

# Financial Management: An Overview

Financial management is broadly concerned with the acquisition and use of funds by a business firm. Its scope may be defined in terms of the following questions:

- How large should the firm be and how fast should it grow?
- What should be the composition of the firm's assets?
- What should be the mix of the firm's financing?
- How should the firm analyse, plan, and control its financial affairs?

While the first three questions express Ezra Solomon's conception of financial management as discussed in his classic work *The Theory of Financial Management*,<sup>1</sup> the fourth one represents an addition that is very relevant in the light of the responsibilities shouldered by finance managers in practice.

This chapter seeks to provide an overview of financial management (referred to also as managerial finance or corporate finance). It is organised into nine sections. The first traces the evolution of financial management; the second specifies the objectives of financial management; the third explains the nature of the agency problem; the fourth describes the key activities of financial management; the fifth clarifies the risk-return tradeoffs in financial decisions; the sixth looks at the organisation of the finance function; the seventh dwells on the relationship of finance to economics and accounting; the eighth highlights the emerging role of the finance manager in India; and the ninth outlines the contents of the book.

## 1.1 EVOLUTION OF FINANCIAL MANAGEMENT

Financial management emerged as a distinct field of study at the turn of this century. Its evolution may be divided into three broad phases (though the demarcating lines between these phases are somewhat arbitrary): the traditional phase, the transitional phase, and the modern phase.

The traditional phase lasted for about four decades. The following were its important features:

- The focus of financial management was mainly on certain episodic events like formation, issuance of capital, major expansion, merger, reorganisation, and liquidation in the life cycle of the firm.
- The approach was mainly descriptive and institutional. The instruments of financing, the institutions and procedures used in capital markets, and the legal aspects of financial events formed the core of financial management.

<sup>1</sup>Ezra Solomon, *The Theory of Financial Management*, New York: Columbia University Press, 1963.

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- The outsider's point of view was dominant. Financial management was viewed mainly from the point of the investment bankers, lenders, and other outside interests.

A typical work of the traditional phase is *The Financial Policy of Corporations*<sup>1</sup> by Arthur S. Dewing. This book discusses at length the types of securities, procedures used in issuing these securities, bankruptcy, reorganisations, mergers, consolidations, and combinations. The treatment of these topics is essentially descriptive, institutional, and legalistic.

The *transitional phase* began around the early forties and continued through the early fifties. Though the nature of financial management during this phase was similar to that of the traditional phase, greater emphasis was placed on the day-to-day problems faced by finance managers in the areas of funds analysis, planning, and control. These problems, however, were discussed within limited analytical frameworks. A representative work of this phase is *Essays on Business Finance*<sup>2</sup> by Wilford J. Eiteman *et al.*

The *modern phase* began in the mid-fifties and has witnessed an accelerated pace of development with the infusion of ideas from economic theory and application of quantitative methods of analysis. The distinctive features of the modern phase are:

- The scope of financial management has broadened. The central concern of financial management is considered to be a rational matching of funds to their uses in the light of appropriate decision criteria.
- The approach of financial management has become more analytical and quantitative.
- The point of view of the managerial decision maker has become dominant.

Since the beginning of the modern phase many significant and seminal developments have occurred in the fields of capital budgeting, capital structure theory, efficient market theory, option pricing theory, agency theory, arbitrage pricing theory, valuation models, dividend policy, working capital management, financial modeling, and behavioural finance. Many more exciting developments are in the offing making finance a fascinating and challenging field.

#### □ 1.2 GOALS OF FINANCIAL MANAGEMENT

Finance theory, in general, rests on the premise that the goal of a firm should be to maximise the value of the firm to its equity shareholders. This means that the goal of the firm should be to maximise the market value of its equity shares (which represents the value of the firm to its equity shareholders).

What is the justification for this goal? It appears to provide a rational guide for business decision-making and promote an efficient allocation of resources in the economic system. Savings are allocated primarily on the basis of expected return and risk and the market value of a firm's equity stock reflects the risk-return trade-off of investors in the market place. Hence, if a firm makes decisions aimed at maximising the market value of its equity, it will raise capital only when its investments warrant the use of capital from the overall point of view of the economy. This suggests that it allocates resources optimally. If a firm does not pursue the goal of shareholder wealth maximisation, it implies that its actions result in a suboptimal allocation of resources. This in turn leads to inadequate capital formation and lower rate of economic growth.

<sup>1</sup>Arthur S. Dewing, *The Financial Policy of Corporations*, New York, Ronalds, 1918.

<sup>2</sup>Wilford J. Eiteman *et al.*, *Essays on Business Finance*, Ann Arbor, Michigan, Masterco Press, Inc., 1953.

Another justification may be provided for the goal of shareholder wealth maximisation. Equity shareholders provide the venture (risk) capital required to start a business firm and appoint the management of the firm indirectly through the board of directors. Hence, it behoves on corporate management to promote the welfare of equity shareholders.

What about a public sector firm whose equity stock, being fully owned by the government, is not traded on the stock market? In such a case, the goal of financial management should be to maximise the present value of the stream of equity returns. Of course, in determining the present value of the stream of equity returns an appropriate discount rate has to be applied. A similar observation may be made with respect to other companies whose equity shares are either not traded or very thinly traded.

### **Alternative Goals**

Are there other goals, besides the goal of maximal shareholder wealth, expressing the shareholders' viewpoint? Several alternatives have been suggested: maximisation of profit, maximisation of earnings per share, maximisation of return on equity (defined as equity earnings/net worth). Let us examine them.

Maximisation of profit is not as inclusive a goal as maximisation of shareholder wealth. It suffers from several limitations:

- Profit in absolute terms is not a proper guide to decision making. It should be expressed either on a per share basis or in relation to investment.
- It leaves considerations of timing and duration undefined. There is no guide for comparing profit now with profit in future or for comparing profit streams of different durations.
- It glosses over the factor of risk. It cannot, for example, discriminate between an investment project which generates a certain profit of Rs. 50,000 and an investment project which has a variable profit outcome with an expected value of Rs. 50,000.

The goals of maximisation of earnings per share and maximisation of return on equity do not suffer from the first limitation mentioned above. However, they do suffer from the other limitations and hence are not suitable.

In view of the shortcomings of the alternatives discussed above, maximisation of the wealth of equity shareholders (as reflected in the market price of equity) appears to be the most appropriate goal for financial decision making. Though the strict validity of this goal rests on certain rigid assumptions, it can be reasonably defended as a guide for financial decision making under fairly plausible assumptions about capital markets.

### **Other Concerns of the Business**

Do firms really act or should solely act to further shareholder welfare? Indeed, firms may pursue or ought to pursue several other goals. Business firms seek to achieve a high rate of growth, enjoy a substantial market share, attain product and technological leadership, promote employee welfare, further customer satisfaction, support education and research, improve community life, and solve other societal problems. Some of these goals may, of course, be in consonance with the goal of shareholder wealth maximisation. For, a rapid growth rate, a dominant market position, and a higher customer satisfaction may lead to increasing returns for equity shareholders. Even efforts towards solving societal problems may further the interest of shareholders in the long run by improving the image of the firm and strengthening its relationship with the environment.

When these other goals seem to conflict with the goal of maximising the wealth of equity shareholders, it is helpful to know the cost of pursuing these goals. The tradeoff has to be understood. It should be appreciated that maximisation of the wealth of equity shareholders constitutes the principal guarantee for efficient allocation of resources in the economy and hence is to be regarded as the *normative* goal from the financial point of view.

### Shareholder Orientation in India

Most companies in India till recently paid lip service to the goal of shareholder wealth maximisation. They showed sporadic concern for the shareholders, mainly when they approached the capital market for raising capital.

Things, however, are changing. A confluence of forces appears now to be prodding companies to accord greater importance to the goal of shareholder wealth maximisation. The important ones are as follows:

**Foreign Exposure** The scions of most business families have been abroad for higher education, particularly to the US. The importance of shareholder value is perhaps appreciated by them better.

**Greater Dependence on Capital Market** In the wake of liberalisation, the investment opportunities for the private sector have expanded considerably and consequently its appetite for funds has increased substantially. Thanks to significant freedom that companies now enjoy in pricing equity issues, there is a stronger incentive to access the capital market. The public sector, too, is now required to tap the capital market. The higher corporate needs for funds and greater dependence on the capital market have induced firms to become more shareholder friendly.

**Growing Importance of Institutional Investors** Companies are relying more on mutual funds, financial institutions, and foreign institutional investors for raising equity capital. Institutional investors tend to be more discerning and have the muscle and motivation to nudge companies to pursue shareholder friendly policies.

**Abolition of Wealth Tax on Financial Assets** Till recently wealth tax, subject to some exemptions, was payable on equity shares. This induced many controlling groups to ignore and even depress share prices. With the abolition of wealth tax on equity shares and other financial assets, there is now an incentive to enhance share prices. This gets heightened when business magnates nurture a desire to join the exclusive billionaire's club.

To sum up, in the new environment there is a greater incentive to report improved earnings, stimulate increases in share prices, and issue external equity at a substantial premium. Perhaps this is the most sensible approach for companies keen on raising large funds from the capital market to support ambitious investment plans without bringing about significant dilution in the ownership stake of the controlling group. This new corporate thinking has been articulated very clearly in the chairman's statement to the shareholders in the 1993 Annual Report of Reliance Industries Limited, the company with the largest investor base, as follows: "In everything that we do, we have only one supreme goal, that is to maximise your wealth as members of India's largest investor family... Your company does not intend to have any major offerings leading to equity dilution but will always seize highly cost effective opportunities to tap the capital markets at an appropriate time, with a commitment to not only maintain shareholder value but also to substantially enhance them and make your company's financial position even stronger."

### □ 1.3 AGENCY PROBLEM

Typically, shareholders, scattered and ill-organised as they are, exercise a relatively weak control over the firm. As a result, managers enjoy substantial autonomy and have a natural inclination to further their own goals. In order to prevent being dislodged from their position, managers may try to achieve a certain acceptable level of performance as far as shareholder welfare is concerned. However, beyond that their own personal goals (like higher remuneration, generous perquisites, greater job security, bigger empire, easier pace, etc.) acquire priority over shareholder welfare. Put differently, they seek to 'satisfice' rather than 'maximise' shareholder welfare, so that they enjoy latitude for furthering their personal goals.

Managers may be regarded as the agents of shareholders, employed to run the firm for the benefit of the shareholders. As long as the firm is owned and managed by the same person, there is no room for conflict. As the stake of managers in the ownership of the firm diminishes, the scope for conflict increases. In a typical joint stock company, where managers usually have a very little stake in ownership, they are likely to act in ways which may not be compatible with the interest of the shareholders. To prevent or mitigate such agency problems, shareholders bear the following costs:

Monitoring Expenditures Firms incur expenditures on audits and control procedures aimed at assessing and limiting managerial behaviour to those actions that subserve the interests of shareholders.

Bonding Expenditures Firms may seek protection against dishonest acts of managers by obtaining a fidelity bond from a third party bonding company which agrees to compensate the firm up to a certain amount if a certain manager's dishonest acts entail financial losses to the firm.

Structuring Expenditures To promote greater congruence between the goals of the managers and the shareholders, certain incentives are offered. These are in the form of (i) stock options that give the managers the right to purchase stock at a certain price, (ii) performance shares given to managers when they fulfil certain performance goals, typically defined in terms of returns, and (iii) cash bonuses that are linked to certain performance targets.

Opportunity Costs Professionally managed companies typically tend to be slower than owner-managed companies. They may not be able to seize profitable opportunities because of bureaucratic procedures and control mechanisms that stifle managerial initiatives and entrepreneurial impulses.

### □ 1.4 KEY ACTIVITIES OF FINANCIAL MANAGEMENT

The three broad activities of financial management are: (i) financial analysis, planning, and control, (ii) management of the firm's asset structure, and (iii) management of the firm's financial structure. Figure 1.1 shows how these activities are related to the balance sheet of the firm.

#### Financial Analysis, Planning, and Control

Financial analysis, planning, and control are concerned with (i) assessing the financial performance and condition of the firm, (ii) forecasting and planning the financial future of the firm, (iii) estimating the financing needs of the firm, and (iv) instituting appropriate systems of control to ensure that the actions of managers are congruent with the goals of the firm. Comprehensive as they are, these functions have reference to the balance sheet, the profit and loss account, and other statements.

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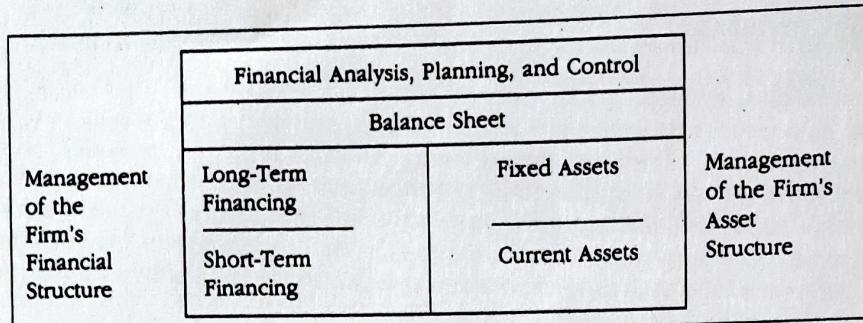


Fig. 1.1 Key Activities of Financial Management

### Management of the Firm's Asset Structure

Value is created mostly on the asset side of the balance sheet. Management of the firm's asset structure involves, *inter alia*, (i) determining the capital budget, (ii) managing the liquid resources, (iii) establishing the credit policy, and (iv) controlling the level of inventories.

### Management of the Firm's Financial Structure

The management of the financing side of the balance sheet involves, *inter alia*, (a) establishing the debt-equity ratio or financial leverage, (b) determining the dividend policy, (c) choosing the specific instruments of financing, and (d) negotiating and developing relationships with various suppliers of capital.

## □ 1.5 RISK-RETURN TRADEOFF

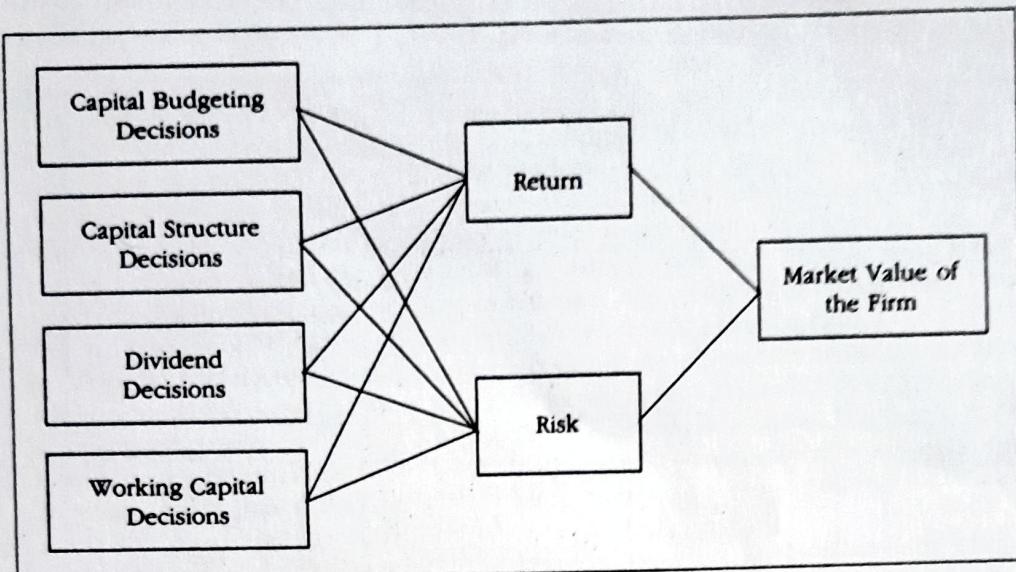
Financial decisions often involve alternative courses of action. Should the firm set up a plant which has a capacity of one million tons or two million tons? Should the debt-equity ratio of the firm be 2 : 1 or 1 : 1? Should the firm pursue a generous credit policy or a niggardly credit policy? Should the firm carry a large inventory or a small inventory?

The alternative courses of action typically have different risk-return implications. A large plant may have a higher expected return and a higher risk exposure, whereas a small plant may have a lower expected return and a lower risk exposure. A higher debt-equity ratio compared to a lower debt-equity ratio, may reduce the cost of capital but expose the firm to greater risk. A 'hot' stock, compared to a defensive stock, may offer a higher expected return but also a greater possibility of loss.

In general, when you make a financial decision, you have to answer the following questions: What is the expected return? What is the risk exposure? Given the risk-return characteristics of the decision, how would it influence value? Figure 1.2 shows schematically the relationship between the key financial decisions, return, risk, and market value.

## □ 1.6 ORGANISATION OF THE FINANCE FUNCTION

Financial management is in many ways an integral part of the jobs of managers who are involved in planning, allocation of resources, and control. The responsibilities for financial management are dispersed throughout the organisation. For example:



**Fig. 1.2 Decisions, Return, Risk, and Market Value**

- ✓ Ans.
- The engineer, who proposes a new plant, shapes the investment policy of the firm.
  - The marketing analyst provides inputs in the process of forecasting and planning.
  - The purchase manager influences the level of investment in inventories.
  - The sales manager has a say in the determination of the receivables policy.
  - Departmental managers, in general, are important links in the financial control system of the firm.

There are, however, many tasks of financial management and allied areas (like accounting) which are specialised in nature and which are attended to by specialists. These tasks and their typical distribution between the two key financial officers of the firm, the treasurer and the controller<sup>1</sup>, are shown in Table 1.1. Note that the treasurer is responsible mainly for financing and investment activities and the controller is concerned primarily with accounting and control.

Typically, the chief finance officer who may be designated as Director (Finance) or Vice President (Finance) supervises the work of the treasurer and the controller. In turn, these officers

**Table 1.1 Functions of the Treasurer and the Controller**

Treasurer	Controller
Obtaining finance	Financial accounting
Banking relationship	Internal auditing
Cash management	Taxation
Credit administration	Management accounting
Capital budgeting	and control

<sup>1</sup>Even though a firm may not have two separate financial officers designated as treasurer and controller, it is helpful to distinguish the functions of treasurership and controllership.

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are assisted by several specialist managers working under them. The finance function in a large organisation may be organised as shown in Fig. 1.3.

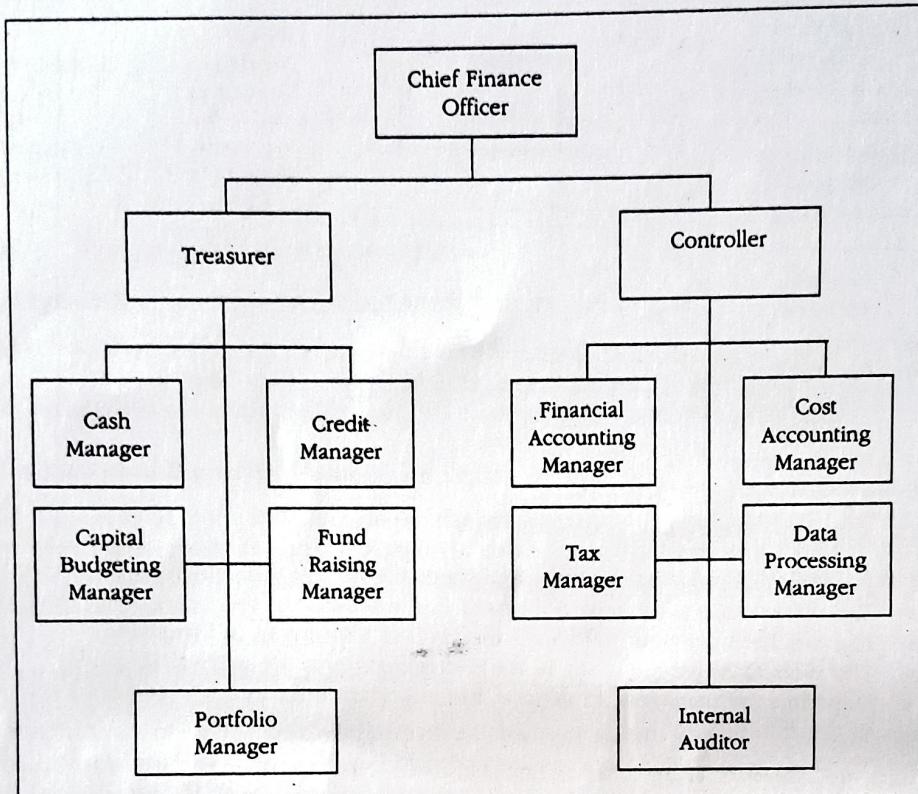


Fig. 1.3 Organisation of Finance Function

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The finance officers, in addition to their specialised responsibilities, have significant involvement in injecting financial discipline in corporate management processes. They are responsible for emphasising the need for rationality in the use of funds and the need for monitoring the operations of the firm to achieve desired financial results. In this respect the tasks of financial officers have assumed new dimensions. Instead of just looking after routine financing and accounting activities, they guide and participate in the tasks of planning, funds allocation, and control so that the financial point of view is sufficiently emphasised in the process of corporate management.

### □ 1.7 RELATIONSHIP OF FINANCE TO ECONOMICS AND ACCOUNTING

Financial management has a close relationship to economics on the one hand and accounting on the other.

### Relationship to Economics

There are two important linkages between economics and finance. The macro-economic environment defines the setting within which a firm operates and the micro-economic theory provides the conceptual underpinning for the tools of financial decision making.

Key macro-economic factors like the growth rate of the economy, the domestic savings rate, the role of the government in economic affairs, the tax environment, the nature of external economic relationships, the availability of funds to the corporate sector, the rate of inflation, the real rate of interest, and the terms on which the firm can raise finances define the environment in which the firm operates. No finance manager can afford to ignore the key developments in the macro-economic sphere and the impact of the same on the firm.

While an understanding of the macro-economic developments sensitises the finance manager to the opportunities and threats in the environment, a firm grounding in micro-economic principles sharpens his analysis of decision alternatives. Finance, in essence, is applied micro-economics. For example the principle of marginal analysis—a key principle of micro-economics according to which a decision should be guided by a comparison of incremental benefits and costs—is applicable to a number of managerial decisions in finance.

To sum up, a basic knowledge of macro-economics is necessary for understanding the environment in which the firm operates and a good grasp of micro-economic principles is helpful in sharpening the tools of financial decision making.

### Relationship to Accounting

The finance and accounting functions are closely related and almost invariably fall within the domain of the chief financial officer as shown in Fig. 1.3. Given this affinity, it is not surprising that in popular perception finance and accounting are often considered indistinguishable or at least substantially overlapping. However, as a student of finance you should know how the two differ and how the two relate. The following discussion highlights the differences and relationship between the two.

*Score Keeping vs. Value Maximising* Accounting is concerned with score keeping, whereas finance is aimed at value maximising. The primary objective of accounting is to measure the performance of the firm, assess its financial condition, and determine the base for tax payment. The principal goal of financial management is to create shareholder value by investing in positive net present value projects and minimising the cost of financing. Of course, financial decision making require considerable inputs from accounting. As Gitman says:

"The accountant's role is to provide consistently developed and easily interpreted data about the firm's past, present, and future operations. The financial manager uses these data, either in raw form or after certain adjustments and analyses, as an important input to the decision-making process."<sup>1</sup>

*Accrual Method vs. Cash Flow Method* The accountant prepares the accounting reports based on the accrual method which recognises revenues when the sale occurs (irrespective of whether the cash is realised immediately or not) and matches expenses to sales<sup>2</sup> (irrespective of whether

<sup>1</sup>Lawrence J Gitman, *Principles of Managerial Finance*, Fifth Ed., New York: Harper & Row, 1988.

<sup>2</sup>Of course, fixed overhead expenses are typically treated as period costs and written off in the period in which they are incurred.

cash is paid or not). The focus of the finance manager, however, is on cash flows. He is concerned about the magnitude, timing, and risk of cash flows as these are the fundamental determinants of values.

Certainty vs. Uncertainty Accounting deals primarily with the past. It records what has happened. Hence it is relatively more objective and certain. Finance is concerned mainly with the future. It involves decision making under imperfect information and uncertainty. Hence it is characterised by a higher degree of subjectivity.

### 1.8 EMERGING ROLE OF THE FINANCE MANAGER IN INDIA

In the last few years, the complexion of the economic and financial environment has altered in many ways. The important changes have been as follows:

- The industrial licensing framework has been considerably relaxed.
- The Monopolies and Restrictive Trade Practices (MRTP) Act has been virtually abolished.
- The Foreign Exchange Regulation Act (FERA) has been substantially liberalised.
- Considerable freedom has been given to companies in pricing their equity issues.
- The scope for designing new financing instruments has been substantially widened.
- Interest rate ceilings have been largely removed.
- The rupee was devalued and, in two stages, has been made fully convertible on the current account.
- Investors have become more demanding and discerning.
- The system of cash credit is being replaced by a system of syndicated loans.
- A number of new investment opportunities have emerged in the money market.
- The relative dependence on the capital market has increased.

These changes have made the job of the finance manager more important, complex, and demanding. Here is a sampling of views expressed by leading finance professionals:

"There has been a total attitudinal change among owners towards the finance manager. He is no longer referred to as 'my accountant'. Instead of being a commodity, the finance manager is now a part of the top management."<sup>1</sup>

"The finance manager's job has vastly changed. Earlier it was a support function, now it's mainline. And finance itself has been a profit centre."<sup>2</sup>

"Today and in the future, finance heads will face a tremendous challenge to shape their organisations. A challenge to upgrade accounting practices, improve reporting systems, utilise the international market for sourcing finance, operate adeptly in the forex market, as well as aid companies to compete internationally."<sup>3</sup>

"The finance man's job has become more creative and cerebral than just juggling with figures. Accounting no longer means just maintaining log books."<sup>4</sup>

"In the paper business, the returns may be 16 per cent while in the agribusiness it may be 20 per cent. So how much to invest in which sector becomes very crucial. The finance

<sup>1</sup>Bhaskar Banerjee of the Duncan Group.

<sup>2</sup>Anand Rathi of Indian Rayon.

<sup>3</sup>Bhaskar Mitter, Corporate Finance Director of ITC.

<sup>4</sup>N. Gopalakrishnan, of Shriram Fibres.

department tells the management where it should increase its presence and where it should get out from."<sup>1</sup>

The key challenges for the finance manager in India appear to be in the following areas:

- Investment planning
- Financial structure
- Treasury operations
- Foreign exchange
- Investor communication
- Management control.

As Feroz Ahmed and Dilip Maitra said:

"Clearly, the clout of the finance manager is growing along with the change in his role. And as the reforms in the financial sector gather pace, this trend will only increase. If the 1970s were the age of the Organisation Man and the 1980s that of the Marketing Man, the 1990s will be the age of the Finance Man."<sup>2</sup>

#### □ 1.9 OUTLINE OF THE TEXT

This text discusses the types of decisions confronted by finance managers, explains the tools and techniques helpful in analysing these decisions, and presents information about institutions and environment relevant for financial management in India. It is divided into eleven parts as described below. It should be emphasised here that the various types of financial decisions are interrelated and the division of the text into a series of parts is meant primarily for pedagogic convenience.

- |                 |  |
|-----------------|--|
| <i>Part I</i>   | <i>Overview and Financial Environment</i> Chapter 1 provides an overview of the discipline of financial management. Chapter 2 describes the organisational, regulatory, and tax environment relevant for financial management in India. Chapter 3 discusses the principal components of the Indian financial system.   |
| <i>Part II</i>  | <i>Fundamental Valuation Concepts</i> Chapter 4 dwells on the ideas of compounding and discounting and their use in establishing financial equivalences. Chapter 5 discusses the concepts of risk and rate of return and the interrelationships between them. Chapter 6 explains how financial securities, bonds and equity stocks, may be valued.   |
| <i>Part III</i> | <i>Capital Budgeting</i> Chapter 7 discusses the basic framework of capital budgeting. Chapter 8 explains the concept and measurement of cost of capital. Chapter 9 dwells on the analysis of risk in capital budgeting. Chapter 10 presents some advanced concepts and techniques of capital budgeting. Chapter 11 looks at certain hard-to-quantify aspects of capital budgeting.                                  |
| <i>Part IV</i>  | <i>Capital Structure and Dividend Policies</i> Chapter 12 expounds various views on the relationship between capital structure and cost of capital. Chapter 13 dwells on considerations and tools helpful in planning the capital structure. Chapter 14 examines various positions on the relationship between dividend policy and share valuation. Chapter 15 discusses practical aspects of the dividend decision. |

<sup>1</sup>Hemant Luthra of Ballarpur Industries Limited.

<sup>2</sup>Feroz Ahmed and Dilip Maitra, "Money from Money", *Business today*, September 22, 1992.

- Part V Long-term Financing** Chapter 16 describes the characteristics of various sources of long-term financing. Chapter 17 explains how securities are issued in the primary market for raising long-term finance. Chapter 18 discusses the working of term-lending financial institutions and the assistance provided by them. Chapter 19 throws light on the nature of debt financing and explains analytical issues relating to debt. Chapter 20 analyses the features of leasing and hire purchase which are gaining importance in India.
- Part VI Working Capital Management** Chapters 21 through 26 focus on working capital management, which is concerned with the management of current assets and liabilities. Chapter 21 clarifies the key issues relating to working capital policy. Chapter 22 presents the tools of cash management. Chapter 23 discusses important aspects of credit management. Chapter 24 dwells on various facets of inventory management. Chapter 25 describes various sources of financing current assets. Chapter 26 explains advanced techniques for managing working capital.
- Part VII Financial Analysis Planning and Control** Chapters 27 through 30 discuss the various tools of financial analysis and planning. Chapter 27 examines the basic financial statements. Chapter 28 discusses the tools for analysing financial performance. Chapter 29 explains break-even analysis and develops the concepts of leverages. Chapter 30 presents various tools of financial planning and budgeting.
- Part VIII Derivatives and Corporate Finance** Chapter 31 presents the insights provided by the option pricing model and their application to corporate finance. Chapter 32 discusses the valuation of warrants and convertible debentures and the rationale for issuing these instruments. Chapter 33 describes a variety of hedging devices, mostly derivative instruments, and their use in corporate risk management.
- Part IX Corporate Valuation, Restructuring and Value Creation** Chapter 34 explains the discounted cash flow as well as the non-discounted cash flow methods of corporate valuation. Chapter 35 expounds various approaches to value-based management. Chapter 36 explains the mechanics of acquisitions and discusses the financial and managerial dimensions of acquisitions. Chapter 37 discusses the modus operandi and rationale for sell offs and changes in ownership and control. Chapter 38 looks at the mechanisms for aligning the interest of managers and shareholders.
- Part X Special Topics** Consisting of Chapters 39 through 44, Part X discusses several special topics in financial management. Chapter 39 examines the implications of inflation for financial management. Chapter 40 discusses the nature, development, and use of corporate financial models. Chapter 41 focuses on the measurement and control of divisional performance. Chapter 42 explains the distinctive features of international financial management. Chapter 43 looks at financial management in public enterprises. Finally, Chapter 44 dwells on the causes, symptoms, prediction, and revival of sick units.

### SUMMARY

- Financial management, also referred to as corporate finance or managerial finance, is broadly concerned with the acquisition and use of funds by a business firm.
- Financial management emerged as a distinct field of study at the turn of the century. Its evolution may be divided into three broad phases: the traditional phase, the transitional phase, and the modern phase.

(Contd)

**Summary (Contd)**

- Finance theory, in general, rests on the premise that the goal of financial management should be to maximise the wealth of shareholders. This goal is conceptually superior to alternatives like maximisation of profit, maximisation of earnings per share, and maximisation of return on equity.
- Business firms may or ought to pursue other goals. When these other goals seem to conflict with the goal of maximising the wealth of equity shareholders, the tradeoff has to be understood.
- A confluence of forces appears now to be prodding Indian companies to accord greater importance to the goal of shareholder wealth maximisation.
- Though managers are the agents of shareholders, they are likely to act in ways which may not be compatible with the interest of shareholders. To prevent or mitigate agency problems, shareholders bear certain costs.
- The three broad activities of financial management are: (i) financial analysis, planning, and control, (ii) management of the firm's asset structure, and (iii) management of the firm's financial structure.
- Financial decisions should primarily be evaluated in terms of their risk and return characteristics.
- In many ways, financial management is an integral part of the jobs of managers who are involved in planning, resource allocation, and control. There are, however, many tasks of financial management and allied areas (like accounting) which are specialised in nature and attended to by the two key financial officers of the firm, viz. the treasurer and the controller.
- A basic knowledge of macro-economics is necessary for understanding the environment in which the firm operates and a good grasp of micro-economic principles is helpful in sharpening the tools of financial decision making.
- Accounting is concerned with score keeping, whereas finance is aimed at value maximising; accounting relies on the accrual method, whereas finance is based on the cash flow method; accounting deals with certainties, whereas finance copes with uncertainties.
- In the last few years, the complexion of the economic and financial environment in India has altered in many ways. These changes have made the job of the finance manager more important, complex, and demanding.

**QUESTIONS**

1. Discuss the salient features of the traditional and modern approaches to financial management.
2. What is the justification for the goal of maximising the wealth of shareholders?
3. Critically evaluate the goals of maximisation of profit and maximisation of return on equity.
4. What forces are prodding companies in India to accord greater importance to the goal of shareholder wealth maximisation?
5. What are the agency costs?
6. Describe the key activities of financial management.
7. How is the finance function organised in a large company?
8. Discuss the relationship of financial management to economics and accounting.
9. What is the emerging role of the finance manager in India?

# The Indian Financial System

The financial system consists of a variety of institutions, markets, and instruments that are related in the manner shown in Fig. 3.1. It provides the principal means by which savings are transformed into investments. Given its role in the allocation of resources, the efficient functioning of the financial system is of critical importance to a modern economy.

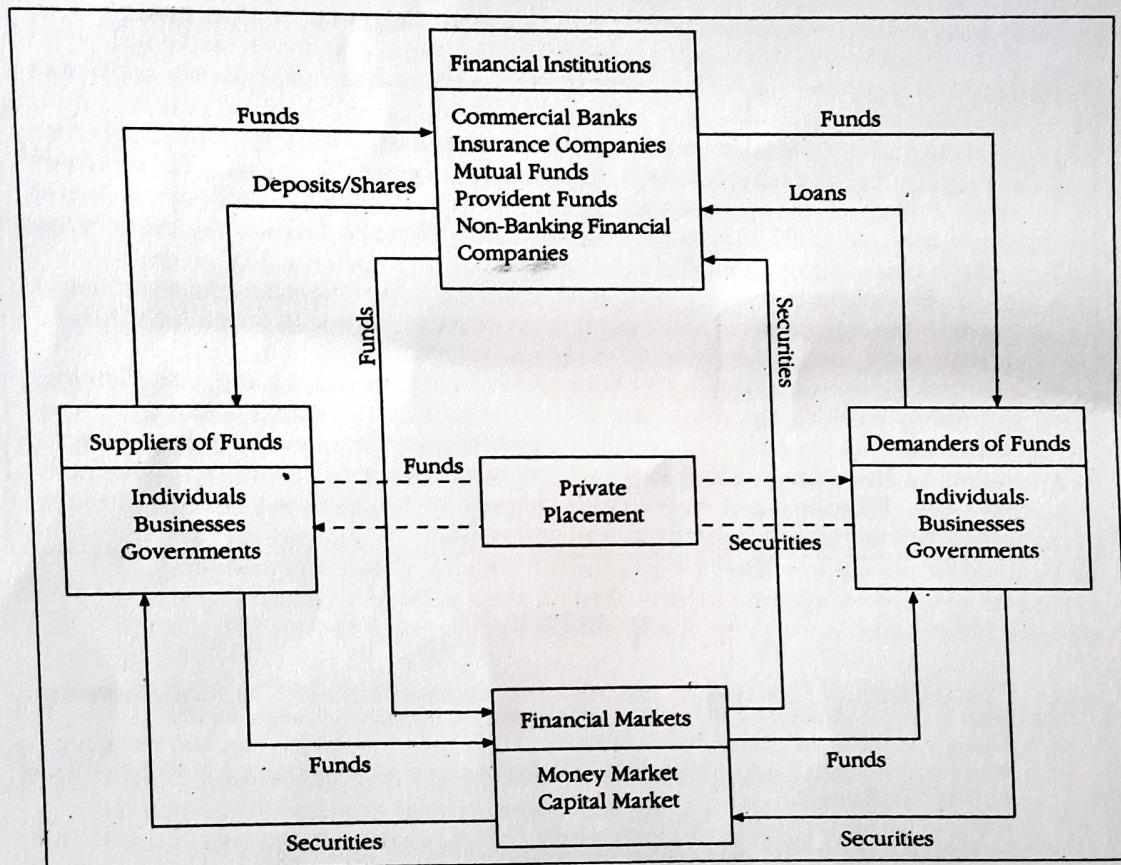


Fig. 3.1 The Financial System

While an understanding of the financial system is useful to all informed citizens, it is particularly relevant to the financial manager. He negotiates loans from financial institutions, raises resources in the financial markets, and invests surplus funds in financial markets. In a very significant way he manages the interface between the firm and its financial environment.

This chapter aims at providing a basic understanding of the financial system, in particular the Indian financial system. It is divided into six sections as follows:

- Functions of the financial system
- Financial instruments
- Financial institutions
- Financial markets
- Equilibrium in financial markets
- Growth and trends in the Indian financial system

### □ 3.1 FUNCTIONS OF THE FINANCIAL SYSTEM<sup>1</sup>

The financial system performs the following interrelated functions that are essential to a modern economy:

- It provides a payment system for the exchange of goods and services.
- It enables the pooling of funds for undertaking large scale enterprises.
- It provides a mechanism for spatial and temporal transfer of resources.
- It provides a way for managing uncertainty and controlling risk.
- It generates information that helps in coordinating decentralised decision making.
- It helps in dealing with the problem of informational asymmetry.

**Payment System** Depository financial intermediaries such as banks are the pivot of the payment system. Credit card companies play a supplementary role. To realise the importance of this function, simply look at the hardship and inconvenience caused when the payment system breaks down.

**Pooling of Funds** Modern business enterprises require large investments which are often beyond the means of an individual or even of hundreds of individuals. Mechanisms like financial markets and financial intermediaries, which are an integral part of the financial system, facilitate the pooling of household savings for financing business. If you look at it from the other side, the financial system enables households to participate in large indivisible enterprises.

**Transfer of Resources** The financial system facilitates the transfer of economic resources across time and space. As Robert Merton says:

"A well-developed, smooth-functioning financial system facilitates the efficient life-cycle allocations of household consumption and the efficient allocation of physical capital to its most-productive use in the business sector."

"A well-developed, smooth-functioning capital market also makes possible the efficient separation of ownership from management of the firm. This in turn makes feasible efficient specialisation in production according to the principle of comparative advantage."

<sup>1</sup>This section is based on Chapter 1 of the book *Cases in Financial Engineering* by Robert Merton et al., published by the Harvard Business School Press in 1994.

**Risk Management** A well-developed financial system offers a variety of instruments that enable economic agents to pool, price, and exchange risk. It provides opportunities for risk-pooling and risk-sharing for both household and business firms. As Robert Merton says:

"It facilitates efficient life-cycle risk-bearing by households, and it allows for the separation of the providers of working capital for *real* investments (i.e., in personnel, plant, and equipment) from the providers of risk capital who bear the financial risk of those investments."

The three basic methods for managing risk are: hedging, diversification, and insurance. Hedging entails moving from a risky asset to a riskless asset. A forward contract, for example, is a hedging device. Diversification involves pooling and sub-dividing risks. While it does not eliminate the total risk, it redistributes it to diminish the risk faced by each individual. Insurance enables the insured to retain the economic benefits of ownership while laying off the possible losses. Of course, to do this a fee or insurance premium has to be paid.

**Price Information for Decentralised Decision Making** Apart from the manifest function of facilitating individuals and businesses to trade in financial assets, financial markets serve an important latent function as well. They provide information that helps in coordinating decentralised decision making. Robert Merton puts it thus:

"Interest rates and security prices are used by households or their agents in making their consumption-saving decisions and in choosing the portfolio allocations of their wealth. These same prices provide important signals to managers of firms in their selection of investment projects and financings."

**Coping with Informational Asymmetry** When one party to a transaction has information that the other does not have, informational asymmetry exists. This leads to the problems of moral hazard and adverse selection<sup>1</sup>, which are broadly referred to as *agency problems*. In this connection Robert Merton remarks:

"Such problems can prevent efficient separation of ownership and management of business firms (the principal-agent problem). They can also prevent borrowers and lenders from entering into otherwise mutually advantageous transactions."

Financial intermediaries like banks and venture capital organisations can solve the problem of informational asymmetry by handling sensitive information discreetly and developing a reputation for profitable activity.

### 3.2 FINANCIAL INSTRUMENTS

Financial instruments, financial institutions, and financial markets are closely interrelated and it is difficult to separate them. However, for pedagogic convenience we discuss them one by one.

Financial instruments range from the common (coins, currency notes, demand deposits, corporate debentures, gilt-edged securities, and equity shares) to the more exotic (futures and options). Financial instruments may be viewed as financial assets and financial liabilities.

<sup>1</sup>The nature of these problems may be illustrated with reference to insurance. A person who has taken a fire insurance policy is likely to become somewhat negligent. This is the moral hazard faced by the insurance company. A person who is more likely to experience fire losses will be inclined to take fire insurance. This is the adverse selection problem faced by the insurance company.

Financial assets represent claims against the future income and wealth of others. Financial liabilities, the counterparts of financial assets, represent promises to pay some portion of prospective income and wealth to others. Financial assets and liabilities emanate from the basic process of financing. They distribute the returns and risks of economic activities to a variety of participants.

The important financial assets and liabilities, claims and promises, in our economy are as follows:

**Money** Money is issued by the Reserve Bank of India and to a minor extent by the Ministry of Finance.

**Demand Deposit** This is a promise to repay a given sum as and when demanded by the holder. It may or may not carry interest with it.

**Short-term Debt** This is a promise to repay a specified sum along with interest within a period of one year.

**Intermediate-term Debt** This is a promise to repay a specified sum along with interest within a period that exceeds one year but is less than five years.<sup>1</sup>

**Long-term Debt** This is a promise to pay a stream of interest over a long period of time (ordinarily exceeding five years) and then repay the principal in a lumpsum or in instalments. (In exceptional cases the debt may be perpetual.)

**Equity Stock** This represents ownership capital. Equity shareholders have a residual interest in the income and wealth of the company after all other claims are fulfilled.

In addition to the above, a modern financial system has many other financial contracts like forwards, futures, swaps, options, insurance, and so on.

### 3.3 FINANCIAL INSTITUTIONS

The primary role of a financial institution is to serve as an intermediary between lenders and borrowers. Financial institutions in the organised sector function under the overall surveillance of the Reserve Bank of India. The structure of financial institutions in India is depicted in Fig. 3.2.

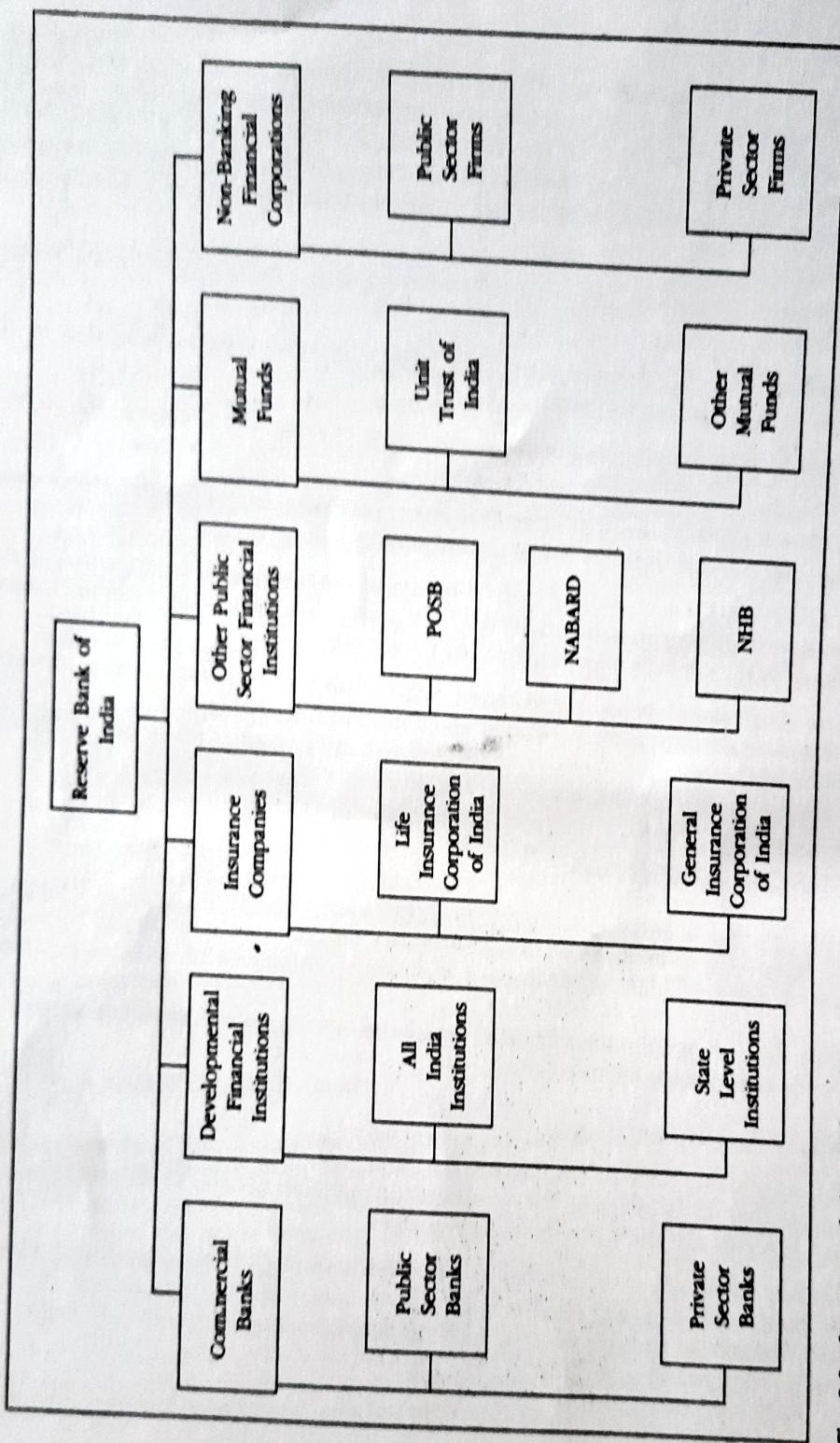
Before we learn about the various financial institutions in India, let us understand the rationale for financial institutions (or intermediaries).

#### Rationale for Financial Institutions

What is the rationale for financial institutions? Put differently, what are the benefits to individual investors when they invest indirectly through financial institutions rather than directly in operating companies? It seems that there are several advantages:

**Diversification** The pool of funds mobilised by a financial institution is invested in a broadly diversified portfolio of financial assets (stocks, bonds, money market instruments, and loans). Individual investors can scarcely achieve such diversification on their own. Remember that a diversified portfolio reduces risk.

<sup>1</sup>Note that the classification of debt into short term, intermediate term, and long term categories on the basis of the period of maturity is quite arbitrary.



*Fig. 3.2 Structure of Financial Institutions*

**Lower Transaction Cost** The average size of a transaction of a financial institution is much higher than that of an individual investor. The transaction cost, in percentage terms, tends to decrease as the transaction size increases. Hence, financial institutions, compared to individual investors, incur lower transaction costs.

**Economies of Scale** Buying and holding securities (or for that matter granting loans and supervising them) calls for information gathering and processing and regular monitoring. These functions entail cost. Financial institutions, thanks to their bigger size and professional resources, enjoy economies of scale in performing these functions. Hence they have a comparative advantage over individual investors.

**Confidentiality** Companies seeking funds or the continuing support of existing investors are required to disclose information that they like to keep confidential for competitive reasons. They would feel more comfortable in dealing with few financial institutions rather than numerous individual investors. Information shared with financial institutions is generally kept confidential whereas information disclosed to numerous individual investors falls in the domain of public knowledge.

**Signaling** With greater professional expertise at their command, financial institutions can pick up and interpret signals and cues provided by operating companies more efficiently. Hence, they can offer better terms to operating companies which are likely to gravitate to them. In this manner, financial institutions perform a signaling function for the investing community.

### Reserve Bank of India

The Reserve Bank of India (RBI) being the central banking authority is at the apex of the Indian financial system. Established in 1935, it became a government-owned institution from 1949 under the Reserve Bank Act of 1948. Under this Act, the central government is empowered to issue directions to the RBI, after consulting with the RBI governor. The RBI performs the following traditional functions of the central banking authority: (i) It formulates and implements monetary and credit policies. (ii) It functions as the banker's bank. (iii) It manages the liquidity reserves of the credit institutions and supervises their operations. (iv) It plays an important role in maintaining the exchange value of the rupee. However, with the increased convertibility of the rupee, the importance of this function is declining. (v) It controls payments and receipts for international trade and regulates other foreign exchange transactions.

In addition to the traditional functions of the central banking authority, the RBI performs several functions aimed at developing the Indian financial system: (i) It seeks to integrate the unorganised financial sector with the organised financial sector. (ii) It encourages the extension of the commercial banking system in the rural areas. (iii) It influences the allocation of credit. (iv) It supports innovation in cooperative banks. (v) It promotes the development of new institutions. For example, it set up the Unit Trust of India (UTI), the Industrial Development Bank of India (IDBI), and the National Bank for Agriculture and Rural Development (NABARD).

### Commercial Banks

Commercial banks represent the most important institutions in the financial system. The largest commercial Bank in India, the State Bank of India (SBI), was set up in 1955 when the Imperial Bank was nationalised and merged with some banks of the princely states. In 1969, in one fell swoop, the fourteen largest privately-owned commercial banks were nationalised. Subsequently,

several other privately-owned commercial banks were nationalised. As a result of these actions, public sector commercial banks, which today are twenty-eight in number, virtually dominate the commercial banking scene in the country.

The nationalisation and greater government control over the major banks was aimed at: (i) reducing the influence of business houses on banks, (ii) preventing misuse of the resources of banks, (iii) achieving a wider spread of bank credit, (iv) directing a larger flow of credit to priority sectors, and (v) making banks more effective instruments of progress.

The changes in banking structure and control have resulted in (i) wider geographical spread and deeper penetration of rural areas, (ii) higher mobilisation of deposits, (iii) reallocation of bank credit to priority activities, and (iv) lower operational autonomy for bank management.

One of the major activities of the commercial banks is to provide working capital advance to industry. In recent years, the RBI has been closely monitoring the credit extended by commercial banks to industry, which traditionally relied heavily on commercial banks and were the primary beneficiaries of the banking system. Several committees—the Dehejia Committee, the Tandon Committee, the Chore Committee, etc.—were set up to look into the problem of working capital credit and to suggest remedial measures. The major recommendations of these committees have been two-fold: reduction in bank credit to industry in relative terms and inculcation of a greater sense of financial discipline in industrial borrowers. By and large, the RBI has accepted the recommendations of these committees.

### **Developmental Financial Institutions**

Since independence a number of developmental financial institutions have been set up to primarily cater to the long-term financing needs of the industrial sector. An elaborate structure of financial institutions consisting of three all-India term-lending institutions (Industrial Development Bank of India, Industrial Finance Corporation of India, and Industrial Credit and Investment Corporation of India), State Financial Corporations, and State Industrial and Development Corporations has come into being. Due to the importance given to the small scale sector, the government established the Small Industries Development Bank of India (SIDBI) in July 1989. It is a subsidiary of IDBI and functions as the chief refinancing agency for the small scale sector.

The financial institutions have been fairly responsive to the growing and varied long-term financial requirements of industry. They have provided the bulk of long-term industrial capital needs, particularly for new projects. They help in identifying investment opportunities, encourage competent new entrepreneurs, lay emphasis on development of backward regions, and support modernisation efforts. Their wide-ranging activities may be divided under five broad categories: direct financing, indirect financing, assistance financing, promotional work, and miscellaneous activities.

### **Insurance Companies**

There are two insurance companies in India: the Life Insurance Corporation (LIC) of India and the General Insurance Corporation (GIC) of India (which is essentially a holding company that has four fully-owned subsidiary companies in its fold). The Life Insurance Corporation of India, which provides life insurance, has massive resources at its command due to two reasons: (i) insurance policies usually incorporate a substantial element of savings, and (ii) insurance premiums are payable in advance. The subsidiaries of the General Insurance Corporation of India, which are engaged in the business of property insurance, too, have considerable resources with them because of the advance collection of insurance premiums.

### Other Public Sector Financial Institutions

There are a variety of other public sector financial institutions. A brief description of the more important ones follows:

**Post Office Savings Bank (POSB)** Run by the Post and Telegraph Department on behalf of the Ministry of Finance, Government of India, the POSB is operated through the vast network of post offices. The POSB collects funds through various schemes like savings bank accounts, recurring and cumulative time deposit schemes, Public Provident Fund, and Indira Vikas Patras.

**National Bank for Agriculture and Rural Development (NABARD)** The apex agricultural financing institution, NABARD channelises assistance through an elaborate network of regional, state level, and field level institutions like the Regional Rural Banks (RRB), the State Cooperative Banks, and so on.

**National Housing Bank (NHB)** The apex agency for housing finance, NHB seeks to promote an institutional framework for the supply of finance in the housing sector.

### Mutual Funds

A mutual fund is a collective investment arrangement. In India three entities are central to a mutual fund: the sponsor, the trust, and the asset management company. The sponsor promotes the mutual fund. The mutual fund is organised as a trust<sup>1</sup> (with a board of trustees). It is, in a way, an umbrella organisation which floats various schemes in which the investment public can participate. The asset management company, organised as a separate joint stock company, manages the funds mobilised under various schemes.

Mutual funds have recorded a very impressive growth in India in the last several years. While there was only one mutual fund in India, viz. the Unit Trust of India, till 1986, presently there are a number of mutual funds in both the public sector as well as the private sector. Of course, Unit Trust of India, with its massive resources, continues to dominate the mutual fund scene in India.

### Non-Banking Financial Corporations

From the mid-eighties many non-banking financial corporations have come into being in the public sector as well as the private sector—numerically, of course, most of them are in the private sector. Some of the well known non-banking finance corporations are SBI Capital Markets, Kotak Mahindra Finance, Sundaram Finance, and Infrastructure Leasing and Finance Corporation.

Non-banking financial corporations engage in a variety of fund-based as well as non-fund based activities. The principal fund-based activities are leasing, hire purchase, and bill discounting; the main non-fund based activities are issue management, corporate advisory services, loan syndication, and forex advisory services.

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<sup>1</sup>Except when it is set up under a statute as is the case of the Unit Trust of India.

### 3.4 FINANCIAL MARKETS

As against a real transaction that involves exchange of money for real goods or services<sup>1</sup>, a financial transaction involves creation or transfer of a financial asset. Here are some examples of financial transactions: issue of equity stock by a company, purchase of bonds in the secondary market, deposit of money in a bank account, transfer of funds from a current account to a savings account. While this list can be easily extended, the point of such examples is clear: financial transactions are very pervasive throughout the economic system. Hence financial markets, which exist wherever financial transactions occur, are equally pervasive.

There are two broad segments of the financial market, viz., the money market and the capital market. The money market deals with short-term debt, whereas the capital market deals with long-term debt and stock (equity and preference). Further, each of these markets has a primary segment and a secondary segment. New financial assets are issued in the primary market, whereas outstanding financial assets are traded in the secondary segment.

#### Money Market

The money market deals in short-term debt, in contrast to the capital market which deals in long-term debt and stock (equity and preference). A well-developed money market (i) uses a broad range of financial instruments (treasury bills, bills of exchange, etc.), (ii) channelises savings into productive investments (like working capital), (iii) promotes financial mobility in the form of inter-sectoral flows of funds, and (iv) facilitates the implementation of monetary policy by way of open market operations.

The money market in India, as in many other developing countries, is dichotomised into the organised and unorganised segments. The principal intermediaries in the organised segment are the commercial and other banks. (In addition, there are the LIC, UTI, Discount and Finance House of India Ltd., mutual funds, non-banking financial companies, and cooperative societies which presently play a minor role.) These intermediaries lend funds on a short-term basis to create an active inter-bank call loan market as part of the organised money market.

The Discount and Finance House of India Ltd., (DFHI), a financial house established as a company under the Companies Act, 1956 provides liquidity to money market instruments by creating a secondary market where they can be traded.

The salient features of the organised money market in India are:

1. A significant part of its operations, which is dominated by commercial banks, is subject to tight control by the Reserve Bank of India which (a) regulates the interest rate structure (on deposits as well as loans), reserve requirements, and sectoral allocation of credit, and (b) provides support to the banks by lending to them on a short-term basis and insuring the deposits made by the public.

2. It is characterised by fairly rigid and complex rules which may prevent it from meeting the needs of some borrowers even though funds may be available.

3. Overall, there used to be a paucity of loanable funds, mainly because of the low rate of interest paid on deposits, but with the removal of the 10 per cent interest rate ceiling on call loans, the situation has eased to some extent.

The principal participants in the unorganised money market are money-lenders, indigenous

<sup>1</sup>Or an exchange of goods for goods in a barter economy.

bankers<sup>1</sup>, nidhis (mutual loan associations), and chit funds<sup>2</sup>. They lend primarily to borrowers who are not able to get credit from the organised money market. The unorganised money market is characterised by informal procedures, flexible terms, attractive rates of interest to depositors, and high rate of interest to borrowers.

The size of the unorganised money market is difficult to estimate, though it appears to be fairly large. However, its importance relative to that of the organised money market is declining. This is a welcome development from the point of view of the Reserve Bank of India, because the existence of a large unorganised market frustrates its efforts to control credit.

### Capital Market (Corporate Securities)

The capital market is the market for financial assets that have long or indefinite maturity. When a company wishes to raise capital by issuing securities, it goes to the primary market which is the segment of the capital market where issuers exchange financial securities for long-term funds. The primary market facilitates the formation of capital.

There are three ways in which a company may raise capital<sup>3</sup> in the primary market: public issue, rights issue, and private placement. Public issue, which involves sale of securities to members of the public, is the most important mode of raising long-term funds. Rights issue is the method of raising further capital from existing shareholders by offering additional securities to them on a pre-emptive basis. Private placement is a way of selling securities privately to a small group of investors.

The secondary market in India, where outstanding securities are traded, consists of the stock exchanges recognised by the government. There are presently twenty one regional exchanges (located at Bombay, Calcutta, Delhi, Madras and other cities) and two nation-wide computerised exchanges, viz., the National Stock Exchange (NSE) and the Over-the-Counter Exchange of India (OTCEI).

The government has accorded powers to the Securities and Exchange Board of India (SEBI), an autonomous body, to oversee the functioning of the securities market and the operations of intermediaries like mutual funds and merchant bankers and to prohibit insider trading.

### Government Securities Market

Debt securities issued by the central government, state government, semi-government authorities, autonomous institutions like port trusts, electricity boards, all-India and state-level financial institutions, and public sector enterprises are broadly referred to as gilt-edged securities. Understandably, the market for gilt-edged securities is very large. The salient features of the market for gilt-edged securities are:

1. Subscription to these securities is made almost wholly by commercial banks, provident funds, and other institutional investors.
2. The secondary market is very narrow as institutional investors tend to retain these securities until maturity.

<sup>1</sup>What is the difference between a money-lender and an indigenous banker? The former neither accepts deposits nor deals in bills of exchange, whereas the latter accepts deposits from public and discounts bundles (indigenous bills of exchange).

<sup>2</sup>The inter-corporate deposit market may also be included as part of the unorganised money market.

<sup>3</sup>For more details see Chapter 17.

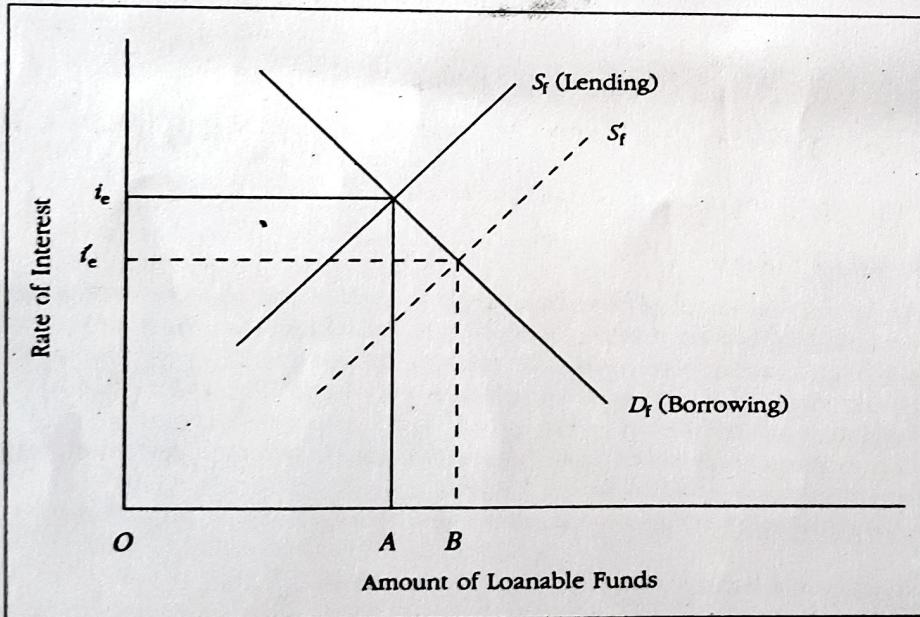
3. Commercial banks hold a very substantial proportion of these securities to satisfy the statutory liquidity ratio (SLR) requirement.

### □ 3.5 EQUILIBRIUM IN FINANCIAL MARKETS

The supply and demand for various commodities (such as aluminium) are cleared at their respective equilibrium prices in real markets. Likewise, an equilibrium price clears the market for loanable funds. Put differently, at the equilibrium price, the supply and demand for loanable funds are matched. It is expressed as an interest rate—the amount per rupee per annum that the lender gets and the borrower pays. The supply of loanable funds (or equivalently the demand for securities) and the demand for loanable funds (or equivalently the supply of securities) is depicted graphically in Fig. 3.3.

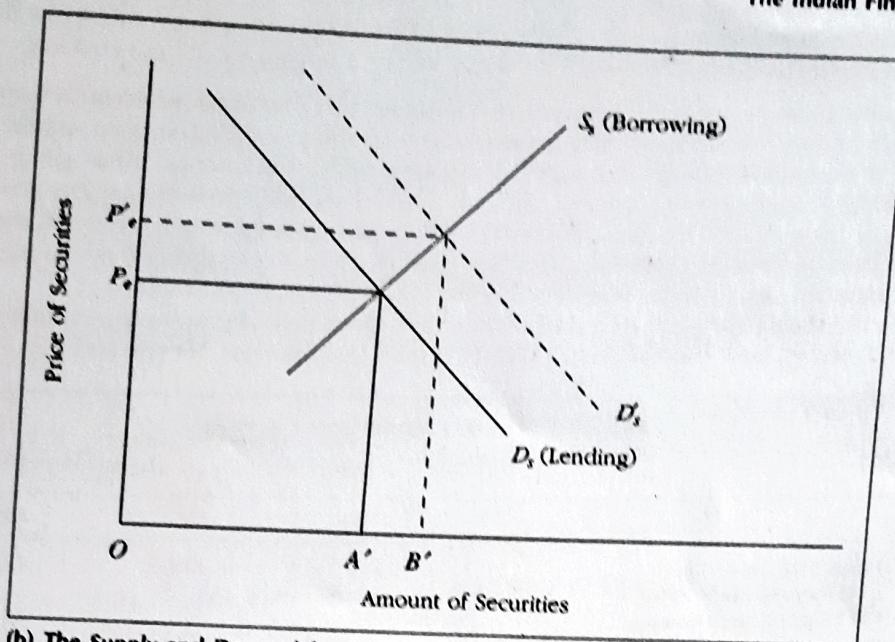
As Fig. 3.3(a) shows, the supply schedule of loanable funds ( $S_f$ ) has a positive slope, implying that the lenders are willing to provide more funds as the interest rate rises. On the other hand, the demand schedule for loanable funds ( $D_f$ ) has a negative slope, implying that the borrowers are willing to borrow more funds as the interest rate falls. Given the nature of these two schedules, the market for loanable funds will clear at  $i_e$ , the equilibrium rate of interest, and the amount of funds lent and borrowed will be equal to OA.

Figure 3.3(b) is the counterpart of Fig. 3.3(a) in which the volume of securities substitutes the loanable funds on the horizontal axis and the price per security replaces the interest rate on the vertical axis. The demand schedule for securities ( $D_s$ ) has a negative slope, implying that the investors are willing to buy more securities as the price falls. On the other hand, the supply



(a) The Supply and Demand for Loanable Funds and the Determination of Interest Rate

(Contd)



(b) The Supply and Demand for Securities and the Determination of Prices  
Fig. 3.3 Equilibrium in Financial Markets

schedule of securities ( $S_s$ ) has a positive slope, implying that the borrowers are prepared to offer more securities as the price rises. Given the nature of these two schedules, the market for securities will clear at  $P_e$ , the equilibrium price, and the amount of securities exchanged will be equal to  $OA'$ . Note that  $OA'$  in Fig. 3.3(a) and  $OA'$  in Fig. 3.3(b) are equal, if the same unit of measurement is used.

Suppose the supply schedule of loanable funds in Fig. 3.3(a) shifts rightward and becomes  $S'_s$ , implying that at each rate of interest, the amount of loanable funds supplied increases. This results in a decrease in the equilibrium rate of interest from  $i_e$  to  $i'_e$  and an increase in the amount of loanable funds traded from  $OA$  to  $OB$ . The rightward shift in the supply schedule of loanable funds is paralleled by a rightward shift, to the same degree, in the demand schedule of securities ( $D_s$  to  $D'_s$ ) in Fig. 3.3(b). This leads to an increase in the equilibrium price of securities from  $P_e$  to  $P'_e$  along with an increase in the amount of securities exchanged from  $A'$  to  $B'$ .

#### Regulation of Interest Rates

In the previous discussion, we assumed that the interest rates are determined by the free forces of demand and supply in financial markets. In India, however, the interest rates in the organised sector have traditionally been almost wholly regulated. Despite some deregulation in recent years, interest rates in India continue to be substantially regulated. The key current regulations are as follows:

- Interest rates on deposits with commercial banks are subject to a ceiling.
- Interest rates chargeable by commercial banks are subject to floors.

- Interest rates payable by companies on fixed deposit is subject to a ceiling.
- Interest rates chargeable by developmental financial institution are subject to floors.
- Interest rates payable on small savings schemes are fixed by the government.

The interest rate policy of the government is designed to: (i) facilitate governmental borrowing somewhat cheaply, (ii) ensure stability in the macro-economic system, (iii) support certain activities through preferential lending rates, and (iv) mobilise substantial savings. While some of these objectives may be laudable, critics of the administered interest rate policy of the government argue, and quite rightly so, that interest rates in India do not necessarily perform the role of allocating scarce resources between alternative uses. This role is played largely by the government and its agencies. As a result, there is scope for misallocation of resources.

Given the above backdrop of government policy, let us look at the structure of interest rates. Table 3.1 shows how the short-term and long-term interest rates have evolved in India. An

**Table 3.1 Interest Rate Behaviour in India**

(figures in percentages)

	1975	1985	1995
1. Bank Rate	9.0	10.0	12.0
2. Commercial Bank Rates			
(a) Deposit rates ceiling	8.0	8.0	12.0
(b) Lending rate ceiling (general)	16.5	18.0	19.0
3. All-India Term Lending			Floor rate
Institutions Lending Rate (general)	11.0	14.0	15.0
4. Corporate Borrowing Rates			No regulation
(a) Debenture rate ceiling	10.5	15.0	15.0
(b) Fixed deposits ceiling	13.5	15.0	

analysis of the data given in this table reveals the following features of interest rate behaviour in India:

1. There has been a general upward trend in the nominal interest rates. This perhaps reflects higher inflation rates and scarcity of capital resources.
2. Interest rates on short-term deposits have been lower than those on long-term deposits. This is in conformity with normal expectation because higher interest rates have to be offered to induce investors to lend at longer maturities.
3. Term finance rates have been lower than working capital finance rates. This is contrary to what one observes in freely functioning financial systems where longer maturities generally carry higher interest rates.

### 3.6 GROWTH AND TRENDS IN THE INDIAN FINANCIAL SYSTEM

The Indian financial system experienced an impressive growth in the post-1950 era. This is evident from the following:

- Emergence of a wide array of financial institutions to provide a variety of services.

- Significant expansion of the network of commercial banks and operations of the developmental financial institutions.
- Introduction of a variety of schemes and instruments for mobilising savings.
- Remarkable growth in the primary as well as the secondary segments of the capital market.

### **✓ Financial Development Measures**

The financial development of a country is commonly assessed in terms of the following ratios:

**1. Finance Ratio** Reflecting the relationship between financial development and economic development, this ratio is defined as:

$$\frac{\text{Total financial claims}}{\text{National income}}$$

**2. Financial Interrelations Ratio** An indicator which shows the relationship between the financial system and the funding of investment, this ratio is measured as:

$$\frac{\text{Total financial claims}}{\text{Net physical capital formation}}$$

**3. New Issue Ratio** Reflecting the extent to which the non-financial sector directly finances investment, this ratio is defined as:

$$\frac{\text{Primary issues (claims created by non-financial sectors)}}{\text{Net physical capital formation}}$$

**4. Intermediation Ratio** A measure of the proportion of financial transactions which occur through financial institutions, this ratio is expressed as:

$$\frac{\text{Issues of financial institutions}}{\text{Total financial issues in the economy}}$$

In the wake of the significant growth that has occurred in the Indian financial system, the financial development measures improved substantially over the last forty five years. This is evident from the following:

	1950 (Approx)	1995 (Approx)
Finance Ratio (%)	5	45
Financial Interrelations Ratio	0.60	3.0
New Issue Ratio	0.45	2.0
Intermediation Ratio	0.25	0.70

The trends in the financial development ratios suggest that: (i) financial flows are increasing in relation to economic activity, (ii) the financial system is increasingly facilitating the transfer of funds from savings-surplus units to savings-deficit units, and (iii) the role of financial intermediaries is expanding in the economy. Overall, one can conclude that the Indian financial system is widening, deepening, maturing, and gaining in sophistication.

### Quality of Financial Development

✓ The impressive growth of the financial system in terms of quantitative indicators has, however, led to impairment of banks and financial institution. As P.J. Nayak observes:

"The maxim that credit institutions can grow only as fast as their resources has diverted attention to the growth of these institutions' liabilities, encouraged by a Government of India vista of financial deepening in which banks are encouraged to transmit savings into investment. The imperative to raise the savings rate—and more explicitly the financial savings rate—further spurred the growth of the institutions. It is precisely in such a strategy, however, that the seeds of retrogression have lain."<sup>1</sup>

Echoing a somewhat similar view, L.M. Bhole says:

"The increasing politicization of lending institutions and credit programmes, and the Government's gross interference in them have been progressively undermining the credit discipline and increasing the financial distress in India."<sup>2</sup>

### Trends

✓ The key trends discernible in the Indian financial system are as follows:

- The statutory liquidity ratio applicable to commercial banks is being lowered.
- The ambit of market-determined interest rates is increasing and correspondingly the domain of administered interest rates is shrinking. This is accompanied by greater volatility in interest rates.
- Financial institutions like the Industrial Development Bank of India, which traditionally had substantial access to cheaper SLR borrowing, have to now rely more on the capital market.
- In the regulation of financial markets and financial institutions, prudential regulation and supervision (capital adequacy, disclosure, transparency, and so on) are being emphasised and product and price controls are being done away with.
- The Indian financial system is getting gradually integrated with the world financial system.
- Financial innovation (introduction of new financial instruments or processes) is gaining momentum. Options and futures are expected to be introduced in India.

### SUMMARY

- The financial system—consisting of a variety of institutions, markets, and instruments related in a systematic manner—provides the principal means by which savings are transformed into investments.
- The financial system provides a payment mechanism, enables the pooling of funds,

(Contd)

<sup>1</sup>P.J. Nayak, *The Reform of India's Financial System*, Asian Development Bank Report.

<sup>2</sup>L.M. Bhole, *Financial Institutions and Markets*, Tata McGraw-Hill Publishing Company, New Delhi, 1992.

**Summary (Contd)**

facilitates the management of uncertainty, generates information for decentralised decision making, and helps in dealing with informational asymmetry.

- Financial assets represent claims against the future income and wealth of others. Financial liabilities, the counterparts of financial assets, represent promises to pay some portion of prospective income and wealth to others.
- The important financial assets and liabilities in our economy are money, demand deposit, short-term debt, intermediate-term debt, long-term debt, and equity stock.
- The primary role of a financial institution is to serve as an intermediary between lenders and borrowers. Financial institutions in the organised sector function under the overall surveillance of the Reserve Bank of India, the central banking authority in India.
- The major financial institutions in India are commercial banks, developmental financial institutions, insurance companies, mutual funds, and non-banking financial corporations.
- A financial transaction involves creation or transfer of a financial asset. Financial markets, which exist wherever financial transactions occur, are quite pervasive.
- There are two broad segments of the financial market, viz., the money market and the capital market. The money market deals with short-term debt, whereas the capital market deals with long-term debt and stock (equity and preference). Further, each of these markets has a primary segment and a secondary segment. New financial assets are issued in the primary market, whereas outstanding financial assets are traded in the secondary market.
- An equilibrium price clears the market for loanable funds. It is expressed as an interest rate—the amount per rupee per annum that the lender gets and the borrower pays.
- Despite a good deal of deregulation in recent years, interest rates in India continue to be substantially regulated.
- The Indian financial system experienced an impressive growth in the post-1950 era. This in turn has led to substantial improvement in the following financial development measures: finance ratio, financial inter-relations ratio, new issue ratio, and intermediation ratio.
- Some of the key trends discernible in the Indian financial system are: increase in the ambit of market-determined interest rates, greater emphasis on prudential regulation, gradual integration with the world financial system, and rise in financial innovation.

### **QUESTIONS**

1. What are the principal components of the financial system? Diagrammatically show how they are related.
2. Discuss the functions of the financial system.
3. Describe briefly the important financial assets and liabilities.
4. What is the rationale of financial institutions?
5. What functions are performed by the Reserve Bank of India?
6. Discuss briefly the important financial institutions in India.
7. Write a short note on the money market in India.
8. What are the salient features of the gilt-edged securities market in India?
9. Describe the key regulations applicable to interest rates in India.
10. Define the important measures of financial development.
11. Discuss the key trends discernible in the Indian financial system.