



Chapter 1

Financial Markets

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1.1 Introduction

Land, labour and capital are three important factors of production in the process of producing goods and services. For example, a farmer needs land and labour to perform agricultural activities on the land and capital to buy seeds and manure and to pay for labour. In today's modern world, we need management or entrepreneurship as fourth factors of production because several goods and services produced today are much more complex than agricultural activities. In a way, farmer is also a manager or entrepreneur in addition to being a labour who works in the field. He takes the decision of what to grow, when to grow, how much to grow and when to sell the agriculture output. Entrepreneurs acquire resources or other factors of production by using capital. Business requires capital continuously throughout the year to keep the business moving like blood circulating inside our body. Government and not-for-profit organizations also require capital to perform their activities. Capital is created out of savings. Continuing our simple agriculture example, a farmer at the end of harvest consumes a part of the output for his personal use, sells a part of the output to spend for other needs and keep some quantity of output and cash for use for the next season. The last part is his savings and is also equal to capital. In a complex society, savings and investments happen at different places. Financial system consists of several institutions that encourage savings and facilitate flow of capital. The term 'finance' in the financial system refers to capital and savings. Finance at macro level deals with how the country or economy encourages savings and convert them into productive capital. Governments and central banks constantly measure the savings and capital formation in the economy and





initiate policy measures to achieve desired savings and capital formation. Finance at micro level deals with how firms raise capital and use them in various productive assets. In this book, our focus on finance is at micro level.

1.2 Financial System

If we place financial system at the center, we see deficit sector on the one side and surplus sector on the other side. The surplus sector consists of capital suppliers, who are mainly individuals and are willing to save a part of their earnings. Household savings are typically in the form of small savings like investments in NSS, NSC, IVP, savings bank, fixed deposits with banks and Non-Bank Financial Institutions (NBFIs), chit funds, insurance policies and provident or pension funds. Firms which earn profit also saves a part of their earnings in the form of retained earnings. On the deficit side, we see several capital seekers. It includes individuals who need capital to buy houses or vehicles or consumer durables. They are primarily consumers but still capital seekers. In addition, there are sole proprietors, private and public limited companies, SSI units/cottage industries, agricultural sector, rural industries, artisans etc. who need capital. Table 1.1 provides domestic savings and capital formation in the Indian economy over the years. You can look around you and list down the developments that has happened during the last few years. This might include a metro project, a corporate hospital, a few IT companies, a mall and hypermarket, education institutions and many other things. All these investments are supported by capital suppliers through financial system.

Table 1.1: Gross Savings and Capital Formation

(Rs. In billions)

Year	Base Year	Gross Savings	Gross Capital Formation
2004-05	2004-05	10507.03	10522.32
2005-06	2004-05	12351.51	12237.17
2006-07	2004-05	14859.09	14107.54
2007-08	2004-05	18363.32	16534.38
2008-09	2004-05	18026.20	16262.20
2009-10	2004-05	21823.38	18320.50
2010-11	2004-05	26217.42	21019.36
2011-12	2004-05	28244.59	22372.10
2011-12	2011-12	30267.24	34028.95
2012-13	2011-12	33647.67	38426.87
2013-14	2011-12	36036.05	37895.48



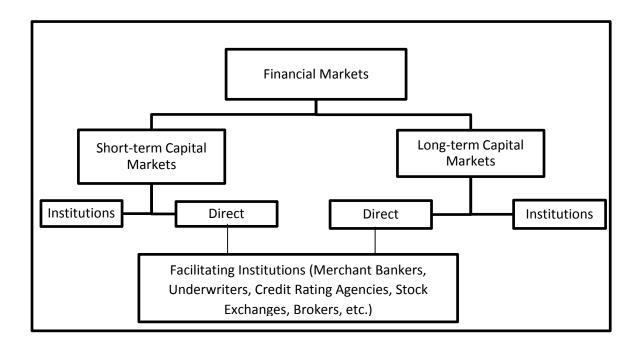


2014-15	2011-12	40984.53	42582.74
2015-16	2011-12	44050.86	45454.86

Source: Handbook of the statistics of Indian Economy, www.rbi.org.in

Financial system plays a critical role in encouraging savings in the economy, converting savings into capital formation and finally channelizing the capital for productive purpose. In a most efficient financial system, savings and creation of productive capital take place directly by connecting the savers and business houses and others who create productive assets. For example, if a metro rail project or steel company issue a bond and if you as individual subscribe the bond, savings and productive capital formation take place simultaneously. In a less efficient financial system, it requires an intermediary like a bank or financial institutions to mobilize the savings and channelize the same for productive capital formation. Several institutions including regulating agencies play a critical role for the development of financial system. Figure 1.1 shows the structure of financial markets.

Figure 1.1: Structure of Financial Markets





If you plan to start a business at some point of time in your life, what you critically need is an 'idea'. Once you give a shape to your idea, you will start developing strategies and planning to commercialize the idea. As a part of commercialization of your idea, you will be examining whether there is a market or customers to buy your products or services. You will also examine whether the idea you have is technically viable. For example, if your business idea is to generate and supply solar power at Rs. 2 per KWh, there is enough market for your product. You can also generate solar power but the challenge is generating power at a cost below Rs. 2. Once you find there is a way to achieve both technical and commercial viability of your idea, you will start looking for resources to construct factories or hire offices and produce products or deliver services. You will now look for capital or financial resources to buy other resources required for the project. Knowledge on finance and managing financial resources is critical at this point for you.

The first question is where to get capital to start your businesses. Often, the capital with the promoter or entrepreneur is limited and far below than the funds required to start and run the business. There is a market for capital like market for commodities which connects those who are in need of capital and those who are willing to supply capital. Typically, entrepreneurs and business houses need capital and individuals who have surplus income provide capital. As the market for capital is global, both suppliers of capital and seekers of capital are not only within the country but also from outside the country. The capital flows to a place where there is a need. The developed markets generate far more capital than their requirement due to high income levels whereas the need for capital in developing and emerging markets is far more than the savings of the people in those countries. Therefore, there is a huge movement of capital from developed markets to developing markets.

The capital market can be classified into two ways. Some entrepreneurs directly access capital market and approach investors directly. In this case, both capital suppliers and capital seekers are comfortable in directly dealing with each other. We can call this as **Direct Capital Market**. Many other capital seekers and investors would prefer to exchange capital through intermediary institutions. In this **Indirect Capital Market**, financial institutions and banks mobilize savings of people and lend to businesses. This intermediation service comes with a cost for both investors and businesses. There is another way to classify capital markets. This classification is based on period for which capital is required. If a business needs capital for a short period, the capital is raised in a market called **Money Market or Short-term Capital Market**. On the other hand, if capital required is for long-term needs, the capital is raised through **Long-term**





Capital Market. An active capital market encourages savings and investments in the economy and also flow of capital from other countries. The governments and regulating agencies create an environment to facilitate active capital markets. Table 1.2 provides statistics on capital market activities in India. Compared to total capital formation, direct capital market activities are relatively small. A significant part of capital formation is taking place outside the formal financial system. For example, if an organization used a part of the profit earned to expand the business, capital formation is taking place without intervention of financial markets. However, new venture financing takes place through financial markets and hence, entrepreneurs and managers need to know how macro-economic policies affect the financial markets.

Table 1.2: Financial Assistance provided by Financial Institutions and Capital Markets (Rs. in billions)

Loans Disbursed by Financial Institutions	Capital Market Funding
761.39	58.18
591.73	56.92
273.73	18.78
301.73	37.22
215.06	130.79
211.46	211.54
386.53	306.03
460.29	636.38
942.70	161.71
920.67	279.79
878.47	274.60
1003.09	156.82
894.62	161.00
920.48	116.81
1029.06	170.56
1071.40	267.16
	Institutions 761.39 591.73 273.73 301.73 215.06 211.46 386.53 460.29 942.70 920.67 878.47 1003.09 894.62 920.48 1029.06

Source: Handbook of the statistics of Indian Economy, www.rbi.org.in





1.3 Institutional Financing

In a less developed economy, the task of mobilizing and channeling the savings to productive capital is achieved by setting up suitable intermediary institutions of different kinds, which in turn raise capital either directly or indirectly from the market and then distribute the same to those who need capital. India opted for this model after independence and set up many intermediary institutions at central, state and district levels. Their main functions are providing loans and advances, project appraisal, promoting overall economic development through promotional activities, mobilization of funds and identification of investible projects for development planning, project financing assistance to backward areas and small scale sector, assistance to infrastructure and key sectors, support for development of capital market, nursing of sick units and merchant banking services, technological consultancy and technology transfer, bridge loans, etc¹.

Financial intermediary institutions can be broadly classified under six categories.

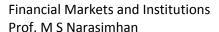
- 1. Central financial institutions or term-lending institutions viz. IDBI and IFCI.
- 2. State level finance institutions and other state level promotional and finance agencies. (SIDCs/SIICs/SSIDCs).
- 3. Investment institutions like Life Insurance and General Insurance companies.
- 4. Commercial Banks
- 5. Mutual Funds and Pension funds.
- 6. Venture Capital and Private Equity

(a) Central Financial Institutions

The central finance institutions like IFCI, IDBI and ICICI have extended their operations for all companies in the country but confine their operations to organized medium and large scale industries. They render variety of financial assistance including loans, underwriting and direct subscriptions to new issues of equity and debentures and provide guarantee for assistance provided by third parties, among others. Many large steel, cement, fertilizer and petrochemical companies were established with the assistance of these central institutions. They were called development financial institutions (DFI) since they provide between 60% and 80% of the total project cost and assume huge risk of the venture. With several defaults, these institutions were

¹ However, the concept of development banking is slowly withdrawn after the economic liberalisation and financial institutions get more freedom to take decision on commercial basis.

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not able to carry out their development financier role over the years and many of them were converted themselves into commercial banks. For example, ICICI is now ICICI Bank. IDBI has started its own bank.

(b) State level finance institutions and other promotional agencies

State Finance Corporations (SFC), State Industrial Development Corporations (SIDCs) and State Industrial Investment Corporations (SIICs) were established in each State and they played critical role for industrial development. In addition to providing finance to medium and small industries, these institutions also build and maintain industrial estates. When India was emerging as a major player in the IT segment, SIDCs in many States played an important role in creating infrastructure that include land, building and telecommunication facilities. The financial intermediation role has come down significantly due to large scale defaults over the years.

(c) Investment institutions (LIC, UTI and GIC)

Life and general Insurance companies sell insurance products and invest their premium collection in various securities. On most days, their collection is more than settlement of insurance claims. They are called investment institutions because they are net investors in the market on most of the days in a year. Insurance companies invest bulk of their surplus funds in government securities and balance in corporate bonds and equities. With expansion of economic activities and growing penetration of insurance products, even a smaller part of funds available for private sector is large in absolute Rupee value. Insurance companies also invest in other intermediary institutions like housing finance companies, companies providing infrastructure support, irrigation and water supply projects and banks and other financial corporations.

(d) Commercial Banks

With the exit of central and state financial institutions, commercial banks have filled-in the space and active in providing financial assistance to firms. Banks meet the financial needs of companies of different types, sizes and needs. They provide variety of loans either directly or through consortium of banks if the loan amount is large. The loan products include long-term loans, working capital loans and retail loans. With the entry of private sector banks, banks started offering innovative products and services.





(f) Mutual and Pension Funds

Mutual funds and pension funds mobilize a large volume of household savings. Depending on the scheme objective, they invest their funds in many securities which include government bonds, corporate bonds and equity shares of companies. With the entry of private sector players in mutual and pension funds, the awareness of financial markets increased in general and resulted in growth of mutual and pension funds. Tax concession and general economic development have added to the growth of these fund houses over the years.

Table 1.3: Asset Under the Management (AUM) of Mutual Funds in India (Rs. in billions)

Year (End-March)	Amount	Year (End-March)	Amount
2001	905.87	2009	4173.00
2002	1005.94	2010	6139.79
2003	1092.99	2011	5922.50
2004	1396.16	2012	5872.17
2005	1496.00	2013	7014.43
2006	2318.62	2014	8252.40
2007	3262.92	2015	10827.57
2008	5051.52	2016	12328.24

(f) Venture Capital and Private Equity

Venture Capital and Private Equity firms raise capital from high net worth investors and fund enterprises at early stage. Angel investors fund the project at the idea stage itself. Once the project takes some shape, venture capital funds invest in the project. During growth stage, private equity funds join and provide equity support. For many firms in technology space, the debt finance is generally not available. Angel, VC and PE funds provide equity support. They sell their equity during IPO or when the firm is sold to a large company. Angel investor may exit early if they get attractive offer from VC and PE.





1.4 Direct Capital Flows

The role of intermediary financial institutions depends on the economic policy adopted by the country. Since India opted for planned economy model after independence, financial institutions were used to ensure that capital is allocated as per the plan that was approved by the government. The government decides capital to be allocated to different sectors and regions. However, this model of allocating capital through intermediary institutions comes with a cost. There is a time lag between capital mobilization activity and actual distribution of capital. For large projects, these institutions initially sanction loan and then raise capital; in other words, the two activities are not instantaneous and there were occasions where there is a considerable delay in disbursement of sanctioned loan. The cost of distribution is also typically high and normally the spread is between 4 to 6 percent. Table 1.4 shows the deposit interest rates and lending rates of banks. The rates are minimum lending rate and actual rate depends on the credit rating of borrowers. As market develops, financial markets facilitate direct flow of capital. Under the direct capital flow, those who need capital directly approach those who have surplus with the help of certain facilitating agencies and in that process the conversion of savings into productive capital is instantaneous. Also, the agencies connected with direct flow charges low service fee and that too it is one-time expense unlike intermediate institutions charging the spread every year.

Table 1.4: Deposit and Lending Rates

	Call/Notice		D	Deposit Rates (%)		
Year	Vionev	Savings Rate (%)	1 to 3 years	3 to 5 years	Above 5 years	Lending Rates (%)
2000-01	9.15	4.00	8.50-9.50	9.50-10.00	8.50-10.00	11.00-12.00
2001-02	7.16	4.00	7.50-8.50	8.00-8.50	8.00-8.50	11.00-12.00
2002-03	5.89	3.50	4.25-6.00	5.50-6.25	5.50-6.25	10.75-11.50
2003-04	4.62	3.50	4.00-5.25	5.25-5.50	5.25-5.50	10.25-11.00
2004-05	4.65	3.50	5.25-5.75	5.75-6.25	6.25	10.25-11.00
2005-06	5.60	3.50	6.00-6.75	6.25-7.00	6.50-7.00	10.25-12.75
2006-07	7.22	3.50	6.75-8.50	7.75-9.50	7.75-8.50	12.25-14.75
2007-08	6.07	3.50	8.00-8.75	8.00-8.75	8.50-9.00	12.25-15.75
2008-09	7.26	3.50	8.00-8.75	8.00-8.50	7.75-8.50	11.50-16.75
2009-10	3.29	3.50	6.00-7.00	6.50-7.50	7.00-7.75	11.00-15.75





2010-11	5.89	3.50	8.25-9.00	8.25-8.75	8.50-8.75	8.25-9.50
2011-12	8.22	4.00	9.25	9.00-9.25	8.50-9.25	10.00-10.75
2012-13	8.09	4.00	8.75-9.00	8.75-9.00	8.50-9.00	9.70-10.25
2013-14	8.28	4.00	8.75-9.25	8.75-9.10	8.50-9.10	10.00-10.25
2014-15	7.97	4.00	8.50-8.75	8.50-8.75	8.25-8.50	10.00-10.25
2015-16	6.98	4.00	7.25-7.50	7.00-7.50	7.00-7.30	9.30-9.70

Source: Database on Indian Economy, www.rbi.org.in

Direct capital flow takes place in primary market when a firm raises capital by selling its securities to investors. There are several agencies which facilitate the firms to raise debt and equity capital directly from the investors. A few of them are discussed below.

(a) Investment banker or merchant banking

Investment banker or merchant banker facilitates the issuing companies to raise capital from investors. Since issuers generally have little knowledge on capital market regulations, these institutions help the issuers in providing various services like complying legal formalities, designing and pricing instruments, etc. They also take an active role in distribution of the securities to ultimate investors. While merchant bankers provide only advisory services, investment bankers may also invest in the issue. Investment and merchant banker provides end-to-end service. Under securities market regulations, investment and merchant bankers are held responsible for all activities connected with the issue.

(b) Underwriter

The issuers face the risk of not selling the securities when they issue securities in the primary market. Underwriters take the risk and provide insurance cover. They market the issue through their network. In the event of the issue not subscribing in full, underwrites subscribe the unsold part of the issue and thus ensure full subscription of the issue. Underwriters get commission for the quantity underwritten by them.

(c) Registrar of the issue

The registrar mainly gives administrative support for the issue. The agency collects the details on the number of applications received on daily basis from the banker and prepares the list of applicants. After the finalization of allotment, the agency informs the applicants on allotment of shares and sends the allotment advice/share certificate/refund order.





(d) Credit rating

Credit rating was first introduced to rate commercial paper in 1990 by CRISIL in India. Credit rating assess the degree of risk associated with the instruments. Bonds and debentures, commercial paper and other debt instruments are required to be rated by the rating agency. The six credit rating agencies in India are:

- i) Credit Rating Information Service or India Ltd. (CRISIL)
- ii) Investment Information and Credit Rating Agency. (ICRA)
- iii) Credit Analysis and Research Limited. (CARE)
- iv) Fitch Ratings India Private Ltd. (FITCH)
- v) Brickwork Ratings India Private Limited. (Brickwork)
- vi) SME Rating Agency of India Ltd. (SMERA)

Credit Rating agencies also rate initial public offerings (IPOs). Initially, when SEBI brought the regulation, it was mandatory for IPO issuers to obtain rating but in 2013, IPO rating was made optional.

(e) Stock Exchanges and Brokers

Stock exchanges play an important role in the direct capital flow. Before offering the securities, the issuing firms approach stock exchanges for permission to list the securities after the completion of the issue. Based on this conditional approval, the issuer approaches the investors for raising capital. Stock exchanges provide a platform for investors to trade on the securities that they bought in the primary market. Stock brokers or members of stock exchanges or dealers facilitate the buyers and sellers to buy and sell their securities.

1.5 Types of offerings

Initially promoters subscribe to the equity shares of the company. Subsequently, shares are issued to friends and others through private placement. Others like angel investors and Venture Capitalists also subscribe equity shares of the firm at different point of time in the early stages. Public offerings come at the end of this process. **Initial public offering** (IPO) is when company issues shares to public for the first time. Several years after IPO, companies might issue shares to public and such issues are called **seasoned offerings**. Between IPOs and season offering, companies also issue shares on right basis. **Rights offering** refers to issue of shares to existing © All Rights Reserved. This document has been authored by Professor Narasimhan M S and is permitted for use only within the course, Accounting and Finance, delivered in the online course format by IIM Bangalore. No part of this document, including any logo, data, illustrations, pictures, scripts, may be reproduced, or stored in a retrieval system or transmitted in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior permission of the author.



shareholders on right basis. Corporate Law in several countries protects the rights of existing shareholders to maintain their equity stake in the company. This is called preemptive rights. Small quantity of shares is also offered to institutions and individuals on private placement basis.

1.6 Financial Instruments

Financial instruments or products are broadly classified into three categories. They are debt products, equity products and derivative products. While debt and equity products are created in the primary markets and traded subsequently in secondary markets, derivative products are created and traded in secondary markets. Financial products can also be classified under government securities and corporate securities or short-term money market securities and long-term capital market securities. A brief description of various financial products is given below:

A) Debt instruments

Debt instruments represent a promise to pay a specific amount of money (the principal amount) to the holder of the security on a specific date (the maturity date). The investor or holder of the security, receives interest. Interest is paid either periodically (normally at the end of every six months or annually) or along with maturity. If the interest is paid along with maturity, they are called zero-coupon bonds or discount or deep discount bonds.

a) Money Market instruments

Money market is place where short-term capital is exchanged. Treasury bill, commercial paper, certificate of deposits, REPO (repurchase agreement), call money, etc. are few instruments or facilities through which government, corporate and banks raise capital for short-term requirements. The organised money market consists of Reserve Bank of India, Commercial Banks and other institutions like SBI DFHI connected with the money market. The market typically functions through telephone and buyers and sellers contact through telephone to buy and sell securities. Once the buyers and sellers completed their negotiation, they need to report the same to Negotiated Dealing System (NDS) of RBI. Once NDS accepts the trade, the trade is settled through National Clearing Corporation of India. In 2005, RBI introduced Negotiated Dealing System – Order Matching System (NDS-OM), which is an electronic, screen based, anonymous, order driven trading system for dealing in Government securities. The Reserve Bank owns NDS-OM and CCIL maintains it. The platform is in addition to the existing facility of over-the-counter (OTC) or phone market in Government securities. The order executed under





the NDS-OM are settled by CCIL and interestingly, for all orders, CCIL is the counterparty and hence it is not possible for the buyer or seller to know who is the counter-party of the transaction. CCIL started offering clearing facility for many securities transactions like Interest-Rate Swaps (IRS) and Forward Rate Agreement (FRA). A few important money market instruments are explained below:

- i) Call money: Call money refers to lending and borrowing for a short period of time. The period ranges a day to fortnight. Banks which need temporary funds borrow from other banks for a short period. One prominent reason for such need is to meet the cash reserve ratio (CRR) of the central bank. Central banks as a part of monetary control require banks to maintain a percentage of deposits received from the customers as cash reserve with the central bank. It means the funds available with the bank for lending is reduced to that extent. In addition to CRR, banks are also required to keep a part of the deposits in the form of government securities (SLR). Some banks may have used the deposits for long-term lending and hence fail to meet the requirement. They borrow from other banks and deposit the same with the central bank. Banks may also borrow from other banks if some customers bank demand money suddenly but the bank has lent the money to others.
- ii) REPO: REPO refers to repurchase agreement in which a bank or a financial institution sells government securities and simultaneously agrees to buy the securities at a future date and at a predetermined price. Though there are two different transactions, REPOs are essentially borrowing against the collateral. The difference between the sale and purchase price is interest cost for the borrower. REPO transactions are generally done by banks, mutual funds, insurance company and Primary Dealers of government securities to meet their short-term funds requirement. The Central Bank of the country uses REPO transactions to control money supply in the market. By reducing the REPO rate, the central bank expresses its willingness to lend money at lower rate to banks and banks borrows money from central bank at lower rates. This in turn increases money supply in the market. A news item from a financial newspaper on REPO rate is given below:





RBI cuts repo rate by 50 bps to 8% Business Standard, April 17, 2012

The Reserve Bank of India (RBI) cut interest rates today for the first time in three years by an unexpectedly sharp 50 basis points to give a boost to flagging economic growth but warned that there is limited scope for further rate cuts. The RBI cut its policy repo rate to 8%, compared with market and expert expectations for a 25 basis point cut.... The RBI raised rates 13 times between March 2010 and October 2011 as it struggled to contain price pressures.

iii) Treasury Bill: Treasury Bills (TB) are money market security issued by the Government for short-term requirement. Money market securities are generally issued for a period of 91 days, 182 days and 364 days. The Central Bank auctions the treasury bills on behalf of the Government. These securities are issued at a discount to their face value and repaid at the face value. The T Bill Yields as on June 2012 are 8.31% for 91 days and 182 days and 7.83% for 364 days. The rate changes on daily basis depending on money market conditions and you can find the current rate from RBI website. Governments issue Treasury Bills mainly for cash management. While government receives some parts of tax collection on daily basis (like excise duty and customs duty), other taxes like Income Tax, Corporate Tax, and Capital Gains Tax are collected at certain intervals. Government spending also happens both on daily basis and at certain intervals like salary to government employees. Since the inflows and outflows are not matching, the government need short-term finance to meet the obligations. Government uses long-term borrowing if the overall outflow is more than inflow and it is called deficit financing.

Table 1.5: Average Treasury Bill Yield (%)

Year	Treasury Bill Period (days)					
1 cai	Upto 14	15-91	92-182	183-364		
2001 - 2002	6.43	6.79	6.89	7.12		
2002 - 2003	5.58	5.72	5.78	5.88		
2003 - 2004	4.31	4.52	4.53	4.55		
2004 - 2005	4.75	4.79	5.02	5.11		
2005 - 2006	5.61	5.65	5.82	5.90		
2006 - 2007	6.25	6.54	6.68	6.88		
2007 - 2008	6.59	6.87	7.20	7.40		





2008 - 2009	6.16	6.89	7.56	7.13
2009 - 2010	3.14	3.40	3.59	4.23
2010 - 2011	5.44	5.85	6.19	6.22
2011 - 2012	8.15	8.44	8.53	8.40
2012 - 2013	8.11	8.14	8.12	8.03
2013 - 2014	8.54	8.86	8.90	8.65
2014 - 2015	8.18	8.35	8.43	8.40
2015 - 2016	7.09	7.27	7.34	7.39
2016 - 2017	6.28	6.40	6.45	6.54

Source: Rates compiled from RBI website (www.rbi.org.in)

iv) Certificate of Deposit: Certificate of Deposit (CD) is issued by a bank with a face value and interest rate. The period can be between 3 months to 5 years. Since the period can be more than a year and these instruments bear an interest rate, it is strictly not a money market instrument. The difference between fixed deposit of a bank and certificate of deposit is the CDs are transferrable by endorsement. Interest rate is volatile and is determined on daily basis based on money market condition. Interest rates are negotiated between the bank and investors. On other hand, interest rates on term deposits offered to public are fixed and are not transferrable. CDs are purchased by corporates with large liquid funds and mutual funds.

Table 1.6: Certificate of Deposits issued by the Banks in India

Year	CD Issued (Rupees in billion)	Interest Rate (Minimum)	Interest Rate (Maximum)
2012	8648.38	8.05	12.00
2013	7652.94	7.50	11.95
2014	8281.61	8.08	10.35
2015	6556.78	7.00	9.16
2016	5019.18	5.92	8.71

Source: Data compiled from RBI website, www.rbi.org.in





v) Commercial Paper: Commercial Papers (CP) are issued by large corporations with high credit rating for a short period. The period ranges from 7 days to 1 year and they are issued mainly for working capital purpose. In some countries, the maximum period allowed is 270 days. It is an unsecured negotiable promissory note. Commercial papers are traded in the secondary market. Like other money market instruments, the interest rates for CPs are dynamic reflecting demand and supply of capital.

Table 1.6: Commercial Papers issued by the Corporate Sector in India

Year	CP Issued (Rupees in billion)	Interest Rate (Minimum)	Interest Rate (Maximum)
2011-12	4924.20	7.06	15.25
2012-13	7512.20	7.37	15.25
2013-14	7281.50	7.36	14.31
2014-15	11500.60	7.36	14.92
2015-16	16287.60	6.52	13.14
2016-17	18222.10	5.68	14.21

Source: Compiled from RBI website (www.rbi.org.in)

vi) Bankers Acceptances: In international business transactions, the seller faces credit risk on buyer. Buyers may not be in a position to make advance payment to sellers. Bankers' Acceptance guarantees the payment. Under this arrangement, buyer approaches the bank to issue bankers' acceptance on seller such that seller will get the money on supply of goods. Bankers Acceptance or Letter of Credit (LC) is a bill drawn on bank and accepted by the bank. By accepting the bill, the bank guarantees the seller that the buyer will make the payment on the due date. If the buyer fails to pay the dues, the bank will make the payment. An importer typically draws the Banker's Acceptance to fund the import and delivers the instrument to the exporter. The exporter in turn uses the instrument to raise funds for working capital. Bank charges a fee for giving the guarantee. Banker's Acceptances are usually drawn for a period of 90 days and the period varies between 30 days to 180 days.





b) Fixed Income Capital Market Instrument

The capital market supplies long-term funds to corporations, government entities and other users of capital. The issuers issue bonds of different maturities to raise long term funds. Bonds usually pay interest to the holders once every six months (semi-annually) and pay the principal or face amount upon maturity. Although the face amounts of bonds do vary, the typical bond has a face value of Rs. 1000. Current interest rate and other factors affect the market value of bond.

i) Government Bonds

Central and State Governments issue long-term bonds to meet the needs of long-term funds. Governments initiate many development projects and tax collection may not be adequate to meet the funds required for such development projects. Government bonds are issued for a period ranging from 1 year to 30 years.

Table 1.7: Central and State Government Market Borrowings and Interest Rate

	Central Government	nent Securities	State Governme	ent Securities
Year	Gross Borrowing	Interest Rate	Gross Borrowing	Interest Rate
	(Rs in billion)	(%)	(Rs in billion)	(%)
2001-02	1338.01	9.44	187.07	9.20
2002-03	1511.26	7.34	308.53	7.49
2003-04	1476.36	5.71	505.21	6.13
2004-05	1065.01	6.11	391.01	6.45
2005-06	1600.18	7.34	217.29	7.63
2006-07	1793.73	7.89	208.25	8.10
2007-08	1882.05	8.12	677.79	8.25
2008-09	3185.50	7.69	1181.38	7.87
2009-10	4924.97	7.23	1311.22	8.11
2010-11	4794.82	7.92	1040.39	8.39
2011-12	6003.82	8.52	1586.32	8.79
2012-13	6884.71	8.36	1772.79	8.84
2013-14	7004.56	8.45	1966.63	9.18
2014-15	7412.01	8.51	2408.42	8.58
2015-16	7390.33	7.89	2945.60	8.28

Source: Reserve Bank of India website www.rbi.org.in





Table 1.8: Maturity Pattern of Government of India Rupee Loans (Rs. in billion)

Year	Less than 5 years	5 to 10 years	Above 10 years	Total
2001	1641.69	1907.88	1813.67	5363.24
2002	1779.00	2336.91	2626.12	6742.03
2003	1848.10	2551.57	3846.45	8246.12
2004	2212.28	2838.39	4245.45	9296.12
2005	2455.01	3072.69	4795.27	10322.97
2006	2751.58	3469.20	5253.41	11474.19
2007	4169.78	4134.75	5533.11	13837.64
2008	4031.78	5371.75	6165.38	15568.91
2009	4591.59	7466.44	7250.60	19308.63
2010	6244.73	7353.81	7970.60	21569.14
2011	5388.16	8536.25	8764.10	22688.51
2012	5568.87	6432.51	13931.90	25933.28
2013	9481.75	10697.88	10427.49	30607.12
2014	10520.54	11078.10	13542.22	35140.86
2015	11179.48	12018.10	16395.96	39593.54
2016	11720.54	12925.97	19009.08	43655.59

Source: Reserve Bank of India website www.rbi.org.in

ii) Municipal Bonds

The term "Municipal" in general refers to all governments in a multi-structure political governance other than Federal or Central or Union Government. It includes States, Cities, and other political subdivisions. In many countries, municipal bonds enjoy concessional treatment of federal and state-level income tax (either no income tax or lower tax). In India, State Governments bonds are generally clubbed with Central Government bonds. Though City and Municipal corporations in general are not frequently issuing bonds in India, a few municipal corporation like Ahmedabad, Bengaluru, Nasik, Madurai, Ludhiana have issued bonds². Like in the U.S. these bonds are tax free in India. In 2015, the SEBI brought a new regulation on issuing bonds to public by the municipal corporations.

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² Singh, Charan and Singh, Chiranjiv, Financing of Urban Local Bodies in India, IIMB Working Paper No. 493, June 2015

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iii) Public sector undertaking bonds

PSU bonds are issued to finance projects of various public sector undertakings like NTPC (National Thermal Power Corporation), IRFC (Indian Railways Finance Corporation), etc. There are two kinds of bonds: Tax free with lower coupon and taxable with slightly higher coupon. Many of you might be investing in such bonds issued by infrastructure companies like IDFC towards financial year end to avail personal income-tax concession. There are also bonds issued by a few Infrastructure companies specifically targeted for those who prefer not to pay tax on long-term capital gains but invest in such bonds. These bonds carry a low coupon with a lockin period of 3 years. While investors avoid long-term capital gain earned out of previous assets, the interest income of the investments in these bonds are taxable.

Table 1.9: Bonds Issued by Public Sector Undertakings (Rupees in billions)

Year	Tax-free Bonds	Taxable Bonds	Total Bonds
2001-02	2.74	141.62	144.3
2002-03	2.86	72.43	75.29
2003-04	-	54.43	54.43
2004-05	-	75.91	75.91
2005-06	-	48.46	48.46
2006-07	-	103.25	103.25
2007-08	-	134.04	134.04
2008-09	-	205.46	205.46
2009-10	19.26	464.83	484.09
2010-11	16.42	587.91	604.33
2011-12	280.82	599.83	880.65
2012-13	148.6	378.57	527.17
2013-14	342.44	166.21	508.65
2014-15	0	372.83	372.83
2015-16	435	90.05	525.05

Source: Handbook of Statistics on Indian Economy, RBI website www.rbi.org.in





c) Corporate Bonds

Debt securities of corporations with maturity of longer than one year are corporate bonds. The usual par value of a corporate bond is Rs. 100 and sometimes Rs. 1000 and the maturities range from about two to ten years. In recent years, however, corporate bond issues have been of shorter maturities as inflation and economic uncertainties have caused investors to be less willing to commit their funds for longer periods of time. The corporate debt market in both primary and secondary markets is not active in India.

Table 1.10: Primary and Secondary Market Activities of Corporate Debt (Rs. in billions)

Year	No. of Issues	Amount	Volume Traded in NSE
2001-02	13	48.32	21.92
2002-03	4	14.18	58.16
2003-04	3	12.51	78.16
2004-05	3	16.27	175.21
2005-06	2	2.45	106.19
2006-07	3	8.50	66.40
2007-08	2	8.09	85.76
2008-09	1	15.00	119.34
2009-10	4	26.80	544.77
2010-11	6	26.30	450.59
2011-12	14	75.30	501.45
2012-13	6	22.17	283.20
2013-14	17	58.69	NA
2014-15	23	77.41	NA
2015-16	9	27.14	NA

Source: http://dbie.rbi.org.in/

B) Equity investments

Equity securities represent the residual ownership claim on the assets of the firm. That is, debt holders are paid first and equity holders share the balance available. Hence, equity securities are riskiest instrument among the financial instruments. In order to reduce the risk, the law allows





the issue of equity shares with limited liability. It means equity shareholders are liabilities are limited to the par value of the shares. There are two types of equity shares – common stock or ordinary equity shares and preference equity shares.

a) Common stock

The common stockholders are the residual owners. While the risk is high when the firm is not doing well, they earn maximum return when the firm is doing well. Equity shareholders get periodic dividend for their investments if the company is earning adequate profit. But it is not mandatory that a company should pay dividend even if the company is positing profit. The firm retains a part of the profit to undertake expansion and new projects resulting in the growth of the firm. The value of equity shares increases over the years reflecting the growth. Though equity holders collectively own the company, it is not practical for them to directly participate in managing the firm. They elect Board of Directors who in turn hire professional managers to run the company. Equity shares in general carry voting rights and by exercising voting right, equity holders decide many things related to management of the company and business.

Table 1.11 New Capital Issues by non-Government Companies (Rupees in billions)

Year	# of Issues	Amount	Year	# of Issues	Amount
1981-82	357	3.05	2001-02	6	8.60
1982-83	570	2.59	2002-03	5	4.60
1983-84	734	3.82	2003-04	35	24.71
1984-85	402	3.63	2004-05	51	114.52
1985-86	758	8.98	2005-06	128	208.99
1986-87	424	10.08	2006-07	114	297.56
1987-88	174	11.05	2007-08	111	568.48
1988-89	256	10.34	2008-09	45	146.71
1989-90	269	12.20	2009-10	67	252.99
1990-91	246	12.84	2010-11	70	248.30
1991-92	366	19.16	2011-12	49	81.52
1992-93	868	99.53	2012-13	48	138.85
1993-94	983	99.60	2013-14	53	58.12





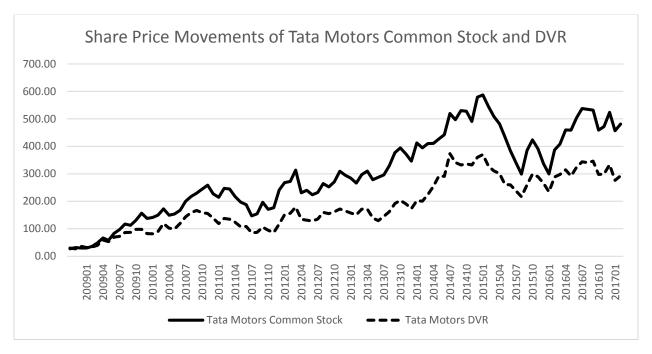
1994-95	1548	174.14	2014-15	63	93.15
1995-96	1591	118.77	2015-16	87	240.02
1996-97	801	61.01			
1997-98	89	11.62			
1998-99	33	25.63			
1999-00	69	27.53			
2000-01	128	26.08			

Source: http://dbie.rbi.org.in/

Corporate Laws in many countries allow issue of non-voting shares or differential voting rights shares (DVR). These shareholders are on par with shareholders with voting rights except voting. For giving up the voting either completely or partially, they are compensated with additional dividend. For example, a company can issue a Class A common stock with voting right and each share carries one vote. The company can also issue Class B common stock but each stock carries 0.10 votes (i.e. every 10 shares carry 1 vote). The company may issue the Class B shares at discount or offer higher dividend (like 2 times dividend of common stock holders dividend) or Non-voting shares or differential voting share are not popular in India. In 2008, Tata Motors issued DVR shares that carries 1/10 voting rights but DVR shareholders get 500 basic points (5%) additional dividend over and above dividend paid to equity shareholders. DVRs are generally sold at discount and at time as high as 40%. Only few companies have issued DVR to public and listed in the stock exchanges. In addition to Tata Motors DVR which is most actively traded, Future Enterprises, Gujarat NRE Coke and Jain Irrigation have issued DVR. Companies issue non-voting or differential-voting-rights shares to protect the rights of existing shareholders particularly promoters of the company. The challenge is valuation of the voting rights and compensating the same either in pricing or through dividend.

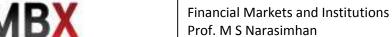






b) Preferred stock

In addition to common stock, companies also issue preference stock or preference shares. Preference shares are not normally issued to public but are placed privately to institutional investors and others. Preferred stockholders receive a fixed dividend and return of capital after certain number of years. Considering only the fixed return and repayment of capital, it is equal to bond. However, preference shareholders can't insist payment of dividend or return of capital. There is no preference on this. Their preference is restricted to preference over equity holders for receiving dividend or return of capital in the event of winding up the business. In other words, equity holders can't be paid any dividend without paying current and past dividends and distribute the assets without repaying their capital. If the company is doing well, the preference shareholders will not be able to participate on the growth. The dividend rate should be high to attract investors to subscribe preference shares. A few companies issued convertible preference shares instead of convertible bonds or debentures to avoid litigation in the event of company not able to pay interest or principal. Dividend received from preference shares also enjoys certain tax concession in some countries.







C) Contingent Claim Securities

Contingent claim securities are securities that give the holder a claim on another asset, contingent upon certain contract conditions. Although there are many types of contingent claim securities, the three most popular kinds today are options, warrants, and convertible securities.

i) Options

An option is a contract giving its holder the right to buy or sell an asset or security at a fixed price. All options are valid only for a specified time period, after which they expire. A call option gives its holder the right to buy the underlying asset and thereby guarantees the purchase price of the asset for the duration of the option. A put option carries the right to sell and guarantees the selling price of the underlying security. Call and put options can be issued by anyone and not necessarily by the companies. They are instruments created and traded in the secondary market and primarily used for risk management. They are not meant for raising capital. Companies may sell put option to guarantee certain minimum share repurchase price. Options are started trading in India from June 2001.

ii) Warrants

Warrants are similar to call options but are issued by companies. They give their holders the right to purchase the common stock from the corporation at a fixed price. Warrants usually have longer period than options, typically five to seven years, although some companies issue perpetual warrants to promoters. Promoters issue perpetual warrants to defend take-over threats. Corporations usually issue warrants in conjunction with another issue of securities as a sweetener. For example, when companies issue non-convertible bond or preference shares, they are worried whether investors will subscribe the issue. To make these instruments attractive, they can issue share warrants that entitle the investor to receive one common stock of the company at a future date at a predetermined price. Companies offer such packages to sweeten the deal and make the other security easier to sell. Deepak Fertilizer was the first company to issue detachable warrants along with non-convertible debenture in India and subsequently Reliance Industries Ltd., came out with a major bond issue with warrants. A non-convertible bond with detachable warrant is equal to convertible bond. In terms of structuring, it is easy for investors to sell the one which they don't want to hold. For example, a retired person will be interested in holding non-convertible portion of the bond but sell the warrants to improve yield. A risk-taker will sell the bond but keep the warrant.





iii) Convertible securities

Convertible securities are securities that may be converted into common stock. A convertible bond is a bond that the holder may exchange for common stock of the corporation. The other common type of convertible security is convertible preferred stock, which allows the preferred stock holders to exchange for a certain number of shares of common stock of the corporation.

d) Futures contracts

A contract that arranges for delivery and payment of an asset at a future date is a futures contract. Futures contracts are traded publicly on the futures exchanges, and these exchanges have developed contracts on several assets, such as corn, wheat, soybeans, and frozen pork bellies. In MCX and NCDX, future contracts are actively traded. These contracts, often called commodity futures because of the nature of the underlying asset, allow producers and consumers of the commodities to plan their production and sales in advance as well as allow investors to buy and sell these commodities. A second group of futures, such as Treasury bills, negotiable CDs, and stock markets indexes, is called financial futures. These futures allow banks and other investors to manage their risk while borrowing or lending or investing. In NSE, financial futures are activitely traded.

Secondary Market

After the initial public offering, securities are listed in stock exchanges. Listed securities are traded in secondary market where investors buy and sell securities among themselves. Stock brokers and dealers facilitate the transactions. Stock exchanges provide electronic trading platform for the brokers to enter investors' orders and match them. Most broking firms provide online trading platform for investors to directly enter their orders. An organized stock exchange is a place³ where stocks and bonds are traded by the exchange members. National Stock Exchange [NSE, www.nseindia.com] is most active exchange. Bombay Stock Exchange [BSE, www.nseindia.com] is the oldest stock exchange in India and reasonably active. There were number of regional stock exchanges but over the years most of them have become defunct. The stock exchanges are recognized by the central government and function within the purview

²

³ The world is changing fast. Many stock exchanges all over the world are computerising the trading and back-office functions. Shortly, we may not have any floor-based trading. All stock exchanges in India have abolished floor-based trading though a few exchanges in other countries follow dual system of trading.

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of the Securities Contracts (Regulation) Act, 1956, bye-laws, and regulations duly approved by the central government. The functions of stock exchanges are listed below:

- Providing a continuous market for the purchase and sale of securities.
- Providing a mechanism for determining a fair market price for securities.
- Providing reports of all transactions and price quotations of securities traded on the exchange.
- Imposing some degree of standardization regarding the release of financial information by the companies whose securities trade on the exchange.

Table 1.12: Volume of Trading in BSE and NSE on Cash and Derivative Segments

Year	NSE Volume	BSE Volume	Derivative Volume (NSE)
	(Rs. in billions)	(Rs. in billions)	(Rs. in billions)
2001-02	5131.67	3072.92	1019.26
2002-03	6179.89	3140.73	4398.62
2003-04	10995.33	5026.18	21304.08
2004-05	11400.71	5187.16	25469.82
2005-06	15635.01	8160.74	48241.74
2006-07	19452.87	9561.85	73562.42
2007-08	35510.38	15788.56	130904.77
2008-09	27520.23	11000.74	110104.87
2009-10	41380.24	13788.09	176636.66
2010-11	35774.10	11034.66	292482.2
2011-12	28108.93	6670.22	313497.34
2012-13	27082.79	5487.74	315330.01
2013-14	28084.88	5216.65	382092.14
2014-15	43258.38	8548.44	556041.98
2015-16	41152.56	7400.89	648258.26
2016-17	47442.25	7574.13	750508.12

Source: http://dbie.rbi.org.in/

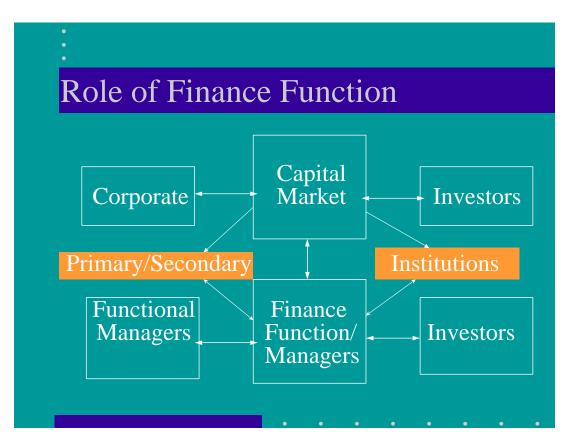
1.7 Role of Finance Function

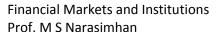
Most organizations are structured on functional basis like production department, marketing department, human resources department, financial department, purchase department, R & D department, etc. For many functional managers, the finance department is seen as supplier of capital. Functional managers create demand for capital inside organizations to pursue their





activities and targets given to them. For example, a production manager wants to improve the productivity of the machine and thus would like to replace an existing machine. A marketing manager needs capital to improve the brand or extend credit period to customers to increase sales. Functional managers demand capital to achieve certain overall organization goal. Finance department is expected to raise capital and provide the same to others in the organization to exploit every profitable opportunity and achieve excellence. Finance managers in turn interact with the capital markets to raise capital. Capital markets connect investors who has surplus funds and capital seekers who need capital. Finance managers represents capital seekers in the capital markets. They interact with institutions and individual investors. They also interact with the secondary market to ensure the valuation of their securities are correctly reflected. They need to understand investors' need and design instruments that meet requirement of investors. They also need to understand organizations existing risk profile and design a capital structure and instruments to ensure long-term solvency of the business.









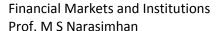
In addition to raising capital, there are few more functions that finance managers perform to ensure organizations remain financially healthy.

(i) Acquiring capital at the least cost

Capital required for business is raised from several sources. The cost of capital is determined based on the end use of capital and the instrument through which the capital is raised. If the firm intends to take up a risky venture compared to the present venture, the providers of capital for the risky venture expect higher compensation. Similarly, the cost of equity is more than the cost of the debt because equity holders take higher risk in the venture. Capital is also raised within the country and overseas. The cost of capital also differs based on the country from where the capital is raised. The cost of capital may be very low in countries like Japan but there is a currency risk. There is an additional cost if the firm decides to eliminate the currency risk through a derivative transaction. The finance manager must see combined cost and take a decision from where the capital is to be raised. Capital can also be raised through institutions or directly. The cost of capital may be lower if the capital is raised directly but the firm has to go through certain regulatory process and incur cost. Finally, the market conditions also need to be considered while raising capital. Overall, the finance manager of the firm should have a master plan or structure on raising capital and takes operational decision within the master plan. The primary objective is raising capital at least cost.

(ii) Assessing financial viability of investments

As discussed earlier, functional managers come with demand for capital. They submit proposals that require additional capital. This could be replacement of an existing machine or expansion or new project or extending credit period. There are technical and commercial justification. The finance manager must ensure that there is also financial justification for investing capital. All investment proposals should go through financial viability or feasibility test. In the past, finance department collects information from sponsors of the projects and prepares financial feasibility report. Today, in many organizations, the sponsors are required to prepare financial feasibility report as a part of project proposal and submit to Investment Committee or Capital Budgeting committee. A project is financially viable if the risk adjusted present value of benefits from the project is greater than investment in the project.







(iii) Managing Cash Flow

During the financial year, firms experience uneven cash flow movements. In few months, they face deficit in cash flow and in other periods, the cash inflows are more than cash outflows. During the busy season, the firm requires more cash to build inventory and extend credit period. In many countries, November, December and January are busy seasons with Thanksgiving, Christmas and New Year but production starts from September onwards to meet the busy period demand. In India, we have several festivals and hence firms see spike in sales around festival times. Once the busy season is over, firms starts realizing receivables and turn cash rich. The period of busy season and off-busy season depends on nature of the industry. Firms in seasonal food processing industry like Sugar industry will have a different business cycle compared to a firms that manufacture industrial equipment. The job of finance manager is to manage this uneven flow. The busy season working capital requirement are to be estimated well in advance and funds need to be tied up through banking and other sources. Last minute emergency borrowing will be costlier. When the firm surplus cash, the finance manager decides where to invest the surplus cash until they are used for either payment of dividend or taking up long-term projects.

(iv) Design suitable long-term dividend policy

Investors of public listed companies expect dividend. Though dividend yield is relatively small, both firms and investors expect regular cash dividend. Finance manager must decide how much of the profit should be paid out as dividend and how much of the profit be retained in the business. There are several factors influencing such decision. The first and foremost is whether the business is on growth path and the profit to be retained to finance such growth initiatives. The profit to be retained depends on the capital structure policy of the firm and growth opportunities. For example, if a firm needs Rs. 1000 million for taking up new projects and the firm's capital structure policy is 40% debt and 60% equity, the firm needs to set aside Rs. 600 million out of profit as equity component to take up new projects. If the profit for the period is Rs. 800 million, the firm has surplus profit of Rs. 200 million available for distribution of dividend. Finance managers want to have stable dividend policy such that dividends are increased at the of every three or five years. Since both profit and growth opportunities are fluctuating, finance manager wants to play safe while taking dividend decision. In the above example, the finance manager may start distributing Rs. 100 million out of the surplus Rs. 200 million and increase the amount to Rs. 300 million at the end of three years when the distributable profit increases.



(v) Balancing Finance and Business Risk

The functions we discussed so far are operational in nature. In addition, the finance managers also perform advisory role. If taking risk is business, excessive risk is not good for the business. Finance managers need to constantly assess the business risk by closely observing volatility of the cash flows. Firms are also exposed to financial risk when they start funding a part of the assets through debt. Total risk of the firm is sum of business risk and financial risk. Finance managers need to be measure both risks and ensure they are balanced in such a way total risk is under control. For example, when market turns competitive particularly from overseas competitors, the business risk increases. Finance managers can't do anything in reducing business risk but she/he can quickly adjust financial risk so that total risk is under control. It means, the finance manager must strengthen the equity part of the capital structure. The worst-case scenario is firms borrowing heavily and taking up high risk venture. Most Indian film producers resort to high leverage (large debt) funding and suffer if the film fails to attract viewers. A few Indian airlines have also borrowed heavily and expanded their fleet strength during the economic boom times and collapsed subsequently.

(vi) Giving feedback periodically on investments in various assets

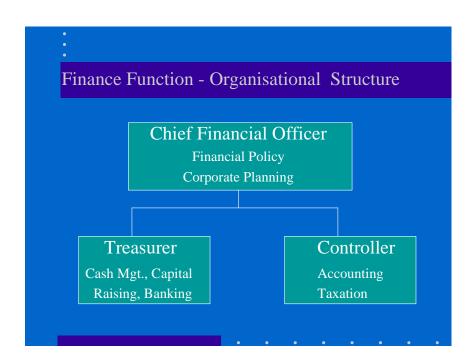
If business is a game, accountant is a scorekeeper and finance manager is a goal-keeper. Goal-keeper may be less active in a game but get an overview of the game. She or he observes the game in close circle and gets a better perspective of the performance of the team and its competitor and share their analysis with team members. Finance managers like goal-keeper may be less active in the business but gets an overview of the business and its competitors. They do good amount of financial analytics of the firm and competitors and share their analysis with the other financial managers. Many large multinational companies have set-up such analytic centers in India which employ professional financial accounts and management graduates to perform such analysis and share their reports with business heads of several countries. They go beyond financial analysis but consider several macroeconomic variables.





1.8 Organization Structure of Finance Function

Finance department in any organization performs three distinctive functions. The first one is related to establishing financial policies and contribute as a member of top management group on organizational strategies. The second one is more of operational activities which involve arranging funds and managing cash flows. The last function is more of scorekeeping function which includes accounting and taxation. The typical designations are Chief Financial Officer (CFO), Treasurer and Controller respectively.



1.9 Financial Goal and Agency Cost

Organizations prepare vision and mission document to set long-term purpose of the organizations and how to achieve the same. Most organizations are for profit organizations and hence set financial goal. The financial goal depends on the nature of organization and its life cycle. For young organizations, survival is the most appropriate short-term financial goal. They try to achieve cash break-even as quickly as possible and try to cover all cash expenses through revenue. Once they achieve cash break-even, the next target is achieving normal break-even and © All Rights Reserved. This document has been authored by Professor Narasimhan M S and is permitted for use only within the course, Accounting and Finance, delivered in the online course format by IIM Bangalore. No part of this document, including any logo, data, illustrations, pictures, scripts, may be reproduced, or stored in a retrieval system or transmitted in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior permission of the author.





it means, the revenue should recover non-cash expenses like depreciation. During the next phase, organizations set growth as their financial goal. Here they pursue strategies that allows them to increase the revenue and market share. Such growth may happen through normal expansion of business or through acquisition. After the growth phase, the next financial goal is maximizing profit. Measures like ROI or ROE are used to track the profitability of the business. Finally, organizations set wealth maximization as long-term financial goal. It refers to maximizing shareholders' wealth and this can be achieved maximizing the stock price. Though the goal looks like focusing only shareholders' welfare, it is not possible to maximize shareholders value by ignoring the welfare of other shareholders. For example, it is not possible to increase the stock price by providing substandard quality product or customer service. Similarly, it is not possible to squeeze employees and suppliers to maximize the share value. They may yield short-term profit but will not provide long-term advantage for the firm. The stock price reflects future growth opportunities and ability of the firm to capture such opportunities. This is possible if the firm satisfies all stakeholders' welfare. Therefore, the long-term financial goal for organizations is maximizing wealth of shareholders.

Managers behave bit differently and often wealth maximization is not pursued. Shareholders elect board of directors who in turn appoint managers to run the business. The relationship between managers and shareholder is like agent-principal relationship. Wealth maximization goal requires agents to maximize wealth of the principal. However, in reality agents first pursue their own goal and then pursue shareholders' goal. The conflict of interest between the managers and shareholders results in certain suboptimal decisions by agents which are not necessarily improve the wealth of the shareholders. For examples, managers are more worried about topline and hence opt for expansion even if the expansion is not profitable. Agents prefer to create an empire and protect their jobs. Finance Managers have a role in resolving this conflict of interest. They can set capital structuring policy with more debt and provide a seat or more in the Board. They can set dividend policy such that managers have little funds to pursue different objectives. Adopting several voluntary disclosures in the annual reports helps in reducing the conflict. ESOP and EVA based compensation plans are other useful measures to reduce the conflict of interest between shareholders and managers.





1.10 Summary

Capital is an important factor of production or offering services in all types of organizations. It allows managers to acquire resources required for producing products or offering services. Savings are converted into capital and capital markets provide a place for such conversion. Like any other markets, capital market allows suppliers of capital and seekers of capital meet and exchange the capital. Suppliers of capital are individuals who want to save a part of their earnings. Capital seekers are firms and governments which need capital for taking up projects and development activities. Exchange of capital happens through specialized financial institutions like banks or directly. Over the years, as the capital markets mature, the role of direct capital flow has increased. This process of increasing direct capital flows between capital seekers and suppliers is called disintermediation. Direct capital flow reduces the cost of capital as it eliminates transaction cost of intermediary institutions. There are host of institutions like Investment or Merchant Bankers, Underwriting houses, Credit Rating Agencies, Stock Exchanges and Stock Brokers to facilitate such transactions. While capital flow takes in primary market, an active secondary market is a prerequisite for primary market. In secondary market, the investors who purchase securities in primary market can sell the securities. It also allows investors to buy and sell securities of existing companies among themselves.

Capital seekers issue a variety of securities. Money market securities are those whose maturity period is less than a year and meet the short-term needs of the firms and government. Government and central bank are active in money market to raise short-term needs and administer monetary policy. Firms issue short-term securities to raise capital for working capital purpose. Long-term Capital Market securities have maturity period more than year. Government and firms are active in long-term capital market. Government issue bonds (called 'dated securities') and firms issue bonds, equity and many other financially engineered securities. Bonds are claims on the assets of firm and bond holders are paid interest till maturity date. On maturity, the principal is repaid. Equity represents ownership on the firm's asset and equity holders take risk in the business.

Functional managers like production manager and marketing manager submit their capital needs to take up new projects or initiatives. Finance department consolidates all capital needs and raise the capital required for the business. Finance managers constantly interact with capital markets to raise capital. In addition, finance managers assess the financial viability of the project before raising capital. A project is financially viable, if the risk adjusted present value of benefit (called cash inflow) is greater than project cost (called cash outflow). Managing working capital needs © All Rights Reserved. This document has been authored by Professor Narasimhan M S and is permitted for use only within the course, Accounting and Finance, delivered in the online course format by IIM Bangalore. No part of this document, including any logo, data, illustrations, pictures, scripts, may be reproduced, or stored in a retrieval system or transmitted in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior permission of the author.





of the organization and surplus cash by selecting appropriate investments are two other important functions of finance managers. They also set a few financial policies like capital structuring policy, dividend policy and working capital policies. In addition to above operational functions, finance managers take advisory role. They are called goal-keeper of the organization. They get holistic view of the business like a goal-keeper in a game and share their knowledge with other functional managers. As a part of goal-keeping function, finance managers ensure that the risk level of the business are within limit. They constantly measure business risk by measuring volatility of the operating cash flows.

If the business risk increases, finance risk needs to be adjusted appropriately to ensure that overall risk is within the limit. In all financial decisions, financial managers follow certain goals depending on the life-cycle of the firm. In the early stage of business life-cycle, finance managers pursue survival as primary financial goal and take decisions to ensure that business achieve cash break-even. As the business matures, growth and profit are appropriate financial goals. The long-term financial goal is wealth maximization. Wealth maximization refers to maximizing the market value of shares. Market value of shares reflects future growth opportunities and profitability. It is possible to increase the market value when the firm addresses the needs of all stakeholders including customers, employees, suppliers, shareholders and society at large.

In a company form of business structure, the conflict of interest between the shareholders and professional managers reduces the importance of wealth maximization objective when the agents (professional managers) pursue their interests at the cost of the interest of other stakeholders. The behavior of agents pursuing their interest leads to agency cost. The firm value is equal to true value of the firm less agency cost. The finance managers have a role in reducing agency cost. When the firms borrow capital, debt holders start monitoring the firm in addition to board of directors and ask managers to take their approval on important policy matters. External and internal auditing are other forms of monitoring agents' behavior. A dividend policy to distribute excess surplus periodically is another tool available with finance managers to ensure that managers are not pursuing activities to use the surplus cash. Managerial compensation plans linking incentives to share value (like ESOP) is another way to ensure managers take decisions that benefit all stakeholders.