on January 16, 1991 as an independent and professional credit rating agency providing investment information and credit rating services. It was promoted by the Industrial Finance Corporation of India jointly with other leading investment institutions, commercial banks, and financial service companies. The agency commenced its commercial activities from August 31, 1991. The primary objective of ICRA is to provide information and guidance to investors/creditors for determining the credit risk associated with a debt instrument/credit obligation. ICRA Limited is a Public Limited Company, with its shares listed on the Bombay Stock Exchange and the National Stock Exchange.

ICRA launched two services in 1992.

- **Credit assessment:** ICRA gives ratings to companies so as to enable them to obtain loans from banks, financial institutions, and so on.
- **General assessment:** At the request of the bank and other potential users, the ICRA comes out with the general assessment of the companies.

ICRA has tied up with Moody's Investors Services which is also one of its major shareholders. Moody's Investment Company India (Pvt.) Limited is the largest shareholder in the ICRA.

Since mid-1995, ICRA has been rating equity instruments also. Its Earning Prospects and Risk Analysis (EPRA) group offers two different services: equity assessment and equity grading/rating. The former is done at the instance of investors while the latter is done on the request of the issuer. These services provide reliable and authentic information on the relative quality of equity in diverse corporates, with respect to the earnings prospects and the risks inherent in these earnings prospects. Equity grading is in the form of a symbolic indicator and is kept under surveillance once the company accepts and uses the equity grade while equity assessment is in the form of a report and is a one-time exercise.

ICRA has a broad-based its services to the corporate and financial sectors, both in India and overseas. It presently offer five types of services: Rating Services, Information Grading and Research Services, Advisory Services, Economic Research, and Outsourcing.

Rating Services ICRA rates rupee-denominated debt instruments, such as bonds and debentures (long-term), fixed deposit programmes (medium-term), commercial paper and certificates of deposit (short-term), and structured obligations and sector-specific debt obligations (issued by Power, Telecom, and Infrastructure companies). The other rating services offered include Corporate Governance Rating, Stakeholder Value and Governance Rating, Corporate Governance Assesment, Credit Risk Rating of Debt

Mutual Funds, Rating of Claims Paying Ability of Insurance Companies, Project Finance Rating, and Line of Credit Rating. ICRA, along with National Small Industries Corporation Limited (NSIC), has launched a Performance and Credit Rating Scheme for small-scale enterprises in India. The service is aimed at enabling small and medium enterprises (SMEs) improve their access to institutional credit, increase their competitiveness, and raise their market standing. ICRA also evaluates/rates parallel marketers of LPG and kerosene. It has also carried out credit opinion for municipal corporations.

Grading Services ICRA has developed highly specialised evaluation methodologies for grading of construction entities; real estate developers and projects; healthcare entities; maritime training institutes; and initial public offers (IPOs). These grading methodologies have been developed in association with reputable and specialised bodies associated with the domain.

ICRA Management Consulting Services Limited, a subsidiary of ICRA Limited, offers advisory/consulting services to clients based in the USA and in the Philippines. It also launched Consulting Services for Carbon Management in 2008.

ICRA undertakes economic and industry research exercises, which are customised to address the unique needs and requirements of clients.

It has been appointed as a consultant by the Disinvestment Commission. It completed specific studies for 13 PSUs spread across a wide industry spectrum.

ICRA offers its rating services to a wide range of issuers including manufacturing companies, banks and financial institutions, power companies, service companies, construction companies, insurance companies, municipal and other local bodies, non-banking financial service companies, telecom companies and companies involved in infrastructure such as ports, dams, roads, and highways.

ICRA assists a local credit rating agency in Kuwait to provide credit rating services.

ICRA has launched a quarterly publication—*Money and Finance*. This research journal contains various articles that analyse contemporary developments in the Indian money and capital markets.

Credit Analysis and Research Limited (CARE) Ratings

This was launched in November 1993. It has been set up by the IDBI in collaboration with some banks and financial institutions. The IDBI Bank, SBI, and Canara bank are its major shareholders. The main services offered by it are

- Credit rating of debentures/preference shares/fixed deposits/commercial papers.
- Information services.
- Equity research—extensive study of the shares listed on major stock exchanges through EIL (Economy, Industry, Company) analysis.

CARE is a full service rating company offering a wide range of rating and grading services which includes rating debt instruments/enterprise ratings of corporate banks, financial institutions (FIs), public sector undertakings (PSUs), state government bodies, municipal corporations, non-banking finance companies (NBFCs), SMEs, micro-finance institutions, structured finance securitisation transactions. In addition, CARE Ratings undertakes corporate governance ratings, mutual fund credit quality ratings, IPO grading, claims paying ability rating of insurance companies, grading of construction entities and issuer ratings. CARE Ratings offers advisory services, relating to securitisation transactions, structuring financial instruments, financing of infrastructure projects, mergers and amalgamation, and financial restructuring.

It has set up an advanced service division on power sector and municipal finances. It has completed a number of studies on different manufacturing sectors. It has also completed studies for 17 public sector enterprises for the Disinvestment Commission.

It prepares credit reports of Indian companies on request and undertakes credit assessment of companies for use by banks and financial institutions. CARE assists the Disinvestment Commission in equity valuation of a number of state owned companies and for suggesting disinvestment strategies for these companies. Upto June 30, 2009, it had completed 6,256 rating assignments for an aggregate value of about Rs. 18,248 billion. It has rated 5,847 instruments and 2,219 issuers.

Fitch Ratings India Private Limited

Fitch Rating India was formerly known as DCR India—Duff and Phelps Credit Rating Co. Fitch Ratings, USA and DCR India merged to form a new entity called Fitch India. Fitch India is a 100 per cent subsidiary of Fitch Ratings, USA and is the only wholly owned foreign operator in India. Fitch is the only international rating agency with a presence on the ground in India. Fitch Rating India rates corporates, banks, financial institutions, structured deals, securitised paper, global infrastructure and project finance, public finance, SMEs, asset management companies, and insurance companies.

Brickwork Ratings

It is the fifth agency in the ratings business which commenced its activities from September 24, 2008. It rates IPOs, perpetual bonds of banks, non-convertible debenture issues, and certificate of deposits.

RATING AGENCIES FOR SMEs

The rating agencies approved for rating small and medium enterprises (SMEs) are SMERA, ONICRA, ICRA, CRISIL, CARE, and Fitch.

SME Rating Agency of India Limited (SMERA), set up by SIDBI, Dun and Bradstreet Information Services India Private Limited (D&B) and several leading banks, is the first rating agency that focuses primarily on the Micro, Small and Medium (MSME) segment.

Ratings help SMEs to get access to credit faster and cheaper (at reduced rates) from banks, financial institutions and private equity (PE) funds. SMEs use ratings as a tool to build customer relations and confidence as ratings foster financial discipline and good governance practices. Ratings also enable SMEs to foray into foreign markets successfully. SMERA and CRISIL have rated over 15,000 and 10,000 SMEs respectively in the last five years.

IPO GRADING BY CREDIT RATING AGENCIES

The IPO scam of 2005 shook the confidence of retail investors in the capital market. Many retail investors were deprived of allotment of IP shares as a large number of shares were cornered through multiple share applications and opening of *benami* dematerialised accounts by few scamsters. In order to protect the interest of small investors, SEBI made amendments to the SEBI (Disclosure and Investor Protection) Guidelines, 2000.

SEBI recommended a new service ‘IPO Grading’ that provides an independent assessment of fundamentals to aid comparative assessment that would prove useful as an information and imvestment tool for the investors. Moreover, such a service is particularly useful for assessing the offerings of companies accessing the equity markets for the first time where there is no track record of their market performance. Credit rating agencies registered with SEBI carry out IPO grading for any individual issue, which would represent a relative assessment of the fundamentals of that issue in relation to other listed equity shares. Such grading is assigned on a five-point scale with a higher score indicating stronger fundamentals. IPO grading is a one-time assessment done prior to the IPO issue during the draft prospectues stage. The grading is mandatory for the issuing company and the cost of grading IPOs would be borne by the issuer.

Limitations of Credit Rating in India

The rating business in India grew tremendously in the 1990s. New rating agencies came into existence and competition among them increased. There has been a significant increase in volume of rated debt. The rating business is going strong because of mandatory rating of IPOs, roll out of Basel II norms, rating of security receipts of public–private partnership projects, increased market access by real estate companies, rating of urban municipal bonds, and RBI’s stipulations that companies with borrowings of Rs. 10 crore and above need to get rated. Despite the increase in popularity of rating, the credit rating business suffers from certain limitations.

- The credibility of rating is questionable. The institutions whose instruments were given the highest rating have not performed well. For example, CARE gave the highest rating to CRB Capital, which failed. The CRB scam created a panic among investors and credit agencies alike. While investors queued up to prematurely retire their deposits with NBFCs, rating agencies started downgrading almost every company irrespective of their status.
- A frequent revision of grading by credit rating agencies, that is, sometimes upgrading and sometimes downgrading, creates a confusion among investors questioning again the credibility of the expertise of rating agencies.

- Around a third of the ratings done by credit rating agencies are not accepted by the clients. This has led to a competitive relaxation of rating standards by credit rating agencies. It should be mandatory to obtain at least two ratings as risk perception of rating agencies differ. Both the ratings should be mandatory published in the prospectus, advertisements, and newspapers,
- The rating agencies do not perform an audit but rely solely on information provided by the issuer. If the information provided is inaccurate and incomplete, the rating process is compromised.
- Often a credit rating agency gives a high rating to one instrument of a particular company on the one hand and on the other, frequently downgrades the rating of another instrument of the same company. The rating exercise appears biased and investors not only get confused but lose their investments by depending on these ratings.
- Rating agencies often fail to correctly predict a borrower's financial health in the short-term. The latest case is the non-convertible debenture (NCD) issue of BPL which was downgraded by CRISIL from A to D in one stroke. In other words, CRISIL downgraded the instrument by 12 stages. The investor, who depends on these ratings, is not given any warning by rating agencies to wind down his investment in time.
- Rating agencies offer consultancy and financial advice to the clients whose papers they rate. This leads to a conflict of interest and compromise on their rating process to favour their clients. This has been highlighted by the financial crisis in the US. Hence, the government is working with regulators on the new regulatory framework for credit rating agencies.

Conclusion

Ratings are opinions on creditworthiness based on objective and subjective analysis. Rating agencies play an important role in the world markets; they can best serve markets when they operate independently, adopt and enforce internal guidelines to avoid conflicts of interest, and protect confidential information received from issuers. Credit rating agencies cannot afford to commit too many mistakes as it is the investor who pays the price for their mistakes. Credit rating agencies should be made accountable for any faulty rating by penalising them or even de-recognising them, if needed. Competition in the rating industry should be enhanced by creating niche rating agencies specialising in information technology, or state governments.

KEY TERMS

Credit rating, rating agencies.

SUMMARY

1. Credit rating is the assessment of a borrower's credit quality. Credit rating performs the function of credit risk evaluation reflecting the borrower's expected capability to repay the debt as per terms of issue.
2. Credit rating agencies now undertake financial analysis and assessment of financial products, individuals institutions, and governments.
3. This concept originated in the US in 1909 AD when the founder of Moody's Investor Service, John Moody, rated the US Rail Road Bonds. The rating giants have diversified their service portfolio in order to survive and grow.
4. India was first among the developing world to set up a credit rating agency—CRISIL Limited in 1988. Then came ICRA Limited in 1990, followed by CARE in 1993, and Fitch Ratings India Private Limited.
5. The Indian credit rating industry is next to the US in terms of number of ratings issued and in the number of agencies. CRISIL Limited is the market leader in the credit rating industry with a 70 per cent market share.
6. Ratings are based on an in-depth study of the industry and an evaluation of the strengths and weakness of the company. The analytical framework for rating consists of the following four broad areas: business analysis, financial analysis, management evaluation, and fundamental analysis.
7. Rating agencies use symbols such as AAA, AA, BBB, B, C, D, to convey the safety grade to the investor. Ratings are classified into three grades: high investment grades, investment grades, and speculative grades.
8. CRISIL Limited was set up in January 1998 jointly by ICICI Limited, UTI, GIC, United India Insurance Company, LIC, and domestic and foreign banks as the first credit rating agency in India. It offers a comprehensive range of integrated product and service offerings—real time news, analysed data, incisive insights and opinion, and expert advice—to enable investors, issuers, policy makers de-risk their business and financial decision-making, take informed investment decisions and develop workable solutions.
9. CRISIL is the market leader, with a 70 per cent share in the credit rating industry. It is globally the fourth largest and India's most influential rating agency.
10. ICRA Limited was promoted by the Industrial Finance Corporation of India jointly with other leading investment institutions, commercial banks, and financial service companies. The agency commenced its commercial activities from August 31, 1991.
11. CARE was set up by the IDBI in collaboration with some banks and financial institutions in November 1993. It offers services such as credit rating of debentures/preference shares/fixed deposits/commercial papers, information services and equity research—extensive study of the shares listed on major stock exchanges through EIL (economy, industry, company) analysis.

REVIEW QUESTIONS

1. What is credit rating? Explain the importance of credit rating.
2. How do credit rating agencies rate an instrument?
3. What are the limitations of credit rating in India?
4. Give a brief profile of CRISIL, ICRA, and CARE.
5. What is grading of IPOs?
6. Explain the rating process and methodology.
7. Would the rating methodology in case of banks differ from that of a manufacturing concern? Why?
8. Why have the business volumes of credit rating agencies expanded in India?

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Factoring and Forfaiting

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *The meaning of factoring*
2. *The origin of factoring*
3. *The types of factoring*
4. *The factoring mechanism*
5. *The factoring charges*
6. *The legal aspects of factoring*
7. *The advantages of factoring*
8. *The comparison of factoring with bills discounting and cash credit*
9. *International factoring: Need and Benefits*
10. *Flow chart of international factoring transaction*
11. *International factoring charges*
12. *Factoring in India*
13. *Meaning of forfaiting*
14. *The origin, characteristics, need, and benefits of forfaiting*
15. *The flow chart of a forfaiting transaction*
16. *The pricing of a forfaiting transaction*
17. *The difference between forfaiting and factoring*
18. *The growth of forfaiting in India*

INTRODUCTION

With the advent of globalisation and liberalisation, competition among firms—both domestic and international—has increased. Globally, mergers and acquisitions are a common phenomena. Indian corporates have to guard against hostile takeovers. Both environmental and technological changes are rapid and a firm's strategy has to constantly keep pace with these changes. Moreover, there has been a slowdown in economic activity globally. Financial markets all over the world are facing rough weather. In this scenario, management of cash and receivables is of utmost importance to both corporate giants and small firms. Many business have collapsed for want of liquidity. The key to success lies in converting credit sales into cash within a short period of time. There are many traditional methods such as cash credit, bills discounting, and consumer credit through financial intermediaries that help in raising short-term funds against credit sales or receivables. Recently, new financial services, such as factoring and forfaiting, have come into existence to assist the financing of credit sales and, thereby, help the business unit to tide over the liquidity crunch.

FACTORING

Factoring is a continuing arrangement between a financial intermediary known as the factor and a business concern (the client) whereby the factor purchases the client's accounts receivable/book debts either with or without recourse to the client. This relation enables the factor to control the credit extended to the customer and administer the sales ledger.

Besides purchase of accounts receivables, a factor may provide a wide range of services, such as the following.

- Credit management and covering the credit risk involved.
- Provision of prepayment of funds against the debts it agreed to buy.
- Arrangement for collection of debts.
- Administration of the sales ledger.

Factoring is a collection and finance service designed to improve the client's (seller's) cash flow by turning his credit sales invoices into ready cash. In very simple terms, factoring is an activity of managing the trade debts of a business concern. The factor controls the credit extended to the customers and administers the sales ledger.

The Origin of Factoring

Modern factoring came into existence in the 1920s. Factoring as financing against receivables got a boost in the 1930s but there was no comprehensive framework of statutory law for a factoring arrangement. In the UK, factoring came into existence in the form of invoice discounting. The factoring market grew there in the late 1960s. In 1976, the leading factoring companies of the UK formed the Association of British Factors (ABF). The factoring business has now thrived in Italy and Asia-Pacific countries. They are also experiencing a tremendous growth in the factoring business.

Types of Factoring

Based on the features built into the factoring transactions, different types of factoring arrangements have come into existence.

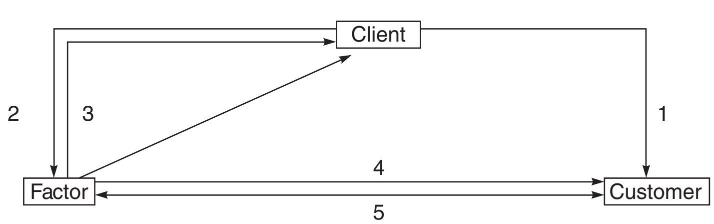
- **Recourse factoring:** In recourse factoring, the factor purchases trade debts and essentially renders collection service and maintains sales ledgers. But, in case of default or non-payment by a trade debtor, the client refunds the amount to the factor. Hence, recourse factoring does not include bad-debts protection. It is popular in the developing countries.
- **Non-recourse factoring:** Under non-recourse factoring, the factor's obligation to the client becomes absolute on the due date of the invoice, irrespective of the payment made or not made by the trade debtor. In other words, if the trade debtor fails to make a payment, the factor cannot recover this amount from the client. In non-recourse factoring, factor charges are high as they offer the client protection against bad-debts. The loss arising out of irrecoverable receivables is borne by the factor. This type of factoring arrangement is found in developed countries such as UK and USA, where reliable credit rating services are available.
- **Advance and maturity factoring:** Sometimes, the factor and the client make an arrangement whereby the factor pays a pre-specified portion of the factored receivables in advance to the client on submission of necessary documents. This type of arrangement is known as advance factoring. The balance portion is paid upon collection or on the guaranteed payment date. Generally, factoring is advance factoring and factor pays 80 per cent of the invoice amount in advance.

  Under maturity factoring no advance payment is made by the factor but payment is made only on the guaranteed payment date or on the date of collection. Maturity factoring is also known as collection factoring.
- **Old line factoring:** Old line factoring is also known as full factoring as it provides an entire spectrum of services, such as collection, credit protection, sales ledger administration, and short-term finance. It includes all features of non-recourse and advance factoring.
- **Cross-border factoring/International factoring:** In domestic factoring, three parties are involved, namely, customer (buyer), client (seller), and factor (financial institution or intermediary) while in international factoring there are four parties, namely, exporter (client), importer (customer), export factor, and import factor. Thus, in international business transactions, factoring services are provided by factors of both countries, that is, the exporter country's factor and the importer country's factor. This is known as cross-border factoring or international factoring.
- **Invoice discount:** Invoice discount is a variant of factoring. It provides finance against invoices backed by letters of credit of banks. The factor provides finance once the letter of credit opening bank confirms the due date of payment.

Factoring Mechanism

The mechanism of factoring can be explained with the help of the following flowchart (Figure 20.1).

1. Customer places an order with the client for goods and/or service on credit; client delivers the goods and sends invoice to customers.
2. Client assigns invoice to factor.
3. Factor makes prepayment upto 80 per cent and sends periodical statements.
4. Monthly statement of accounts to customer and follow-up.
5. Customer makes payment to factor.
6. Factor makes balance 20 per cent payment on realisation to the client.



Source: *SBI Factors and Commercial Services.*

Figure 20.1 A Flow Chart of Factoring Transaction

The client sends an invoice to his customer in the usual way but adds a notification that the invoice is assigned to and must be paid to the factor with whom he has made an arrangement.

The client then submits copies of invoices to the factor with a schedule of offer accompanied by the receipt, delivery *challan*, or any other valid proof of despatch.

The factor provides prepayment upto 80 per cent of the invoice value and follows-up with the customers for realisation of payments due. The balance payment is made immediately on realisation. The factor sends a monthly statement of accounts to the client to keep him informed of the factored invoices.

Factoring Charges

Factors charge finance charges and service fees.

- **Finance charge:** Finance charge is computed on the prepayment outstanding in the client's account at monthly intervals. Finance charges are only for financing that has been availed. These charges are similar to the interest levied on the cash credit facilities in a bank.
- **Service fee:** Service charge is a nominal charge levied at monthly intervals to cover the cost of services, namely, collection, sales ledger management, and periodical MIS reports. Service fee is determined on the basis of criteria such as the gross sales value, the number of customers, the number of invoices and credit notes, and the degree of credit risk represented by the customers or the transaction. Both these charges taken together compare very favourably with the interest rates charged by banks and financial institutions for short-term borrowings.

Legal Aspects of Factoring

- Upon entering into a factoring arrangement, the client agrees to serve a notice of assignment in the prescribed form to all customers, whose receivables have been factored.
- The client agrees to provide all copies of invoices, *challans,* and other evidences relating to the factored account and also remit any payment received, if any, by him against the factored invoices.
- The factor requires a power of attorney to assign the debts and to draw negotiable instruments in respect of such debts.
- The legal status of the factor is that of an assignee.
- In case of multiple finance (i.e., a part of book debts is financed by bank and part by factoring), the letter of disclaimer is required by factor so that there is no duplicate charge and double financing is avoided.
- Factoring transactions attract stamp duty to assign all debts.

Advantages of Factoring

Factoring is beneficial to the client, his customers, and banks.

Benefits to the Client

The benefits to the clients are as follows.

- The client's credit sales are immediately converted into ready cash as the factor makes a payment of around 80 per cent of the factored invoices in advance. This proportion of finance is higher than the bank finance against credit sales.
- The client can offer competitive credit terms to his buyers which, in turn, enable him to increase his sales and profits.
- The cash realised from credit sales can be used to accelerate the production cycle.
- The client is free from the tensions of monitoring his sales ledger and can concentrate on production, marketing, and other aspects. This results in a reduction in overhead expenses and an increase in sales and profits.
- Factoring results in a close internation among working capital components of the business. Efficient management of one component can have positive impact on other component. For example, an increase in liquidity enables the firm to avail of discounts on purchases of raw materials.
- The factor provides a comprehensive credit control system by analysing payment history. This helps in assessing the quality of the debtors and monitoring their financial health.
- The client can expand his business by exploring new markets.

Benefits to Customers (Buyers)

The benefits that the customers enjoy are as follows.

- Factoring facilitates the credit purchases of the customers as they get adequate credit period.
- Customers save on bank charges and expenses.
- The customer has not to furnish any documents. He has merely to acknowledge the notification letter, that is, an undertaking to make payment of the invoices to the factor. Customers are furnished with periodical statements of outstanding invoices by the factor.
- Factoring does not impinge on the customer's rights vis-a-vis the supplier's in respect of quality of goods, contractual obligations, and so on.

Benefits to Banks

Factoring improves liquidity of the clients and, thereby, improves the quality of advances of banks. Factoring is not a threat to banking; it is a financial service complementary to that of the banks.

Comparison of Factoring with Bills Discounting and Cash Credit

Both bills discounting and cash credit are like factoring as they are short-term sources of finance but they differ in many respects from factoring.

Bills Discounting vis-á-vis Factoring

- Bills discounting is an individual transaction in the sense that each bill is separately assessed and discounted. Factoring is a financial service provided by a financial institution/intermediary on a whole turnover basis. Factoring is the provision of bulk finance against several unpaid trade invoices. This gives the client the liberty to draw desired finance only.
- In case of bills discounting, each bill has to be individually accepted by the drawee, which takes time. In factoring a one-time notification is taken from the customer at the commencement of the facility.
- Bills discounting is an expensive short-term source of finance as stamp duty is charged on certain usance bills together with bank charges. In case of factoring, no stamp duty is charged on the invoices and hence it is less expensive than bills discounting.
- Bills discounting involves more paper work as compared to factoring.
- In case of bills discounting, the grace period for payment is usually three days while in case of factoring, the grace period is higher.
- Bills discounting requires submission of original documents such as bill of lading, *challans,* and invoices. Only copies of such documents are required in factoring.
- In bills discounting, charges are normally upfront whereas there are no upfront charges in case of factoring. Finance charges are levied on the amount of money withdrawn.
- Bills discounting is not an off-balance sheet mode of financing while factoring is.
- Bills discounting is more domestic-related and usually falls within the working limits set by the bank for the customer. Factoring may be domestic or international and is not concerned with the working capital limits set by the bank.
- Bills discounting does not involve assignment of debts while factoring involves assignment of debts.

Cash Credit vis-á-vis Factoring

Commercial banks allot two types of credit limits for their clients—the cash credit limit and the loan limit. The cash credit limit is for working capital requirement and is short-term in nature. The cash credit funds can be withdrawn at a short notice for working capital requirements.

- In cash credit, the margin retained on receivables is usually 40 to 50 per cent as banks have no means of following up sundry debtors, while in case of factoring, the margin retained is 20 per cent.
- In case of cash credit, the drawing power on the basis of stock statements is computed once a month. If invoices are raised between submission of stock statement, no money can be drawn against them. Factoring is like cash sales—prepayments against invoices are made as and when they are factored.

- In case of cash credit, the client has to submit various statements to the bank while no statements are to be submitted to the factor. On the contrary, the factor furnishes various reports to both the client and the customer.
- The bank does not provide collection services to its clients while a factor renders debt collection service to its clients.
- In case of cash credit, once a book debt exceeds its usance period, it is removed from the eligible list. In factoring, the factor allows generous grace period on factored receivables.
- To avail cash credit facilities, processing fees are about one per cent of the limit and interest is linked to the prime lending rate. In case of factoring, the maximum processing fees are fixed and finance charge is linked to the cost of funds.

Thus, factoring tends to increase the number of rotations by converting credit sales into cash sales in a manner that banks cannot accomplish.

International Factoring

International factoring facilitates international trade. It is a comprehensive range of receivables management and financing services wherein a factor provides an exporter with at least two of the following services.

- Credit management and bad debt protection.
- Credit guarantee.
- Finance upto 90 per cent of the invoice value on shipment to approved debtor.
- Collection services.
- Professional sales ledger and analysis.

International factoring eases much of the credit and collection burden created by international sales. Export receivables that can be factored should have the following characteristics.

- When the seller and buyer are located in different countries and a factoring agreement takes place it is called international factoring

- The buyer's country should be covered by the factor.
- The exporter's performance obligation should be completed at the time the exporter presents an invoice for prepayment.
- There should be multiple shipments or a continuous sales flow on an ongoing basis with the same buyer or buyers. There should be assignment of the whole turnover with a buyer on a continuous basis.
- Factoring transactions are best suited for credit periods upto 180 days and factoring facilities are typically provided for 'open-account' transactions. In the absence of this, the buyers would have to open a letter of credit (LC), thereby blocking bank limits.

Need for International Factoring

An exporter requires international factoring services to relieve him of the problems of collecting receivables in a foreign country and the tensions arising from the unfamiliarity with the customer's creditworthiness. Moreover, the demand for open account trading, where the importer makes the payment after he receives the goods, has expanded globally and Indian exporters are also required to offer similar terms to importers in order to remain competitive. This has created a demand for better credit risk protection services arising out of importers delaying payments or not making any payments at all. International factoring provides credit assessment and protection, financing and collection services to exporters for regular sales in open account terms. International factoring requires no collateral or letter of credit (LC). A letter from a bank to a foreign bank authorising the payment of a specified sum to the person or company named is known as letter of credit (LC). Letters of credit are widely used as a means of payment for goods in foreign trade.

An export factor in India pays 90 per cent as advance on the approved invoices and also gives a 100 per cent risk protection on the receivables in the event of the buyer's failure to pay including insolvency.

Benefits of International Factoring

The exporter deals with only one factor even if his exports are spread across different countries. He can obtain experience of the correspondent factor not only in terms of getting an access to the creditworthiness of the buyer but also in legal laws and business practices of these countries. The exporter's risk and bad debts are reduced. He can expand his business by exploring new markets.

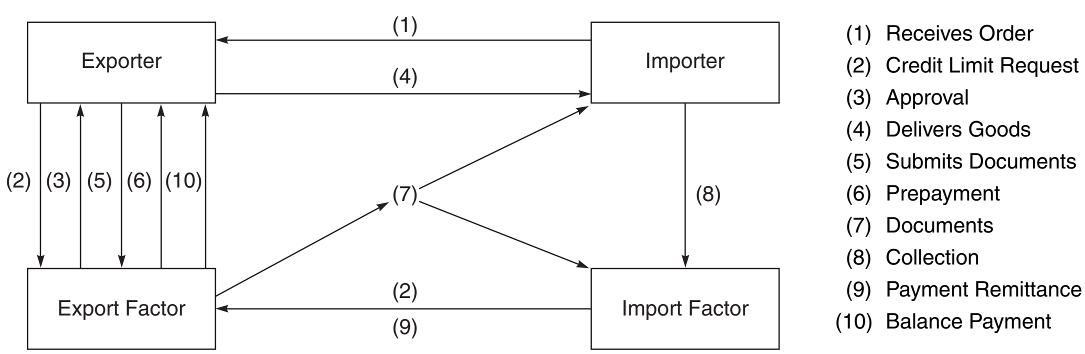
The importer also benefits as he pays the invoice amount to a factoring company in his own country. This is similar to making payment to domestic suppliers. The importer gets an access to open account credit terms. In the absence of this, he would have to open letter of credit (LC), thereby blocking his bank limits.

Flow Chart of International Factoring Transaction

In international factoring, there are four parties, that is, the exporter (client), the importer (customer), the export factor, and the import factor (Figure 20.2). International factoring is a two factor system. The export factor services the needs of clients in India while the import factor undertakes the credit assessment of customer keeping in view the macro-conditions of the country and industry specific factors. It also undertakes collections and follow-up required for realisation on maturity.

In international factoring, there is no bank involved in the transaction. All the necessary documentations and the RBI formalities are performed by the export factor who is an authorised dealer.

- The exporter receives an order or regularly receives orders from an importer or importers and is able to estimate the financing requirement.
- The exporter provides the export factor with contact details of its customers alongwith estimates of the credit limits. The export factor forwards these details to correspondent import factors in the relevant country.
- On approval of the exporter's credit limits, the exporter enters into a factoring agreement with the export factor.
- The exporter ships the goods to his customer (importer).
- The exporter submits the relevant documents such as invoice, bill of lading/airway bill, GR form, and so on to the export factor.
- The export factor scrutinises the documents and makes a prepayment as agreed upon to the exporter.



Source: Global Trade Finance Private Limited.

Figure 20.2 International Factoring Transaction

- The export factor directly forwards the documents to the customer(s) under advice to the correspondent factors.
- The correspondent factor (import factor) follows up with the customers and collect payments from them.
- The correspondent factor (import factor) collects the payment and immediately remits it to the export factor.
- On collection, the export factor credits the balance payment to the exporter's account after adjusting for prepayments made.

Factoring is most suitable for manufacturing and trading companies. It is also suitable for advertising agencies, solicitors and legal firms, architect firms, medical firms, construction and engineering contracts, and software firms.

International Factoring Charges

In international factoring, there are two types of charges: discount charge and service charge. The factor levies a discount charge for prepayment and service charge for allied services, which includes a 100 per cent risk protection. The charge is generally calculated as a percentage on a flat basis on the gross invoice value.

Factor Chain International

Established in 1968, Factor Chain International (FCI) is a global network of leading factoring companies whose common aim is to facilitate international trade through factoring and related financial services. The FCI network consists of 247 factors in 66 countries. It provides modern and effective communication systems to enable factors to conduct their business in a cost effective way. It also provides a legal framework to protect exporters and importers. It has developed standard procedures of factoring to maintain a universal quality. It also undertakes worldwide promotion to position international factoring as the preferred method of trade finance.

According to FCI, the growth rate in international factoring is greater than the growth rate in domestic factoring.

Factoring in India

The RBI formed a committee headed by C. S. Kalyanasundaram, a former managing director of the State Bank of India (SBI) to examine the need for and scope of factoring organisations in India. The committee submitted its report in December 1988 and recommended introduction of factoring services in India. The RBI advised banks to take up factoring activity through a subsidiary.

SBI Factors and Commercial Services The State Bank of India, in association with the State Bank of Indore, the State Bank of Saurashtra, the Small Industries Development Bank of India, and the Union Bank of India set up the SBI Factors and Commercial Services in February 1991. SBI Factors commenced operations from April 1991. SBI Factors was the first factoring company to be set up in India. It has a 45 per cent market share in this business. SBI Factors offers domestic, export, and import factoring services.

SBI factors offers two types of products under domestic factoring:

1. **Bill 2 cash** (Receivables factoring facility)—the seller invoices the goods to the buyer, assigns the same to SBI factors, and receives prepayment up to 90 per cent of the invoice value immediately. The balance amount is paid to the client when the customer pays to SBI factors. This facility can be 'with recourse' or 'without recourse'. Without recourse factoring is a finance option, which is an off-balance sheet item, and it improves Return on Assets (ROA) substantially.
2. **Cash 4 purchase** (Purchase bill factoring)—facilitates instant payment for purchases made and is generally sanctioned in conjunction with receivable factoring facility or export factoring facility.

Box 20.1 Factor Chain International (FCI)

Country Profile INDIA (2008)

Number of Factoring Companies:	6
Domestic Factoring Turnover (in Millions of EUR):	4,750
International Factoring Turnover (in Millions of EUR):	450
Total Factoring Turnover (in Millions of EUR):	**5,200**

FCI Members

- Export Credit Guarantee Corporation of India Ltd (Factoring Division)
- Global Trade Finance Limited
- IFCI Factors Ltd. (Foremost Factors Limited)
- SBI Factors and Commercial Services Pvt. Ltd
- Standard Chartered Bank (Trade, Transaction Banking)
- The Hongkong and Shanghai Banking Corporation Ltd. (Factoring & Receivables Finance)

Source: www.factors-chain.com

Under Export Factoring Facility known as Vishwavyapar, it factors invoices drawn on overseas buyers and makes a prepayment of up to 90 per cent of the invoice amount, immediately. Its Import Factoring Service enables buyers/importers to purchase the goods from foreign suppliers on credit without Letter of Credit or Bank Guarantee, i.e., on open account terms. The importer makes the payment to the import factor (SBI Factors) and not to the exporter. SBI Factors assume the credit risk on evaluation of the importer and provides the credit cover to the Export Factor. The cost in this regard has to be borne by the exporter through the Import Factor. It also undertakes to pay the Export Factor under guarantee, in case, the approved account receivables remain unpaid 90 days past due.

Canbank Factors Limited is another factoring company and it is also into recourse factoring. Canbank factors is a subsidiary of Canara Bank and was incorporated in the year 1991 with Small Industries Development Bank of India (SIDBI) and Andhra Bank as co-promoters. It is registered as a non-banking finance company (NBFC) and hence is governed by the regulatory norms of the RBI. It extends also export factoring services. In export factoring, the export factor appoints an import factor, who provides credit protection/exposure limits for a particular importer. The export factor after getting the approval of the import factor, provides financial assistance to the Indian exporter. In export factoring, there is no requirement of an LC or a credit insurance cover.

Global Trade Finance Private Limited was set up in September 2001 by West Deutesche Landesbank Girozentrate, EXIM Bank of India, and International Finance Corporation for promoting cross-border factoring services. In March 2008, the SBI acquired 92.85 per cent stake and the remaining 7.15 per cent is with Bank of Maharashtra. It is the only provider of international factoring, domestic factoring, and forfaiting services under one roof in India.

Factors Inhibiting the Growth of Factoring in India

The factoring industry has grown phenomenally extending to over 66 countries around the world. More than 1 lakh businesses are currently using factoring to settle trade transactions with some seven million customers worldwide. The worldwide factoring volume is now over €1,325,111 million a year. In the US, there are 120 factoring companies with a total turnover of €1,00,000 million. A small country like Taiwan has a marketing market of €44 billion which is 15 per cent of its GDP while the Indian factoring market is merely 0.06 per cent of its GDP. The factoring volume is quite low in India. The factors inhibiting the growth of factoring volumes are as follows.

- Lack of a credit appraisal system and authentic information about customers and clients restricts the growth of this business. As against this, in the UK and the USA, companies like Dunn and Bradstreet are engaged in credit appraisal systems. Factors rely on their reports to enter into factoring arrangements.
- Higher stamp duty on assigning of debt increases the cost of the client which reduces factoring arrangements.
- Non-availability of permission to factoring companies for raising their debt restricts their financing capacity and thereby the growth of the market.
- Being registered as NBFCs, factoring companies are not eligible for refinance which limits the extension of this facility to the exporters on open account sales. This restricts the growth of the market.

To remove such limitations and to boost factoring, the following can be suggested.

- Eliminate or reduce the stamp duty.
- Develop a separate company which would give a true and fair credit appraisal report, covering all aspects of the client and his customers account.
- The debt raising capacity of factoring companies should be increased.
- A factoring law which would address the present inadequacies and impediments should be framed and passed.
- The factoring companies should be given the status of financial institutions so that they can be eligible for refinance which, in turn, would provide an impetus to the growth of the factoring market.
- Workshops and seminars should be organised by factoring companies to increase awareness and usefulness of factoring among small scale units.
- Factoring companies should extend their network of branches especially to those areas where small scale units are located.

FORFAITING

- Forfaiting is a non-recourse long-term financing of international trade

Forfaiting has emerged as an important instrument of short- to long-term financing of international trade.

Forfaiting is the discounting of international trade receivables on a 100 per cent without recourse basis. Forfaiting converts the exporter's credit sale into a cash sale. By transforming the exporter's credit into a cash transaction, it protects the exporter from all the risks associated with selling overseas on credit. Trade receivables, include bills of exchange, promissory notes, book receivables and deferred payments under letters of credit. The exporter surrenders trade receivables to the forfaiting agency, which pays him in cash after deducting some charges. The forfaiting agency then collects the dues from the importer on expiry of the same period. Thus, forfaiting enables exporters to offer longer-term financing to importers of capital goods from India.

Origin of Forfaiting

The term 'forfait' in French means to 'relinquish a right'. Here, it refers to the exporter relinquishing his right to a receivable due at a future date in exchange for immediate cash payment, at an agreed discount, passing all risks and responsibilities for collecting the debt to the forfaiter.

Forfaiting evolved in the 1960s. This concept was originally developed to help finance German exports to the Eastern bloc countries. The buyers of the Eastern bloc countries required credit and their need could not be fulfilled through the then existing modes of finance. This gave birth to a new concept—forfaiting.

Initially, it was in Switzerland that many forfaiting houses mushroomed but over the last decade, London has been the main centre for this market.

In India, the RBI vide its circular AD (GP Series) No. 3 dated February 13, 1992, approved forfaiting as an export financing option. Exim Bank was the first institution which got approval in 1992 to finance exports through forfaiting. Forfaiting facility is provided by an international forfaiting agency and a forfaiting transaction is routed through an authorised dealer (AD). This authorised dealer provides services such as handling documentation and providing customs clarification for GR form purposes. Forfaiting proceeds are to be received in India as soon as possible after shipment but within the 180-day period specified by the RBI for all exports.

Initially, forfaiting developed as a fixed interest rate and medium-term (3 to 5 years) financing. Now it can be tailor-made to suit the exporter's requirements on the basis of interest rate, credit period, moratorium, and variable shipment schedule. Forfaiting can now be structured on a floating rate basis as well as for shorter and longer periods ranging between 60 days to 10 years. It is also possible to finance multinational corporates or state-owned entities risks. Earlier, the concept was restricted to post shipment finance. Now the concept has been extended to provide pre-export finance, structured trade finance, project finance, and even working capital.

Characteristics of a Forfaiting Transaction

- Forfaiting is 100 per cent financing without recourse to the exporter. This means that the exporter is insulated against the possibility of default in payment by the importer.
- Trade receivables are usually evidenced by bills of exchange, promissory notes, or a letter of credit. The trade receivables are required to be denominated in a freely convertible currency. The most common currency denominations are the US dollar and euro.
- Credit periods can range from 60 days to 10 years.
- Forfaiting is flexible as it can be structured on fixed interest rate basis as well as floating rate basis and can be tailor-made to accommodate variations in terms such as credit period, and shipment schedule.
- An importer's obligation is normally supported by a local bank guarantee or an aval. An aval means an unconditional financial obligation; it takes the form of an endorsement on a debt instrument like a promissory note or bills of exchange. The act of giving an aval is known as avalising. It represents an irrevocable, unconditional, and fully transferable guarantee given by the foreign buyer's local bank and is normally a requirement in forfaiting transaction.
- Forfaiting is suitable for high-value exports such as capital goods, consumer durables, vehicles, consultancy and construction contracts, project exports, and bulk commodities. Forfaiting is also suitable for low value but repetitive products, including pharmaceuticals, dyes and chemicals, cotton textiles and yarn, leather and garments, granite, handicrafts, and carpets.

Forfaiting is used in the following situations.

- There is a request for deferred payment for more than 60 days.
- The contract is for at least USD 1,00,000 or its equivalent, in a freely convertible currency, and when each shipment is not less than USD 25,000.
- Either a letter of credit or a bank guarantee is available or the exporter believes that the buyer is an acceptable stand alone risk.
- The sale is made to a buyer in a high credit risk country.
- The exporters' own bank limits are inadequate or not available.

Need for Forfaiting

- Forfaiting is a non-recourse and off-balance sheet financing. It eliminates all risks from the exporter's books.
- Commercial banks usually do not fund credit risks beyond 180 days. Hence, for financing long tenor receivables, forfaiting is the only option.
- Forfaiting helps in eliminating interest rate fluctuation as it involves upfront discounting. The interest cost is known to both the exporter and importer and is built into the contract thereby providing protection against adverse interest rate fluctuations.

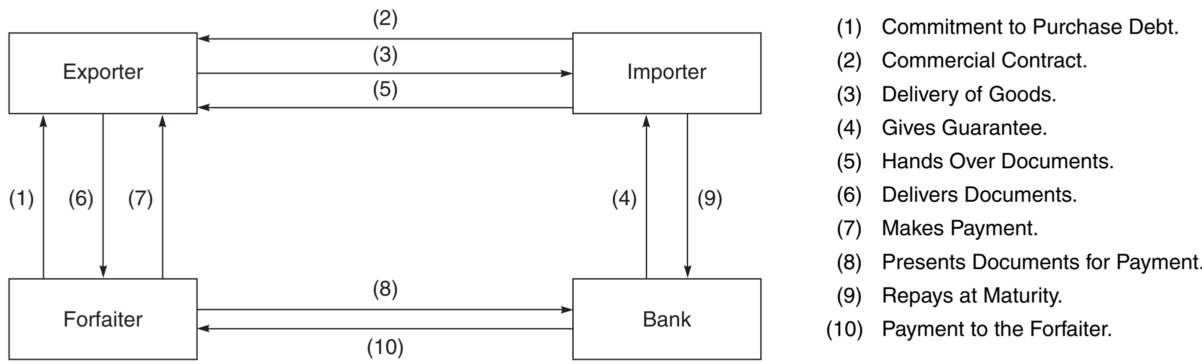
Benefits of Forfaiting

- The exporter receives the full export value from the forfaiter. It is superior to the traditional discounting of bills wherein a part of the export proceeds are deducted by the bank.
- The exporter is absolved of all the risks attached to the transaction. In other words, it eliminates risks such as commercial risk, political risk, transfer risk, interest risk, and exchange risk.
- It improves the liquidity of the exporter as it converts credit sales into a cash transaction.
- It also relieves the balance sheet of contingent liabilities and helps the exporter to undertake more exports.
- It enhances the competitive advantage of the exporter by enabling the exporter to provide more credit, which increases the attractiveness of his offer. This, in turn, increases the volume of business and his ability to do business in risky countries.
- It relieves the exporter from administration and collection hassles.
- Its documentation procedure is simple, enabling exporters to forfait transactions quickly and efficiently.
- It does not affect the existing banking limits of the exporter.
- Forfaiting is transaction specific and hence does not require a long-term banking relationship with the forfaiter.
- The exporter saves on insurance costs as forfeiting obviates the need for export credit insurance.
- Forfaiting is beneficial to the importer also. For the importer, forfaiting is an alternative form of financing capacity that increases and diversifies borrowing capacity, speeds the conclusion of commercial contract, avoids restrictive borrowing covenants, and frees him from administrative and legal hassles.

Flow Chart of a Forfaiting Transaction

The mechanism of forfaiting can be explained with the help of the following flowchart (Figure 20.3).

- At the request of the exporter, and normally nearer the time of shipment, the forfeiter provides the exporter with a written commitment to purchase the debt from him on a without recourse basis.
- The exporter and the importer sign the commercial contract.
- A forfaiting certificate is provided by the authorised dealer (AD) to be attached to the goods received form prior to submission to customers. The rest of the shipping documents are prepared as per the commercial contract. The goods are then despatched to the importer.
- The importer's bank provides guarantee at the request of the importer.
- The guarantee is forwarded by the importer to the exporter.
- The exporter then assigns the guarantee in favour of the forfaiter and forwards other documents relating to forfaiting.
- On receipt of complete documentation, the forfaiter makes the payment to the exporter on a without recourse basis.
- On maturity, the forfaiter presents the documents to the importer's bank for payment.
- The importer makes the payment to his guaranteeing bank.
- The importer's bank guaranteeing the transaction makes the payment to the forfaiter on due date.



Source: Global Trade Finance Private Limited.

Figure 20.3 A Flow Chart of a Forfaiting Transaction

Pricing of a Forfaiting Transaction

The pricing consists of four elements: discount rate, commitment fees, grace days, and handling fee.

- **Discount rate:** Discount rate is the interest element and reflects the cost of funds. It is the rate at which the face value of a negotiable instrument is discounted. The discount rate is usually quoted as a margin over London Inter-Bank Offer Rate (LIBOR). The margin depends upon the country/bank risk and the credit period. A high country risk and longer credit period will attract higher margins.
- **Commitment fees:** The commitment fees is calculated from the date the forfaiter is committed to undertake the financing until the date of discounting.
- **Grace days:** These are the number of days beyond the stated maturity. They represent the anticipated number of days required for transmission and receipt of funds at maturity. It normally ranges from two to five days and can extend upto 15 days and beyond.
- **Handling fee:** A handling fee is applicable for documentation and custom clarification.

Difference Between Forfaiting and Factoring

- Forfaiting is usually for international credit transactions of long-term maturity periods ranging between 90 days and upto 5 years. Factoring is for transactions of short-term maturities not exceeding six months.
- Forfaiting is 100 per cent financing without recourse to the exporter. Factoring can be with recourse or without recourse depending on the terms of transaction between the seller and the factor.
- In forfaiting, the cost (charges) consists of three elements—discount rate, commitment fees, and handling fees, which are ultimately borne by the importer. The cost of factoring is usually borne by the seller.
- In forfaiting, the complete sales ledger of the exporter is not handled by the forfaiter. Forfaiting, structuring, and costing is tailor-made and on a case-to-case basis. Under factoring, the factor handles the entire sales ledger at a predetermined price. Factoring requires the assignment of whole turnover with a buyer on a continuous basis. Factoring is a continuous and revolving facility.
- The fundamental difference between factoring and forfaiting is the difference in the risk profiles of the receivables, which has implications for the cost of services.
- In forfaiting, there is a forfaiter and a bank involved in the transaction while in international factoring, there is a two factor system—the export factor and the import factor, with no bank involved in the transaction.

Growth of Forfaiting in India

Forfaiting is a non-course financing wherein the proceeds are to be received in India as soon as possible after shipment but within the 180 days period specified by the RBI for all exporters. A forfaiting transaction is to be routed through an authorised dealer, who apart from handling documentation will also provide customs certification for GR form purposes.

The EXIM Bank was the first institution to get an approval from the RBI to finance exports through forfaiting. The Indian exporter still relies on an LC or an Export and Credit Guarantee Corporation (ECGC) insurance for the post shipment period. To popularise this concept, EXIM Bank has been organising workshops and seminars. But compared to the forfaiting business of more than USD 500 billion in the developed countries, the volume of forfaiting business in India is comparatively quite low.

In September 2001, to encourage forfaiting, the Global Trade Finance Limited was born to promote market-driven export financing solutions for small and medium sized Indian exporters, operating in an increasingly competitive world environment. Global Trade Finance Limited offers forfaiting and export factoring to Indian exporters under one roof in India and has received the necessary approvals from the RBI.

Conclusion

Both factoring and forfeiting are new trade financing services. The combined global market for these services is estimated to be USD 700 billion and India is widely recognised as the top 10 countries where the use of factoring and forfaiting is expected to rise significantly in the coming years.

KEY TERMS

Factoring, Recourse Factoring, Non-recourse Factoring, Advance Factoring, Maturity Factoring, Old Line Factoring, International Factoring and Forfaiting.

SUMMARY

1. Factoring is an activity of managing the trade debts of a business concern. The factor controls the credit extended to the customers and administers the sales ledger.
2. The different types of factoring arrangements are : recourse factoring, non-recourse factoring, advance and maturity factoring, old line factoring, cross-border factoring/international factoring, invoice discount.
3. Factoring is beneficial to the client, his customers, and banks.
4. International factoring facilitates international trade. It is a comprehensive range of receivables management and financing services wherein a factor provides an exporter with at least two of the following services: credit management and bad debt protection, credit guarantee, finance upto 90 per cent of the invoice value on shipment to approved debtor, collection services, and professional sales ledger and analysis.
5. In international factoring, there are four parties, that is, exporter (client) importer (customer), the export factor, and the import factor. International factoring is a two-factor system. The export factor services the needs of clients in India while the import factor undertakes the credit assessment of customer keeping in view the macro-conditions of the country and industry specific factors. It also undertakes collections and follow-up required for realisation on maturity.
6. Forfaiting has emerged as an important instrument of short to long-term financing of international trade.
7. Forfaiting is the discounting of international trade receivables on a 100 per cent without recourse basis. It converts the exporter credit sale into a cash sale. For financing long tenor receivables, forfaiting is the only option. It helps in eliminating interest rate fluctuation as it involves upfront discounting.
8. Forfaiting is used when: there is a request for deferred payment for more than 60 days; the contract is for at least USD 1,00,000 or its equivalent, in a freely convertible currency; and when each shipment is not less than USD 25,000; either a letter of credit or a bank guarantee is available or the exporter believes that the buyer is an acceptable stand alone risk; the sale is made to a buyer in a high credit risk country and the exporters' own bank limits are inadequate or not available.

REVIEW QUESTIONS

1. What is factoring? Explain the types and mechanism of factoring.
2. How does factoring differ from bills discounting and cash credit?
3. What is international factoring? How does it differ from forfaiting? Explain the mechanism of international factoring.
4. State the major factors inhibiting the growth of factoring in India.
5. Explain the concept of forfaiting. What are the benefits of forfaiting?

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Housing Finance

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *Meaning of housing finance*
2. *Role of housing and housing finance in the economy*
3. *Evolution of housing and housing finance in India*
4. *Policy initiatives and measures to develop the housing sector in India*
5. *Housing-finance institutions (HFIs)*
6. *Types of housing loans*
7. *Risk management by HFIs*
8. *Marketing strategies of HFIs*
9. *National Housing Bank and its role in housing finance*
10. *Residential mortgage-backed securitisation*
11. *Reverse-mortgage loan*
12. *Housing-finance Industry: Issues and future outlook*

- HDFC is the market leader with 21 per cent share in the housing finance market

INTRODUCTION

Shelter being one of the three basic human needs, every human being aspires to own a home. Homes are not just houses—they are environments which project the aspirations of individual families to live a better life. An individual shares an emotional bond with his home. It gives him a sense of security and comfort. It is the possession of a home that makes an individual a good citizen and provides citizens with a stake in their society.

The UN Conference on Environment and Development, 1991, has stated that 'access to safe and healthy shelter is essential to a person's physical, psychological, social, and economic well-being, and should be a fundamental part of our urgent actions for the more than one-billion people without decent living conditions. Our objective is to achieve adequate shelter for all, especially, the deprived urban and rural poor, through an enabling approach to the development and improvement of shelter that is environmentally sound.' Yet, even today, one-sixth of the world's total population does not have a proper housing. According to the National Building Organisation (NBO), the total demand for housing is estimated at 2-million units per year and the total housing shortfall is estimated to be 26.53-million units by 2012 from the current shortage of 24.7-million units. This shortage is acute in rural areas.

In India, up to the late 1970s, housing finance was a key constraint to ownership of a house. An individual could think of owning a home only at the time of retirement, when he would receive the benefits of retirement. The concept of housing finance was pioneered by Housing Development Finance Corporation (HDFC) in October 1977. It was not only a trend-setter for housing finance in the whole Asian continent, but also built up the industry by setting rules, policies and procedures to protect the interests of the customers.

Housing finance is a business of financial intermediation wherein the money raised through various sources such as public deposits (which are subject to the regulatory stipulations of NHB), institutional borrowings (from banks), refinance from NHB and their own capital, is lent to borrowers for purchasing a house. These intermediaries lend money by accepting mortgage by deposit of title deeds of the residential property. Section 96 of the Transfer of Property Act, 1882, has put mortgage by deposit-of-title deeds on the same footing as a simple mortgage, and attracts stamp duty and also requires registration under the Registration Act,1908. If the borrower fails to pay according to the contract, the lender has the right to sell off the mortgaged property by the intervention of the court.

The prominent players in this industry continue to be housing-finance companies (HFCs) and commercial (local as well as foreign) banks. Cooperative banks and other cooperative-sector institutions have developed their own niche and have been catering to their markets, extensively.

ROLE OF HOUSING AND HOUSING FINANCE IN THE ECONOMY

Real estate forms the largest asset class of the world and is one of the largest sources of wealth for families. Real estate is defined as land, including the space above it and the ground below it, and any building or structures on it. Real estate is a vast asset class that spans direct markets, real-estate stocks, real-estate mutual funds and real-estate investment trusts. It is also the most imperfect asset as different people pay different prices for the same commodity. No two homes are alike nor are there exchanges where the prices are recorded.

Housing is an industry with tremendous potential for contributing towards the economic growth of any country.

- It is one of the top employment generators for the economy.
- It has both forward as well as backward linkages with over 250 industries, including such core industries like cement, steel, timber, ceramics, tiles, etc.
- A small initiative in housing can boost multiplier effects in the whole economy through the generation of demand.
- It is supposed to be the most-preferred investment avenue in a recession-prone economy.

The primary objective of the governments of the developed countries like the United States and the United Kingdom was developing the housing market. The financial sectors of these countries grew in consonance with the housing industry.

Housing finance acts as a catalyst for the growth of this industry. Pricing of housing loans is a crucial factor driving the growth of the business of housing finance and, thereby, the housing industry. Pricing of housing loans also set up lending-rate curve and influences the pricing of short-term loans.

The growth in the housing and housing finance activities in the recent years reflect the buoyant state of the housing-finance market in the country. The proportion of outstanding housing loans as the percentage of gross domestic product (GDP) increased from 3.4 per cent in 2001 to 8.5 per cent by 2008. This proportion is abysmal when compared to the proportion of investment in housing in the other developed and emerging economies. The proportion of investment in housing to the GDP is 54 per cent in the United States, 57 per cent in the United Kingdom, 40 per cent in the European Union, 17 per cent in Thailand, 34 per cent in Malaysia and 7 per cent in China.

In view of the rising growth in urbanisation, it is expected that the share of housing in GDP will increase. These fiscal measures and incentives have led to an increase in the demand for the housing loans, resulting in increased disbursements of housing finance by the primary lenders over the years. As a result, housing stock in the country increased from 14.8 million units in 1991 to 18.7 million units in 2001, and is expected to further go upto 26.53 million dwelling units by the end of the eleventh five year plan. The urban land stock in India, which is only 2.3 per cent of the countries total geographical area is housing 30 per cent of India's population.

- Growing levels of urbanisation, rising disposable incomes and affordable interest rates have contributed to the growth of housing finance industry

EVOLUTION OF HOUSING AND HOUSING FINANCE IN INDIA

The accessibility of housing finance for people in general has evolved, developed and improved over the years. In the early years of independent India, housing was through the self-construction route, and later on emerged the concept of housing cooperatives which encouraged group housing. Housing cooperatives have a prominent place in the cooperative movement in the country. Today, it is estimated that there are over 92,000 primary-housing cooperatives with over 6.5-million members.

Also, the government/quasi-government entities, like housing boards and development authorities, allotted land and housing sites to facilitate the development of this sector. Today, the private-sector participation in the housing projects has increased. In many cases, public–private partnerships in complex projects that take the shape of mini-cities, malls and multiplexes, information-technology parks and housing communities, specialised townships, special-economic zones and even the concept of private towns, is found.

A noteworthy change has been in the financing opportunities for housing and real estate. It was difficult for builders/developers to find financiers for funding housing and real estate. In cases where funding was possible, the developers, generally, had to be content with plain vanilla-loan structures that provided a minimal flexibility.

Today, there are a number of options to finance housing and real-estate projects through initial public offerings (IPOs), foreign-direct investment (FDI), venture capital, private equity, listings on the alternative investment market, in addition to the traditional debt-financing options.

In order to enable HFCs to finance big construction projects, they have been allowed to raise funds through foreign-currency bonds. They can mobilise resources by selling 15-year, upper-tier-II instruments, including foreign-currency bonds, which need the clearance of the Reserve Bank of India (RBI). These options would be a cheaper source option to raise capital, boost housing-finance market and help maintain regulatory stipulations. Foreign institutional investors (FIIs) can invest up to $500 million in upper-tier-II rupee-denominated bonds.

POLICY INITIATIVES AND MEASURES TO DEVELOP HOUSING SECTOR IN INDIA

Housing is regarded as a critical sector in terms of policy initiatives and interventions. This is reflected in the efforts of the government to improve housing and habitat conditions by way of financial allocations in the five-year plans and fiscal measures related to housing announced in the Union Budgets.

Some of these measures include:

Rural Housing

- Indira Awas Yojana
- Golden Jubilee Rural Housing Finance Scheme
- Bharat Nirman
- Rural Housing Fund

- The National Housing and Habitat Policy (NHHP) was formulated in 1998 and stressed on:
  - removing legal, financial and administrative barriers for facilitating access to loans, finance and technology;
  - ensuring that housing, along with supporting services, was treated as a priority and at par with the infrastructure sector;
  - creation of surpluses in housing stock;
  - providing quality and cost-effective shelters, especially, to the vulnerable groups and the poor.
- The National Urban Housing and Habitat Policy, 2007, while focusing on urban shelters, emphasised on the promotion of larger flow of funds, to meet the revenue requirements of urban housing and infrastructure using innovative tools. The Policy seeks to promote various types of public–private partnerships for realising the goal of "Affordable Housing for All".
- The Goal of the Draft "National Rural Housing & Habitat Policy" is to ensure adequate and affordable housing for all and to facilitate development of sustainable and inclusive habitats by expanding Government support, promoting community participation, self-help and public-private partnership within the framework of Panchayati Raj.
- The Golden Jubilee Rural Housing Finance Scheme (GJRHFS) was launched in the year 1997–98 to provide people living in the rural areas an improved access to housing finance. HFCs and banks have financed 24,71,454 dwelling units during the period 1997–2009.
- To improve the habitat conditions in the rural areas, construction of 60-lakh houses in rural areas under Bharat Nirman undertaken. A new scheme, Rajiv Awas Yojana (RAY), has ben announced to make the country slum free in the five year (2010–2015) period. The allocation for the Indira Awas Yojana (IAY) has been increased by 63 per cent to Rs. 8,800 crore in Budget estimates 2009–10. Indira Awaas Yojana (IAY) was launched during 1985–86 initially as a sub-scheme of Rural Landless Employment Guarantee Programme (RLEGP) and thereafter continued as a sub-scheme of Jawahar Rozgar Yojana (JRY) since its launching in April, 1989. IAY was de-linked from JRY and made an independent scheme with effect from January 1, 1996. IAY is now a cash subsidy based programme, under which assistance is provided to rural below poverty line (BPL) families for constructing dwelling units on their own using their own design and technology.
- To increase the pace of rural housing, a sum of Rs. 2,200 crore has been allocated from the shortfall in the priority sector lending of commercial banks, for Rural Housing Fund in the NHB for extending financial assistance to the weaker sections only.
- Fiscal concessions to individuals increased under Section 80C of the IT Act [rebate up to Rs. 1 lakh in respect of the repayment of principal], Section 24(2) [interest deduction up to a limit of Rs. 1.50 lakhs, in respect of properties acquired or constructed with the borrowed capital and self occupied.
- Increase in the rebate on the repayment of principal under Section 88 to 30 per cent in certain cases.
- Deduction in respect of rental income from property allowable to an extent of 30 per cent of its annual value.
- Clearance under Section 230(A) of the Income Tax Act, 1961, for sale of property is no longer required.
- NHB and Housing and Urban Development Corporation Limited have been allowed to issue tax-free bonds.
- No specific permission is required for transfer of property.
- NHB is in the process of operationalising foreclosure of mortgages.
- NHB to launch Mortgage Credit Guarantee Scheme.
- RBI has reduced the risk weights on investments made by banks in mortgage-backed securities (MBSs) to 50 per cent.
- NHB has reduced the risk weights on individual housing loans to 75 per cent.
- The definition of 'securities' amended under the Securities Contract (Regulation) Act,1956, to include Mortgage Backed Securities (MBS) as 'securities' tradable, in the capital market.
- To strengthen the recovery mechanism, Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act), was enacted and Housing-finance Institutions (HFIs) included in the eligible list of institutions.

- FDIs allowed up to 100 per cent under the automatic route in townships, housing, built-up infrastructure and construction-development projects, to catalyze investment in a vital infrastructural sector of the economy.
- Housing loans up to Rs. 20 lakhs to individuals for purchase/construction of one dwelling unit per family (excluding loans granted by banks to their own employees) and loans given for repairs to the damaged dwelling units of families up to Rs. 1 lakh in rural and semi-urban areas and up to Rs. 2 lakhs in urban and metropolitan areas, brought under priority-sector lending of banks. Further, in order to give a boost to the secondary-mortgage market, investments by banks in the MBS have been classified as direct lending to housing, within priority-sector lending, subject to certain conditions.
- The RBI has allowed mortgage-guarantee company to commence the business of providing mortgage guarantee in India after (a) obtaining a certificate of registration from the RBI and (b) having a net-owned fund of one-hundred-crore rupees or such other higher amount, as the RBI may, by notification, specify. The mortgage-guarantee company shall be under the regulatory and supervisory jurisdiction of the RBI. However, mortgage-guarantee companies cannot accept public deposits. They can also not avail external commercial borrowings.

HOUSING-FINANCE INSTITUTIONS (HFIs)

There are different types of institutions which cater to the need of long-term finance, for housing in urban and rural areas. They are:

Scheduled Commercial Banks (SCBs)

These banks have floated housing-finance arms to avail the National Housing Bank's refinance facilities and the tax concessions available to HFCs. Both public and private sector as well as the foreign banks' large network and access to the low-cost retail deposits have helped them to offer home-loan products at competitive rates, giving a stiff competition to the housing-finance business by the HFCs. Housing loans enjoy the largest share of 50 per cent in the retail-loan portfolio of the banks. Banks have to earmark 3 per cent of incremental deposits to finance housing activities, and this financing becomes a part of the 40 per cent priority-sector lending. Moreover, security, by way of mortgage of property and robust demand, has been a major consideration for banks to lend to this sector.

- Banks and HFCs are major players in the housing finance industry

Scheduled Cooperative Banks

They include scheduled state-cooperative banks, scheduled district-cooperative banks and scheduled urban-cooperative banks. These banks are connected with the semi-urban and rural areas. Scheduled state-cooperative banks give housing loans either directly or through the district central-cooperative banks/primary, agricultural credit societies. These banks are eligible for availing the refinance facility from NHB.

Regional Rural Banks (RRBs)

They were set up to develop the rural economy by providing credit and other facilities, particularly to the small and marginal farmers, agricultural labourers, artisans and small entrepreneurs. They lend housing loans in rural areas and are refinanced by NHB.

Agriculture and Rural Development Banks (ARDBs)

Keeping in view the housing shortage in rural areas, a few state governments permitted them to lend for housing. They do not fall under the category of either the SCBs or the specialised HFIs. The NHB has formulated a scheme to subscribe to special rural-housing debentures floated by ARDBs, backed by the mortgages originated by them, in order to extend financial assistance to this category of institutions.

Housing-finance Companies (HFCs)

A housing-finance company (HFC) is a company which mainly carries on the business of housing finance or has one of its main object clauses in the Memorandum of Association, of carrying on the business of providing finance for the housing. A HFC is required to have certificate of registration from NHB, a minimum net-owned funds of Rs. 200 lakhs. About 43 HFCs have been granted certificate of registration under Section 29A of the NHB Act, 1987. Of 43 HFCs, only 20 can accept public deposits. They are:

Cent Bank Home Finance Limited, Can Fin Homes Limited, Deutsche Post Bank Home Finance Limited, Dewan Housing Finance Corporation Limited, DHFL Vysya Housing Finance Limited, GIC Housing Finance Limited, GRUH Finance Limited, Housing and Urban Development Corporation Limited, HDFC Limited, ICICI Home Finance Company Limited, IDBI Home Finance Limited, Ind Bank Housing Limited, LIC Housing Finance Limited, Manipal Housing Finance Syndicate Limited, National Trust Housing Finance Limited, PNB Housing Finance Limited, REPCO Housing Finance Limited, Sundaram BNP Paribas Home Finance Limited, Vishwakriya Housing Finance Limited and AIG Home Finance Limited.

The housing-finance industry is capital-intensive in nature, coupled with long payback period which discouraged many banks from entering into this sector. Looking to the potentiality of this untapped sector, many HFCs forayed into this sector.

HFCs are regulated and supervised by National Housing Banks (NHB).

The National Cooperative Housing Federation of India (NCHF)

- The outstanding housing loan portfolio of banks and HFCs was around Rs. 4500 billion as of December 31, 2009

It is an apex organisation for coordinating, guiding and promoting cooperative housing activities in the country. The cooperative housing structure consists of primary housing cooperatives at the grass-root level and apex-cooperative, housing-finance societies (ACHFS) at the state level. ACHFS at the state level are affiliated to NCHF, which looks after their growth strategies, policy formulations and evolving housing programmes, besides interfacing with various institutions to channel finances for these societies, for onward lending to the ultimate borrowers. In addition, NCHF also helps the ACHFS in improving their financial, organisational and technical capabilities.

Apex-cooperative Housing-finance Societies (ACHFS)

The primary housing cooperatives are functioning all over the country with a membership of over 6.5 million. These ACHFS represent about 92,000 housing cooperatives all over the country, out of which, about 31,000 housing cooperatives are affiliated to state-level ACHFS for getting financial assistance. The rest of the cooperatives are (i) those that get finances from other sources, (ii) those that have not yet started construction activities and (iii) those that have repaid their loans fully.

TYPES OF HOUSING LOANS

The following types of home loans are generally available in the market:

1. **Home-equity loans:** A form of finance to the customer by way of mortgage of existing property to the financier for taking a loan for some other purpose. The current market value of the property is the basis for providing home-equity loans.
2. **Home-extension loans:** The purpose of this loan is the extension of existing houses like addition of rooms, toilet facilities and so on. Such loans fall under the category of home loans.
3. **Home-improvement loans:** These loans are provided mainly for repairs and maintenance of existing houses. These could include internal and external repairing, waterproofing and roofing, complete interior renovation, tiling and flooring and so on.
4. **Home-purchase loans:** Finance provided for the purchase of ready-made houses.
5. **Land-purchase loans:** These loans are being provided for the purchase of land for the purpose of construction of residential houses. Finance to public and private builders to increase the supply of land suitable for building houses.
6. **Home loans to self-help groups (SHGs)/Micro-finance institutions (MFIs):** To achieve the objective of inclusive growth, HFIs now finance self-help groups (SHGs) and micro-finance institutions (MFIs). Generally, the individual housing loans of a house is priced lower as compared to the loan to builders or corporate/s for project finance.
7. **Loan to NRIs:** This loan is sanctioned to NRI wishing to build or buy a home in India in accordance with the guidelines issued by the RBI.

The loan amount generally depends on:

1. the period for which the loan is needed,
2. the repayment capacity of the borrower,
3. the estimated value of property and
4. clear title deeds of the borrower.

The rate of interest on these loans depends on a number of factors, such as the tenure of the loan, loan amount, purpose of loan, repayment capacity of borrowers and the cost of the fund of the financier. Two types of interest rates (i) floating [Adjustable Rate Mortgage (ARM)] and (ii) fixed rates are offered to home-loan borrowers. Under fixed home loan rates, a reset clause is inserted which gives a right to the HFI to increase the rate of interest after the prescribed interval.

The repayment of the loan is generally done through the equated monthly instalment (EMI) method. In case of borrowers expecting a reasonable growth in their future income, instalments may be on a graduated basis.

- EMI is the amount payable to the HFI every month, till the loan is paid back in full. It consists of interest due as well a portion repayable towards the principal. The interest on home loans is usually calculated on monthly reducing balance

The effective home loan rate is around 2–3 per cent lower than its prime lending rate (PLR). The bank's PLR is dependent on its cost of funds. If the cost of funds for a bank increases, it hikes its PLR, which, in turn, leads to a rise in home-loan rates. A bank/HFC resets the floating rates once in every quarter. In the past few years, there was a huge demand for home loans when home loans fell to 7.5 per cent.

The banks and the HFCs also levy a fee for processing the application and the fee varies from 0.5 per cent to 1 per cent of the loan amount. In addition, they also charge an administrative fee of 1 per cent of the loan amount.

RISK MANAGEMENT BY HFCs

HFCs have to manage various risks associated with the mortgage business. These risks include credit risk, liquidity risk, foreign-exchange risk and interest-rate risk.

HFCs manage credit risk through stringent credit norms. Liquidity risk and interest-rate risks arising out of maturity mismatch of assets and liabilities, are managed through regular monitoring of the maturity profiles. They also enter into interest-rate swaps wherein the fixed-rate rupee liabilities for varying maturities of a notional amount are converted into floating-rate liabilities linked to various benchmarks. The currency risk on the borrowings is hedged through a combination of dollar-denominated assets, long-term forward contracts, principal-only swaps (POS), full-currency swaps and currency options.

Longer tenure of housing loans poses a significant challenge of asset–liability mismatch for banks, as they finance these long-term loans' average tenure of 15 years with deposits' average tenure of 2 years. The level of NPAs in the housing-loan segment is around 4 per cent. As Indians share an emotional bond with their house and have a high stake in their own house, they are less likely to default in case of a housing loan among all their liabilities. Defaults in the housing-loan segment occur when the borrower reaches a point of indifference due to changes in the external environment. HDFC has the lowest bad loans in the housing sector, not just in India, but perhaps in the world itself on the whole. Since inception, the corporation has lent around Rs. 1,52,000 crores towards housing loans. Of which, it had only Rs. 66 crores of loan losses.

MARKETING STRATEGIES OF HFCs

Housing finance is an attractive business on account of acute shortage of housing units, increased urbanisation, higher levels of disposable incomes, fiscal incentives and rise in property prices. The sector offers safe and secure residential assets, good business opportunities for the lending agencies and attractive terms for the borrowers making it a buyers' market.

With a growing number of players and increased competition, the housing sector has become increasingly market-driven.

- Marketing approaches now take into account the changing preferences of the customer, who is more aware of what he wants and the choices available to him.
- Positioned themselves not just as a company providing finance to customers but a company that also provides loan counselling, technical and legal assistance and other property-related solutions.
- Build up credit-appraisal skills and trained their personnel to become customer focussed.
- Using mobile telephony to communicate with new and existing customers.
- Cross-selling of financial products and services.
- Expanding network of offices.
- Organising property fairs in different parts of the country.
- Appointing direct-selling agents to cater to customers who prefer door service.
- Designing and developing web sites as a marketing tool, especially for attracting non-resident Indian customers.

NATIONAL HOUSING BANK

It is the apex-level financial institution for the housing sector. The National Housing Bank (NHB) is a wholly owned subsidiary of the RBI and the regulator of non-banking HFCs. The NHB was established on July 9, 1988, under an Act of the Parliament, namely, the National Housing Bank Act, 1987, to function as a principal agency to promote HFIs and to provide financial and other support to such institutions. The Act, inter alia, empowers NHB to:

- Issue directions to HFIs to ensure their growth on sound lines,
- Make loans and advances and render any other form of financial assistance to scheduled banks and HFIs or to any authority established by or under any Central, State or Provincial Act and engaged in slum improvement and
- Formulate schemes for the purpose of mobilisation of resources and extension of credit for housing.

Role of NHB in Housing Finance

(i) Promotion and development of HFIs: NHB frames, reviews and modifies guidelines for HFCs for their healthy and sound growth. All HFCs, registered with NHB, under Section 29A of the National Housing Bank Act, 1987, and scheduled commercial/cooperative banks, are eligible for refinance support, subject to terms and conditions as laid down under the respective refinance schemes. It extends guarantee to bonds/debentures floated by HFCs meeting certain laid-down criteria. It also extends equity support to HFCs. NHB's participation in equity is at par and restricted to 25 per cent of the paid-up capital of the HFC. However, where the HFC is permitted with the main object of catering to the home-loan requirements of economically weak sector/low-income group/rural segments of the society, NHB's participation can be up to 50 per cent of the paid-up capital. In the case of rights issue, NHB can subscribe at a premium. NHB has equity participation in three HFCs, namely, GRUH Finance Limited, Cent Bank Home Finance Limited and Mahindra Rural Housing Finance Limited.

(ii) Regulation and supervision of HFCs: NHB regulates the housing-finance sector under the regulatory provisions of the National Housing Bank Act, 1987, to prevent the affairs of any HFI being conducted in a manner detrimental to the interest of the depositors or in a manner prejudicial to the interest of the HFIs. For this, it has been empowered to determine the policy and give directions to the HFIs and their auditors. It has issued the Housing Finance Companies (NHB) Directions, 2001, as also Guidelines for Asset Liability Management System in HFCs. These are periodically updated through issue of circulars and notifications. All HFCs have to register themselves, under Section 29A of the National Housing Bank Act, 1987, with NHB. It regulates the deposit-acceptance activities of HFCs and also issues prudential norms relating to capital adequacy, asset classification, income recognition and provisioning for bad and doubtful debts. It also supervises the sector through a system of on- and off-site surveillance. It has also developed a model code of conduct for HFIs and ensures that they are adopted and followed.

(iii) Refinancing: HFIs provide finance to individual borrowers, builders, corporate houses, and so on, for purchase/construction of houses and for repair/upgradation of the existing house. With the objective of providing long-term funds to these institutions, NHB extends refinance in respect of the loans extended by them. It provides refinance to retail-lending institutions such as RRBs, scheduled state-cooperative banks, specialised HFIs, ACHFS and rural-development banks. Refinance for rural housing is provided at a concessional rate of 8 per cent per annum for 7 years. NHB introduced a new refinance scheme for construction finance for affordable housing with special focus on Tier II and Tier III cities. Slum redevelopment in metros is also covered under this scheme.

(iv) Project lending: It provides financial assistance for project lending to a range of borrowers both in the public/state housing boards, state slum-clearance boards, development authorities, municipal corporations, new town-development agencies, local authorities for housing and urban development, public-sector companies for employee housing projects, and private sector agencies such as reputed developers/builders/MFIs/SHGs/NGOs/Societies registered under the Societies Act, 1860. The extent of financing varies between 65 per cent and 100 per cent of the project cost for a maximum period of 15 years.

- Secondary mortgage market involves conversion of mortgages into tradable financial instruments which are then sold to prospective investors

(v) Development of a secondary mortgage market: It supports the securitisation of mortgage loans of retail-lending institutions and has taken an initiative to develop secondary mortgage market in India. Moreover, in order to protect lenders against default, it has been entrusted with the responsibility of launching a mortgage credit-guarantee scheme.

Various Initiatives Undertaken by NHB for the Development of Housing in India

Banks and HFCs seek funds from NHB for reasons such as meeting their short-term needs and balancing their assets and liabilities. NHB taps public funds by launching fixed-deposit programmes to diversify its resource base. In the Indian market, the finance minister in the Union Budget 2008–09, has allocated a fund of Rs. 1,200 crores in NHB, to enhance its refinance operations in the rural-housing sector.

NHB is working in close cooperation with banks, non-government organisations and MFIs to create a 'refinance window' to direct the fund flow. It is also considering setting up a separate mortgage-guarantee company that would address the issue of loan defaults. Mortgage guarantee or insurance is a key component of a well-functioning mortgage-finance system. It provides market-based default-risk protection to lenders. This would enhance the flow of housing finance, particularly to lower income groups, and thereby, help banks and HFCs to lower their risk. It is introducing this product by setting up a separate joint-venture company.

NHB is working with the government to set up a national mortgage depository, wherein loans taken against houses would be electronically linked to the property registrar. This would have the potential to become a part of the e-governance programme of the governments.

It has launched a residential-property index, NHB RESIDEX, which is India's first official-property index, for five cities—Bangaluru, Delhi, Bhopal, Kolkata and Mumbai, covering the period 2001–05. It has since been updated to December 2009 and has been expanded to ten more cities, viz, Ahmedabad, Faridabad, Chennai, Kochi, Hyderabad, Jaipur, Patna, Lucknow, Pune and Surat. It is the first housing-price index in India to fill price-information gap and streamline the property-development process in major cities. This would be released every 6 months and give a somewhat fair indication of the price movements in that city. NHB residex can be used to assess the movement in the value of housing stock over a period of time and also to assess the gap found between the actual and reported market prices of real estate in different locations. State government and local administration can use the indices in formulating policies on various legal issues related to property tax, property evaluation and so on. Similarly, the NHB residex can be used by housing-finance industry to mark out areas where the demand for housing finance is more likely to increase. Builders and real-estate developers too can use the index for the same purposes. The index would be useful for investors, banks and others for their 'collaterals.' In 2 years, the index would cover 63 cities and all cities with population above 10 lakhs.

NHB is also planning to launch an interactive portal for consumers that would provide assorted info on the property market. The Golden Jubilee Rural Housing Finance Scheme (GJRHFS) was launched in the year 1997–98 with a view to provide improved access to housing finance to people living in rural areas. The Scheme provides for construction of a new dwelling unit or upgradation of the existing one. The Scheme is implemented through various primarly lending institutions (PLIs), namely, HFCs, public-sector banks (PSBs) and cooperative-sector institutions. NHB is the monitoring agency, and fixes annual targets to each PLI.

The RBI extended a refinance facility of Rs. 4,000 crores to NHB, which will be on-lent by NHB to HFCs. This amount will be available only for loans below Rs. 20 lakhs at an interest rate of 8 per cent upto March 31, 2010.

NHB has launched home loan counselling programme which can be provided by independent mortgage counselors.

Prudential Norms for the Housing-finance Sector

The number of players in the housing sector has increased in the past few years as the demand for housing far exceeds the supply. This has led to an increase in the competition whereby all the players are trying to increase the slice of the cake.

In order to ensure a stability in the sector, prudential norms have been provided by the regulator. Stipulations regarding income recognition, asset classification, capital adequacy and credit concentration have been specified from time to time, depending on the industry requirements. The regulatory norms stipulate a 10 per cent capital adequacy for banks, whereas the same is 12 per cent for HFCs.

In case of housing loans extended by HFCs and SCBs, the NPA classification norm was changed from 180 days to 90 days past due. During the year 2008–09, the risk weightages for housing loans granted by the HFCs were modified and linked to loan to value (LTV) Ratios. Mortgage loans upto Rs. 30 lakh having LTV = or <75 per cent would attract risk weight of 50 per cent while mortgage loan above Rs. 30 lakh would attract risk weight of 75 per cent.

RESIDENTIAL MORTGAGE-BACKED SECURITISATION

NHB launched the pilot issues of MBSs in August 2000. The primary lenders create mortgages against loans provided by them to the purchasers of houses. The mortgages held as assets generate cash flows represented by repayment of both principal as well as interest on the loans. The secondary mortgage market involves the conversion of mortgages into financial instruments and the sale of these instruments to prospective investors. The cash flows which come as repayments from the borrowers to the originators, are transferred to a third party with simultaneous transfer of assets to an intermediary agency known as special-purpose vehicle (SPV) designated for the purpose of managing the bought-over pool of mortgages.

The securitisation process of MBSs is as follows:

1. Assignment of retail-housing loans along with the underlying mortgages from the HFCs to NHB.
2. The loans, repayable in EMIs, are packaged and offered to investors as pass-through certificates (PTCs) by NHB, acting as an issuer and trustee. The housing loans, which constitute the receivables to be securitised, are held by NHB–SPV Trust set up by NHB. The PTCs are in the nature of trust certificates and represent a proportionate, undivided beneficial interest in the pool of housing loans. They are tradable securities without any recourse to the originator or the SPV. NHB issues Class-A and Class-B PTCs. Class-A PTCs are allotted to investors and Class-B PTCs are subscribed entirely by the originators. Class-B PTCs are subordinated to Class-A PTCs and act as a credit enhancement for Class-A PTC holders. Credit enhancement is an additional credit support and may be provided in various forms, such as setting aside a cash pool, limited corporate guarantee and third-party guarantee.
3. Issue opens and NHB receives application money.
4. Issue closes and NHB, and the issue arrangers finalise the allotment and issue-allotment letter to investors.

Benefits of Securitisation

1. Improves capital-adequacy ratio through transfer of risky weighted assets.
2. Helps develop a long-term debt market in India.
3. Aids asset–liability management through deployment of long-term funds in the housing sector.
4. Enables a better-spread management and facilitates improvement of returns on assets and equity.
5. A new source of fee-based income.
6. Offers a viable and sustainable, market-oriented, fund-raising mechanism with the potential of integrating housing market with the domestic as well as international capital markets. In the past few years, the housing-finance industry has integrated, in some measure, with the capital market, through the securitisation route. This integration has established functional links between savers, home-loan borrowers, financiers and capital-market investors.

This market has a huge growth potential to serve as an important funding source for the housing sector.

Box 21.1 The US Sub-prime Mortgage Crisis

The sub-prime mortgage crisis began in the United States in August 2007 and its repercussions were on the world economy. Let us understand what a sub-prime mortgage is.

There are four types of mortgages in the United States: Jumbo, Prime, Near-prime and Sub-prime. Jumbo loans are prime quality loans which exceed the $417,000 ceiling for mortgages that can be bought and guaranteed by government-sponsored enterprises (GSEs). Prime mortgages are the traditional type of loans to borrowers with good credit worthiness and full documentation of income. Near-prime are smaller than jumbo but do not qualify as prime as these borrowers are not able to fully document their income or provide traditional down payments. Sub-prime mortgages are loans to higher risk borrowers with lower income or poor-credit histories and weak documentation of income.

In the United States, there are two major mortgage companies—Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation),which own or guarantee roughly half of the country's $12 trillion in the outstanding mortgage. The two companies were set up by the federal law as GSEs that operate as private companies with profits and stockholders. They encourage home-ownership by buying mortgages from banks. This frees cash for the banks so that they can make new loans. Some of the mortgages are held by them in their own portfolio and the rest are sold by packaging them as bonds and other securities known as 'residential MBS' (RMBS). These GSEs had not packaged many non-prime mortgages into RMBS.

Some 80 per cent of outstanding the US mortgages are prime, while 14 per cent are sub-prime and 6 per cent fall into the near-prime category. Sub- and near-prime loans shot up from 9 per cent of newly originated securitised mortgages in 2001 to 40 per cent in 2006. Easing of lending standards such as lower-average down payments and no requirement of full documentation of income, coupled with a sizeable rise in adjustable-rate mortgages (ARMs), facilitated the growth of sub-prime mortgages. An ARM is a mortgage loan where the interest rate on the mortgage loan is linked to an index. The interest rate is adjusted if there is a change in the index.

An increase in the housing loans required banks to back the risk in lending by bringing in an additional capital. Instead of bringing in the additional capital, banks started selling these loans as collateralised debt obligations (CDOs). A CDO, essentially, is a repacking of mortgage loans into marketable securities. The housing loans are categorised into pools with different risks and return characteristics. These pools known as CDOs are rated by credit-rating agencies on the basis of their past repayment history and the value of the underlying mortgaged property. Sometimes, new attributes such as credit enhancement and credit insurance are added to the pool of housing loans to make them more marketable. Credit enhancer, who, usually, is the originator, credit insurer and who guarantees payment on bonds, share the risk with the investors. The CDOs are sold to investors such as mutual funds, insurance companies and hedge

(*Continued*)

Box 21.1 (*Continued*)

funds at a yield, lesser than the contracted yield, with the individual mortgages, thus yielding cash flows and profits. The yields vary with the grade assigned by the credit-rating agency and the risk appetite of the investors.

The increase in the sub-prime borrowing, coupled with low-interest rates, led to an increase in the home-ownership rates and the demand for housing. The overall US home-ownership rate increased from 63.8 per cent in 1994 to a peak of 69.2 per cent in 2004. This demand helped to fuel housing price increases and consumer spending. American home prices increased by 124 per cent between 1997 and 2006.

However, with the increase in the interest rates from June 2004 onwards, the sales of the existing and new homes started declining from 2006 onwards. This excess supply of houses led to a significant decline in the house prices, which, in turn, increased defaults and foreclosures. With lenders tightening the credit standards and credit-rating agencies downgrading many sub-prime MBSs, these securities turned illiquid due to lack of sufficient trading volume. However, the trigger for deterioration in the credit market was provided by the news that two of Bear Stearns hedge funds, that had sub-prime exposure, had suffered heavy losses and had even almost lost their capital. The uncertainty over the financial-system exposures spread to banks and hedge funds outside the United States and also spilled over into short-term money markets, causing steep increases in the overnight interest rates in major economies in August 2007. Bear Stearns, on the point of bankruptcy, was sold to JP Morgan Chase in March 2008. Adverse news from the United States' housing sector aggravated the concerns of further weakening of the US economy. The housing downturn was so steep that the two mortgage giants—Fannie Mae and Freddie Mac saw increasing delinquencies on their conventional portfolio and were exposed to investor flight from financial assets. They could not meet their obligations and were taken over by the US government on September 7, 2008. The American International Group (AIG), once the world's biggest insurer, had to be bailed out by the US government in September 2008. AIG ran into a crash crunch, and rating declines required it to post large amount of collateral to counter-parties of credit-default swaps by a financial product unit. Hence, the US government had to pump cash into AIG to avoid a threat to the trading partners from a collapse. On November 10, 2008, the US Treasuries purchased $40 billion AIG shares. On September 13, 2008, Lehman Brothers, the oldest investment bank of the United States, filed for bankruptcy. Merill Lynch, a mortgage company, reported a loss of US$71 billion, and was merged with Bank of America. Several investment banks were allowed to convert to bank-holding companies and access the repo window. Another country which was hard hit by this crisis was the United Kingdom. The Royal Bank of Scotland reported the largest-ever British corporate loss in 2008. The UK government also bailed out its financial institutions through a variety of means.

According to the IMF's staff estimates, potential losses to banks from exposure to the US sub-prime mortgage market and from related structured securities, as well as losses on other US credit classes such as consumer and corporate loans, could be of the order of US$440 to US$510 billion out of the total potential losses of US$945 billion. The sub-prime crisis developed into the largest financial shock since the Great Depression, inflicting a heavy damage on markets and institutions, at the core of the financial system. Global financial markets lost $50 trillion assets in 2008.

The Indian housing-finance sector remained insulated from the sub-prime crisis, owing to various factors, such as:

- First, the housing-finance products in India are plain-vanilla home loans as against complex home-loan products marketed in the United States. The actual equity component in housing is much higher than in the West.
- Secondly, the financial institutions have a limited exposure to highly leveraged structured products.
- Thirdly, pre-emptive and timely measures were taken by the regulators, such as increasing risk weights and provisioning requirements to prevent the formation of property and asset bubbles.
- Further, Indians are disinclined towards debt and, therefore, prefer to repay their loans as soon as they can.

REVERSE-MORTGAGE LOAN (RML)

The proportion of senior citizens to total population is increasing not only in India but world over. While on the one hand, there is a significant increase in longevity, on the other hand, the cost of good health-care facilities is spiralling, and there is little social security. Senior citizens need a regular cash-flow stream for supplementing pension/other income and meeting their social and financial needs. There has been an increase in the residential-house prices in the past few years, which have created considerable 'home-equity wealth.' For most senior citizens, the house is the largest component of their wealth.

- RML enables senior citizens (over 60 years) to mortgage their home with a HFI and convert home equity into tax-free income without having to sell the house.

Reverse mortgage seeks to monetise the house as an asset and, specifically, the owner's equity in the house. It is a mortgage loan for senior citizens (over 60 years), who generally are not eligible for any form of mortgage loan. The loan is given on single or on joint basis with the spouse, even if one of the spouses is below 60 years. Reverse mortgage is a loan that allows senior citizens to convert home equity into cash, without leaving their homes and without making monthly-mortgage payments.

- The borrower mortgages the house property to a lender, who then makes periodic payments to the borrower during the latter's lifetime, that is, the payment stream is reversed as compared to the conventional mortgage.
- The borrower is not required to service the loan during his lifetime, that is, he does not make a payment of instalment or interest so long, till he is alive and in occupation of the property.
- The loan will be repaid on the death of the borrower and the spouse (usually, a co-obligant) or on permanent movement through sale of property.

- After adjusting the principal amount of the loan and the accumulated interest, the surplus will go to the estate of the deceased. The borrower(s)/heir(s) can also repay or prepay the loan, with accumulated interest, and have the mortgage released without resorting to sale of the property.
- The loan can be prepaid together with accumulated interest at any point in time without any prepayment charges. The maximum period of loan will be 15 years. In cases where the borrower lives longer than 15 years, the payments will not be made by the lender. Borrower will be responsible for paying property tax, house-insurance premium and so on.

Benefits of RML

- It enables senior/elderly citizens owning a house but having inadequate income to meet their needs such as renovation/repairs/hospitalisation, etc.
- Borrower owns and occupies the house till demise or changes residence. Even after demise, the spouse can continue to stay until demise.
- The monthly receipts will not be taxed in the hands of the senior citizens. Reverse-mortgage payments will be considered as a loan and not as an income for tax calculations, as there is no transfer of capital asset. It will not attract capital-gain tax also. But the interest income in the books of the banks will be taxed on accrual basis.
- It unlocks the liquidity potential of an immovable asset.

NHB issued **operational guidelines** for this new product on May 31, 2007, which are given as follows:

1. RMLs are to be extended by PLIs, namely, scheduled banks and HFCs that are registered with NHB. The PLIs reserve their discretion to offer RMLs. Prospective borrowers are advised to consult PLIs regarding the detailed terms of RML, as may be applicable to them.

2. Eligible Borrowers

- Should be a senior citizen of India above 60 years of age.
- Married couples will be eligible as joint borrowers for financial assistance. In such a case, the age criteria for the couple would be at the discretion of the PLI, subject to at least one of them being above 60 years of age. PLIs may put in place suitable safeguards keeping into view the inherent longevity risk.
- Should be the owner of a self-acquired, self-occupied residential property (house or flat) located in India, with a clear title indicating the prospective borrower's ownership of the property.
- The residential property should be free from any encumbrances.
- The residual life of the property should be at least 20 years.
- The prospective borrowers should use that residential property as a permanent primary residence. For the purpose of determining that the residential property is the permanent primary residence of the borrower, the PLIs may rely on a documentary evidence, other sources supplemented by physical inspections.

3. Determination of an Eligible Amount of Loan

- The amount of loan will depend on the market value of the residential property, as assessed by the PLI, age of borrower(s) and the prevalent interest rate.
- The table given hereunder may serve as an indicative guide for determining the loan eligibility:

Age	*Loan as Proportion of Assessed Value of Property*
60–65	40%
66–70	50%
71–75	55%
Above 75	60%

- The above table is indicative, and the PLIs will have the discretion to determine the eligible quantum of loan reckoning the 'no negative-equity guarantee' being provided by the PLI. The methodology adopted for determining the quantum of loan, including the detailed tables of calculations, the rate of interest and assumptions (if any), shall be clearly disclosed to the borrower.
- The PLI may consider ensuring that the equity of the borrower in the residential property (equity–value ratio [EVR]) does not at any time, during the tenor of the loan, fall below 10 per cent.

- The PLIs will need to re-value the property mortgaged to them at intervals that may be fixed by the PLI, depending upon the location of the property, its physical state and so on. Such revaluation may be done **at least once every 5 years**, the quantum of loan may undergo revisions based on such re-valuation of property, at the discretion of the lender.

4. Nature of Payment Any or a combination of the following:

- Periodic payments (monthly, quarterly, half-yearly, annual) to be decided mutually between the PLI and the borrower upfront.
- Lump-sum payments in one or more tranches.
- Committed line of credit, with an availability period agreed upon mutually, to be drawn down by the borrower.

Lump-sum payments may be made conditional and limited to special requirements such as medical exigencies, home improvement, maintenance, upgradation, renovation, extension of residential property and so on. The PLIs may be selective in considering the lump-sum payment option and may frame their internal-policy guidelines, particularly, the eligibility and end-use criteria. However, these conditions shall be fully disclosed to potential borrowers upfront.

It is important that the nature of payments be decided in advance as part of the RML covenants. PLI, at their discretion, may consider providing for options to the borrower, to change.

The stream of income received by the senior citizen under RML would not be income as they are in the nature of capital receipt.

5. Eligible End-use of Funds The loan amount can be used for the following purposes:

- Upgradation, renovation and extension of residential property.
- For uses associated with home improvement and maintenance/insurance of residential property.
- Medical and emergency expenditure for the maintenance of family.
- For supplementing pension/other income.
- Repayment of an existing loan taken for the residential property to be mortgaged.
- Meeting any other genuine need.

Use of RML for speculative, trading and business purposes shall not be permitted

6. Period of Loan Maximum 15 years.

7. Interest Rate The interest rate (including the periodic rest) to be charged on the RML, to be extended to the borrower(s), may be fixed by PLI in the usual manner based on risk perception, the loan-pricing policy and so on, and specified to the prospective borrowers. Fixed- and floating-rate of interest may be offered by the PLIs, subject to disclosure of the terms and conditions in a transparent manner, upfront to the borrower.

8. Security

- The RML shall be secured by way of mortgage of residential property, in a suitable form, in favour of PLI.
- Commercial property will not be eligible for RML.

9. Foreclosure

- The loan shall be liable for foreclosure due to occurrence of the following events of default.
  - If the borrower has not stayed in the property for a continuous period of 1 year.
  - If the borrower(s) fail(s) to pay the property taxes or maintain and repair the residential property or fail(s) to keep the home insured, the PLI reserves the right to insist on the repayment of loan, by bringing the residential property to sale and utilising the sale proceeds to meet the outstanding balance of principal and interest.
  - If the borrower(s) declare himself/herself/themselves bankrupt.
  - If the residential property, so mortgaged to the PLI, is donated or abandoned by the borrower(s).

- If the borrower(s) effect changes in the residential property that affect the security of the loan for the lender. For example: renting out a part or all of the house; adding a new owner to the house's title; changing the house's zoning classification; or creating further encumbrance on the property, either by taking out a new debt against the residential property or alienating the interest by way of a gift or will.
- Due to perpetration of fraud or misrepresentation by the borrower(s).
- If the government under statutory provisions, seeks to acquiring the residential property for public use.
- If the government condemns the residential property (e.g., for health or safety reasons).

NHB has asked insurance companies to bring in an annuity-based product which could be combined with the reverse-mortgage scheme of banks, so that the senior citizen continues to receive monthly payments, even after the tenure of the scheme is over. For example, suppose a senior citizen buys reverse mortgage when he is 60 years old. The bank agrees to pay him a fixed monthly sum for, say, 20 years. If the man dies after 15 years, the bank sells the house and collects its dues out of the proceeds and pays any surplus to the heir. But if the man lives on, the monthly payments stop when he is 80, but what will the 80-year-old man do if his monthly income stops? It is here that NHB wants insurance companies to step in. The insurance company could be paid a premium by the bank for an annuity fund.

The reverse-mortgage product, meant exclusively for senior citizens, is new in India. Banks began offering it about a year ago, but so far only about 1,100 senior citizens have availed themselves of the scheme.

NHB is planning to tie up life insurance with reverse mortgage for developing a Reverse-mortgage Life-time Annuity Product. This product enables the senior citizens to receive a monthly annuity for life, unlike the reverse mortgage which is available for 20 years only.

HOUSING-FINANCE INDUSTRY: ISSUES AND FUTURE OUTLOOK

The housing-finance industry recorded a compounded annual growth rate (CAGR) of 38 per cent over the last 6 years (2000–01 to 2007–08), due to a decline in the interest rates, the high loan to value ratio and the rising income levels. Housing loans, as a percentage of the GDP, increased from 6 per cent in 2005–06 to 8.5 per cent in 2007–08. The growth in the housing-loan industry has slowed down from 25 per cent in 2006–07 to 12 per cent in 2007–08, as property prices and interest rates have moved up while increase in the income levels have failed to match the property-price increase. Banks have gone slow on home loans as the demand for corporate loans has more than doubled in the past few years. Mortgage penetration is an abysmally low 8.5 per cent of GDP, which indicates that there is a huge potentiality of growth of this sector.

There are some key issues which need the attention of the regulator. They are:

1. There are varying standards and practices among the HFIs, be it in origination and documentation or monitoring and supervision which impose systemic risks that can be a potential threat to the sector. Thus, there is a felt need for standardisation and uniformity in practices, in order to improve transparency in the market and bring a greater efficiency. This will require improvements in every aspect of housing—regulations, technology, products and investments.
2. High stamp duties on transfer of property, highly distorted land policies (the basic ingredient for good housing) and high taxes on building materials inhibit the growth of housing. There is a need to rationalise these duties and taxes. The central government and some states such as Karnataka, Gujarat and Punjab abolished the Urban Land Ceiling & Regulation Act (ULCRA). Repealing ULCRA in all states will help the real-estate business to grow.
3. There is a lot of migration from rural areas to cities. According to a recent UN report, 900 million people in India will be living in urban areas in another four decades—a three-fold increase from the present 300 million urban dwellers. Cities are collapsing with little or no infrastructure, which, in turn, is a result of absence of urban planning. Infrastructure and housing capacities need to be expanded, especially. According to a World Bank estimate, India needs to invest an additional 3–4 per cent of its GDP on infrastructure to sustain its current levels of growth and to spread the benefits of growth more widely.
4. HFIs prefer to finance the salaried class as they have a steady flow of income. It is difficult for the self-employed and those at the bottom of the pyramid to get housing loans, as it is hard to estimate their income. This needs to be corrected by ensuring that all individuals have an access to housing and housing finance.

There is acute housing shortage in the country, and to increase home ownership in India should be the mission of the government and the HFIs.

KEY TERMS

Housing Finance, HFIs, RMBS, RML, Sub-prime Mortgage.

SUMMARY

1. Housing finance is a business of financial intermediation, wherein the money raised through various sources such as public deposits (which are subject to the regulatory stipulations of NHB), institutional borrowings (from banks), refinance from NHB and their own capital, is lent to borrowers for purchasing a house.
2. Housing is an industry with tremendous potential for contributing towards the economic growth of any country.
3. The accessibility of housing finance for people, in general, has evolved, developed and improved over the years.
4. Housing is regarded as a critical sector in terms of initiatives and interventions. This is reflected in the efforts of the government to improve housing and habitat conditions by way of financial allocations in the five-year plan and fiscal measures related to housing announced in the Union Budgets.
5. There are different types of institutions which cater to the need for a long-term finance, for housing in urban and rural areas. They are: SCBs, RRBs, ARDBs, HFCs, NCHF and ACHFS.
6. Home-equity loans, Home-extension loans, Home-improvement loans, Home-purchase loans, Land-purchase loans and Home loans to SHGs/MFIs are the different types of housing loans available in the market.
7. HFCs have to manage various risks associated with the mortgage business. These risks include credit risk, liquidity risk, foreign-exchange risk and interest-rate risk.
8. With a growing number of players and increased competition, the housing sector has become increasingly market-driven.
9. NHB is the apex-level financial institution for the housing sector. The NHB is a wholly-owned subsidiary of the RBI and the regulator of non-banking HFCs. The role of NHB is to promote and develop HFIs, regulate and supervise HFCs, refinance HFCs, undertake project-lending and develop a secondary mortgage market. NHB has launched a residential-property index, NHB Residex, for five cities—Bengaluru, Delhi, Bhopal, Kolkata and Mumbai. It is the first housing-price index in India to fill the price-information gap and streamline the property-development process in major cities. NHB launched the pilot issues of MBSs in August 2000.
10. RMBS offers a viable and sustainable, market-oriented, fund-raising mechanism, with the potential of integrating housing market, with the domestic as well as international capital markets.
11. Reverse mortgage seeks to monetise the house as an asset and, specifically, the owner's equity in the house. It is a mortgage loan for senior citizens (over 60 years), who, generally, are not eligible for any form of mortgage loan.
12. The housing-finance industry recorded a CAGR of 38 per cent, over the last 6 years (2000–01 to 2007–08), due to a decline in the interest rates, high loan to value ratio and rising income levels. Housing loans as a percentage of the GDP increased from 6 per cent in 2005–06 to 8.5 per cent in 2007–08. Growth in the housing-loan industry has slowed down from 25 per cent in 2006–07 to 12 per cent in 2007–08, as property price and interest rates have moved up while increase in the income levels has failed to match the property-price increase.

MINI CASE

You have just graduated with an MBA degree, and have been offered a job in Mumbai, with a well-known company as an associate in the project-finance division. You are very enthused and excited about this job opportunity. You have already moved to Mumbai and checked out a few flats and have decided to purchase a flat for Rs. 12 lakhs. You have only Rs. 2 lakhs in cash and you intend to finance the rest of Rs. 10 lakhs, by taking a mortgage loan against the house for the same amount. The mortgage manager has offered you multiple options as follows:

Option A—Traditional fixed-rate loan: A 30-year loan of Rs. 10 lakhs at a fixed 10 per cent annual interest with monthly payments. The house, which is priced at Rs. 12 lakhs, is mortgaged against the loan.

Option B—Bi-weekly, Traditional fixed-rate loan: A 30-year mortgage loan at 11 per cent annual interest but with payments every two weeks.

Option C—A 7-year Balloon loan at 8 per cent annual interest. The loan payments are calculated as if the loan was a traditional 30-year, fixed-rate, mortgage loan, at 8 per cent annual interest. However, the loan is only for 7 years, but the payments are made as if the loan was for 30 years. At the end of 7 years, the remaining principal is due.

Option D—Interest-only, 7-year loan at 8 per cent annual interest. This loan is similar to the 7-year Balloon loan, except that you pay only the interest and not the principal with every payment.

Option E—A 30-year loan with a 7-year ARM Loan: For the first 7 years, the rate stays fixed at 8.5 per cent and then becomes floating. The float = Prime index (floating) + 2 per cent Premium.

QUESTIONS FOR DISCUSSION

1. Which option has the lowest monthly payment? Why?
2. Since this is your first house purchase and as this is a small flat too, you do not expect to stay in the flat for more than 7 years. In such a case, which mortgage loans are better for you?
3. In continuation of Q1, supposing you are a savvy stock-market investor, then which loan is now better for you?
4. Suppose that this is a very big flat in a very nice neighbourhood, and, thus, you intend to stay in the flat for more than 10 years. Which loan options are good for you?
5. In continuation of Q4, suppose that your company pays your salary every 2 weeks, then which loan option is better for you? Why?
6. Why do you think the interest rate in options C, D, and E are lower than in A and B? Why do you think the interest rate in option E is lower than in the options A and B? Why do you think the interest rate in option B is higher than in option A?

REVIEW QUESTIONS

1. What is housing finance? State the role of housing finance in the economy.
2. State the policy initiatives and measures to develop housing sector in India.
3. Which are the institutions which cater to the need of housing finance in India? Also, state the different kinds of loans given by them.
4. How is the loan amount and interest rate determined?
5. 'With growing number of players and increased competition, the housing sector has become increasingly market-driven.' Discuss.
6. Discuss the role of NHB in housing finance.
7. What is an RMBS? Describe the process of mortgage securitisation and state the benefits of mortgage securitisation.
8. What is an RML? State the benefits and operational guidelines of RMLs.
9. Which factors inhibit the growth of housing-finance industry in India?
10. Which factors were responsible for the sub-prime mortgage crisis and what was the impact of this crisis?

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Leasing and Hire Purchase

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1 *Lease financing*
2 *Leasing and economic growth*
3 *Leasing in India*
4 *Lease structure*
5 *Rights, obligations and responsibilities of the lessor*
6 *Rights, obligations and responsibilities of the lessee*
7 *Types of leases*
8 *Difference between operating and finance lease*
9 *Advantages and disadvantages of leasing*
10 *Accounting for lease*
11 *Hire purchase*
12 *Difference between leasing and hire purchase*
13 *Instalment-purchase system*
14 *Difference between hire purchase and instalment*

INTRODUCTION TO LEASE FINANCING

There are various forms of financing business assets. An entrepreneur may finance business assets through his own funds or borrowed funds. An alternative form of financing or acquisition of an asset/assets emerged in the early 1950s in the United States, wherein without owning the asset and raising funds either through equity or debt, including loan, an entrepreneur gets the right to use the asset. This alternative form of financing is known as 'leasing.'

In simple terms, lease is a method of acquiring right to use an equipment or asset for a consideration.

Lease can be defined as 'a contract between owner of an asset (lessor) and the user of the asset (lessee), under which the lessor gives the right to the lessee to use the asset or equipment for agreed period of time and consideration called "lease rental".'

The Transfer of Property Act defines a lease as a transaction in which a party owning the asset provides the asset for use, over a certain period of time, to another for consideration in the form of periodic rent.

Indian Accounting Standard 19, on leases, defines a lease as an agreement whereby the lessor conveys to the lessee in return for a payment or a series of payments the right to use an asset for an agreed period of time.

International Accounting Standard 17 (IAS-17), on 'leases,' defines a lease as an agreement whereby the lessor conveys to the lessee in return for a payment or a series of payments the right to use an asset for an agreed period of time.

Leasing is suitable for financing most investments such as agricultural equipments, medical equipments, construction equipments, office equipments, machinery, aircraft, high-value cars, software, green energy and windmills, corporate jets, telecom towers, satellite, mining equipments and alternate energy, and is also available to a broad range of businesses such as corporates, hospitals, educational institutions and government agencies.

As per the Sale of Goods Act, a 'sale' means a transfer of property in goods. A lease, on the other hand, is merely a transfer of the right to use the goods and is therefore not a sale. A lease transaction is a deemed sale under the law and sales tax is levied on the lease rentals. The sales-tax rates differ in different states and in case of inter-state sale, the sales-tax rate applicable will be the state where the agreement is entered into. Moreover, a 12.36% service tax is chargeable on the interest portion of the lease rental and other charges.

Leasing and Economic Growth

- Lease is a contract between owner of an asset (lessor) and the user of the asset (lessee) under which the lessor gives the right to the lessee to use the asset for agreed period of time and consideration, called 'lease rental'

Leasing has developed as a complementary tool to bank loan and has increased competition in the financial sector. As no upfront payment is to be made to acquire the asset on a lease, leasing promotes investment in capital equipments, which, in turn, leads to an increase in the domestic production. Leasing leaves lines of credit free for working capital, investments, or unexpected emergencies. It provides opportunities to extend product lines and enables product-portfolio diversification.

Leasing also provides security against equipment obsolescence, thus freeing the lessee from the worries of resale of obsolete equipments. This facilitates a speedy transfer of new technology, which leads to a higher capital formation and economic growth. SME sector development is often hindered by the lack of access to long-term finance that is required for capital investment. Moreover, these businesses often do not have the track record, collateral, or expertise to obtain term-financing from banks. The cost of buying new equipment to meet the changing and growing business needs can be difficult for most small businesses. Leasing helps start-ups, small businesses and growing businesses to further capital investment.

Leasing is infrastructure-friendly and can contribute to a country's infrastructure growth. Leverage lease and sale and leaseback can help in boosting investment in infrastructure. Leasing industry has met the needs of the Indian government to finance the railways or telecommunications, or computers for e-governance in various states. The government has allowed the entry of private players in the railway-wagon leasing, which was a monopoly of Indian Railway Finance Corporation. New customised and special-purpose containers will enter the market and coal, automobiles, steel and cement companies will be the major beneficiaries as they will be able to take wagons on lease depending on their requirements.

Leasing in India

The first leasing company of India pioneered the concept of leasing in India in 1973. Till 1981, it was the only leasing company in the country. Looking at its success, many companies and development financial institutions forayed into this business. The government also encouraged competition in leasing business. The banks were allowed to enter into this business in 1994. The State Bank of India is into big-ticket finance leasing. The cost of the equipment being leased is the ticket size. The ticket size may be small, medium or big. The bank undertakes leasing contracts worth a minimum of Rs. 5 crore. Besides banks, many foreign-owned financial firms like GE Capital are in this business. There were around 400 companies in the leasing business in the 1990s. The government permitted companies to raise initial public offering from the capital market, to prevent leasing companies from leaning on the banking system for funds. Leasing companies, to raise funds, promised dividend rates of 18% and interest rates on deposits much higher than that paid by the banks (6–8% higher than the bank-deposit rate). Many non-banking finance companies in leasing business cheated depositors and proved to be fly-by-night operators. The leasing industry got into deep trouble with these scams. Two of the largest leasing companies sold off their business to a leading financial institution. The RBI brought these leasing companies into its regulatory ambit in 1998 and subjected them to prudential norms. The regulator classified them into deposit-taking and non-deposit-taking NBFCs. The non-deposit-taking NBFCs were subject to higher and stricter provisioning norms so as to prevent the flow of bank credit to them. NBFCs accepting deposits have to appoint a trustee and create a floating charge over the SLR securities that were held as special reserves to backstop the deposit liability. Equipment-leasing companies and hire-puchase companies are classified as Asset Finance Companies (AFC). The RBI has defined AFC as any company which is a financial institution carrying on as its principal business the financing of physical assets supporting productive/economic activity, such as automobiles, tractors, lathe machines, generator sets, earth-moving and material-handling equipments, moving on own power and general-purpose industrial machines. The principal business for this purpose is defined as an aggregate of financing real/physical assets supporting economic activity and income arising there from is not less than 60% of its total assets and total income, respectively.

TABLE 22.1 Indian Leasing Industry

Year	*Number of Companies*	*Gross-leased Assets in Rs. Crores*	*Gross-leased Assets in US$ Million*	*Net-leased Assets in Rs. Crores*	*Net-leased Assets in US$ Million*
2000	375	9,899	2,199.7	5,129	1,139.8
2001	323	9,592	2,131.4	4,823	1,071.6
2002	249	7,277	1,617.0	3,052	678.1
2003	190	5,810	1,292.5	2,010	446.6
2004	126	3,039	674.0	804	178.6
2005	88	2,025	437.0	483	104.4
2006	62	1,502	357.62	615	146.43
2007	46	1,364	324.76	738	175.71

Source: World Leasing Yearbook–2009.

LEASE STRUCTURE

1. Lease is a contract between two parties: the owner, called the lessor, and the user, called the lessee. It is not necessary for the lessor to own an asset, if he has the right to use the asset, but can sublease unless the original lessor has restricted the right to sublease.
2. Any asset, article or property can be leased. Only tangible assets such as an automobile, aircraft, machine, consumer durable, land, building, factory can be leased. But, nowadays, software is also leased.
3. The contract is for a specified time period and the lessee has to return the asset at the end of the lease period. Lease contracts are usually structured for a tenor of 5–7 years. A financial lease contract may include two types of lease periods known as the 'primary lease period' and the 'secondary lease period.' An original lease-contract period is known as the 'primary period' or 'minimum lease term,' for example, 5 years. This is the length of the contract that the lessee agrees to be bound with the contract terms and conditions, and is non-cancellable. It is the period over which the lessor expects to recover his investment. If the lessee wishes to end the agreement early, then he will normally be subject to termination costs as contained within the lease contract. The contract ends at the the end of the primary lease period and the asset is returned to the lessor. The following options are available to the lessee at the end of the primary lease period: (i) Option to buy the asset at a mutually agreed price or at a fair market value, (ii) Option to renew the lease and (iii) Option to return the asset.

   If the lessee wants an extension to the primary lease period, he can get provided there is a clause in the lease agreement or the lessor agrees to it. Any extension to the primary lease period is known as a secondary lease period. It allows the lessee to use a substantial part of the remaining asset value.
4. The amount paid by the lessee to acquire the right to use the asset is known as 'lease rental.' In case of a financial lease transaction, lease rental comprises of principal repayment plus interest. If it is an operating lease, the lease rentals include interest on principal, service charges, depreciation charges and other incidental costs such as repairs and maintenance, and insurance. Lease rentals are payable after the delivery of the asset for the lease period.

Sometimes, the lessee may be required to pay an upfront payment in the form of advance lease rental or security deposit. Leasing companies charge a lease-management fee—an upfront, non-refundable fee for services rendered like processing/marketing and so on.

Lease rentals may be equated monthly instalments (EMIs) or structured. EMIs are instalments of equal amounts paid every month during the lease tenor by the lessee to the lessor. Structured rentals are not equated over the lease tenor and are tailor-made to fit the lessee's cash inflows from the use of the asset. They are of two types: Stepped-up rentals wherein the lessee pays smaller rental amounts at the beginning of the lease period and larger rental amounts towards the end of the lease period and Stepped-down rentals wherein the lessee pays larger rental amounts at the beginning of the lease period and lower rental amounts towards the end of the lease period.

Rights, Obligations and Responsibilities of the Lessor

- Obligation of acquiring the lease asset according to the lessee's specification.
- Right of ownership of the leased asset.
- Right to claim depreciation on the asset.
- Right to ensure that the asset is put to fair use and within the limitations contained in the agreement.
- Right to recover the rentals and other sums payable by the lessee under the agreement.
- Right to sue in case of conversion of the asset by the lessee.
- Right to terminate the lease contract in case of misuse of leased goods by the lessee or if the lessee does not pay the lease rentals.
- Right to reimbursement of damages in case of misuse of leased assets.
- Right to the recovery of the leased asset in the event of the lessee's failure to pay the lease rentals or lessee's bankruptcy.
- Responsibility towards the lessee for legal deficiencies of the leased asset (if the third person exercises a right over the lease asset, which excludes, diminishes or limits lessee's unrestricted possession of the asset) and responsibility towards the lessee for suffered damages in this respect.

Rights, Obligations and Responsibilities of the Lessee

- Obligation to pay the lease rentals periodically as specified in the lease agreement.
- Obligation to keep the asset insured at all times for an amount equal to the full insurable value of the asset.
- Obligation to return the leased asset to the lessor upon expiration or earlier termination of this lease agreement.
- Right to use and operate the asset during the lease period, according to the terms of the lease agreement.
- Right to terminate the financial lease contract if the asset has not been delivered in line with the contract (if the supplier does not deliver the asset, delivers the asset with delay or if the asset has a material deficiency).
- Right of damage compensation and termination of the lease rental payment until the delivery of the leased asset is in line with the lease contract.
- Responsibility for the damage caused by using the lease asset.
- Responsibility for a sudden devastation or damage of the leased asset from the moment of taking over the asset.

TYPES OF LEASES

Types of Leases

- Financial Lease
- Operating Lease
- Sale and Leaseback
- Leverage Leasing
- Close and Open-ended Lease
- Upfront and Back-end Lease
- Percentage Lease
- 3N Lease
- Cross-border Lease

1. Financial Lease Financial lease is also known as Capital lease—a means of financing capital equipments. A financial lease is a lease that transfers substantially all the risks and rewards incident to the ownership of an asset to the lesse, though the lessor is the legal owner in substance. Title may or may not eventually be transferred. It is the alternative to own funds, bank credit and borrowing, through the issue of debt securities. According to AS-19, whether a lease is a finance lease or an operating lease depends on the substance of the transaction rather than its form.

In financial lease, the asset is leased for a long period. Generally, the time duration is equal to the economic life of the asset. Economic life is either:

1. the period over which an asset is expected to be economically usable by one or more users; or
2. the number of production or similar units expected to be obtained from the asset by one or more users.

This lease is non-cancellable in nature; and at the end of the lease period, the lessee has the option to buy the asset. The AS-19 defines a non-cancellable lease as a lease that is cancellable only:

1. upon the occurrence of some remote contingency; or
2. with the permission of the lessor; or
3. if the lessee enters into a new lease for the same or an equivalent asset with the same lessor; or
4. upon payment by the lessee of an additional amount, such that, at inception, continuation of the lease is reasonably certain.

Thus, in the case of a finance lease,

1. the entire risk incidental to the ownership of the asset and the benefits arising from the use of the asset are transferred to the lessee except the legal title which may or may not be eventually transferred;
2. the lessor transfers the ownership of the asset to the lessee by the end of the lease term;
3. the lessee has the option to purchase the asset at a price which is expected to be sufficiently lower than the fair value at the date the option becomes exercisable, such that, at the inception of the lease, it is reasonably certain that the option will be exercised;
4. the lease term is for the major part of the economic life of the asset even if the title is not transferred;
5. at the inception of the lease, the present value of the minimum lease payment amounts to at least substantially all of the fair value of the leased asset; and
6. the leased asset is of a specialised nature, such that, only the lessee can use it without major modifications being made.

Indicators of situations which individually or in combination could also lead to a lease being classified as a finance lease are:

1. if the lessee can cancel the lease, the lessor's losses associated with the cancellation are borne by the lessee;
2. gains or losses from the fluctuation in the fair value of the residual fall on the lessee (e.g., in the form of a rent rebate equalling most of the sales proceeds at the end of the lease); and

3. the lessee can continue the lease for a secondary period at a rent which is substantially lower than the market rent.

2. Operating Lease A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incident to ownership. Both AS-19 as well as IAS-17 define operating lease as a lease other than a finance lease. An operating lease is a lease in which the period of lease is short when compared to the useful life of the asset or the equipment being leased. An operating lease is mostly used to acquire assets on a relatively short-period basis. For instance, an aircraft which has an economic life of 25 years may be leased to an airline for 5 years on an operating lease. The lease period being short, the lessor will recover the cost of the asset from multiple lessees. They are typically for assets like computers, windmills and so on.

In operating lease, the lessor is responsible for all kinds of maintenance, insurance and all other expenses related to the leased asset.

Difference Between Operating and Finance Lease

Point	*Financial Lease*	*Operating Lease*
Duration	Financial Lease is generally for the whole useful life of the asset.	Operating Lease is generally for a shorter duration.
Revocation	Financial-lease contract cannot be revoked.	Operating-lease contract is revocable.
Maintenance	In Financial Lease, all the cost relating to maintenance, taxes and insurance are to be borne by the lessee.	In Operating Lease, all such expenses are borne by the lessor.
Obsolescence Risk	The Lessee has to bear the risk of obsolescence.	The Lessor has to bear the risk of obsolescence.
Option of Purchase	A Finance-lease contract provides for the option to purchase the asset at the end of the contract.	No such option is available in an Operating-lease contract.
Economic Service	Being a Capital Lease, it is only an exchange of money for money and does not result in the creation of economic services.	It is basically an economic service.

3. Sale and Leaseback In this type of lease, the owner of an asset sells that asset to the lessor and then gets the asset back on lease from the lessor. The purpose of the leaseback is to free up the original owner's capital while allowing the owner to retain possession and use of the property.

A sale and leaseback can be beneficial to both the buyer as well as the seller. The seller gets a lump-sum of cash quickly which improves the liquidity. And the lessor gets the benefit in terms of tax credit and a flow of regular income.

The sale and leaseback arrangement is popular among companies which are facing short-term liquidity crisis. Oil and Natural Gas Commission (ONGC), undertook an international 'sale and leaseback' agreement with 10 Japanese lessors, led by Sumisho Leasing for an equipment owned by the ONGC, aggregating \$60 million. The payment terms were fixed at a rate of 10.5% with the amount repayable in 14 equal semi-annual instalments, following a grace period of 6 years, so that the aggregate lease tenor extended to 13 years. The ONGC simultaneously swapped the fixed-rate borrowing with a floating-interest rate so that the cost of funds was reduced to 60 basis points below Libor.

4. Leverage Leasing Under leveraged-leasing arrangement, a third party is involved besides the lessor and the lessee. The lessor borrows a part of the purchase cost (say 80%) of the asset from the third party, that is, the lender and the asset so purchased is held as a security against the loan. The lender is paid off from the lease rentals directly by the lessee and the surplus after meeting the claims of the lender goes to the lessor. The lessor, the owner of the asset, is entitled to a depreciation allowance, associated with the asset.

5. Close- and Open-ended Lease In a close-ended lease, the asset gets transferred to the lessor, at the end of the lease-contract period, where as in an open-ended lease, the lessee has the option of purchasing the asset.

6. Upfront and Back-end Lease In an upfront lease, higher lease rentals are charged in the initial years and lower rentals in the later years of contract. Where as in the back-end lease, in the initial years, the lease rentals are less but increase in the later years.

7. Percentage Lease In the percentage lease, the lessor needs to pay fix-lease rentals plus some percentage of the previous year's gross revenue.

8. 3N Lease (Net and Net-net Leases) In the Net and Net-net leases, the lessee is responsible for maintenance, insurance and taxes of the property.

9. Cross-border Lease In the cross-border or international lease, the lessee and the lessor are situated in two different countries.

Commonly-used Lease Terminology

1. Wet lease: A wet lease is a leasing arrangement whereby one airline (lessor) provides an aircraft, complete crew, maintenance and insurance (also known as an ACMI lease) to another airline (lessee), who pays by hours operated. Kingfisher Airlines wet leased four new Airbus aircraft to Air India in January 2008. Jet Airways wet leased two aircrafts to Oman Air for a period of 6 months each, with effect from May 2009, under the ongoing, route-restructuring and cost-saving programme, undertaken by the company. The operational control and maintenance responsibility remains with the company. The aircraft remains on Indian registry and is operated with the company's crew.

Under wet lease as opposed to dry lease, a carrier leases its aircraft to another airline along with its crew. The lessee provides fuel, covers airport fees and any other duties, taxes and so on. The flight uses the flight number of the lessee. A wet lease, generally, lasts from 1 month to 2 years. It is typically utilised during peak traffic seasons or annual heavy-maintenance checks, or to initiate new routes. Ground handling is usually done by the lessor even though this can vary from country to country. In some cases, the lessee provides these services.

2. Dry lease: 'Dry lease' refers to leasing the aircraft alone. A wet lease without crew is occasionally referred to as a 'moist lease.'

Advantages and Disadvantages of Leasing

Leasing is a popular financing option for the following reasons:

Advantages of Leasing

- No large outlay
- Tax Advantages
- Budgeting
- Hedge against risk of obsolescence

(i) No Large Outlay Leasing could provide 100% financing as the lessor buys the equipment and leases to the lessee. The lessee need not make large cash payments for the purchase of the needed equipment. It finances a higher percentage of the price of the leased asset when compared to a bank loan. In addition, the lessor also finances the value-added tax (VAT). Leasing frees the working capital for more productive use. This can significantly help to maintain cash flow, which is critical to all businesses. Poor cash flow is the main cause of small business failures, and leasing can help to keep it under better control. It also allows using better equipment that would be too expensive to buy outright. Leasing has been helpful for start-ups and growing firms where finance is stretched. A leasing arrangement does not limit the firm's ability to raise credit.

(ii) Tax Advantages Under a finance lease, the lessor gets the benefit of tax depreciation. Lease rentals are considered as an operating cost, which means that it is possible to deduct them from taxable profits (as a trading expense). As lease rentals are fully tax-deductible, the cost of the asset is written-off in the lessee's books over the lease period. Leasing permits a more rapid amortisation of the asset. In case of front-end-loaded leases, the write-off is as high as 50% of the cost in the very first year.

(iii) Budgeting As a lease agreement is almost always a fixed contract, it is relatively easy to budget and forecast with. The amount can be worked into business budgets much more easily than an irregularly-occurring lump-sum; allowing to keep a much better control over the current and future cash flow.

(iv) Hedge Against Risk of Obsolescence In an operating lease, the obsolescence risk is borne by the lessor. Likewise, the lessee is saved of the trouble of having to dispose of the asset that he is not using—by simply terminating the contract or returning it to the lessor.

- **Flexible finance:** Leasing contracts can be structured to accomodate the cash-flow needs of the lessee, in accordance with production flows and cash cycles. It is flexible on terms and repayment periods. It is simple to negotiate and administer. Moreover, the leasing company does not require any collateral, as the lessor retains the ownership of the leased asset. A leasing plan can be tailor-made to suit the requirements of the lessee.

- **No coercive covenants:** Leasing companies do not impose coercive conditions—such as restrictions on the transfer of shares, issue of bonus shares, right to appoint nominee directors, convertibility clause. Loan agreements with banks usually contain coercive covenants.
  - **Inflation-friendly**: Leasing is fixed-rate financing; Even though the costs go up over the years, the lessee pays the same agreed rate and the equal monthly-lease rentals.
  - **Vendor-leasing:** Leasing companies have helped companies dealing in computer hardware and electronic copier machines to multiply their sales through vendor-leasing programmes.

Disadvantages of Leasing

Although leasing is a preferred alternative means of financing, it may not be suitable for all kinds of equipments or industries.

Disadvantages of Leasing

- No ownership
- Long-term expense
- Cost of maintenance
- Restrictions on use of equipment
- Termination of the contract in case of default

(i) No Ownership The main disadvantage of leasing is that business will never own the asset. It remains the property of the leasing company during and after the lease. The only exception is in the case of a financial lease. It may happen that when the lessee decides to purchase the asset, it would have depreciated significantly.

(ii) Long-term Expense Although leasing allows businesses to avoid paying a large lump-sum, over a long period of time, it often works out considerably more expensive. Over the course of a standard lease, a business pays the cost of the equipment as well as the leasing company's charges. Moreover, as lease cannot be terminated before the original term is completed, it can pose a major financial problem for the lessee when the business experiences a downturn.

(iii) Cost of Maintenance In leasing, the lessee is responsible for maintaining the equipment, as specified by the terms of the lease, and failure to do so can prove costly to him.

(iv) Restrictions on Use of Equipment Sometimes, the lease agreement may pose some restrictions on the use of the equipment, thereby making it uneconomical for the lessee.

(v) Consequences of Default If the lessee makes default in payment of lease rentals, the lessor can terminate the contract and take back the leased assets. In case of financial lease, the lessee needs to pay for damages and higher lease rentals in case of default.

Accounting for Lease in the Book of Lessee

1. **Accounting Treatment for Finance Lease** Finance lease will be capitalised in the books of the lessee and shown as both liabilities as well as assets in the balance sheet, at a present value of the committed lease rental. The asset will be capitalised under the 'fixed assets' category in the balance sheet, and the future lease-rentals payable will be shown in the liabilities side of the balance sheet.
   - The lessee will be entitled to depreciate the assets in the books of accounts. Costs, including depreciation, incurred in earning the lease income are recognised as an expense.
   - The total amount of lease rental is to be segregated into two parts, that is, principal amount and financial charges. Financial charges will be treated as expenses and shown in P&L account where as the principal amount will be deducted from the liability of the lease payable.

2. **Accounting Treatment for Operating Lease** Lease rentals under the operating lease will be treated as an expense and will be shown in the P&L account.

Accounting for Lease in the Book of Lessor

1. Accounting Treatment for Finance Lease

- In the books of the lessor, the leased asset will be shown in the balance sheet as a receivable at an amount equal to the net investment in the assets.
- The lease-payment receivable will be treated as a repayment of the principal.

2. Accounting Treatment for Operating Lease

- The asset will be shown in the balance sheet as a fixed asset and depreciation will be charged by the lessor as per the depreciation policy.
- The lease rentals received by the lessor will be shown in the P&L account as income.

Legal Aspect of Leasing

In India, we do not have a separate law for leasing. Lease contracts are treated as special cases of contract and the provisions relating to the bailment in the Indian Contract Act govern equipment-leasing contracts also. According to these provisions, the lessor and the lessee have the following duties to perform:

1. The lessor has the duty to deliver the equipment or assets to the lessee and also give him the legal authority to use the assets for the lease agreement.
2. The lessee has the duty to pay the lease rental as specified, in time, and also take reasonable care of the assets and return back the assets on expiry of the lease agreements.

Taxation Aspect of Leasing

Income-tax aspects relating to financial and operating lease are given as follows:

- Lease rentals paid by the lessee are tax-deductible expenses. Lease rental received by the lessor is treated as income and is taxable under the head of 'Profits and Gain' from business and profession.
- Irrespective of the type of leases, the lessor alone can claim depreciation as deduction and not the lessee.

HIRE PURCHASE

- Hire purchase agreement is a contract whereby the owner of the goods lets them on hire to hire purchaser on payment of rent, to be paid in instalments and the title in the goods will pass to the hirer on the payment of last instalment

A hire-purchase agreement is a contract whereby the owner of the goods lets them on hire to another person called the 'hirer or hire purchaser' on payment of rent, to be paid in instalments, and upon an agreement that when a certain number of such instalments is paid, the title in the goods will pass to the hirer. The hirer may return the goods at any time without any obligation to pay the balance rent.

Essentials of Hire Purchase

- The delivery of goods will be given by the owner of the goods to the hire purchaser.
- Payment is to be made in instalments.
- Ownership of the goods passes to the hire purchaser only on payment of the last instalment.
- In the event of any default by the buyer, the seller can take back the possession of the goods, and the money paid by the buyer will be adjusted as rent for using the assets.

Difference Between Lease and Hire Purchase

Basis	*Lease*	*Hire Purchase*
Meaning	A lease transaction is a commercial arrangement, whereby an equipment owner or a manufacturer conveys to the equipment user the right to use the equipment in return for a rental.	Hire purchase is a type of instalment credit under which the hire purchaser agrees to take the goods on hire at a stated rental, which is inclusive of the repayment of the principal, as well as interest, with an option to purchase.
Option to User	Except the financial Lease, no option is provided to the lessee (user) to purchase the goods.	The hire purchaser becomes the owner of the asset after paying the last instalment.
Nature of Expenditure	Lease rentals paid by the lessee are entirely the revenue expenditure of the lessee.	Only interest element included in the hire-purchase Instalments is revenue expenditure in nature.
Components	Lease rentals comprise two elements: (1) Finance charge and (2) Capital recovery.	Hire-purchase instalments comprise three elements: (1) Normal trading profit, (2) Finance charge and (3) Recovery of cost of goods/assets.
Depreciation	Lessor can claim for depreciation.	Hire purchaser can claim for depreciation.
Tax Benefit	In a Lease agreement, the Lessor can claim depreciation and the lessee can claim maintenance and rentals from taxable income as expense.	A hire purchaser can claim depreciation and interest payment from the taxable income, whereas the seller can claim for the interest on the borrowed fund for purchasing the assets.

Accounting for Hire Purchase

In the Books of Hire Purchaser

- In the books of the hire purchaser, the cash price of assets is capitalised and the asset is shown on the assets side in the balance sheet and the cash price, as reduced by the down payment, is shown on the liability side.
- Depreciation is charged by the hire purchaser based on cash price and his depreciation policy.
- The total finance charges paid by the purchaser are allocated over the hire period using several available methods, namely, the sum of the year digit, straight-line method of depreciation and so on.

In the Books of Hire Seller

- The seller should record the transaction as receivables (current assets) in the balance sheet.

Legal Aspects of Hire Purchase

A hire-purchase agreement is not a contract of sale, but only a bailment; and the property in the goods remains in the owner during the continuance of the bailment. In other words, a hire purchase is an agreement of bailment plus an agreement to sell.

The contract of hire purchase is governed by the special contract of bailment and Sale of Goods Act.

Taxation Aspect of Hire Purchase

In case of a hire-purchase transaction, the deduction can be claimed in respect of hire-purchase charges.

INSTALMENT PURCHASE

Instalment-purchase system is a credit sale in which the seller gives the facility to the buyer to pay the money in agreed instalments. In this kind of transaction, the possession and legal ownership of goods are passed to the buyer immediately.

Essential characteristics of this system are as follows:

- The buyer gets the immediate possession and ownership of the goods.
- The payment of price has to be made in agreed instalments.
- In the event of default by the buyer, the seller can sue the buyer for recovery of the balance payment.

Difference Between Instalment Purchase and Hire Purchase

Basis	*Hire Purchase*	*Instalment Purchase*
Transfer of Ownership	In a hire-purchase system, the ownership of the asset is transferred after the payment of all instalments.	In an instalment purchase, the ownership in goods passes to the buyer immediately at the time of sale.
Recovery of Goods	In case of hire purchase, if the buyer fails to pay the instalment, the seller can recover the goods back.	If the buyer fails to pay the instalment, the seller cannot recover the goods back.
Forfeiture of Instalment	In a hire-purchase transaction, in the event of the buyer's default, the seller can forfeit all the money paid by the buyer as rent for using the assets.	Whereas, in the case of an instalment purchase, the money paid by the buyer is taken as payment towards the selling price and the seller can sue only for the balance.

Conclusion

There is tremendous potential for the leasing industry in India. This industry can play a vital role in promoting investment and thereby economic growth.

KEY TERMS

Leasing, Financial Lease, Operating Lease, Sale and Leaseback, Leverage Lease, Wet Lease, Dry Lease, Net Lease, Cross-border Lease, Percentage Lease, Close-ended Lease, Open-ended Lease, Hire Purchase, Instalment, Upfront Lease, Back-end Lease, Lessor and Lessee.

SUMMARY

1. Lease is a method of acquiring right to use an equipment or asset for a consideration.
2. A lease transaction is a deemed sale under the law and sales tax is levied on the lease rentals.
3. There are different types of leases. The main types are Financial Lease and Operating Lease.
4. A financial lease is a lease that transfers substantially all the risks and rewards incident to the ownership of an asset to the lessee, though the lessor is the legal owner in substance.
5. An operating lease is a lease in which the period of lease is short when compared to the useful life of the asset or equipment being leased. An operating lease is mostly used to acquire assets on a relatively short-period basis.
6. A hire-purchase agreement is a contract whereby the owner of the goods lets them on hire to another person called hirer or hire purchaser on payment of rent, to be paid in instalments, and upon an agreement that when a certain number of such instalments is paid, the title in the goods will pass to the hirer.
7. Instalment purchase system is a credit sale in which the seller gives the facility to the buyer to pay the money in agreed instalments.

REVIEW QUESTIONS

1. What is leasing? State the importance of leasing.
2. State the obligations, rights and responsibilities of the lessor and the lessee.
3. Distinguish between: Lease and Hire purchase; Hire Purchase and Instalment Purchase; and Financial Lease and Operating Lease.
4. What is a wet lease? How is it different from dry lease?
5. What are the elements in a lease structure?

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Financial Inclusion and Microfinance

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *Financial inclusion*
2. *Microfinance*
3. *Financial inclusion*

INTRODUCTION TO FINANCIAL INCLUSION

The banks were nationalised with an objective to cover a large part of the population under banking services. Even after more than 35 years of nationalisation, more than 40 per cent of the adult population in India has no access to formal banking and financial services. This financial exclusion could be on the grounds that the individual has either no savings/assets and hence, no savings/current account in the bank. Besides, he also may not have access to any financial advice and perceives the cost of the financial services as not affordable.

Several studies have revealed the extent of financial exclusion in India. Some of the studies are cited as follows:

1. According to the Rural Financial Access Survey, 2003, conducted by the World Bank and the National Council of Applied Economic Research, only 21 per cent of the rural households have access to formal credit and 42 per cent rural households have access to saving deposits in the states of Andhra Pradesh and Uttar Pradesh. Among the rural households, it is the poorer households which have no access to financial services. Moreover, 70 per cent of marginal farmers do not have a bank account and 87 per cent have no access to formal credit. The reasons cited by the survey include cumbersome procedures for opening an account or seeking a loan and inability of the borrower to provide a collateral with a clear title coupled with unstable/irregular income.
2. The All India Rural Debt and Investment Survey (AIDIS), 2002, showed that 111.5 million households had no access to formal credit and 17 million households were indebted to moneylenders. It also revealed that lower the asset class or income, higher the degree of exclusion.
3. The Invest India Incomes and Savings Survey (2007) showed that 32.8 per cent of households had borrowed from institutional sources and 67.2 per cent had borrowed from non-institutional sources. It also found that 70 per cent of earners in the annual income bracket of more than Rs. 400,000 borrowed from institutional sources as compared with only 27.5 per cent in the case of earners in the income bracket of less than Rs. 50,000.

   In India, the financially excluded sections comprise largely marginal farmers, landless labourers, self-employed and unorganised-sector enterprises, urban-slum dwellers, migrants, ethnic minorities and socially excluded groups, senior citizens and women. These sections have no access to basic banking services like payment services, savings or loans.
4. The Committee on Financial Inclusion (2008) observed that in India 51.4 per cent of farmer households are financially excluded from both formal/informal sources and 73 per cent of farmer households do not access formal sources of credit. Exclusion is most acute in Central, Eastern and North-eastern regions with 64 per cent of all financially excluded farmer households.

Financial exclusion leads to loss of opportunities of growth for an individual, which, in turn, leads to loss of output for an economy and a reduction in the societal welfare. The financially excluded sections turn to the informal sector to meet their medical and social obligations and get trapped into a vicious circle of poverty and social exclusion. Research has found that countries with a high level of income inequality tend to have higher levels of financial exclusion.

Evidences of Financial Exclusion

The Indian economy is one of the fastest growing economies of the world. But this economic growth is skewed as all the sections of the society have not benefited from this growth process. When certain sections of the society are bypassed, the sustainability of the growth process is threatened. The evidences are as follows:

Magnitude of Financial Exclusion

- 500 million unbanked population in India
- Out of more than 6,00,000 rural habitations, only around 32,000 have a commercial bank branch
- 99 blocks in the country not having a single bank branch. Of these, 86 are in the North East with some blocks having population of less than 10,000

1. **A large number of people below the poverty line with no access to financial services:** Banks opened a large number of branches in the rural areas, implemented specific poverty-alleviation programmes and encouraged self-employment through cheap subsidised credit for decades, but through inappropriate policies, services and loan products. The loan products of large sizes did not suit the needs of the large number of poor. What the poor really needed was a better access to these services and products rather than a subsidised credit.
2. **The average employment rate declined from 2.84 per cent during 1980–90 to 2.49 per cent in 2005:** There has been a substantial decline in the rural employment on account of commercialisation of agriculture and technology intensification. Banks' focus was centered on the credit delivery for the agriculture to fulfil the priority sector-lending norms laid down by the Reserve Bank. These policies and practices did not encourage them to finance micro-enterprises and create opportunities for self-employment.
3. **Banks' focus on commercial objectives with emphasis on profitability:** In the late 1990s, the objective of the Reserve Bank of India (RBI) was to strengthen the banking system. With the introduction of prudential norms, the focus was on quality lending and viable accounts which implied a tendency towards exclusion.
4. **The success of microfinance in rural India:** The RBI took an initiative to promote financial inclusion—to include those who have been excluded from banking services with a view to empowering them.

Financial Inclusion Includes

- Access to a No-frills account
- Access to credit
- Access to insurance and remittance facilities
- Credit counselling
- Financial education/literacy

Policy Initiatives for Inclusive Finance

- Nationalisation of banks
- Lead bank scheme
- Priority sector lending
- Setting up of RRBs in 1975
- Poverty alleviation programmes in 1980s
- Microfinance-SHG movement in 1990s
- Simplification of KYC norms
- Issue of GCC
- BC/BF model
- Priority sector redefined

Definition of Financial Inclusion

The Asian Development Bank has defined financial inclusion as 'provision of a broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to poor and low-income households and their micro-enterprises.'

The Committee on Financial Inclusion has defined financial inclusion as 'the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost.'

Benefits of Financial Inclusion

1. Financial inclusion is an avenue for bringing the savings of the poor into the formal financial intermediation system.
2. Large number of low-cost deposits help banks manage both liquidity risks and asset-liability mismatches.
3. Financial inclusion helps transfer payments such as social security, national rural employment guarantee programme (NREGA) wages into the bank accounts of beneficiaries through the 'electronic benefit transfer' (EBT) method.
4. It provides opportunities to the poor to build savings, make investments and avail credit.
5. It helps the poor insure themselves against income shocks and equip them to meet emergencies such as illness or loss of employment.

Process of Financial Inclusion

Financial inclusion is to be undertaken in three steps:

1. Providing access to financial products and services.
2. Availability of financial products and services in a fair and equitable manner.
3. Credit counselling which includes providing sound services to arrest deterioration of incomes, restructuring of debt solution to overcome debt burden and improve money-management skills.

Various Initiatives Undertaken for Financial Inclusion

1. In 1992, the SHG–bank linkage programme and in 1998, Kisan Credit Cards (KCCs) for providing credit to farmers were introduced by NABARD, with policy support from the RBI. Under the

SHG–bank linkage programme, banks provide the resources, while the non-government organisations (NGOs) act as agencies to organise the poor, build their capacities and facilitate the process of empowering them. In 1998, those SHGs that were engaged in promoting the saving habits among their members were made eligible to open savings bank accounts.

2. In April 2005, 'financial inclusion' was explicitly made as a major policy objective and in November 2005, banks were advised to make available a basic banking 'no frills' account with low or nil minimum balances through simplified know-your-customer (KYC) procedures as well as charges to expand the outreach of such accounts to vast sections of the population. The KYC procedure for opening accounts was simplified for those accounts with balances not exceeding Rs. 50,000 and credit limits not exceeding Rs. 100,000 in a year. The simplified procedure allowed an introduction by a customer on whom the full KYC drill had already been done. The customer is allowed 5–10 transactions, free of cost, and an ATM facility. NGOs and MFIs (microfinance institutions) can act as agents to help open accounts. Banks were also asked to offer a small overdraft/general credit card (GCC), not exceeding Rs. 25,000, to their customers at their rural and semi-urban branches. Under GCC, banks do not insist for collateral; and based on the assessment of household cash flows, the limits are sanctioned. Interest rate on the facility is completely deregulated. 50 per cent of GCC loans are treated as priority-sector lending.

- Number of No-frill accounts: 4.15 crore as on June 39, 2009

3. In January 2006, the RBI permitted banks to utilise the services of NGOs/SHGs, MFIs (other than NBFCs) and other civil-society organisations, as intermediaries, for providing financial and banking services through the use of a **business facilitator (BF) and business correspondent (BC) models.**

   Banks use BFs for (i) identification of borrowers and fitment of activities; (ii) collection and preliminary processing of loan applications including verification of primary information/data; (iii) creating awareness about savings and other products and education and advice on managing money and debt counselling; (iv) processing and submission of applications to banks; (v) promotion and nurturing Self-help Groups/Joint-liability Groups; (vi) post-sanction monitoring; (vii) monitoring and handholding of Self-help Groups/Joint-liability Groups/Credit Groups/others; and (viii) follow-up for recovery. Banks may use intermediaries, such as, NGOs/Farmers' Clubs, cooperatives, community-based organisations, IT-enabled rural outlets of corporate entities, post offices, insurance agents, well-functioning panchayats, village knowledge centres, agri clinics/agri business centres, krishi vigyan kendras and KVIC/KVIB units, for providing facilitation services.

- Business correspondents and facilitators support the bank by extending nonfinancial services to the poor. They function as 'pass through' agents

   The role of the business correspondent (BC) is to disburse small loans, recover principal and interest, collect saving deposits, deliver small-amount remittances, make pension payments and wage payments under National Rural Employment Guarantee (NREG) Scheme and sell micro-insurance, mutual funds, pension funds and other third-party products on behalf of the bank. He earns commission for undertaking these activities. He uses a finger-print scanner, an identifier, a mobile and a printer to process the payments. The beneficiaries hold smartcards with the photographs and images of their finger prints preloaded. The chip gets activated and connected with the bank server, using a dial-up or mobile phone. The BC may carry cash physically to make payments. The distance between the place of business of the BC and the branch should not exceed the criterion of 15 km or 5 km, as applicable. A BC or a BF is generally appointed for a district by the bank, and is either a part of the bank or the MFI, usually an NGO, it has partnered with. Being a familiar face for the villagers, he is just like a mobile pocket ATM enabling anytime, anywhere banking. For banks, this branchless banking extends the distribution of financial service to rural people at low cost, increases access to cheap savings and enhances the scope for distribution of other services such as crop loans and micro-insurance. Banks are permitted to appoint NGOs/MFIs to set up under Societies/Trust Acts, Societies registered under Mutually Aided Cooperative Societies Acts or the Cooperative Societies Acts of States, Section 25 companies, registered NBFCs not accepting public deposits and post offices to act as BCs. The goal of the RBI is to have at least one BC in every village.

- FINO (Financial Information Network and Operations Limited) Fintech Foundation, a section 25 company under the Indian Companies Act of 1956, provides business correspondent services to banks. It is a multi-bank promoted company

   In April 2008, banks were permitted to engage retired bank employees, ex-servicemen and government employees as BCs, subject to appropriate due diligence. Section-25 companies, NBFCs and post offices acting as BCs can appoint sub-agents while individuals appointed as BCs cannot appoint sub-agents.

Challenges to the BC Model

- High maintenance costs
- Small size of transactions
- Lack of electricity and telecommunication access

   Many public-sector banks have already taken initiatives towards financial inclusion. The Union Bank of India has launched 'village knowledge centres' wherein the bank's staff act as relationship managers, liasing between local authorities and farmers, facilitating the opening of accounts and ensuring that the credit is provided to the needy poor. Andhra Bank has already covered 2,80,000 families under its Srikakulam district project. It not only assists the families in opening a bank account, but also issues them general-purpose credit cards. The RBI launched the 'bank-in-a-box' model in Andhra Pradesh, in collaboration with the Union Bank of India and Corporation Bank. In this project, a local BC opens and maintains accounts for the rural population. He is responsible for collecting savings and giving loans. The number of deposit accounts has exceeded the loan accounts in this model.

4. Based on the recommendations of the C. Rangarajan Committee Report on Financial Inclusion, the government has set up two funds—Financial Inclusion Fund (FIF) for supporting developmental and promotional activities for ensuring financial inclusion and the Financial Inclusion Technology Fund (FITF) for enhancing investment in Information Communication Technology (ICT) for promoting financial inclusion. Each of the funds has an overall corpus of Rs. 500 Crore.

Conclusion

Thrust on

- Spreading Financial Literacy
- Spreading awareness about micro-products in rural areas
- Pro-active participation of banks and technology players

Financial exclusion is a concern of both developed as well as developing countries. The move towards inclusive growth is a big challenge for the financial system. Banks and financial institutions need to re-orient their strategies to increase their effective reach. Financial literacy and awareness about financial products in rural areas also need to be taken up, especially by regional rural banks. In saturated markets, it is the bottom of the pyramid which provides more opportunities if properly tapped. Extensive use of technology can help reduce operating costs of small accounts which are a major hindrance to expansion of banking services. Technology and participation with various voluntary organisations can be facilitators in the promotion of financial inclusion.

MICROFINANCE

A large section of the Indian population is not covered by the formal financial system even after three-and-a-half decades of nationalisation of banks. The government nationalised and expanded the banking system to enlarge its coverage to as large a segment of the population of the country, through the use of targeted, low-priced loans. The poor were given subsidised credit so as to reduce their dependence on the informal sector, which charged high-interest rates in the range of 25–40 per cent. The rural cooperative banks and the regional rural banks were set up to cater to the financial needs of the rural poor. Also, the commercial banks are required to ensure that 40 per cent of the total credit is allocated to the priority sectors. In the race to achieve the quantitative targets, the bankers' lost sight of the qualitative aspects of lending which resulted in high-loan defaults and a belief that poor are not really bankable. For the banking institutions, the transaction cost inherent in servicing small loans to a large number of borrowers and the perceived risk cost in the absence of appropriate risk-management system are barriers to financial inclusion. Thus, for the banking institutions, lending to the poor was a social obligation and not a viable commercial activity. This widened the gap between the demand and supply of credit to weaker sections in the rural areas. Thus, a large section of the population, particularly in rural areas, remains excluded with no access to formal financial services.

An alternative delivery mechanism, for meeting the requirements of the poor known as microfinance, came into existence.

Microfinance: The Paradigm

In 1976, Dr Mohammed Yunus, a professor of Economics in Chittagong University, Bangladesh, came up with the concept of lending to groups of poor women. This group was loaned money without any collateral, but with higher interest rates of 20–24 per cent. If any one member defaulted, the group was denied access to further credit. This joint liability put a social pressure which produced a very high repayment rate of 98 per cent. The success of this pilot project inspired him to set up a Grameen Bank for providing banking services to the poor.

In the Grameen Bank model, members of the group are also the owners of the bank. The group normally consists of five members and the liability to repay the loan lies with the individual. The loan is given directly on the basis of trust and no agreement or document is required. The success of Grameen Bank proved that the poor needed access to financial services rather than the cheap subsidised credit. This pioneering experiment came to be later known as 'microfinance' for the poor. The Grameen Bank lends US$ 30 million a month to 1.8 million needy borrowers. Dr Mohammed Yunus and the Grameen Bank were awarded the Noble Peace Prize in 2006 'for their efforts to create economic and social development from below.' The success of this concept inspired many to set up similar projects across the globe. Today, there are over 7,000 microfinance institutions across the globe, serving 16 million poor households in developing countries.

Microfinance is the provision of financial services to the poor. These financial services may take the form of micro-savings, micro-credit and micro-insurance. Microfinance is also referred to as 'the alternate commercial sector targeting the poor.' The Task Force on Supportive Policy and Regulatory Framework for Microfinance (NABARD), 1999, defines microfinance as 'provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi-urban or urban areas for enabling them to raise their income levels and improve living standards.' Microfinance is a holistic concept—it includes not only micro-credit but also support services such as savings, insurance, payments, market and technical assistance, and capacity building. The clients of microfinance are landless labourers engaged in agriculture, mining and construction; small and marginal farmers; rural artisans and weavers; self-employed in urban informal sector; self-employed in non-farm activities; and women.

Microfinance in India evolved to fill the gaps created by the formal banking institutions. The microfinance movement had already begun in India in the 1970s. Shri Mahila SEWA (Self-Employed Women's Association) Sahakari Bank in Ahmedabad (Gujarat) and Working Women's Forum in Tamil Nadu were the pioneers. The SEWA Bank was set up in 1974 as an Urban Cooperative Bank providing banking services to the poor self-employed women. It has deposits of over Rs. 100 crore, mobilised from nearly 2,50,000 women. It is the biggest poor women's bank in the world and the first microfinance institution (MFI) to be set up in India. In the 1980s, many NGOs, interested in social-development, were involved in forming small informal self-help groups (SHGs) engaged in micro-activities. These SHGs were successful in effectively meeting the immediate needs of their members. They had potential of growth but their major constraint was finance, that is, getting big loans to finance their activities. Realising the potential of these SHGs through research studies and other initiatives, NABARD designed the SHG–bank linkage concept—wherein the SHGs are linked with banks for funds. Looking at the success of NGOs and NABARD, several microfinance institutions came into existence to help the rural and urban poor, particularly, women.

NGOs and SHGs

Non-government organisations (NGOs) are the key players in the microfinance sector. An NGO is a voluntary organisation established to undertake social intermediation like organising SHGs of micro-entrepreneurs and entrusting them to banks for credit linkage or financial intermediation, like borrowing bulk funds from banks for on-lending to SHGs. NGOs are the promoters of the concept of SHGs. Professional Assistance for Development Action and Mysore Resettlement and Development Agency (MYRADA) were the pioneers to promote the concept of SHGs. NGOs have emerged as an effective change agents by organising and promoting SHGs and facilitating their linkage with banks. They conduct workshops, seminars, and training programmes to create awareness among SHGs.

An SHG is a registered or unregistered group of 15–20 members, who have a relatively homogeneous, social and economic background, and have voluntarily come together to save small amounts regularly to a common fund and to meet their emergency needs on mutual-help basis. This common fund may not be sufficient enough to lend to its members and hence, it seeks an external funding from banks to support the income-generating activities. Very often, there is a self-help promoting which enables them to organise and function smoothly. The formation of SHGs reduces the transaction cost for both the lenders as well as the borrowers. Moreover, groups have reliable information about their members and group guarantees can replace collateral, which poor cannot give. It is cheaper to deal with a group than with individuals. A large number of SHGs have women as their members. Women have a tendency to save and are more concerned about the future of their children and family, get adjusted easily in a group, borrow small amounts, and repay regularly and sincerely. Microfinance is used by SHGs to meet the survival needs, diversify their basket of income-generating activities, meet working-capital requirements in traditional activities and set up micro-enterprises. The SHGs are widely viewed as being better managers of money, more transparent and accountable than most other community groups.

SHG–Operational Methodology

- Village meeting of women in villages by MFI
- Group Formation
- Group Training for 5–7 days on procedures and business development skills
- Group Meeting once in a week for mobilising savings, disbursing and repaying loans
- MFI facilitates capacity building, group dynamics and monitors credit discipline through field staff

Microfinance Delivery Mechanisms

In India, in the course of evolution of microfinance, several approaches for providing microfinance services to the poor have emerged. These are:

1. Conventional weaker-section lending by banks.
2. MFIs.
3. SHG–bank linkage programme.

Figure 23.1 Provides an overview of microfinance in India.

(1) Conventional Weaker-section Lending by Banks

Banks are providers of microfinance. The cooperative banks and the regional rural banks were set up specifically to cater to the needs of both rural as well as urban poor. The commercial banks—both the

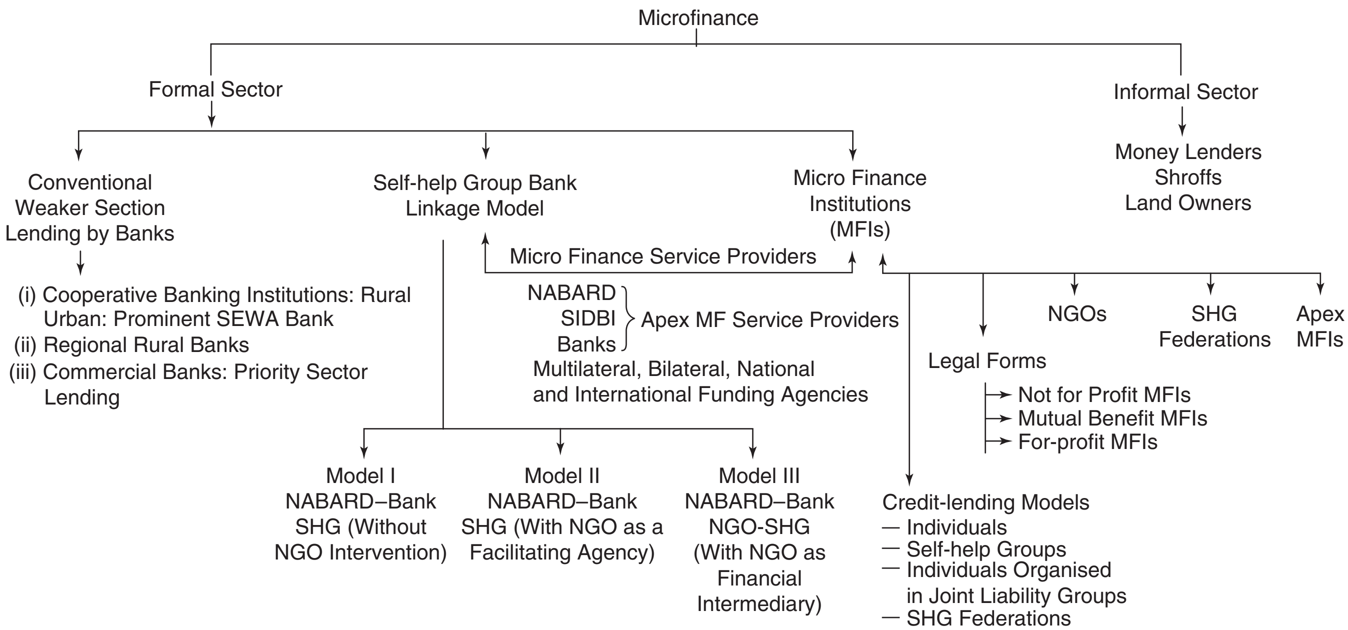

Figure 23.1 Microfinance

private sector and the public sector—lend loans for agricultural as well as other allied activities, as part of the priority-sector lending, mandated by the RBI. The success of many MFIs and the SHG–bank linkage programme has motivated many private-sector banks and foreign banks to actively participate in microfinance. They are lending funds to MFIs and some have raised funds from the capital market to finance the microfinance activity. ICICI Bank, the second-largest commercial bank in India, is a prominent player among the commercial banks in microfinance sector. It has doubled its rural microfinance and agriculture business loans. The bank increased its partner strength and is partnering with around 400 MFIs. The bank is planning to develop a rural banking proposition by capitalising on the partnership model. The first micro-loan securitisation in the world was between Samruddhi, an MFI, and ICICI Bank on November 20, 2003. ICICI Bank bought Samruddhi's crop loans, worth Rs. 42.1 million.

(2) Microfinance Institutions (MFIs)

They are institutions whose major business is the provision of financial services. The Task Force on Supportive Policy and Regulatory Framework for Microfinance (NABARD), 1999, defines MFIs as 'those which provide thrift, credit and other financial services and products of very small amounts, mainly to the poor in rural, semi-urban or urban areas, for enabling them to raise their income level and improve living standards.' A variety of MFIs catering to the needs of poor exist in India. There are around 900 MFIs with varied legal forms. The MFIs can be classified into the following three categories, based on their legal structure:

(a) Not-for-profit MFIs

1. Societies registered under Societies Registration Act, 1860 or similar State Acts.
2. Public Trusts registered under the Indian Trust Act, 1882.
3. Non-profit companies registered under Section 25 of the Companies Act.

MFIs such as ASSIST and Lupin are registered as societies. An MFI which is registered as a society/trust finds difficulty in raising funds when they have achieved a loan-outstanding level of Rs. 25 lakhs and above, from the point of the view of Income Tax Act. Society/Trust does not have the concept of equity. MYRADA has established Sanghamithra Rural Financial Services as a Section-25 company.

Sources of Funding of MFIs

- Donors
- Banks
- SIDBI
- Private Equity
- Venture Capital Funds
- Capital Market

(b) Mutual-benefit MFIs

1. State Credit Cooperatives.
2. National Credit Cooperatives.

3. Mutually Aided Cooperative Societies (MACs) set up under MACS Act, enacted by the Government of Andhra Pradesh in 1955. This law grants functional autonomy to cooperatives that are not receiving funds from the government.

(c) For-profit MFIs Non-banking financial companies (NBFCs) are registered under the Companies Act, 1956, and regulated by the RBI. More than two-thirds of the MFIs are in the form of NBFCs.

NBFCs, such as Sanghamitra, Bangalore; SHARE Microfin Ltd, Hyderabad; Indian Association for Savings and Credit (IASC), Marthandam, Tamil Nadu; and Cashpor Financial and Technical Services (CFTS), Mirzapur, Uttar Pradesh; have exclusive poor clients. An increasing number of MFIs are seeking NBFC status from the RBI to get a wider access to funding including bank finance.

(d) Cooperative MFIs Manndeshi Mahila Bank in Maharashtra, sponsored by HSBC, was the first to receive a cooperative license from the RBI.

Majority of the MFIs have around 500–1,500 clients. The top-three MFIs in India are SHARE Microfin, SKS and Spandana, with a clientele of over 5,00,000.

Other MFIs

(i) SHG federations: An SHG federation is a democratic body formed by SHGs, belonging to a certain geographical area, to represent their common cause to policy-making bodies and facilitate a linkage between SHGs and other agencies. SHG federations are registered mostly as charitable societies. Development of Human Action (DHAN) Foundation further refined the concept of SHGs and helped them to set up federations. SHG federations are formed at two levels—cluster/village-level federations and block/district-level federations. These federations help build solidarity among members. Manavi, an MFI, has 125 SHGss with over 1,500 members. It has formed seven federations out of this group to interact with banks and other agencies.

(ii) Apex MFIs: Rashtriya Mahila Kosh (RMK), the Friends of Women's World Banking (FWWB), Ahmedabad; and Rashtriya Gramin Vikas Nidhi, Guwahati; are the apex MFIs. These institutions provide indirect-support services to MFIs. They are also referred to as wholesale MFIs. They help their members to build capacity, design and implement new products, grant capital, offer a loan guarantee to encourage banks to wholesale funds, and undertake policy initiatives.

(iii) Association of MFIs: Sa-Dhan is the designated national association of Community Development Finance Institutions. It plays a crucial role in increasing capacities, affecting the evolution and development of best practices, increasing the number of service providers, and contributing to improving the policy and operational context for microfinance in India.

The National Bank for Agriculture and Rural Development (NABARD) and the Small Industries Development Bank of India are the apex-microfinance service providers. NABARD is the promoter and regulator of the SHG–bank linkage programme. The Small Industries Development Bank of India (SIDBI) launched the SIDBI Foundation in January 1999, to provide financial and non-financial services to MFIs, so as to facilitate their development into financially viable activities. Multilateral-lending agencies and bilateral-development agencies support the development of microfinance.

Credit-lending methodologies differ from one MFI to another. The major credit-lending models of various MFIs are:

1. Direct lending to individuals organised in joint-liability groups.
2. Lending to SHGs.
3. Lending to SHG federations.

The MFIs have done a commendable job of increasing the outreach of microfinance. Their growth is constrained as they are deprived of equity capital and have no access to public deposits. They rely on loans from banks to fund their growth. They need capital for growth and building capacity.

(3) SHG–Bank Linkage Programme

- This programme was launched by NABARD envisaging synthesis of formal financial system and informal sector
- Commercial banks have the maximum share of SHG's savings and credit

This programme was launched by NABARD in February 1992 with the support of the RBI. The programme initially aimed at promoting and financing 500 SHGs across the country. Under this programme, small groups of the poor were encouraged to pool their savings regularly; and from this pool, small interest-bearing loans were made to members. Subsequently, bank credit was made available to the group to augment its resources for lending to its members. The pilot phase was followed by setting up a working group on NGOs and SHGs, by the RBI in 1994, which came out with wide-ranging recommendations on internalisation of the SHG concept, as a potential intervention tool in the area of banking with the poor. The RBI accepted most of the major recommendations and advised the banks to consider lending to the SHGs, as part of their mainstream rural-credit operations.

The SHG–bank linkage programme is a partnership model between three agencies, namely, the SHGs, banks and the NGOs. NABARD operates three models under this programme. They are:

Model I: NABARAD–Bank–SHG. Under this model, SHGs are formed and financed by banks. There is no NGO intervention. NABARD supports banks and banks, in turn, support SHGs. Around 14 per cent of the SHGs were financed by banks under this model during 2007–08.

Model II: NABARD–Bank–SHG (with NGO as a facilitating agency). Under this model, the NGOs will promote SHGs and link them with banks. SHGs formed by NGOs are directly financed by banks. This is the most popular model. About 80.7 per cent of the SHGs were financed by banks under Model II during 2007–08.

Model III: NABARD–Bank–NGO–SHG (with NGO as the financial intermediary). Funds flow from NABARD to banks and from banks to NGOs. The SHGs are financed by banks through NGOs. About 5 per cent of the SHGs were financed by banks under this model during 2007–08.

NABARD in 1998 formulated its mission for providing access to one-third of the rural poor by linking of one million SHGs by 2007. This mission was achieved well ahead of the schedule. More than 10 lakhs, that is, 10,79,091 SHGs were financed by banks till March 31, 2004, covering 16-million poor families and approximately, 90-million rural people. On March 31, 2009, there were more than 61 lakh saving-linked SHGs and 42 lakh credit linked SHGs. About 8.6 crore households are covered under this programme. Commercial banks had the maximum share in savings of SHGs and disbursement of loans to SHGs. (Tables 23.1 and 23.2)

A notable feature of this programme is that 95 per cent of the loans are timely repaid. To consolidate and expand this programme, NABARD provided active support to partner agencies such as NGOs, RRBs,

TABLE 23.1 SHG–Bank Linkage Programme*

Year	*Total SHGs Financed by Banks (In '000)*		*Bank Loans*		*Refinance*	
	During the Year	*Cumulative*	*During the Year*	*Cumulative*	*During the Year*	*Cumulative*
1	*2*	*3*	*4*	*5*	*6*	*7*
1992–99	33	33	57	57	52	52
1999–2000	82 (147.9)	115 (247.9)	136 (138.1)	193 (238.1)	98 (88.5)	150 (188.5)
2000–01	149 (82.3)	264 (129.9)	288 (112.0)	481 (149.2)	244 (149.0)	394 (162.7)
2001–02	198 (32.6)	461 (74.9)	545 (89.0)	1,026 (113.4)	395 (61.9)	790 (100.5)
2002–03	256 (29.5)	717 (55.4)	1,022 (87.0)	2,049 (99.6)	622 (57.2)	1,412 (78.7)
2003–04	362 (41.4)	1,079 (50.4)	1,856 (81.0)	3,904 (90.6)	705 (13.3)	2,118 (50.0)
2004–05	539 (49.1)	1,618 (50.0)	2,994 (61.0)	6,898 (76.7)	968 (37.3)	3,086 (45.7)
2005–06	620 (15.0)	2,239 (38.3)	4,499 (50.3)	11,398 (65.2)	1,068 (10.3)	4,153 (34.6)
2006–07	1,106	3,345	6,570	17,968	1,293	5,446
2007–08	1,228	4,573	8,849	26,817	1,616	7,062
2008–09P	1,610	6,183	12,254	39,071	–	–

P: Provisional.

* Relating to commercial banks, RRBs and Cooperative banks.

Note:

1. From 2006–07 onwards, the data on number of SHGs financed by banks and bank loans are inclusive of Swarnjayanti Gram Swarozgar Yojna (SGSY), SHGs and the existing groups receiving repeat loans. Owing to this change, NABARD discontinued the publication of data, on a cumulative basis from 2006–07, as such data for 2006–07 onwards are not comparable with the data in the previous years.
2. Figures in parentheses indicate percentage variations over the year.

Source: RBI, Report on Trend and Progress of Banking in India, 2008–09.

TABLE 23.2 Agency-wise SHG–Bank Linkage Position

(Amount in Rs. Crore)

Agency	*SHGs Credit Linked (In '000)*			*Bank Loan Disbursed*		
	2006–07	*2007–08*	*2008–09*	*2006–07*	*2007–08*	*2008–09*
1	*2*	*3*	*4*	*5*	*6*	*7*
Commercial Banks	572 (52)	735 (42)	1,005 (62)	3,919 (60)	5,404 (48)	8,061 (66)
RRBs	381 (34)	328 (33)	406 (25)	2,053 (31)	2,652 (38)	3,193 (26)
Cooperative Banks	153 (14)	165 (25)	199 (13)	599 (09)	794 (14)	999 (8)
Total	**1,106**	**1228**	**1,610**	**6,570**	**8,849**	**12,254**

Note:

1. Figures in parentheses are percentage shares in the respective total.

Source: RBI, Report on Trend and Progress of Banking in India, 2008–09.

cooperatives, farmers' clubs and individual volunteers for their capacity building. It also initiated efforts to scale up the programme in the states where the incidence of poverty was high. NABARD launched a micro-enterprise development programme (MEDP) during 2005–06. It also launched a scheme called Capital/Equity Support to MFIs, to enable them to leverage capital/equity for accessing commercial and other funds from banks for providing financial services at an affordable cost to the poor and achieve sustainability in their operations.

To supplement the efforts of banks in this programme, NABARD has collaborated with institutions such as post offices for financing SHGs, promoted by NGOs. Post offices open savings accounts in the name of SHGs, promoted by identified NGOs and give term loans to these SHGs, repayable within 2 years in 24 monthly instalments. Post offices charge an interest of 9 per cent per annum, on the loans given to SHGs, using a reducing balance method, but do not collect any loan. Post offices are allowed to retain an interest margin of 3 per cent and the amount of actual interest collected from the SHGs is shared between NABARD and the post offices in the ratio of 2 : 1. NABARD, in turn, provides financial support for capacity-building programmes of postal officials. This collaboration paves the way for expansion of microfinance programme in areas where the branch network is poor.

SHG-Bank Linkage Programme

- It is the largest microfinance programme in terms of outreach in the world
- It is recognised as a part of priority sector lending by the RBI

RESOURCES FOR SUPPORTING MICROFINANCE

Microfinance Development Fund (MFDF)

Looking to the success of the SHG–bank linkage programme, the RBI and NABARD designed an integrated programme which would help in the holistic development of the entrepreneur by providing him services such as marketing infrastructure, technology and design development.

In April 2000, NABARD set up a separate fund, the Micro Finance Development Fund, for promotion and development of the microfinance sector with an initial contribution of Rs. 100 crores—Rs. 40 crores each from the RBI and NABARD and Rs. 20 crores from 11 public-sector commercial banks. NABARD has further contributed Rs. 6 crores from its operational surplus during the last 4 years to the corpus. The fund became fully operational on March 7, 2003.

This fund supports broadly the following activities:

- Giving training and exposure to SHG members, partner NGOs, banks and government agencies.
- Providing start-up funds to MFIs and meeting their initial operational deficits.
- Meeting the cost of formation and nurturing of SHGs.
- Designing new delivery mechanisms.
- Promoting research, action research, management-information systems (MISs) and dissemination of best practices in microfinance.

This fund helps in furthering the cause of banking with the poor. The fund is being utilised for scaling up various microfinance initiatives, with a special focus on capacity building, under the SHG–bank linkage programme. The scaling-up efforts emphasise on evolving region-specific strategies for promoting quality SHGs through a synergy of objectives among stakeholders, encouraging proper rating of SHGs by banks and building a proper MIS.The fund is also used for providing loan in the form of revolving financial assistance (RFA) to MFIs. The Microfinance Development Fund was re-designated as Micro Finance Development and Equity Fund in 2005.

Collaboration with External Agencies

NABARD has collaborated with external agencies like the Swiss Agency for Development Cooperation (SDC) for improving the efficiency of credit delivery to rural borrowers and GTZ, Germany, for capacity building. The Credit and Financial Services Fund (CFSF) was set up through the assistance of the SDC. Under the project for NABARD–GTZ technical collaboration—linking of SHGs to banks, GTZ provided technical support for up-scaling the SHG–bank linkage programme. The main objective of this project was capacity building at different levels and promoting greater participation of the people. NABARD has received Rs. 52 crores from GTZ Germany till March 31, 2004.

The SHG–bank linkage programme is the largest microfinance programme of the world in terms of its outreach. As on March 31, 2006, this programme enabled an estimated 329.80-lakh poor households in the country, to gain an access to microfinance activities from the formal banking system.

A study commissioned by NABARD in 2000, which covered 560 SHG member households from 223 SHGs, spread over 11 states, found that:

- Average value of assets increased by 72 per cent from Rs. 6,843 to Rs. 11,793.
- Average annual savings per household registered over three-fold increase from Rs. 460 to Rs. 1,444.
- Average borrowings per year per household increased from Rs. 4,282 to Rs. 8,341. Nearly, 70 per cent of loans was used for income-generating activities.
- Average net income increased per household by about 33 per cent.

Small Industries Development Bank of India (SIDBI) launched its microfinance programme in February 1994 and is one of the largest providers of microfinance through the MFIs. It pioneered the concepts of capacity-assessment rating (CAR) in 1999 and 'transformation loan' in 2003 for the MFIs. The transformation loan is a quasi-equity product with longer repayment period and features for conversion into equity at a later date. It enables the MFI to convert itself into a corporate entity.

The Micro Financial Sector (Development and Regulations) Bill, 2007

It was introduced in the Lok Sabha on March 20, 2007. The Bill seeks to provide for promotion, development and orderly growth of the microfinance sector in rural and urban areas to ensure that small borrowers gain access to integrated financial services. The Bill defines 'microfinance services' as a means for

1. providing financial assistance to an individual or an eligible client being under any of the sub-clauses (i) to (vi) of Clause (b), either directly or through a group mechanism for (A), an amount, not exceeding Rs. 50,000 in aggregate per individual, for small and tiny enterprise, agriculture, allied activities (including for consumption purposes of such individual); or (B) an amount not exceeding Rs. 1,50,000 in aggregate per individual, for housing purposes; or (C) such other amounts, for any of the purposes mentioned at items (A) and (B) above or other purposes, as may be prescribed;
2. financial services to an eligible client or individual borrower under any of the sub-clauses (i) to (vi) of Clause (b), through the BF or BC mechanism, authorised by the scheduled banks or any such other agency, as may be permitted by the RBI;
3. life-insurance- or general-insurance services and pension services which have been approved by the authority, regulating such services;
4. any other services, as may be specified by regulations made by the National Bank.

The Bill proposes to empower NABARD to function as the developer and regulator of the microfinance sector and formulate policies for its orderly growth, so as to ensure transparency, effective management and good governance. It would be mandatory for MFIs to register with NABARD. For safeguarding the interests of depositors, a reserve fund would be set up in which a minimum 15 per cent of the net profit or surplus realised out of thrift services is to be parked. The Bill also proposes to set up a corpus called the Micro Finance Development and Equity Fund, for the development of the microfinance sector and microfinance ombudsman, for settlement of disputes. The Bill has been referred to the Standing Committee Finance.

The Positive Side of Microfinance

The success of the SHG–bank linkage programme has proved that poor are creditworthy and bankable. Financial services can be provided to the poor at commercial rates. Microfinance is a powerful vehicle in the upward and socio-economic transition of the poor. It has reduced household vulnerability to risks, provided higher income and greater security, and reduced social exclusion. It also helps the poor to cope with the natural disasters by helping them to diversify their income services and build portable assets which can be protected from these disasters. It empowers women by enabling them to become the economic agents of charge. Also, the individual lending of microfinance is gaining speed and in the process, changing many lives.

Corporates have successfully penetrated the rural markets through SHGs. Hindustan Lever Limited, under its project Shakti, offers a wide range of its products to the SHGs, comprising of women. This model has created a win–win partnership between HLL and SHGs. This project has not only enabled the company to successfully tap the rural markets, but has also created income-generating capabilities for rural women and transformed many into successful entrepreneurs.

The Downside of Microfinance

Despite the success stories, microfinance has had a much larger share of its controversies. Whether it is the high-interest rates charged by MFIs or unethical recovery methods adopted by them, MFIs tend to remain in news. The microfinance sector is not free from risks. There are many operational, attitudinal and policy-level constraints. There is lack of transparency and absence of governance structure. The growth of microfinance is skewed with a large proportion of SHGs formed in the southern states of India. Regulation can create a discipline and foster the development of sound MFIs.

Future of Microfinance

The industry witnessed a growth rate of 50–60 per cent between 2006–08.The potential for the microfinance industry is still large. It is estimated that only 3 per cent of the 75-million poor households in India receive financial services from the formal and informal sectors. According to Sa-Dhan, the overall outreach is 6.5-million families and the sector-wide loan portfolio is Rs. 2,500 crores meeting 10 per cent of the estimated demand. This sector is expected to grow to a potentially Rs. 35,000 crores, by 2010. With recovery levels of more than 95 per cent, microfinance is seen as an extremely profitable venture. International venture-capital funds and private-equity firms are planning to make a foray into this sector.

KEY TERMS

Financial Inclusion, Microfinance, Microfinance Institutions, Business Facilitator and Business Correspondent.

SUMMARY

1. Even after more than 35 years of nationalisation, more than 40 per cent of the adult population in India has no access to formal banking and financial services.
2. Financial exclusion leads to loss of opportunities of growth for an individual, which, in turn, leads to loss of output for an economy and a reduction in societal welfare.
3. Financial inclusion is to be undertaken in three steps:
   a. Providing access to financial products and services.
   b. Availability of financial products and services in a fair and equitable manner.
   c. Credit counselling which includes providing sound services to arrest deterioration of incomes, restructuring of debt solution to overcome debt burden and improve money-management skills.
4. In November 2005, banks were advised to make available a basic banking, no-frills account, with low or nil minimum balances through simplified KYC procedures as well as charges to expand the outreach of such accounts to vast sections of the population.
5. In January 2006, the RBI, permitted banks to utilise the services of NGOs/SHGs, MFIs (other than NBFCs) and other civil-society organisations, as intermediaries, for providing financial and banking services, through the use of BF and BC models.
6. An alternative delivery mechanism, for meeting the requirements of the poor, known as 'microfinance' came into existence. Microfinance in India evolved to fill the gaps created by the formal banking institutions.
7. Several approaches for providing microfinance services to the poor have emerged. These are:
   a. Conventional weaker-section lending by banks.
   b. MFIs.
   c. SHG–bank linkage programme.
8. The SHG–bank linkage programme is a partnership model between three agencies, namely, the SHGs, banks and NGOs. NABARD operates three models under this programme.
9. In April 2000, NABARD set up a separate fund, the Micro Finance Development Fund, for promotion and development of the microfinance sector with an initial contribution of Rs. 100 crore.
10. The potential for the microfinance industry is still large.

REVIEW QUESTIONS

1. What is financial exclusion? State the reasons for financial exclusion.
2. Define financial inclusion. What initiatives have been undertaken to enlarge financial inclusion?

3. What is a no-frills account? Why is it being offered by banks?
4. Explain the BF and BC models.
5. Describe the SHG–bank linkage programme.
6. Compare the SHG–bank linkage programme and the Grameen Bank model of Bangladesh.
7. 'The potential for the microfinance industry is still large.' Discuss.

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Part V

Financial Regulation

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24

Financial Regulation

Chapter Objectives

This chapter will enable you to develop an understanding of the following:

1. *Regulation of the capital market*
2. *Role and functions of the SEBI*
3. *Role and functions of the Reserve Bank of India*

REGULATION OF THE CAPITAL MARKET

The securities market is regulated by various agencies such as the Department of Economics Affairs (DEA), the Department of Company Affairs (DCA), the Reserve Bank of India (RBI), and the SEBI. The activities of these agencies are coordinated by a high level committee on capital and financial markets. The High Level Co-ordination Committee for Financial Markets (HLCCFM) discusses various policy level issues which require inter-regulatory coordination between the regulators in the financial market, viz., RBI, SEBI, Insurance Regulatory and Development Authority (IRDA), and Pension Fund Regulatory and Development Authority (PFRDA). The Committee is chaired by the Governor, RBI., Secretary-Ministry of Finance, Chairman—SEBI, Chairman—IRDA and Chairman—PFRDA are members of the committee.

The capital market, i.e., the market for equity and debt securities is regulated by the Securities and Exchange Board of India (SEBI). The SEBI has full autonomy and authority to regulate and develop the capital market. The government has framed rules under the Securities Contracts (Regulation) Act (SCRA), the SEBI Act and the Depositories Act. The SEBI has framed regulations under the SEBI Act and the Depositories Act for registration and regulation of all market intermediaries, for prevention of unfair trade practices, and insider trading. Under the acts, the Government and the SEBI issue notifications, guidelines, and circulars which need to be complied with by market participants. All the rules and regulations are administered by the SEBI. The powers in respect of the contracts for sale and purchase of government securities, money market securities and ready forward contracts in debt securities are exercised concurrently by the RBI.

The four main legislations governing the capital market are as follows

- The SEBI Act, 1992 which establishes the SEBI with four-fold objectives of protection of the interests of investors in securities, development of the securities market, regulation of the securities market and matters connected therewith and incidental thereto.
- The Companies Act, 1956 which deals with issue, allotment and transfer of securities, disclosures to be made in public issues, underwriting, rights and bonus issues and payment of interest and dividends.
- The Securities Contracts (Regulation) Act, 1956 which provides for regulations of securities trading and the management of stock exchanges.
- The Depositories Act, 1996 which provides for establishment of depositories for electronic maintenance and transfer of ownership of demat securities.

THE SECURITIES AND EXCHANGE BOARD OF INDIA (SEBI)

- SEBI protects the interests of investors in securities and promotes the development of securities market

With the announcement of the reforms package in 1991, the volume of business in both the primary and secondary segments of the capital market increased. A multicrore securities scam rocked the Indian financial system in 1992. The then existing regulatory framework was found to be fragmented and inadequate and hence a need for an autonomous, statutory, and integrated organisation to ensure the smooth functioning of capital market was felt. To fulfill this need, the Securities and Exchange Board of India (SEBI), which was already in existence since April 1988, was conferred statutory powers to regulate the capital market.

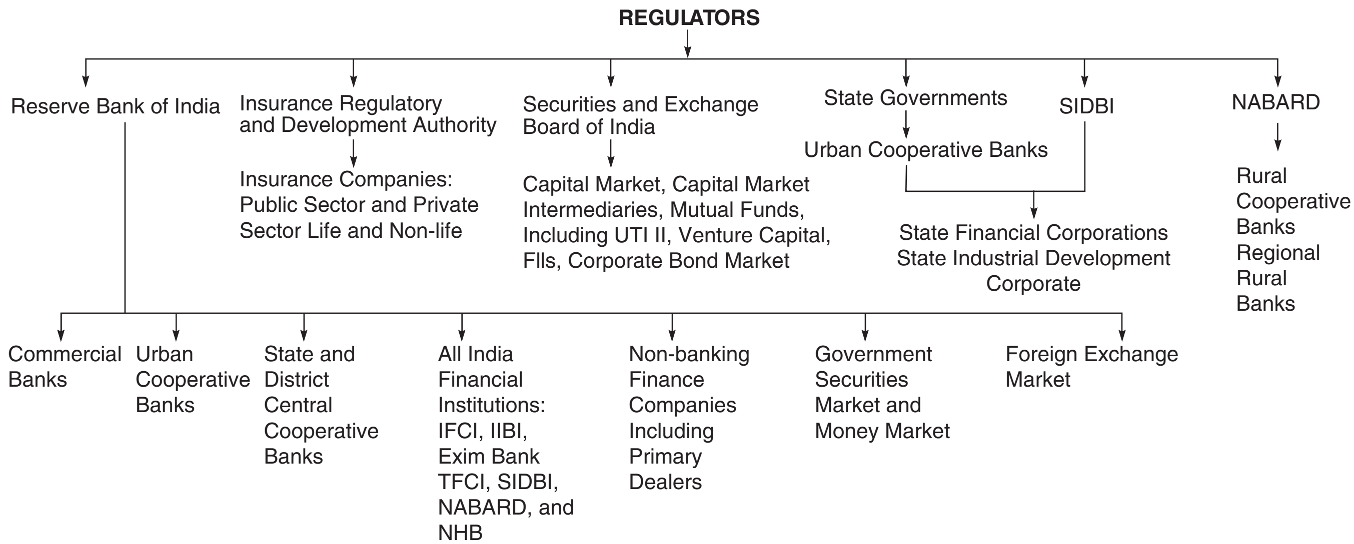

Figure 24.1 Regulatory Structure of Financial Institutions and Markets

Objectives of SEBI

- Protect the interest of the investor in securities
- Promote the development of securities market
- Regulating the securities market

The SEBI got legal teeth through an ordinance issued on January 30, 1992. The ordinance conferred wide-ranging powers on the SEBI, including the authority to prohibit 'insider trading' and 'regulate substantial acquisition of shares' and 'take over of business'. With this, the Capital Issues (Control) Act was repealed and the office of the Controller of Capital Issues (CCI) was abolished in 1992. The SEBI was set up with statutory powers on February 21, 1992. The objectives defined by the ordinance for the board were (i) investor protection and (ii) promotion and development of the capital market while simultaneously regulating the functioning of the securities market. The function of market development includes containing risk, broad basing, maintaining market integrity and promoting long-term investment.

The ordinance was repealed by the SEBI Act on April 4, 1992. The Securities and Exchange Board of India Act, 1992, provides for the establishment of the board to: protect the interest of the investors in securities, promote the development of, and regulate the securities market and matters connected therewith or incidental to. Certain powers under certain sections of the Securities Contracts (Regulation) Act and the Companies Act were delegated to the SEBI. The regulatory powers of the SEBI were increased through the Securities Laws (Amendment) Ordinance of January 1995, which was subsequently replaced by an act of parliament. The SEBI works under the Ministry of Finance. It has been given a status of an independent organisation regulating each and every aspect of the securities market backed by a statute and accountable to the parliament.

Management of the SEBI Under the SEBI Act, 1992

Section 4 of the act lays down the constitution of the management of the SEBI. The board of members of the SEBI shall consist of a chairman; two members from amongst the officials of the ministries of the central government dealing with finance and law; one member from amongst the officials of the RBI constituted under Section 3 of the RBI Act, 1934; two other members to be appointed by the central government, who shall be professionals and, inter alia, have experience or special knowledge relating to the securities market.

Figure 24.1 provides an overview of regulatory structure of financial institutions and markets.

Powers and Functions of the SEBI

Section 11(1) of the act casts upon the SEBI the duty to protect the interests of investors in securities and to promote the development of and to regulate the securities market through appropriate measures. These measures provide for the following

- Regulating the business in stock exchanges and any other securities market.
- Registering and regulating the working of stock brokers, sub-brokers, share transfer agents, bankers to an issue, trustees of trust deeds, registrars to an issue, merchant bankers, underwriters, portfolio

managers, investment advisors, and such other intermediaries who may be associated with the securities market in any manner.

- Registering and regulating the working of collective investment schemes, including mutual funds.
- Promoting and regulating self regulatory organisations.
- Prohibiting fraudulent and unfair trade practices in the securities market.
- Promoting investor education and trading of securities in securities market.
- Prohibiting insider trading in securities.
- Regulating substantial acquisition of shares and takeover of companies.
- Calling for information from, undertaking inspection, conducting inquiries and audits of the stock exchanges and intermediaries and self regulatory organisations in the securities market.
- Performing such functions and exercising such powers under the provisions of the Capital Issues (Control) Act, 1947, (subsequently repealed) and the Securities Contracts (Regulations) Act, 1956, as may be delegated to it by the central government.
- Levying fees or other charges for carrying out the purposes of Section 11 of the act.
- Conducting research for the above purpose.
- Performing such other functions as may be prescribed by the government.

The SEBI exercises powers under Sections 11 and 11B of the SEBI Act, 1992, and 17 other regulations. The SEBI, with its powers, can carry out the following functions.

- Ask any intermediary or market participant for information.
- Inspect books of depository participants, issuers or beneficiary owners.
- Suspend or cancel a certificate of registration granted to a depository participant or issuer.
- Request the RBI to inspect books of a banker to an issue. And suspend or cancel the registration of the banker to an issue.
- Suspend or cancel certification issued to the custodian of securities.
- Suspend or cancel registration issued to foreign institutional investors.
- Investigate and inspect books of accounts and records of insiders.
- Investigate an acquirer, a seller, or merchant banker for violating takeover rules.
- Suspend or cancel the registration of a merchant banker.
- Investigate the affairs of mutual funds, their trustees, and asset management companies.
- Investigate any person dealing in securities on complaint of contravention of trading regulation.
- Suspend or cancel the registration of errant portfolio managers.
- Cancel the certification of registrars and share transfer agents.
- Cancel the certification of brokers who fail to furnish information of transactions in securities or who furnish false information.

Regulations, Guidelines, and Schemes Issued by the SEBI

Regulations

- SEBI (Stock Brokers and Sub Brokers) Regulations, 1992.
- SEBI (Prohibition of Insider Trading) Regulations, 1992.
- SEBI (Merchant Bankers) Regulations, 1992.
- SEBI (Portfolio Managers) regulations, 1993.
- SEBI (Registrars to an Issue and Share Transfer Agents) Regulations, 1993.
- SEBI (Underwriters) Regulations, 1993.
- SEBI (Debenture Trustees) Regulations, 1993.
- SEBI (Bankers to an Issue) Regulations, 1994.
- SEBI (Foreign Institutional Investors) Regulations, 1995.
- SEBI (Custodian of Securities) Regulations 1996.
- SEBI (Depositories and Participants) Regulations, 1996.
- SEBI (Venture Capital Funds) Regulations, 1996.
- SEBI (Mutual Funds) Regulations, 1996.
- SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 1997.
- SEBI (Buyback of Securities) Regulations, 1998.
- SEBI (Credit Rating Agencies) Regulations, 1999.
- SEBI (Collective Investment Schemes) Regulations, 1999.
- SEBI (Foreign Venture Capital Investors) Regulations, 2000.
- SEBI (Procedure for Board Meeting) Regulations, 2001.

- SEBI (Issue of Sweat Equity) regulations, 2002.
- SEBI (Procedure for Holding Enquiry by Enquiry Officer and Imposing Penalty) Regulations, 2002.

With a view to making markets more competitive and compliant, the SEBI brought in the following new regulations:

- SEBI (Prohibition of Fraudulent and Unfair Trade Practices relating to Securities Market) Regulations, 2003.
- SEBI (Ombudsman) Regulations, 2003.
- SEBI (Central Listing Authority) Regulations, 2003.
- SEBI (Central Database for Market Participants) Regulations, 2003.
- SEBI (Self Regulatory Organisations) Regulations, 2004.
- SEBI (Criteria for Fit and Proper Person) Regulations, 2004.

As a measure of regulatory productiveness, the existing regulations are frequently reviewed and amendments notified. Regulations are superior to guidelines as the former have a stronger legal force. Regulations are passed by the SEBI, tabled in the Parliament and are subject to explicit penalties and remedial actions.

Guidelines

- SEBI (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999.
- SEBI (Disclosure and Investor Protection) Guidelines, 2000.
- SEBI (Delisting of Securities) Guidelines, 2003.

Schemes

- Securities Lending Scheme, 1997.
- SEBI (Informal Guidance) Scheme, 2003.

The orders of the SEBI under the securities laws are appealable before a securities appellate tribunal (SAT)-the body that hears appeals against the SEBI's orders. The orders of the SAT are appealable before the high court or the supreme court.

An order passed by the SEBI against market participants such as brokers, custodians, depositories, or mutual funds can be challenged before the SAT. The market participants can move the high court or the Supreme Court if they are not happy with the SAT order. The entire process can take years before a case is finally resolved. There is a provision for out-of-court settlements in the SEBI guidelines. The out-of-court settlement system attempts to resolve administrative, civil, and criminal disputes with the consent of the involved parties and the SEBI. This system saves time, efforts, and money of both the involved parties and the regulator as they do not have to go through long range of legal proceedings.

Under SEBI guidelines, the proposal to settle a dispute is first placed before a high-powered advisory committee of the regulator. If the proposal gets the committee's approval, the terms of settlement are drafted and orders are passed by a panel of two whole-time directors of the SEBI after the cause and nature of violation is established. The panel normally imposes penalty on the offenders and can also temporarily suspend a market participant. If a case is pending before the SAT, the committee files the terms of settlement before the tribunal. It is mandatory for the accused to give an undertaking to the regulator that it will refrain from taking any legal action against it. If the accused violates any condition of the settlement, the regulator can revive its legal action.

Regulation of the Securities Market

The SEBI has powers to register and regulate all market intermediaries. The SEBI has powers to penalise them in case of violations of the provisions of the act, rules and regulations made thereunder.

It can conduct enquiries, audits, and inspection of all market intermediaries and adjudicate offences under the SEBI Act, 1992.

The SEBI registers and regulates the intermediaries in the primary market. Some of the major intermediaries it regulates are merchant bankers, underwriters, bankers to an issue, registrars to an issue and share transfer agents and debenture trustees. The SEBI registers and regulates various intermediaries in the secondary market such as brokers, subbrokers, stock exchanges, foreign institutional investors (FIIs) custodians, depositories, mutual funds, and venture capital funds. Market intermediaries registered with the SEBI are as follows (Table 24.1).

TABLE 24.1 Intermediaries Registered with SEBI

	As on March 31, 2010
Stock Exchanges (Cash Market)	20
Stock Exchanges (Derivatives Market) (BSE and NSE)	2
Stock Exchanges (Currency Derivatives) (BSE, NSE and MCX-SX)	3
Brokers (Cash Segment)	9,772
Brokers (Derivatives Segment)	1,705
Brokers (Currency Derivatives)	1,459
Sub-Brokers (Cash Segment)	75,577
Corporate Brokers (Cash Segment)	4,424
Registrar to an Issue and Share Transfer Agent	74
Bankers to an Issue	48
Debenture Trustees	30
Merchant Bankers	164
Portfolio Managers	243
Underwriters	5
Depositories	2
Depository Participants	758
Credit Rating Agencies	5
Custodians	17
FIIs	1,713
Mutual Funds	47
Venture Capital Funds	158
Foreign Venture Capital Funds	143
Approved Intermediaries (Stock Lending Scheme)	2
STP (Centalised Hub)	1
STP Service Providers	2

Source: SEBI, Bulletin, April 2010

Box 24.1 Capital Adequacy Norms for Intermediaries Prescribed by the SEBI

Intermediary	Net worth	Paid up capital	Base minimum capital (BMC/ Exposure Limits)
Category I merchant banker	Rs. 5 crore	NP	NP
Portfolio manager	Rs. 50 lakh	NP	Limits placed by the clients
Category I registrar to an issue	Rs. 6 lakh	NP	NP
Underwriter	Rs. 20 lakh	NP	20 times of the networth
Debenture trustee	Rs. 1 crore. The entity should also be a scheduled bank or PFI or an insurance company or body corporate	NP	NP
Banker to an issue	Should be a scheduled bank	NP	NP
Custodian of securities	Rs. 50 crore	NP	NP
Depository	Rs. 100 crore	NP	NP

(Continued)

Box 24.1 *(Continued)*

Intermediary	Net worth	Paid up capital	Base minimum capital (BMC/ Exposure Limits)
Depository participant	Should be a PFI or scheduled bank or SFC or CC Rs. 50 lakh, if broker	NP	100 times of the networth, if broker. No limits for others
Mutual funds	Sponsor to have positive net worth, which is more than the capital contribution of the sponsor in the AMC	NP	NP
Venture capital fund	Each scheme/fund to have firm commitment from the investors for contribution of atleast Rs. 5 crore	NP	NP
Collective investment management company	Rs. 5 crore	NP	NP
Credit rating agency	Rs. 5 crore	NP	NP
Stock broker (cash segment)	NP	Rs. 30 lakh for large exchanges	BMC of Rs. 10 lakh for large exchanges. Gross exposure not to exceed 20 times BMC and additional capital
Trading member (derivative segment)	As may be specified by the derivatives exchange or segment from time to time	NP	NP
Clearing member	Rs. 3 crore (Deposit of atleast Rs. 50 lakh with CC)	NP	Three per cent of notional value of gross open position in index futures and short index options and five per cent of notional value of futures and short open positions in stocks not to exceed liquid net worth
Self clearing member	Rs. 1 crore (Deposit of Rs. 50 lakh with the CC)	NP	–do–
Sub-broker	NP	NP	NP
FII	NP	NP	NP
Approved intermediary under SLS	Rs. 50 crore	NP	NP

CC = Clearing Corporation. NP = Not prescribed.

Source: SEBI.

SEBI has specific responsibilities under the SEBI Act, 1992 as listed under.

- Register and regulate the working of the stock brokers, sub-brokers, share-transfer agents, bankers to an issue, trustee of trust deeds, registrars to an issue, merchant bankers, underwriters, portfolio managers, investment advisors and such other intermediaries associated with the securities market.
- Register and regulate the working of the depositories, depository participants, custodian of securities, foreign institutional investors, credit rating agencies, or any other intermediary associated with the securities market as the SEBI may specify by notification.
- Register and regulate the working of the venture capital funds, collective investment schemes, including mutual funds.

All the above mentioned intermediaries can deal in securities or operate in the securities market only after they obtain a certificate of registration from the SEBI. The certificate of registration can be suspended or cancelled by the SEBI in the manner prescribed in the regulations.

As per the existing regulations, if the applicant is a registered stock broker, the board may grant a certificate if the stock broker has a minimum net worth of Rs. 50 lakh and aggregate value of portfolio of securities of the beneficial owners does not exceed 100 times of the networth of the stock broker. This regulation was amended and notified on June 16, 2003. After the amendment, if the stock broker maintains the networth of Rs. 10 crore, the limit on aggregate value of portfolio of securities shall not be applicable.

The SEBI has formed a sub-committee which has recommended daily and aggregated disclosure of key information about brokers including aggregate open proprietary position and value at risk and number of open positions.

Besides, the SEBI is also responsible for promoting and regulating self regulatory organisations, prohibiting fraudulent and unfair trade practices relating to securities market, and prohibiting insider trading in securities.

Supervision of Securities Market

The SEBI supervises the securities market through on-site and off-site inspections, enforcement, enquiry against violation of rules and regulations, and prosecutions. It undertakes inspection of the books and records of depository participants and registrar to an issue. It also issues showcause notices to companies on the basis of reports submitted by the depositories.

It also undertakes inspection of stock exchanges to ensure that

- the exchange provides a fair, equitable, and growing market to investors;
- the exchange has complied with the conditions if any, imposed on it at the time of renewal of grant of its recognition under Section 4 of the SC (R) Act, 1956;
- the exchange's organisation systems and practices are in accordance with the Securities Contracts (Regulation) Act, 1956 and rules framed thereunder;
- the exchange has implemented the directions, guidelines, and instructions issued by the SEBI from time to time; and
- there are adequate control mechanisms and risk management system.

Inspection of stock exchanges involves a thorough review of operations, organisational structure, and administrative control of each exchange.

It also undertakes inspection of brokers/sub-brokers. It has directed the exchanges to carry out comprehensive inspection of atleast 20 per cent of the active brokers every year. In order to avoid excessive exposure, it has directed stock brokers/sub-brokers of an exchange not to deal with brokers/sub-brokers of the same exchange either for proprietary trading or for trading on behalf of clients, except with the prior permission of the exchange. It has initiated cancellation of registration of broker declared defaulter or expelled from the exchange as one-time exercise. It has devised a comprehensive disclosure requirement framework for stock brokers which include information about the registration details of the broker and his associates, their background, and history including details of complaints/arbitration and regulatory action initiated. It is planning to enhance the scope of audit of books of accounts and other records by including reporting of information on collection of margins from clients, maintaining segregation between client funds and arm funds, payment and deliveries to clients and details of related party transaction. Many stock exchanges floated subsidiaries to become members of the NSE and the BSE. These subsidiaries function as brokers of the NSE and the BSE. The SEBI carries out inspection of the books and records of subsidiaries to verify whether the books of accounts, records and other documents are maintained in the manner specified by the Securities Contracts (Regulations) Rules 1957 and the SEBI (Stock Brokers and Sub-brokers) Regulations, 1992, provisions of the SEBI Act, the Securities Contracts (Regulations) Act, 1956 are complied with by the subsidiary and provisions of the bye-laws to business rules of the exchange and subsidiary are adhered to.

- **Inspection of depositories:** The SEBI undertakes an inspection of the two depositories to examine their functioning and compliance.
- **System audit:** In order to ensure the quality of technology and software systems used by the stock exchanges, the SEBI has advised all the active stock exchanges to carry out a system audit.
- **Surveillance:** The SEBI has set up market surveillance mechanisms and systems to ensure safety and integrity of the market. The front line responsibility for market surveillance lies with the stock exchanges. They have a separate surveillance department which monitors market movements, identifies price volatility, analyses, its causes and takes prompt action in close coordination with stock exchange and depositories. Besides, keeping a close oversight on the surveillance activities of stock exchanges, the SEBI holds periodical meetings with market intermediaries to gather information and exchange views.

SEBI's market surveillance essentially focuses on the following.

- Policy formulation for introduction of surveillance systems at the stock exchanges to bring integrity, safety, and stability in the Indian securities markets.

- Overseeing the surveillance activities of the stock exchanges, including the monitoring of market movements by them.
- Inspection of the surveillance cells of the stock exchanges.
- Preparation of reports and studies on market movements, which the SEBI circulates periodically to the Government of India and to securities markets regulators from other countries.

The primary responsibility of market surveillance has been entrusted to the stock exchanges. However, the SEBI keeps a proactive oversight on market monitoring and in exceptional circumstances it analyses the same.

The market surveillance systems are developed and consolidated on a continuous basis. Some of the surveillance systems and risk containment measures that have been put in place are briefly given below.

- Risk containment measures in the form of elaborate margining system and linking of intra-day trading limits and exposure limits to capital adequacy.
- Daily price bands to curb abnormal price behaviour and volatility.
- Reporting by stock exchanges through periodic and event driven reports.
- Establishment of independent surveillance cells in stock exchanges.
- Inspection of intermediaries.
- Imposition of trading restrictions, including suspension of trading in scrips by exchanges to prevent market manipulation.
- Formation of Inter-Exchange Market Surveillance Group for prompt, interactive, and effective decision making on surveillance issues and co-ordination between stock exchanges.
- Implementation of online automated surveillance system (stock watch system) at stock exchanges.
- Dissemination of daily trading data of domestic institutional investors by stock exchanges on their website to reflect their extent of participation and thereby provide investors with meaningful information.

In order to effectively discharge its regulatory functions, the SEBI has put in place an Integrated Market Surveillance System (IMSS) which generates alerts arising out of unusual market movements. This system helps in analysing, detecting, identifying, and taking preventive actions in number of cases where abnormal trading pattern is observed. This, in turn, ensures market integrity, promotes professional standards of participants and their orderly conduct which is vital for smooth functioning of the securities market.

Pursuant to the decisions taken at the weekly surveillance meetings, the SEBI takes surveillance actions which include placing select scrips on a trade to trade basis for a certain period and banning entities involved in illegal trading and *dabba* trading.

- **Investigations:** The SEBI is empowered to investigate the affairs of any securities market intermediary or persons associated with security market or any other persons suspected to have violated any regulatory provisions. It undertakes investigations to probe into possible or suspected or alleged infringements of security market regulations such as price manipulation, artificial volume creation, insider trading, violation of takeover code or any other regulations, public issue related irregularities or any fraudulent or unfair trade practices. Investigations are initiated based on evidence available from various sources including the SEBI's own surveillance activities, stock exchanges, other intermediaries, complaints from various sources including press reports. The SEBI then calls for information, compels production of documents, summons persons interrogation, examines witnesses and where necessary, with the magistrate's approval carries out even search and seizure operations. On completion of investigation, the SEBI takes actions such as warning, suspension of activities, cancellation of registration, denial of access to the capital market for a specified period, imposition of monetary penalties and initiation of prosecution proceedings.

The act has armed the SEBI with powers to discipline the intermediaries.

- Issuing directions to all intermediaries and other persons associated with the securities market, (i) in the interest of investors, (ii) in the interest of orderly development of the securities market, (iii) to prevent the affairs of any intermediary including a mutual fund from being conducted in a manner detrimental to the interest of investors or of the securities market, or (iv) to secure the proper management of any such entity.
- Calling for information from, undertaking inspection, conducting inquiries and audits of the stock exchanges, mutual funds, other persons associated with the securities market, intermediaries, and SROs.
- Appointing a person as investigating authority to investigate the affairs of an intermediary or persons associated with the securities market.

- Appointing adjudicating officers to adjudicate a wide range of violations and impose monetary penalties on any intermediary or other participants in the securities market. The penalty can be upto Rs. 25 crore or three times the amount of profits made out of violations. The violations include failure to submit any document, information or furnish any return, failure to maintain required books of accounts or records, failure to enter into agreement with clients, insider trading, failure to redress the grievances of investors, failure to issue contact notes, and charging excessive brokerage by brokers.
- Attaching for a period not exceeding one month, one or more bank accounts of any intermediary or any person associated with the securities market in any manner involved in violation of any of the provisions of the act or rules or regulations made thereunder, and directing any intermediary or any person associated with the securities market in any manner not to dispose of or alienate an asset forming part of any transaction which is under investigation, in the interest of investors or securities market.
- Suspending or cancelling registration of an intermediary in the manner prescribed in the regulations.

Details of investigations taken up, prosecutions launched, completed and action taken during the period 1992–93 to 2008–09 is given below.

TABLE 24.2 Investigations by the SEBI

Year	*Cases Taken up for Investigation*	*Cases Completed*
1	2	3
1992–93	2	2
1993–94	3	3
1994–95	2	2
1995–96	60	18
1996–97	122	55
1997–98	53	46
1998–99	55	60
1999–00	56	57
2000–01	68	46
2001–02	111	29
2002–03	125	106
2003–04	121	152
2004–05	130	179
2005–06	159	81
2006–07	120	102
2007–08	25	169
2008–09(P)	76	116
Total	**1,288**	**1,223**

P: Provisional.

Source: SEBI, *Annual Report*, 2008–09.

Investigation of Cases Table 24.2 reveals that the focus of SEBI has shifted to speedy completion of the investigations in the recent years. The number of pending cases has declined to 65 as on March 31, 2009. The majority of cases taken up and completed pertained to market manipulation and price rigging. Such investigations coupled with effective market surveillance under the oversight of the SEBI have resulted in significant reduction in cases of market manipulation and price rigging.

Prosecutions The prosecutions are launched under the Companies Act, the SEBI Act, the Depositories Act, the Securities Contract Regulations Act and the Indian Penal Code. Maximum number of prosecutions relating to violation of the SEBI (Substantial Acquisition of Shares and Take-overs) Regulations, 1997, Violation of the SEBI (Prohibition of Fraudulent and Unfair Trade Practices Relating to the Securities Market) Regulations, 1995, Unregistered Entities, Violation of SEBI (Insider Trading) Regulations, 1992, Violation of SEBI (Portfolio Managers) Rules, 1993, Non-payment of Penalty Amount Imposed by the Adjudicating Officer and others are launched under the SEBI Act.

Inspection of Mutual Funds

Inspection of mutual funds is carried out by independent chartered accountant firms. SEBI issues warning and deficiency letters to mutual funds considering the magnitude and seriousness of violations of SEBI regulations/ guidelines. Of the total warnings, majority of the warnings were issued for violating the advertising code and the investment restrictions. Deficiency letters are issued based on the inspection report, and mutual funds were asked to strengthen their systems and improve compliance standards. SEBI has made it mandatory for mutual funds to pay interest @15 per cent per annum for delays in the dispatch of repurchase/redemption proceeds to the unit holders Because of such action, the interest amount paid by mutual funds has declined.

Self Regulatory Organisations (SROs)

For effective regulation, there is a segregation of regulation of the market and the regulation of market participants all over the world. The Indian capital market is characterised by large number of participants operating in a complex and dynamic market place. Hence, a single centralised regulatory agency may not have sufficient resources and expertise to regulate the entire market effectively. Moreover, proper governance requires feedbacks and participation of market participants in the process of framing and implementing regulations. Therefore, the involvement of market participants is important. Keeping this in view, self regulation by participants is preferred and setting up of SROs is promoted.

An SRO is the first level capital market regulator which is a non-government body, having statutory responsibility to regulate its own members for fair and efficient practices. SROs are expected to share the responsibility with the regulator in framing and administering regulations The activities generally undertaken by the SRO are—registering members, establishing rules and regulations for its members to effectively promote market integrity and market efficiency, ensuring compliance of such rules and regulations by imparting training to members, conducting examinations, conducting inspections of members, enhancing the level of investor protection, and also mediating in broker-investor disputes. As SROs have greater understanding of ground reality, development of SROs results in greater acceptance of rules by the members of SROs, provide market players with greater flexibility to respond to securities market, and avoid duplication of responsibilities. For SROs to function effectively, they should be able to establish and enforce bye-laws, rules and regulations to proven manipulative trade practices and permit just and prevent equitable principles of trade. Stock exchanges in India are already acting as SROs. The Association of Merchant Bankers of India, the Association of Mutual Funds of India (AMFI) , the Indian Banks' Association(IBA) and the Association of NSE Members of India (ANMI) perform the functions of SROs.

The SEBI has framed the SEBI (Self Regulatory Organisations) Regulation, 2004, which obligate SROs to undertake the following.

- Always abide by the directions of the SEBI.
- Be responsible for investor protection and education of investors or its members and shall ensure observance of securities laws by its members.
- Specify standard of conduct for its members and also shall be responsible for the implementation of the same by its members.
- Conduct inspection and audit of its members on a regular basis, through independent auditors.
- Submit its annual report to the SEBI.
- Treat all its members and the applications for membership in a fair and transparent manner.
- Collect admission and membership fees from its members for carrying out the purposes of the regulations.
- Promptly inform the SEBI of violations of the provisions of the act, the rules, the regulations, the directions, the circulars or the guidelines by any of its members.
- Conduct screening and certification tests for its members, agents and such other persons as it may determine.
- Conduct training programmes for its members or agents and also conduct awareness programmes for securities market investors.
- Make endeavorer for introduction of best business practices among its members.
- Act in utmost good faith and shall avoid conflict of interest in the conduct of its functions.
- Comply with the norms of corporate governance as applicable to listed companies.
- Discharge such other functions and obligations as may be specified by the SEBI, from time-totime.

Self regulation is not an independent tool, it complements other tools. The SRO assist the regulators in use of the other tools such as registration, monitoring, and enforcement. Further, they are also subject to same tools of registration, monitoring, and enforcement by the SEBI as the other intermediaries are.

There are three alternative models existing in different countries: *limited SRO model* which performs front-line regulation functions for its market and acts as the agent of the regulator, *strong SRO model* which performs extensive market and member regulation function and regulator only acts as the oversight authority and *independent member SRO model* which performs only regulation functions thereby enabling greater use of industry expertise and resources and minimising conflicts of interest between business and SRO functions. Financial Industry Regulatory Authority (FINRA), an independent member SRO, is the largest non-governmental regulator for all securities firms doing business in the US.

In order to make regulation more effective and responsive, the SEBI is contemplating to modify SRO regulations in order to promote the formation of more self regulatory organisations (SROs) in the Indian capital market.

Investor Protection Measures

The SEBI has introduced a variety of measures to protect the interests of investors. With a view to creating an awareness among issuers and intermediaries of the need to redress investor grievances quickly, the SEBI issues fortnightly press releases, publishing the names of the companies against whom maximum number of complaints have been received. To ensure that no malpractice takes place in the allotment of shares, a representative of the SEBI supervises the allotment process. It issues advertisements from time-to-time to guide and enlighten investors on various issues related to the securities market and of their rights and remedies.

In order to protect the interests of investors in collective investment schemes and in accordance with the mandate given by the government, the SEBI framed regulations for collective investment schemes. The regulatory authority took several measures with a two-pronged approach to discipline and take action against erring entities and at the same time to educate the investors about the risks associated with investing in unregulated schemes. The actions taken by the SEBI included issuing show cause notices to defaulting entities, initiating court proceedings to obtain appropriate relief in the interest of investors, conducting a special audit of the books of accounts of the larger entities, making credit rating mandatory for existing schemes, disseminating information to investors through the issue of press releases/public notices.

The SEBI has introduced an automated complaints handling system to deal with investor complaints. The complaints received by the SEBI from investors have been categorised as under:

Type-I: Non-receipt of refund orders/allotment letters/stock invest.
Type-II: Non-receipt of dividend.
Type-III: Non-receipt of share certificates/bonus shares.
Type-IV: Non-receipt of debenture certificates/interest on debentures/redemption amount of debentures/interest on delayed payment of interest on debentures/redemption amount of debentures.
Type-V: Non-receipt of annual reports, letter of offer for rights, rights forms, interest on delayed payment of refund orders/dividends.
Type-VI: Complaints related to collective investment schemes.
Type-VII: Complaints related to mutual funds, FIIs, portfolio managers, venture capital funds, custodians.
Type-VIII: Complaints related to brokers, sub-brokers, securities lending intermediaries, registrars and transfer agents, bankers to issue, underwriters, credit rating agencies, depository participants, merchant bankers.
Type-IX: Complaints related to stock exchanges, clearing and settlement organisations, depositories.
Type-X: Complaints related to derivative exchanges.
Type-XI: Complaints related to corporation finance such as corporate governance, corporate restructuring, substantial acquisition and takeovers, buyback, delisting, compliance with listing conditions.

Investors' Education

Some of the steps taken by the SEBI for educating investors during the year 2000–01 were as under:

- The SEBI distributed the booklet titled *A Quick Reference Guide for Investors* to the investors.
- The SEBI wrote to stock exchanges and various corporates to distribute the booklet titled *A Quick Reference Guide for Investors* to their shareholders/investors.
- The SEBI also issued a series of advertisements/public notices in national as well as regional newspapers to educate and caution the investors about the risks associated with the investments in collective investments schemes.
- The SEBI also broadcasts messages for investors in the collective investment schemes through the national hook-up and regional stations of *Vividh Bharati*.
- The SEBI issued messages in the interest of investors on the national channel and regional stations on *Doordarshan*.

Investors' Grievances Redressal

The SEBI has established a comprehensive investor grievances redressal mechanism. The Investor Grievances Redressal and Guidance Division of the SEBI assists investors who prefer to make complaints to the SEBI against listed companies. A standardised complaint format is available at all SEBI offices and on the SEBI website for the convenience of investors. Each complaint is taken up with the company and if the complaint is not resolved within a reasonable time, a periodical follow up is also made with the company. Errant companies are warned of stern action for their failure to redress grievances. Recalcitrant companies are referred for prosecution.

Regulations relating to redressal of investor grievances—surrender of certificate of security and audit were notified on September 2, 2003. According to these regulations, the issuer/its agent/an intermediary shall redress the beneficial owners' grievances within 30 days of the date of receipt of the complaint and keep the depository informed about the nature of grievance, number of disposed/pending complaints.

Within 15 days of receipt of certificate of securities, the issuer shall confirm to the depository that the securities comprised in the said certificate have been listed on the stock exchange where the earlier issued securities are listed and shall also after due verification immediately mutilate and cancel the certificate of security and substitute in its record the name of the depository as the registered owner and shall send a certificate to this effect to the depository and to every stock exchange where the security is listed.

All matters relating to transfer of securities, maintaining of records of holders of securities, handling of physical shares, and establishing connectivity with the depositories should be collectively handled and maintained at a single point, i.e., either inhouse by the company or by a SEBI registered share transfer agent.

Every issuer shall submit an audit report on a quarterly basis, starting from September 30, 2003, to the concerned stock exchanges audited by a qualified chartered accountant or a practicing company secretary, for the purposes of reconciliation of the total issued capital, listed capital and capital held by depositories in dematerialised form.

The SEBI claims to have resolved an increasing proportion of investors' grievances. The redressal rate is 94 per cent (Table 24.3).

The SEBI setup a new institution in 2003 called the 'ombudsman' for the capital market. The dictionary meaning of ombudsman is 'an official appointed to investigate individuals' complaints against public authorities'. The SEBI ombudsman is an office to redress the grievances of the investors against the intermediaries and the listed companies by mutual agreement or by award on adjudication. Regulation 2 (l) of the SEBI (Ombudsman) Regulations, 2003 defines ombudsman as 'any person appointed under Regulation 3 of these regulations, and unless the context otherwise requires, includes stipendiary ombudsman'. Regulation 3 states that the 'board may, on recommendation of a selection committee appoint one or more ombudsmen for such territorial jurisdiction as may be specified from time to time by an order', Regulation 2 (n) defines 'stipendiary ombudsman' as 'a person appointed under Regulation 9 for the purpose of acting as an ombudsman in respect of a specific matter or matters in a specific territorial jurisdiction and for which he may be paid such expenses, honorarium or sitting expenses as may be determined by the board from time to time'.

- Ombudsman is an office to redress the grievances of the investors against the intermediaries and the listed companies by mutual agreement or by award on adjudication

Regulations 11 and 12 deal with the powers and functions of the ombudsman. They are as follows.

- To receive complaints specified in Regulation 13 against any intermediary or a listed company or both.
- To consider such complaints and facilitate resolution thereof by amicable settlement.
- To approve a friendly or amicable settlement of the dispute between the parties.
- To adjudicate such complaints in the event of failure of settlement thereof by friendly or amicable settlement.

The ombudsman has to submit an annual budget and furnish such other information as may be required by the SEBI.

TABLE 24.3 Investors' Grievances

Year (End March)	*Grievances Received*	*Grievances Resolved*	*Grievances Pending*
1991–92	18,794	4,061	14,733
2005–06	40,485	37,061	1,57,520
2006–07	26,473	17,899	1,66,152
2007–08	54,933	31,676	1,89,409
2008–09	57,580	75,989	1,71,000

Source: SEBI, *Annual Report,* 2008–09.

Regulation 13 provides for the grounds under which a person may lodge a complaint either to the SEBI or ombudsman concerned. A wide gamut of issues relating to non-receipt of refund orders, allotment letters, share certificates, unit certificates, debenture certificates, bonus shares, interest on debentures, redemption amount of debentures, delayed payment of interest on debentures, interest on delayed refund of application a mount, annual reports or statements pertaining to the portfolios, redemption amount from a mutual fund or collective investment scheme; letter of offer or consideration in take over or buy back offer or delisting; and grievance in respect of issue or dealing in securities against an intermediary or a listed company can be the grounds for filing a complaint.

The complainant can make a complaint to the ombudsman subject to certain conditions.

- The complainant has made a written representation to the listed company for the intermediary and the complaint has remained unredressed for a period of one month or more from the date of receipt of the said representation.
- The complaint should be made within a period of seven months from the date of receipt of representation by the company or the intermediary, or within six months from the date of rejection of his complaint by the company or the intermediary.
- The complaint should not be in respect of the same subject matter that has already been settled either through the SEBI or through the ombudsman and for which any proceedings before the SEBI or any court of law or tribunal or any other forum is pending, or a decree or award or a final award has already been passed by such forum.

The ombudsman may award compensation, costs and interest. The award of ombudsman may be reviewed by the SEBI on grounds of substantial miscarriage of justice or an error apparent on the face of the award. Failure to obey the award of the ombudsman or order of the SEBI is liable for penalty under Section 15C, Section 11 (4), and Section 12 of the SEBI Act. In addition, the party shall also be liable for suspension or cancellation of certificate of registration.

The Ombudsman shall be appointed for a term of three years and shall be eligible for appointment for another period of two years.

It is mandatory for every listed company and intermediary to display their name and address of the ombudsman in its office premises and the offer documents or other agreements with clients.

Investors' Associations

With a view to creating a greater degree of awareness among the investors, the SEBI has encouraged forming of investors' associations. During the year 2000–01, the SEBI renewed the registration of six investors' associations for a period of three years and granted provisional registration to five investors' associations for a period of one year. Accordingly, the following investors' associations are registered with SEBI.

- All Body Corporate Shareholders' Forum, Hyderabad.
- Consumer Education and Research Society, Ahmedabad.
- Jagrut Grahak Mandal, Patan (Gujarat).
- Kovai Investors' Association, Coimbatore.
- Tamil Nadu Investors' Association, Chennai.
- The Gujarat Investors' and Shareholders' Association, Ahmedabad.
- Investors' Grievances Forum, Mumbai.
- Kolhapur Investors' Association, Kolhapur.
- Midas Touch Investor's Association, Kanpur.
- Consumer Unity and Trust Society, Jaipur.
- Ghatkopar Investors' Welfare Association, Mumbai.

The recognised investors' associations are eligible to draw a sum upto Rs. 1 lakh each from the SEBI to meet their one-time capital expenditure towards setting up computer terminals and installation of data base on companies and internet connectivity. They are also entitled to draw upto Rs. 5 lakh per association for organising seminars for investor education on capital market subject to a limit of Rs. 50,000 per seminar and for publication and circulation of investor education material and upto Rs. 5,000 per association for translating, printing, and circulating the SEBI booklet titled *A Quick Reference Guide for Investors*.

Corporate governance is an important instrument of investor protection and it is, therefore, a priority on the SEBI's agenda. The development of capital market is dependent on good corporate governance without which investors do not repose confidence in companies. It is imperative for companies to maximise the shareholders' value and wealth. Hence, to ensure that the Indian investors are in no way less informed and protected as compared to their counterparts in the developed capital markets, the SEBI appointed a committee on corporate governance under the chairmanship of Shri Kumar Mangalam Birla, member, SEBI Board.

The committee framed the codes of corporate governance and suggested the implementation of the code through stock exchanges. The SEBI asked the stock exchanges to make amendments in the listing agreements on corporate governance keeping in view the diversity of business and size of the companies entering the market. The SEBI is planning to review the corporate governance norms currently applicable to listed companies. A new committee to be headed by N. Narayana Murthy, Chairman and Chief Mentor of Infosys, will review all recommendations made by earlier committees on the subject and recommend changes to enhance corporate transparency. Recently, the SEBI has proposed corporate governance rating. According to the SEBI chairman, G. N. Bajpai, 'Just as the rating of a financial instrument and the company's financial health are closely linked, the market valuation of a company is influenced by the quality of its corporate governance practices'. It has asked the rating agencies, namely, CRISIL and ICRA to prepare a comprehensive instrument for rating of good corporate governance practices of listed companies. This instrument will enable the securities market regulator judge the compliance status of corporates on parameters such as effective creation, management, and distribution of investors wealth.

For prohibiting fraudulent and unfair trade practices, the SEBI enacted the SEBI (Prohibition of Fraudulent and Unfair Trade Practices relating to the Securities Market) regulations, which enabled the SEBI to investigate into market manipulation. Vigorous efforts were undertaken to enforce these regulations.

In order to make the securities markets fair and transparent and for enhanced investor protection, the SEBI had taken further initiatives to strengthen insider trading regulations. A group was set up under the chairmanship of Shri Kumar Mangalam Birla, to suggest measures to be taken for strengthening of the regulations as well as requirements of procedures, code of conduct and reporting for entities in the capital market which may have access to non-public information. The Insider Trading (Amendment) Regulations were notified on February 20, 2002. The following changes were made through these amendment regulations for enhancing market transparency and for strengthening the insider trading regulations.

- Strengthening existing provisions by including changes in the definition of 'connected person', broadening the meaning of dealing in securities, redefining the term 'deemed to be connected', refraining the term 'unpublished price sensitive information'.
- Incorporation of disclosure requirements by insiders such as directors and large shareholders. These disclosures to be made to stock exchanges within the prescribed time limit.
- Creation of preventive framework and consisting of code of conduct for listed companies and other entities associated with securities markets. The codes of conduct cover the following aspects: maintaining confidentiality of 'Unpublished Price Sensitive Information', trading regulations such as trading windows, restricted lists of securities and pre-clearance of trades, internal reporting requirements for transactions in securities and provisions for internal enforcement, and penalty to be imposed by companies/other entities for contravention of code of conduct.
- Creation of a code of corporate disclosure practices for listed companies. This code covers the areas of prompt disclosure of price sensitive information by listed companies, responding to market rumours, timely reporting of shareholdings/ownership and changes in ownership, disclosure of information with special reference to analysts, institutional investors, and dissemination of information by companies, including through company websites.
- Dealing with market rumours. Companies are required to designate compliance officers who can be contacted by the stock exchanges whenever such verification of rumours is needed. Exchanges required to take up quick verification of rumours and ensure proper dissemination of the relevant information.
- Coordination and sharing of information between exchanges.

The SEBI has created an Overseas Investors Cell to facilitate investments by overseas investors and to enhance their confidence in India's regulatory and redressal mechanism.

Achievements of the SEBI

Throughout its fifteen-year existence as a statutory body, SEBI has sought to balance the two objectives by constantly reviewing and reappraising its existing policies and programmes, formulating new policies and crafting new regulations in areas hitherto unregulated, and implementing them to ensure growth of the market.

The SEBI introduced an array of reforms in the primary and secondary markets and catalysed modernisation of the market infrastructure to prepare the market for the twenty-first century. India is probably the only country in the world where all the exchanges have screen-based trading. Computerised trading has led to reduction in the scope for price-rigging and manipulation, since a paper trail can easily lead the regulators now to the doorsteps of the guilty. Dematerialisation has pushed the process further.

Computerisation has also given a boost to surveillance. The basic surveillance is carried out by the stock exchanges, while the SEBI monitors the process. Introduction of price caps, price bands, circuit filters, margins and stock watch are some ways of keeping a strict vigil on the market.

Improvements have been made in the clearance and settlement system. A major step in this direction has been the establishment of depositories—the National Securities Depository Limited (NSDL) and the Central Depository Services of India Limited (CDSL)—and a clearing corporation—the National Securities Clearing Corporation Limited (NSCCL).

For reviving primary markets, the SEBI further streamlined and simplified the issue procedure, imparted greater flexibility to the issue process and strengthened the criteria for accessing the securities market. The SEBI introduced the option of making an issue through book building.

The development of mutual funds, which are important investment vehicles in a mature securities market, was given a major impetus, with the revision of mutual funds regulations which now provide greater operational flexibility to the fund managers and increase their accountability and supervision. The SEBI scored its biggest public successes in the mutual funds arena, particularly in their regulation. When some funds planned to renege on their promises to investors by unilaterally amending the assured return schemes, the SEBI put its foot down and compelled them to make good their promises.

Due to directions by the SEBI, the sponsors and asset management companies of nine mutual funds contributed a total amount of Rs. 4,558.96 crore to meet the shortfall in case of 32 schemes as on March 31, 2003. Many of these schemes were launched even before the enactment of the SEBI Act 1992. The details of these schemes, contribution made by the asset management companies or the sponsors are given in Table 24.4.

TABLE 24.4 Assured Return Schemes: Contributions Made to Honour the Commitments

(Rs. in Crores)

Name of the Mutual Fund	*Name of the Scheme*	*Contribution Made by Sponsor/AMC (2002–03)*
BOIMF	Double Square Plus	256.50
	Festival Bonanza	1.38
	Growth Scheme**	
	RMI	3.69
Canbank MF	Canstar	1,325.43#
GICMF	GIC Big Value	46.33
	GIC Rise II	133.00
	GIC Rise 91	138.00
	GIC Suraksha 96	5.66
PNBMF	Premium Plus 91	26.15
	Rising Income Plus 90	3.92
Indian Bank MF	Ind Jyothi	43.59
	Swarnapushpa	0.42
SBIMF	Magnum Bond Fund	12.29
	MMIS91	42.27
	Magnum Triple Plus Scheme	126.80
	MMIS97	4.55
	MMIS89	21.18
	MMIS98	0.03

(*Continued*)

TABLE 24.4 *(Continued)*

(Rs. in Crores)

Name of the Mutual Fund	*Name of the Scheme*	*Contribution Made by Sponsor/AMC (2002–03)*
LICMF	Dhanvarsha (3)	12.40
	Dhanvarsha (4)	127.94
	Dhanvarsha (5)	63.92
	Dhanshree 89	7.50
	Dhanvarsha (6)	1.03
	Dhanvarsha (8)	0.41
	Dhanvarsha (10)	0.30
	Dhanvarsha (13)	0.56
UTI	MIP96 (III)	25.50
	MIP97 (I)	617.00
	MIP97 (II)	855.00
	MIP97 (III)	379.00
	IISFUS97	277.00
Taurus MF	Libra Leap	0.03
Total		**4,558.96**

** BOI Festival Bonanza Growth—The amount has since been reimbursed back to the AMC out of income earned on unclaimed amounts.

Canstar Scheme—Rs. 42.6 crore—in the process of meeting the shortfall as and when the investors approach the mutual fund for redemption.

MIP 96 (III)—Shortfall paid from DRF by UTI.

Dhanvarsha (13) Scheme—AMC has waived the management fees of Rs. 55.77 lakh.

Source: SEBI, *Annual Report*, 2002–03.

The regulator introduced a host of investor-friendly regulations in case of mutual funds. The SEBI scrapped the entry load charged while investing in mutual funds for investments directly with the asset management company (AMC). In other words, investors can now bypass the agent/distributor and save this cost. The SEBI also scrapped initial issue expenses and amortisation thereof on close-ended funds for reducing expenses on funds and thereby aiding the investor's interest. SEBI also introduced measures to instill discipline among mutual funds and also ensure investor interest and protection. If a debt fund is close-ended, the mutual funds must not repay its investors pre-maturely and all close-ended debt funds should be traded in the market. It made FMPs strictly close-ended and listing of these FMPs mandatory. Fund managers would have to structure their portfolio by buying assets that will mature along with the tenure of the scheme so that there will be no mis-match between tenure of the scheme and maturity of the holdings under the scheme. Disclosure of portfolios of FMP schemes has become mandatory to help investors make informed and timely redemption decisions. Moreover, mutual funds were also banned to declare indicative returns and yields under FMPs.

Far reaching changes were made in the SEBI regulations for substantial acquisition of shares and takeovers. The regulations for foreign institutional investors (FIIs) were liberalised to provide greater flexibility and for widening the scope of their investments in the Indian securities market.

Some merchant bankers were found to be unscrupulous. They had not performed their duties diligently in scrutinising the prospectus and had taken advantage of the loopholes by concealing some facts in their prospectus. The SEBI reduced the categories of merchant bankers from four to one. Moreover, it prohibited merchant bankers from undertaking activities such as leasing, bills, and discounting.

The SEBI took stringent action against those companies which floated collective schemes. It also came down heavily on plantation forms.

To empower investors make informed decisions and facilitate fair dealing, the SEBI introduced online filing and dissemination of time sensitive price information, benchmarking of mutual fund schemes, valuation norms for unlisted scrips in mutual fund portfolios, rationalisation of depository participants' charges and new regulations for portfolio managers.

The SEBI revolutionalised the settlement system by introducing T+2 rolling settlement across all scrips across exchanges. It issued guidelines for demutualisation and corporatisation of stock exchanges and all the 20 stock exchanges in the country are demutualised. The regulator has made the rights issue process short and simple and last year reduced the 'post-approval timeline' from 109 days to 30 days by making changes in the notice period for record date and board meeting.

To create an effective regulatory regime in which all stakeholders have confidence, the SEBI has posted the securities appellate tribunal orders on the SEBI website, initiated consultative process for framing regulations, and shortened the inquiry process. SAT provides a grievance redressal platform against the SEBI's orders. Public dissemination of such appellate orders is vital as these act as a precedent for other similar cases and on the decision-making process of the SEBI.

The SEBI investigated certain irregularities in the transactions of the shares issued through 21 IPOs during the period 2003–05, before their listing on the stock exchanges. The regulator investigated action against 105 entities including the two depositories—NSDL and CDSL involved in these transactions under the SEBI Act by prohibiting them to trade in the securities market and imposing penalties on them. The SEBI levied disgorgement amount on these entities and is in the process of disgorging further sums from other entities. It levied a disgorgement amount of Rs. 116 crore on NSDL and CDSL. The disgorged amount collected was disbursed to 12.8 lakh investors till April 2010.

The SEBI is trying to bring down various forms of risk that are there in the securities market. A securities market has three kinds of risk—structural, systemic, and operational.

1. **Structural:** Large infrastructure can be a risk; India has a large infrastructure. An over-or under-utilised structure can always be risky. This is receiving the SEBI's attention. This risk is low because most of the regional stock exchanges have no volumes.
2. **Systemic:** These are broadly classified into three parts: disclosure standards, accounting standards and corporate governance. Under disclosure standards, India ranks the best in the world. Accounting standards of India today are by and large aligned completely with the international accounting standards. Many companies have adopted world best corporate governance practices and the others are in the process. The SEBI is asking for risk management factors in corporate governance.
3. **Operational:** Operational efficiency of the Indian market is comparable to the rest of the world. The Indian stock exchanges follow a T+2 settlement cycle. Secondly, every transaction on the trading platform is guaranteed for settlement by a third party. Stock exchanges have a relative monitoring of margining and positions. Today, our settlement stands shoulder to shoulder with the rest of the world.

As far as systemic reforms are concerned, the SEBI has done outstanding work. The SEBI has done a commendable job in developing equity markets and pushing for operational reforms.

However, the market regulator was heavily criticised as it failed to take timely actions during the spate of scams that took place in the last decade. The SEBI, as a watch dog, remained a silent spectator when the small investors were robbed off their savings. The SEBI has been criticised on the following grounds.

- The SEBI, as a regulator, proved to be ineffective in the series of scams that took place in the last decade. The SEBI has been accused of shutting the stable door after the horse had bolted. For instance, the SEBI had occasions to review the affairs of CRB capital markets but took a lenient view and as a result, scores of investors lost crores of rupees.
- The SEBI has gone more than half away to help out potential defaulters to avoid a major payments crisis. Whenever the real racketeers get up to new tricks, surveillance takes a long time to catch up.
- The SEBI acts as the handmaiden of the government instead of an independent regulator. The government also perceives the SEBI to be an extension of the finance ministry.
- The guidelines issued by the SEBI are ambiguous and frequently revised which creates confusion amongst the market participants.
- New concepts are introduced without putting in place the requisite infrastructure. For instance, the dematerialisation concept was introduced without the requisite infrastructure and this created a chaotic situation for the investors, companies, and stock exchanges.
- The SEBI banned *badla,* a time-tested hedging-cum-financing mechanism in India, in December 1993, after its repeated requests to stock exchanges to ensure that brokers maintained capital adequacy norms failed. It banned *badla* without providing an alternative mechanism. In the face of persistent demands by the broking community, the SEBI appointed the G. S. Patel Committee and introduced a modified *badla* in July 1995. The modified *badla* proved unacceptable and the Jayant

Verma Committee was appointed, which suggested a modified carried forward system. All deferral products, including *badla,* were banned in July 2001. The SEBI introduced rolling settlement after the ban of ALBM and BLESS. The ban on deferral products killed liquidity in the markets which, in turn, dampened the market sentiments.

- The SEBI is perceived to be more corporate-friendly than investor-friendly. It not only failed to penalise fraudulent companies, but remained a spectator when the same companies re-entered the market with new issues.
- The SEBI does not have the requisite number and a competent staff to regulate and develop the capital market. There are only two dozen officers who are involved in surveillance, investigation, and prosecution, as compared to a large army of over 1,000 in the Securities Exchange Commission (SEC) of the US. It does not have the necessary machinery to achieve all its objectives and bring discipline and transparency in the market.
- The Investor Grievance Cell of the SEBI merely forwards the grievance letters to the companies. Investors are not happy with the functioning of this cell as they feel that timely action is not taken. In order to ascertain correct status of redressal of grievance, the SEBI has been conducting an exercise of sending reply-paid post cards to investor, requesting them to reply as to whether their complaint has been resolved by companies or not. During 2000–01, out of 69,131 reply-paid postcards sent to investors, 44,915 postcards were received back, of which 3,621 replied that the complaints were resolved and 40,629 replied that the complaints were not resolved. This reveals that the SEBI's claims of having resolved around 95 per cent of investors grievances is not true.
- The SEBI has failed to balance its twin objectives—regulation and growth of capital market. For instance, after the CRB scam was unearthed, the SEBI stipulated many stringent norms for NBFCs, thereby ringing the death bell for many NBFCs.

Recently, most of the orders of the SEBI were overturned by the SAT. The tribunal had quashed SEBI's order in BPL, Videocon, and Sterlite for lack of evidence. In L&T's case, SAT struck down the order against Reliance for violation of takeover code. In the case of HCL, definition of insider was found to be vague and confusing. The SAT totally exonerated Samir Arora, former chief investment officer of Alliance Capital Mutual Fund of all the charges levied by the SEBI on October 15, 2004. The three-member tribunal said that there was no substance in any of the three charges brought by the SEBI. Thus, the SEBI's orders were set aside primarily due to lack of evidence, vagueness of definition of insider and defective/improper investigator. Many of its orders were upheld by SAT and in many cases, where SAT reversed the orders, the SEBI preferred appeal before the higher court. The SEBI's inability to successfully defend its cases before the appellate authority raises questions regarding its investigating and enforcement credibility. The SEBI requires an adequate and skilled staff for effective enforcement and prosecution and a sound legal team to present and defend the SEBI's case. The SEBI should train people in writing proper orders, appreciating the evidence, and interpreting provisions of law so as to make SEBI orders foolproof.

The SEBI, being a watchdog, should always be careful and adopt a cautious approach and use the legal expertise available to it so that it can continue to play its rightful role.

Future Plans

The SEBI has chalked out a vision of becoming the 'most dynamic and respected regulator—globally'. In order to realise this vision, the SEBI has drawn a comprehensive strategic action plan which envisages achievement of strategic aims laid down for: (a) investors, (b) corporates, (c) markets, and (d) regulatory regime.

Box 24.2 SEBI's Orders Set Aside by SAT

Birla Sunlife Mutual Fund, the fifth largest fund house in India acquired Alliance Capital Mutual Fund. The US-based fund, Alliance Capital, ran into trouble with the market regulator SEBI, when its star fund manager Samir Arora was banned from the market for five years, on various charges including insider trading. The SEBI also imposed a Rs 15 crore fine on Alliance in the same case, which the fund challenged in the SAT. SAT absolved Arora of all the charges.

The SEBI had, on May 17, 2005, banned Swiss major UBS Securities from issuing participatory notes for one year. The action was taken by the SEBI as part of its probe into the May 17, 2004 market crash, in which UBS was a seller. As UBS allegedly failed to furnish the details of some of its clients, SEBI initiated action against the firm under Section 11 (4) and 11B of the SEBI Act, 1992. On September 9, 2005, the SAT struck down the SEBI order and made UBS free to access market.

Investors

Aim: To empower investors make informed decisions and achieve fair dealings in their financial dealings.

It does not have the necessary machinery to achieve all its objectives and bring discipline and transparency in the market.

Progress: Online filing and dissemination of time sensitive price information; benchmarking of mutual fund schemes; valuation norms for unlisted scrips in MF portfolios; rationalisation of depository participants' charges; new regulations for portfolio managers.

Plans: Launch of nationwide investor awareness campaign; enhancing continuous disclosure standards; implementation of the Malegam Committee recommendation on disclosures in offer documents.

Corporates

Aim: To ensure that firms and their managers understand and meet their regulatory obligations.

Progress: Institutionalised feed back; code of conduct specified for listed entities and regulated firms under the insider trading regulations; instituted a scheme to enable individuals and companies to disclose the irregularities in reporting of acquisition of shares under the SEBI (SAST) Regulations, 1997.

Plans: Strengthening corporate governance code; improving quality of intermediaries.

Markets and Intermediaries

Aim: To ensure that consumers and other participants believe that the markets are efficient, orderly, and clean.

Progress: T+2 rolling settlement across all scrips across exchanges; demutualisation of stock exchanges; abolition of no-delivery period; introduction of surveillance reporting for derivatives; dual fungibility of ADR/GDR; inter-depository transfer through online connectivity established between CDSL and NSDL; straight through processing (STP) on the securities market made operational.

Plans: Strengthening of secondary market; strengthening of derivatives market; review of market infrastructure; institution of centralised listing authority; review of depository services; development of debt market.

Regulatory Regime

Aim: To create an appropriate and effective regulatory regime in which all stakeholders have confidence.

Progress: Posting of securities appellate tribunal orders on the SEBI website; consultative process for framing regulations; shortening of enquiry process; quicker regulatory responses; the SEBI Act, 1992 amended in October 2002 and SEBI's powers enhanced; the SEBI Board enlarged with the provision of three full time board members.

Plans: Review of regulations making the regulatory process more transparent; reengineering systems and processes; introduction of T+1 settlement and new products.

The SEBI is also trying hard to rebuild its image as an effective regulator. The board has issued around 40 regulations, of which some have turned irrelevant over the years. The SEBI has identified seven to eight regulations which need change and is reviewing them to align them with current market realities. It is seeking feedback from various intermediaries and other market participants.

The SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009 (ICDR Regulations), were notified on August 26, 2009. The matters relating to issue of capital, the manner in which such matters shall be disclosed, and other matters incidental thereto were hitherto provided in the SEBI (Disclosure and Investor Protection) Guidelines, 2000 (DIP Guidelines) issued under Section 11(1) of the SEBI Act, 1992. As these provisions, along with few changes, have since been incorporated in the ICDR Regulations, the DIP Guidelines stand rescinded. With ICDR Regulations, it has removed the ambiguities, rationalised the rules and regulations and enhanced transparency. It has also converted the DIP guidelines into a form recognised by law.

The SEBI plans to put in place a new online reporting system where the company-related information, including annual reports, can be put up. The SEBI's future plans include moving the settlement cycle to T+1, reducing IPO listing time to seven days, and introducing market makers and call auction risks. In a move to improve transparency, the SEBI will also put up the agenda papers of all policy issues on the website. The minutes of the meetings on such items will also be available on the SEBI website once the Board has approved them.

Conclusion

The SEBI is a regulatory body which is seventeen years old and the capital market system is more than 100 years old. This matured capital market system requires monitoring rather than over-regulation. The SEBI should supervise this capital market system in such a manner that all sub-systems become self regulatory organisations gradually. The SEBI should lay down the boundaries within which these subsystems should operate.

Moreover, the fundamental infrastructure for regulation, disclosure, surveillance and trading are all in place. Hence, the SEBI should stop being pre-occupied with day-to-day regulations and become more of a visionary.

Technological changes and integration of Indian financial markets with world markets will pose a greater challenge to the SEBI. As the markets become more interconnected the world over, there will be consolidation of regulations. The SEBI will have to acquire sweeping powers like powers of search and seizure, or banning an individual for life from the securities market or sending an accused to jail without court intervention and prove that it is really an autonomous impartial regulator.

In October 2002, the Union Cabinet approved the ordinance that was the first big attempt at strengthening market regulations a decade since the SEBI Act came into being. Under Chapter VIA of the SEBI Act, 1992, the SEBI now has more powers to investigate market offences, enforce regulations, and impose deterrent penalties. The SEBI has got more teeth for investigation, including powers of search and seizure, only constrained by the requirement to obtain an order from a magistrate. The SEBI has the power to impose deterrent fines, which can be as much as Rs. 25 crore or three times the 'undue profit' derived through market offences, whichever is higher. The quantum of fines goes up from the present range of Rs. 5,000 to Rs. 5 lakh to a minimum of one lakh going upto Rs. 25 crore or even more. The ordinance also amended the SEBI Act, to better clarify and define offences such as 'insider trading', 'fraudulent and manipulative trade practices', and 'market manipulation'.

Additional search and seizure powers have strengthened the SEBI's investigative process and hefty penalties act as a deterrent for those corporates and entities indulging in malpractices. The SEBI now has a stronger organisation with three full-time members other than the chairman, all appointed on the basis of the recommendations of a selection committee.

The SEBI should aim to become a regulator who is not only respected but is fair and just and follows the law to the letter as well as in spirit, taking into account ground realities. The challenge for the SEBI now is to clamp down on price manipulation and rampant trading based on inside information. Being a nodal agency, it should ensure better compliance by the corporate sector and enhance the quality of their disclosures.

The SEBI can ensure a free and fair market and take India into the league of major global capital markets in the next round of reforms. To enable this, it has to thoroughly review its structure and functioning.

The SEBI has to balance between the costs of regulation and market development. There should be cross-border cooperation between various regulators and between regulators and industry.

THE RESERVE BANK OF INDIA

The Reserve Bank of India was established by legislation in 1934 through the Reserve Bank of India Act, 1934. It started functioning from April 1, 1935. Its central office is at Mumbai since 1937. Though originally privately owned, since nationalisation in 1949, it is fully owned by the Government of India. The Reserve Bank of India is the central bank of our country.

Objectives of the Reserve Bank

The preamble of the act states that, 'Whereas it is expedient to constitute a Reserve Bank for India to regulate the issue of bank notes and the keeping of reserve with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage.…' The preamble prescribes the objectives as: (i) to secure monetary stability within the country; (ii) to operate the currency and credit system to the advantage of the country.

In other words, the objectives of the RBI are price stability and ensuring adequate credit availability to finance economic activities for the benefit of the country.

Organisation of the Reserve Bank

The bank is managed by a central board of directors and four local boards of directors.

Central board: The central board is appointed/nominated by the central government for a period of four years. It consists of official directors and non-official directors.

Official directors: The governor and not more than four deputy governors are full-time official directors.

Non-official directors: They are fifteen in number. Ten directors from various fields and one government official are nominated by the government while four directors from four local boards are nominated as non-official directors.

The functions of the central board are general superintendence and direction of the bank's affairs.

- Central Board of Directors consists of fourteen non-executive independent directors nominated by the Government, one Governor and four deputy governors

Local boards: There are four local boards, one each for the four regions of the country in Mumbai, Kolkata, Chennai, and New Delhi. The membership of each local board consists of five members appointed by the central government for a term of four years.

The functions of the local board is to advise the central board on local matters; to represent territorial and economic interns of local cooperative and indigenous banks' interests, and to preform such other functions as delegated by the central board from time to time.

Offices: The RBI has 22 regional offices, most of them in state capitals.

Training Establishments: The Reserve Bank has six training establishments.

- Three training establishments, namely, the College of Agricultural Banking, the Banker's Training College, and the Reserve Bank of India Staff College are part of the RBI.
- Others such as the National Institute for Bank Management, Indira Gandhi Institute for Development Research (IGIDR), and the Institute for Development and Research in Banking Technology (IDRBT) are autonomous.

Subsidiaries

The Reserve Bank has fully owned three subsidiaries: National Housing Bank (NHB), the Deposit Insurance and Credit Guarantee Corporation of India (DICGC), and Bharatiya Reserve Bank Note Mudran Private Limited (BRBNMPL).

The Reserve Bank has a majority stake in the National Bank for Agriculture and Rural Development (NABARD).

The National Housing Bank (NHB) is wholly owned by the RBI. It was set up in July 1988, under an act of the parliament. The NHB was conceived and promoted to function as the apex institution in the housing sector. It promotes housing finance institutions both at local and regional levels and provides financial and other support to such institutions. The Reserve Bank added to the equity of its 100 per cent owned National Housing Bank.

The DICGC, a fully-owned undertaking of the RBI, operates both deposit and credit guarantee schemes. A committee was appointed in 1995 to review the credit guarantee schemes and it recommended that the credit guarantee schemes should be terminated as they were not viable. However, the DICGC continued the schemes but by increasing the premium amount. As a result, many banks opted out of credit guarantee schemes. The Union Budget 2002–03 announced that the DICGC would be converted into the Bank Deposits Insurance Corporation (BDIC) to make it an effective instrument for dealing with depositors risks and distressed banks.

The RBI, during 2001–02, disinvested its holdings in the Discount and Finance House of India (DFHI) and the Securities Trading Corporation of India (STCI) which were promoted for activating and deepening the money market and developing an active secondary market for government securities and PSU bonds, respectively.

The committee on banking sector reforms suggested that the Reserve Bank should not own the institutions it regulates. The Reserve Bank accepted the recommendation for transfer of ownership of its shares in the State Bank of India, National Housing Bank, and National Bank for Agriculture and Rural Development to the central government.

The State Bank of India till the beginning of the 1990s was almost wholly owned by the RBI. As the SBI accessed capital market twice, the RBI's shareholdings have came down to about 60 per cent of the total share capital. The Reserve Bank of India has recently transferred its holding in State Bank of India to the Government of India.

Legal Framework

There are various acts governing the Reserve Bank functions, specific functions, banking operations, and individual institutions owned by RBI. They are:

Umbrella Acts

- The Reserve Bank of India Act, 1934, governs the Reserve Bank functions.
- The Banking Regulation Act, 1949, governs the financial sector.

The RBI Act, alongwith the Banking Regulation Act, 1949, provides wide-ranging powers to the Reserve Bank to issue directions to the banking and financial sectors.

Acts Governing Specific Functions

- The Public Debt Act, 1944/the Government Securities Act (proposed); governs government debt market.
- The Securities Contract (Regulation) Act, 1956, regulates government securities market.
- The Indian Coinage Act, 1906, governs currency and coins.
- The Foreign Exchange Regulation Act, 1973/Foreign Exchange Management Act, 1999, governs foreign exchange market.

Acts Governing Banking Operations

- The Companies Act, 1956, governs banks as companies.
- The Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970/1980, relates to nationalisation of banks.
- The Banker's Books Evidence Act.
- The Banking Secrecy Act.
- The Negotiable Instruments Act, 1881.

Acts Governing Individual Institutions

- The State Bank of India Act, 1954.
- The Industrial Development Bank of India Act.
- The Industrial Finance Corporation of India Act.
- The National Bank for Agriculture and Rural Development Act.
- The National Housing Bank Act.
- The Deposit Insurance and Credit Guarantee Corporation Act.

Main Functions of the RBI

The main functions of the Reserve Bank are as follows:

- To formulate, implement, and monitor the monetary policy.
- To prescribe broad parameters of banking operations within which the country's banking and financial system functions.
- To facilitate external trade and payment and promote orderly development and maintenance of foreign exchange market in India.
- To issue and exchange or destroy currency and coins not fit for circulation.
- To perform a wide range of promotional functions to support national objectives.
- To perform merchant banking function for the central and the state governments.
- To maintain banking accounts of all scheduled banks.

Role of the Reserve Bank of India

Monetary Authority of the Country Monetary policy-making is the central function of the Reserve Bank. The broad objectives of monetary policy in India are (a) maintaining price stability and (b) ensuring adequate flow of credit to productive sectors to assist growth. Monetary policy creates conditions for growth by influencing the cost and availability of money and credit. Monetary policy represents policies, objectives, and instruments directed towards regulating money supply and the cost and availability of credit in the economy. The RBI conducts the monetary policy with the help of an intermediate target, the operating instruments, and procedures. The intermediate target is one which bears a close relationship with the ultimate objectives of monetary policy. The operating instrument is the particular mode of central bank intervention. Macro-economic variables are the information variables used by the central bank to set the intermediate target. The RBI usually sets the broad money (M3) as the intermediate target. M3 is equal to money supply with the public plus demand and time deposits with banks and other deposits with the RBI. For aiming at the intermediate target, the underlying operating target is reserve money, particularly the banks' reserves, while the supplementary operating target is the short term interest rate provided by the overnight call money rates.

Since 1998–99, the RBI has been using multiple indicators such as interest rates, credit extended by banks and financial institutions, the fiscal position, trade, capital flows, the inflation rate, the exchange rate and transactions in foreign exchange together with broad money to draw monetary policy perspectives.

Since 1993–94, monetary policy has become the vehicle for instituting financial sector reforms in India. The reforms in the monetary and financial sectors have enabled the RBI to expand the array of operating instruments and procedures of monetary policy. The liquidity management in the system is carried out through open market operations (OMOs), both outright and repos. The RBI has reduced reliance on direct instruments such as cash reserve ratio which is used to control reserve requirements of banks. The liquidity adjustment facility (LAF) operations combined with OMOs have emerged as the principal operating procedure of monetary policy. In LAF, liquidity is injected or absorbed through reverse repo or repo auctions with a view to imparting stability to short-term money market rates and enabling orderly development of the market. The objective of the RBI is to develop the LAF as the primary instrument of liquidity adjustment and as the key interest rate signal for the short-term money market. Monetary policy and its instruments are discussed in detail in Chapter IV.

The RBI has made efforts to improve the volume and terms of credit by directing bank credit to certain sectors such as agriculture, exports, small-scale industries, infrastructure, housing, and micro-credit institutions, and simplifying the access to credit by simplifying documentation and decentralising the sanctioning to the branch level.

It has used regulatory policies in conjunction with monetary measures. The regulatory policies relate to risk weights, provisioning requirements for banks with regard to exposure to NBFCs, sensitive sectors, and oil companies.

Regulator and Supervisor of the Financial System The objectives of the Reserve Bank as a regulator and supervisor of the financial system are to maintain public confidence in the system, protect depositors' interest and provide cost-effective banking services to the public. In order to attain these objectives, the bank prescribes broad parameters of banking operations within which the country's banking and financial system functions.

The RBI regulates and supervises the banking system in India under the provisions of the Banking Regulation Act, 1949, and the Reserve Bank of India Act, 1934. The RBI regulates select financial institutions (FIs) and non-banking financial companies (NBFCs) under Chapter IIIB of the Reserve Bank of India Act.

The process of issue of regulations is in three stages:

1. Preliminary discussion with representative bodies and select market participants.
2. Appointment of working groups consisting of regulators, market participants, and academicians to prepare the technical report.
3. Placement of the report in the public domain for a feedback. Based on the feedback, draft guidelines and then final guidelines are issued.

The Reserve Bank set up in November 1994 the Board for Financial Supervision (BFS), to supervise commercial banks, select FIs and NBFCs. The directions of the BFS are implemented by the Reserve Bank's Department of Banking Supervision (DBS), which supervises scheduled commercial banks (except regional rural banks), the Financial Institutions Division (FID) of the DBS which supervises select FIs and the Department of Non-banking Supervision (DNBS), which supervises the NBFCs. The BFS carries on on-site inspections of domestic banks and NBFCs on the basis of the CAMELS model (Capital adequacy, asset quality, management, earnings, liquidity, and systems and controls) and foreign banks on the basis of the CACS model (capital adequacy, asset quality, compliance and systems). The board introduced an off-site monitoring and surveillance system for banks in 1995 which was later extended to select FIs and NBFCs as well. The BFS also monitors bank frauds and oversees issues in house-keeping in public sector banks including reconciliation of entries in inter-branch and inter-bank accounts and balancing of the books of accounts.

The RBI undertook structural measures to strengthen the financial system and improve the efficiency of financial intermediation. These structural measures have focused on improving the institutional infrastructure, strengthening prudential and supervisory norms, developing technology, improving risk management and internal control mechanism, debt recovery and upgradation of the payment and settlement system. In line with international practices, the RBI is developing a risk-based supervision methodology and refining on-site inspection procedures.

The RBI has been making efforts to ensure the convergence of its supervisory norms and practices to global standards. Recently, several steps have been taken to empower supervisors to undertake consolidated supervision of the bank groups. Consolidated supervision is qualitative as well as quantitative evaluation of the strength of a group to which a large bank belongs, in order to assess the potential impact of other group companies on the bank. This approach emphasises on the preparation of financial reports on a consolidated basis of banks and their related companies, treating them in effect as if they were a single entity. It has developed a framework for monitoring the systemically important individual banks. It has encouraged banks to not only monitor unhedged foreign currency exposures of their clients, but also keep an oversight as to whether their derivative exposures have been appropriately disclosed.

The Reserve Bank is entrusted with the function of the development and regulation of money, foreign exchange, and government securities markets. The RBI undertakes this function as it is a monetary authority as well as debt manager to the government and is responsible for the stability of the financial system.

The structural rigidities in the financial markets hindered the operational effectiveness of the transmission of monetary policy. The first phase of financial sector reforms aimed at removing the structural rigidities—both price and quantity based. For orderly development of the financial markets, competition was infused, new financial instruments and innovative market practices were introduced, and the institutional and technological infrastructure was developed. In the second phase of reforms, the Reserve Bank's emphasis is on those policies which aim at stability of financial markets.

The RBI has taken steps to develop a pure inter-bank money market and broaden the repo market and to widen other money market segments. The system of primary dealers was introduced in the government securities market to increase liquidity and secondary market trading. The introduction of the negotiated dealing system and operationalisation of Clearing Corporation of India Limited (CCIL) will impart greater flexibility to the RBI to operate its instruments of monetary policy.

The SEBI is a regulator of the securities market. The Securities Contract (Regulation) Act, 1956, was amended in March 1, 2000, to demarcate the regulatory roles of the Reserve Bank and the SEBI with respect to financial markets. The RBI has jurisdiction over transactions in government securities, money market securities, gold-related securities, derivatives based on these securities, and ready forward contracts in all debt securities, in conjunction with the RBI's regulation of foreign exchange transactions under the Foreign Exchange Management Act, 1999.

In spite of these efforts the regulatory authority is facing problems of slow recovery of debt, mounting non-performing assets (NPAs), and deteriorating health of some financial institutions and cooperative banks. The Reserve Bank has not been in a position to perform its regulatory role effectively due to the multiplicity of regulatory authorities in several segments of the financial system. In the cooperative sector, there are dual/triple regulatory and supervisory authorities which hinder the effective functioning of the cooperative institutions. Moreover, the blurring of the distinction between banking, non-banking, and insurance activities has questioned the existence of multiple regulators in the financial system.

Banker to the Government The Reserve Bank manages the public debt of the central and the state governments and also acts as a banker to them under the provisions of the Reserve Bank of India Act, 1934. These functions are to be mandatorily undertaken in the case of the central government under Sections 20 and 21 of the RBI Act. Sections 20 and 21 of the Reserve Bank of India Act, 1934, provide that the central government shall entrust the RBI with all its money, remittance, exchange, and banking transactions in India and the management of its public debt and shall also deposit all its cash balances with the RBI free of interest. The RBI may, by agreement with any state government, take over similar functions on behalf of that government under Section 21A of the Reserve Bank of India Act. The Reserve Bank undertakes this function for all the state governments except Jammu and Kashmir and Sikkim. The agreement with two states—Jammu and Kashmir and Sikkim—is restricted to management of their public debt.

The RBI provides a range of banking services such as acceptance of money on government account, payment/withdrawal of funds, and collection and transfer of funds by various means throughout India. The governments principal accounts are maintained at Central Accounts Section (CAS), Nagpur. The government accounts are handled by the Reserve Bank at 15 offices, besides two state government cells at Bhopal and Chandigarh. It has appointed public sector banks (PSBs) and two private sector banks to handle government accounts. These agency banks handle government transactions of around Rs. 12 lakh crore per annum through 20,800 branches.

In July 2001, a state-of-the-art technological system was set up at CAS, Nagpur, to provide information on a real time online basis to central and state governments in respect of their cash balance position and other transactions. In addition, a virtual private network (VPN) is being established to act as a hub for electronic interchange of information, between CAS, Nagpur, and various civil and non-civil ministries. This will enable various principal accounts officers of government to transmit inter-government transactions to CAS electronically and receive confirmation advices instantly eliminating most of the reconciliation problems.

The Reserve Bank also provides safe custody facility; manages special funds like the Consolidated Sinking Fund, the Guarantee Redemption Fund, the Calamity Relief Fund, and the National Defence Scheme; Issues and manages bonds like relief bonds; and administers schemes for disbursal of pensions of central and state governments' employees through PSBs.

The objective of the debt management policy is raising resources from the market at the minimum cost while containing the refinance risk and maintaining consistency with the monetary policy objectives.

The RBI provides ways and means advances to both the central and state governments. The system of automatic monetisation of budget deficit through creation of ad hoc treasury bills was phased out and subsequently abolished by an agreement with the central government in 1994. It was replaced with a new scheme—ways and means advances—to facilitate bridging of temporary mismatches in the central government's cash flows. With this, the Reserve Bank's autonomy to implement the tools of monetary policy increased.

The Reserve Bank introduced the primary dealer system in 1996 with a view to developing the government securities market. To reduce the cost of borrowing and refinancing risk, the bank has taken initiatives to consolidate loans, reissue existing loans and elongate the maturity structure of government loans. New debt instruments such as floating rate bonds (FRBs) have been issued to reduce the interest rate risk of holders of government securities. The Reserve Bank is actively pursuing the creation and development of the separate trading for registered interest and principal of securities (STRIPS) market.

The bank coordinates the borrowing programmes of the central and state governments. The large borrowing programme of the central government constraints the public debt management of the RBI. In order to facilitate the large borrowing programme of the central government and minimise the cost of public debt, the RBI has adopted the policy of combining auctions, private placements, and open market operations.

Both monetary policy and debt-management policy determine the composition of debt. Both these functions reinforce one another in maintaining an appropriate structure of long-term interest rates. These two functions should be separated and carried out independently to avoid conflict of interest in market operations. The committee on capital account convertibility recommended the separation of debt management from monetary management. The RBI has proposed amendment to the Reserve Bank of India Act, 1934, to take away the mandatory nature of management of public debt by the RBI and rest the discretion with the central government to undertake the management of the public debt either by itself or assign it to some other independent body, if it so desires.

Manager of Exchange Control The function of the Reserve Bank is to develop and regulate the foreign exchange market. The bank's role is to facilitate external trade and payment and promote orderly development and maintenance of foreign exchange market in India. The foreign exchange transactions are regulated under the Foreign Exchange Management Act, 1999.

The medium-term policy of the RBI is to develop the foreign exchange market in terms of depth and liquidity, enable the introduction of new instruments and pricing strategies and enhance integration of the foreign exchange market with other markets. The short-term policy aims at managing volatility and allowing demand and supply conditions to determine exchange rate movements in an orderly manner. The foreign exchange market in India comprises customers, authorised dealers (ADs), and the RBI. The ADs are essentially banks authorised by the RBI to do foreign exchange business. There are over 100 ADs operating in the foreign exchange market. The customer segment is dominated by large public sector units, such as IOC, ONGC, and BHEL, the Government of India, large private sector corporates, such as Reliance, TATA, and Larsen and Toubro.

The RBI undertakes two-way operations in the forex markets to even out lumps or lows in demand/supply and reduce volatility. Sometimes, during bouts of large capital inflows, the Reserve Bank combines operations in the forex market with sterilisation through open market operations, repos, bank rate, and changes in reserve requirements.

The Reserve Bank also enters periodically into foreign exchange transactions to prevent undue fluctuations in the exchange rate and to ensure orderly market conditions. The net intervention sales of the RBI generally coincided with conditions of excess demand in the market, while net intervention purchases coincided with surplus market conditions and contributed to reserve build up. The exchange rate system was transformed from a discretionary, basket-pegged system to a market determined unified exchange rate.

The Reserve Bank liberalised the foreign exchange market as well as the exchange and payments system for current and capital transactions with a view to (i) paving the way for a smooth transition to the Foreign Exchange Management Act (FEMA), 1999, from the Foreign Exchange Regulation Act (FERA), 1973, (ii) enabling a phased movement to capital account convertibility, and (iii) providing a hassle free and prompt exchange and payments system.

Indian companies were allowed to acquire foreign companies or make direct investment in joint ventures/wholly aimed subsidiaries abroad. A two-way fungibility in ADR/GDR issues of Indian Companies, subject to sectoral caps was allowed to improve the climate for foreign investment in India.

In order to develop the forex market, the Reserve Bank gave freedom to banks to (i) fix net overnight position limits and gap limits, (ii) initiate trading position in the overseas market, and (iii) determine the interest rates of NRI deposits and maturity period. Banks were permitted the use of derivative products for asset–liability management. Authorised dealers were allowed to borrow abroad. Foreign institutional investors (FIIs) were allowed to invest upto 49 per cent of the paid-up capital of Indian companies with the approval of the shareholders by a special resolution.

- The RBI is entrusted with the management of foreign exchange reserves which include gold holding also.
- The RBI is entrusted with the responsibility of issuing currency and distributing coins

The Reserve Bank has published a Citizen's Charter to educate the public about the various facilities available for the use of foreign exchange. Customer service meetings are held every quarter in each of the bank's regional offices. Banks have also been advised to provide easy encashment facilities of foreign currency and travellers cheques at a number of locations, especially airports and other important tourist centres.

Issuer of Currency The RBI is entrusted with the function of note issue and currency management by the preamble to the Reserve Bank of India Act, 1934, and by the specific provisions of Section 3 of the act. It acts as the sole currency authority under Section 22 for the issue of bank notes on which there would be no stamp duty. It issues notes in the following denominations: Rs. 2, Rs. 5, Rs. 10, Rs. 20, Rs. 50, Rs. 100, Rs. 500, and Rs. 1,000. The Government of India issues one rupee coins and one rupee notes but they are put into circulation only through the RBI.

Currency management involves efforts to achieve self-sufficiency in the production of currency notes and coins with a judicious denomination mix, improvement in the efficiency of distribution networks and withdrawal and destruction of notes, technology upgradation and enhancement in the security features of currency notes.

The function of note issue and currency management is discharged through 18 regional Issue offices/sub-offices and a wide network of currency chests maintained by banks and government treasuries spread across the country.

Bank notes are printed at four notes presses, of which the Currency Note Press, Nasik, and Bank Note Press, Dewas, are owned by the central government and the presses at Mysore and Salboni are owned by the Bharatiya Reserve Bank Note Mudran Limited, a wholly-owned subsidiary of the Reserve Bank. The printing capacity at the four notes presses has been augmented with a view to meeting the demand–supply gap in currency. The RBI is exploring new channels for distributions of coins. Automatic coin dispensing machines have been commissioned at select regional offices of the Reserve Bank on a pilot basis to cater to low volume requirements.

The Reserve Bank has commissioned currency verification and processing systems at the Bhopal and Chandigarh issues offices to sort the notes into issuable and non-issuable characteristics, detect counterfeit notes, and destroy the non-issuable notes in an eco-friendly manner through shredding and briquetting systems.

The Reserve Bank has proposed to set up a currency museum in Mumbai with display and archival facilities of contemporary and ancient monetary artefacts and coins for preserving and educating the public about the currency history in India.

Developmental Role The Reserve Bank performs a wide range of promotional functions to support national objectives.

The RBI helped to set up a number of development financial institutions such as the Industrial Development Bank of India, the National Bank for Agriculture and Rural Development, the Industrial Reconstruction Bank of India, the National Housing Bank, and, recently, the Infrastructure Development Finance Company Limited to provide project and infrastructure finance. It has also helped to set up the Unit Trust of India, the Discount and Finance House of India, and the Securities Trading Corporation of India to promote and foster financial markets.

Since 1991–92, the RBI has played an activist role of promoting financial sector reforms for attaining sustainable economic growth and stability.

The Reserve Bank has made priority sector lending mandatory for both public and private sector banks. As agriculture continues to provide productive employment opportunities for two-thirds of the population, a higher amount of credit is directed to agriculture. Banks have been advised to manage the rural credit delivery systems and processes to ensure a higher credit flow to small and medium scale industries. Micro-credit schemes to help the poor and artisans in rural areas have been initiated by the bank. It is striving to strengthen the cooperative credit structure to reap productivity and employment gains.

Banker to the Banks The bank's medium-term objective is to bring down the cash reserve ratio to three per cent of the banks demand and time liabilities. The scheduled banks maintain balances in their current account with the RBI mainly for maintaining the Cash Reserve Ratio (CRR) and as working funds for clearing adjustments. As the Reserve Bank maintains banking accounts of all scheduled banks, it has powers to collect credit information from banking companies and appoint any bank as its agent.

The central bank provides a variety of financial facilities and accommodations to scheduled banks. It takes care of temporary liquidity gaps in the banking system through refinancing schemes. It acts as lender of last resort to foster financial stability.

Conclusion

The RBI has done a commendable job as a monetary authority and regulator of the financial system. It has adopted the best international practices in dissemination of information and rationale of policies (i.e., the extent of information disclosed helps market to make its own projections of interest rates). The bank has intervened in markets where necessary and allowed the market participants to build skills and gain maturity to accept the new system. It has adopted a consultative and participative approach to introduce changes. The Reserve Bank has managed foreign exchange resources effectively. The current level of foreign exchange reserves, which is around USD 280 billion, is adequate to meet the liabilities.

KEY TERMS

Securities and Exchange Board of India, Ombudsman, Capital Market, Securities Appellate Tribunal, Reserve Bank of India and Monetary Policy.

SUMMARY

1. The Securities and Exchange Board of India was set up with statutory powers on February 21, 1992. The objectives defined by the ordinance for the board were (i) investor protection and (ii) promotion and development of the capital market while simultaneously regulating the functioning of the securities market.
2. Section 11(1) of the act casts upon the SEBI the duty to protect the interests of investors in securities and to promote the development of and to regulate the securities market through appropriate measures.
3. The orders of the SEBI under the securities laws are appealable before a securities appellate tribunal (SAT). The orders of the SAT are appealable before the supreme court.
4. The SEBI has powers to register and regulate all market intermediaries. It has powers to penalise them in case of violations of the provisions of the act, rules and regulations made thereunder. It can conduct enquiries, audits and inspection of all market intermediaries and adjudicate offences under the SEBI Act, 1992.
5. In order to make regulation more effective and responsive, the SEBI is contemplating to promote self regulatory organisations (SROs) in the Indian capital market. The SROs are expected to share the responsibility with the regulator in framing and administering regulations. The SEBI has framed the SEBI (Self Regulatory Organisations) Regulation, 2003.
6. The SEBI has introduced a variety of measures to protect the interests of investors. It issues fortnightly press releases, publishing the names of the companies against whom maximum number of complaints have been received. The Investor Grievances Redressal and Guidance Division of the SEBI assists investors who prefer to make complaints to the SEBI against listed companies. The SEBI set up a new institution in 2003 called the 'Ombudsman' for the capital market. It has encouraged forming of investors' associations.
7. The SEBI has drawn a comprehensive strategic action plan which envisages achievement of strategic aims laid down for: (a) investors (b) corporates (c) markets and (d) regulatory regime.
8. The SEBI has to balance between the costs of regulation and market development. There should be cross-border cooperation between various regulators and between regulators and industry.
9. The RBI is the central bank of our country. The preamble of the act states that, 'Whereas it is expedient to constitute RBI to regulate the issue of bank notes and the keeping of reserve with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage.…'
10. The objectives of the RBI are price stability and ensuring adequate credit availability to finance economic activities for the benefit of the country. The bank is managed by a central board of directors and four local boards of directors. There are various acts governing the Reserve Bank functions, specific functions, banking operations, and individual institutions owned by the RBI.
11. The main functions of the Reserve Bank are: (i) to formulate, implement, and monitor the monetary policy; (ii) to prescribe broad parameters of banking operations within which the country's banking and financial system functions; (iii) to facilitate external trade and payment and promote orderly development and maintenance of foreign exchange market in India; (iv) to issue and exchange or destroy currency and coins not fit for circulation; (v) to perform a wide range of promotional functions to support national objectives; (vi) to perform merchant banking function for the central and the state governments; and (vii) to maintain banking accounts of all scheduled banks.
12. The RBI has done a commendable job as a monetary authority and regulator of the financial system. The RBI has adopted the best international practices in dissemination of information and rationale of policies.

REVIEW QUESTIONS

1. State the powers and functions of the SEBI.
2. How far has the SEBI been in a position to protect the interest of investors in securities market?
3. Discuss the role of RBI as a monetary authority.
4. Discuss the role of the RBI as a regulator and supervisor of financial system.

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