Directorate of Distance Education

UNIVERSITY OF JAMMU

JAMMU

SELF LEARNING MATERIAL

FOR

POST GRADUATE DIPLOMA IN BUSINESS MANAGEMENT

(PGDBM)

SEMESTER–II

Title of the course :

FINANCIAL MANAGEMENT

PAPER-III	**Lesson No. 1 to 25**	**UNIT I -V**

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FINANCIAL MANAGEMENT

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PGDBM SEMESTER - II

Course Title : FINANCIAL MANAGEMENT **Total Marks: 100**

Paper : III **Internal Assessment : 20**

Contact Hours : 45 **Semester Examination: 80**

Duration of examination: 3 hrs

(For the Examination to be held in 2019, 2020 and 2021.

OBJECTIVE:

The objective of this course is to impart basic knowledge about the aspects of finance and its application to the business decisions and to acquaint participants with the nuances of banking and finance.

UNIT-I: INTRODUCTION

Financial Management - meaning and concept. Finance function and firm's objective. Emerging role of finance manager. Financial decision : an overview.

UNIT-II : INVESTMENT DECISIONS

Time value of money concept. Analysis of capital budgeting decisions - NPV, IRR, PAYBACK, ARR.

UNIT-III: FINANCIAL PLANNING

Concepts and steps in financial plan. Determinants of capital structure. Overcapitalization and undercapitalization. Working capital - meaning and types. Factors influencing working capital. Approaches to financing working capital.

UNIT-IV: FINANCIAL DECISIONS

Sources of finance - Bank finance and non banking finance companies. Equity shares and preference shares, debentures and other debt instruments.

UNIT-V: DIVIDEND DECISIONS :

Determinants of dividend policy. Dividend policy options. Stock split vs. reverse split.

BOOKS RECOMMENDED

1. Chandra Prsanna (2010), Financial management, Tata Mc Graw Hill, Delhi.
2. Hampton John (2010), Financial Decision Making, Pretince Hall, Delhi.
3. Pandey I.M. (2010), Vikas Publishing House, Delhi.
4. Van Horne, James C. (2001), Financial Management Policy, Pretince Hall, Delhi.
5. Van Horne, J.C. and J.M. Wacowicz Jr. (2011), Fundamentals of Financial Management, Pretince Hall, Delhi.

NOTE FOR PAPER SETTING

The question paper shall contain two questions from each unit (Total 10 Questions) and the candidates shall be required to answer one question from each unit (total number of questions to be attempted shall be five, i.e. there shall be internal choice within each unit).

UNIT : I **Lesson No. 1**

INTRODUCTION

Structure

1.1 INTRODUCTION

Business concern needs finance to meet their requirements in the economic world. Any kind of business activity depends on the finance. Hence, it is called

as lifeblood of business organization. Whether the business concerns are big or small, they need finance to fulfill their business activities. In the modern world, all the activities are concerned with the economic activities and very particular to earning profit through any venture or activities. The entire business activities are directly related with making profit. (According to the economics concept of factors of production, rent given to landlord, wage given to labour, interest given to capital and profit given to shareholders or proprietors), a business concern needs finance to meet all the requirements. Hence finance may be called as capital, investment, fund etc., but each term is having different meanings and unique characters. Increasing the profit is the main aim of any kind of economic activity.

1.2 OBJECTIVES

After going through this chapter, you will be able to:

i. Know the definition of financial management

ii. Details the evaluation of financial management

iii. Analyze the nature of financial management

iv. Identify the key areas of financial management

v. Understand how financial management is considered both an art and science

1.3 MEANING OF FINANCIAL MANAGEMENT

Financial management is an integral part of overall management. It is concerned with the duties of the financial managers in the business firm.

The term financial management has been defined by Solomon, **"It is concerned with the efficient use of an important economic resource namely, capital funds"**.

The most popular and acceptable definition of financial management as given

by S.C. Kuchal is that **"Financial Management deals with procurement of funds and their effective utilization in the business."**

Thus, Financial Management is mainly concerned with the effective funds management in the business. In simple words, Financial Management as practiced by business firms can be called as Corporation Finance or Business Finance.

1.4 EVOLUTION OF FINANCIAL MANAGEMENT

Finance, as capital, was part of the economics discipline for a long time. So, financial management until the beginning of the 20th century was not considered as a separate entity and was very much a part of economics. In the 1920s, liquidity management and raising of capital assumed importance. The book, `FINANCIAL POLICY OF CORPORATIONS' written by Arthur Stone Dewing in 1920 was a scholarly text on financing and liquidity management, i.e., cash management and raising of capital in 1920s. In the 1930s there was the Great Depression, i.e., all round price decline, business failures and declining business. This forced the business to be extremely concerned with solvency, survival, reorganization and so on. Financial Management emphasized on solvency management and on debt-equity proportions. Besides external control on businesses became more pronounced. Till early 1950s financial management was concerned with maintaining the financial chastity of the business. Conservatism, investor/lender related 30 protective covenants/information processing, issue management, etc. were the prime concerns. It was an outsider-looking-in function. From the middle of 1950s financial management turned into an insider looking-in function. That is, the emphasis shifted to utilization of funds from raising of funds. So, choice of investment, capital investment appraisals, etc., assumed importance. Objective criteria for commitment of funds in individual assets were evolved. Towards the close of the 1950s Modigliani and Miller even argued that sources of capital were irrelevant and only the investment decisions were relevant. Such was the total turn in the emphasis of financial management. In the 1960s portfolio management of assets gained importance. In the selection of investment opportunities

portfolio approach was adopted, certain combinations of assets give more overall return given the risk or give a certain return for a reduced risk. So, selection of such combination of investments gained eminence. In the 1970s the capital asset pricing model (CAPM), arbitrage pricing model (APM), option pricing model (OPM), etc., were developed - all concerned with how to choose financial assets. In the 1980s further advances in financial management were found. Conjunction of personal taxation with corporate taxation, financial signaling, efficient market hypothesis, etc., was some newer dimensions of corporate financial decision paradigm. Further Merger and Acquisition (M&A) became an important corporate strategy. The 1960s, saw the era of financial globalization. Educational globalization is the order of the day. Capital moved West to East, North to South and so on. So, global financial management, global investment management, foreign exchange risk management, etc., become more important topics. 31 In late 1990s and 2000s, corporate governance got preeminence and financial disclosure and related norms are being great concerns of financial management. The dawn of 21st Century is heralding a new era of financial management with cyber support. The developments till mid 1950s are branded as classical financial management. This dealt with cash management, cash flow management, raising capital, debt-equity norms, issue management, solvency management and the like. The developments since mid - 1950s and up to 1980s are branded as modern financial management. The emphasis is on asset management, portfolio approach, capital asset pricing model, financial signaling, and efficient market hypothesis and so on. The developments since the 1990s may be called post modern financial management with great degree of global financial integration net supported finances and so on.

1.5 NATURE OF FINANCIAL MANAGEMENT

Financial management is applicable to every type of organization, irrespective of the size, kind or nature. Every organization aims to utilize its resources in a best possible and profitable way.

1. Financial Management is an integral part of overall management. Financial

considerations are involved in all business decisions. Acquisition, maintenance, removal or replacement of assets, employee compensation, sources and costs of different capital, production, marketing, finance and personnel decision, almost all decisions for that matter have financial implications. Therefore, financial management is pervasive throughout the organization.

2. The central focus of financial management is valuation of the firm. Financial decisions are directed at increasing/maximization/ optimizing the value of the institution.

3. Financial management essentially involves risk-return trade-off. Decisions on investment involve choosing of types of assets which generate returns accompanied by risks. Generally higher the risk returns might be higher and vice versa. So, the financial manager has to decide the level of risk the firm can assume and satisfy with the accompanying return. Similarly, cheaper sources of capital have other disadvantages. So to avail the benefit of the low cost funds, the firm has to put up with certain risks, so, risk-return trade-off is there throughout.

4. Financial management affects the survival, growth and vitality of the institution. Finance is said to be the life blood of institutions. The amount, type, sources, conditions and cost of finance squarely influence the functioning of the institution.

5. Finance functions, i.e., investment, raising of capital, distribution of profit, are performed in all firms - business or non-business, big or small, proprietary or corporate undertakings. Yes, financial management is a concern of every concern including educational institutions.

6. Financial management is a sub-system of the institutional system which has other subsystems like academic activities, research wing, etc., In systems arrangement financial sub-system is to be well coordinated with others and other sub-systems well matched with the financial sub-system.

7. Financial management of an institution is influenced by the external legal and economic environment. The legal constraints on using a particular type of funds

or on investing in a particular type of activity, etc., affect financial decisions of the institution. Financial management is, therefore, highly influenced/constrained by external environment.

8. Financial management is related to other disciplines like accounting, economics, taxation, operations research, mathematics, statistics etc., It draws heavily from these disciplines.

9. There are some procedural finance functions - like record keeping, credit appraisal and collection, inventory replenishment and issue, etc. These are routinized and are normally delegated to bottom level management executives.

10. The nature of finance function is influenced by the special characteristic of the business. In a predominantly technology oriented institutions like CSIR, CECRI, it is the R & D functions which get more dominance, while in a university or college the different courses offered and research which get more priority and so on.

1.6 SCOPE OF FINANCIAL MANAGEMENT

Financial management is one of the important parts of overall management, which is directly related with various functional departments like personnel, marketing and production. Financial management covers wide area with multidimensional approaches. The following are the important scope of financial management.

1. **Financial Management and Economics:** Economic concepts like micro and macroeconomics are directly applied with the financial management approaches. Investment decisions, micro and macro environmental factors are closely associated with the functions of financial manager. Financial management also uses the economic equations like money value discount factor, economic order quantity etc. Financial economics is one of the emerging area, which provides immense opportunities to finance, and economical areas.

2. **Financial Management and Accounting :** Accounting records include the

financial information of the business concern. Hence, we can easily understand the relationship between the financial management and accounting. In the olden periods, both financial management and accounting are treated as a same discipline and then it has been merged as Management Accounting because this part is very much helpful to finance manager to take decisions. But now a day's financial management and accounting discipline are separate and interrelated.

3. **Financial Management or Mathematics:** Modern approaches of the financial management applied large number of mathematical and statistical tools and techniques. They are also called as econometrics. Economic order quantity, discount factor, time value of money, present value of money, cost of capital, capital structure theories, dividend theories, ratio analysis and working capital analysis are used as mathematical and statistical tools and techniques in the field of financial management.

4. **Financial Management and Production Management:** Production management is the operational part of the business concern, which helps to multiple the money into profit. Profit of the concern depends upon the production performance. Production performance needs finance, because production department requires raw material, machinery, wages, operating expenses etc. These expenditures are decided and estimated by the financial -department and the finance manager allocates the appropriate finance to production department. The financial manager must be aware of the operational process and finance required for each process of production activities.

5. **Financial Management and Marketing:** Produced goods are sold in the market with innovative and modern approaches. For this, the marketing department needs finance to meet their requirements. Introduction to Financial Management 5 The financial manager or finance department is responsible to allocate the adequate finance to the marketing department. Hence, marketing and financial management are interrelated and depends on each other.

6. **Financial Management and Human Resource:** Financial management is

also related with human resource department, which provides manpower to all the functional areas of the management. Financial manager should carefully evaluate the requirement of manpower to each department and allocate the finance to the human resource department as wages, salary, remuneration, commission, bonus, pension and other monetary benefits to the human resource department. Hence, financial management is directly related with human resource management.

1.7 IMPORTANCE OF FINANCIAL MANAGEMENT

Finance is the lifeblood of business organization. It needs to meet the requirement of the business concern. Each and every business concern must maintain adequate amount of finance for their smooth running of the business concern and also maintain the business carefully to achieve the goal of the business concern. The business goal can be achieved only with the help of effective management of finance. We can't neglect the importance of finance at any time at and at any situation. Some of the importance of the financial management is as follows:

1. **Financial Planning:** Financial management helps to determine the financial requirement of the business concern and leads to take financial planning of the concern. Financial planning is an important part of the business concern, which helps to promotion of an enterprise.

2. **Acquisition of Funds:** Financial management involves the acquisition of required finance to the business concern. Acquiring needed funds play a major part of the financial management, which involve possible source of finance at minimum cost.

3. **Proper Use of Funds:** Proper use and allocation of funds leads to improve the operational efficiency of the business concern. When the finance manager uses the funds properly, they can reduce the cost of capital and increase the value of the firm.

4. **Financial Decision:** Financial management helps to take sound financial

decision in the business concern. Financial decision will affect the entire business operation of the concern. Because there is a direct relationship with various department functions such as marketing, production personnel, etc.

5. **Improve Profitability:** Profitability of the concern purely depends on the effectiveness and proper utilization of funds by the business concern. Financial management helps to improve the profitability position of the concern with the help of strong financial control devices such as budgetary control, ratio analysis and cost volume profit analysis.

6. **Increase the Value of the Firm:** Financial management is very important in the field of increasing the wealth of the investors and the business concern. Ultimate aim of any business concern will achieve the maximum profit and higher profitability leads to maximize the wealth of the investors as well as the nation.

7. **Promoting Savings:** Savings are possible only when the business concern earns higher profitability and maximizing wealth. Effective financial management helps to promoting and mobilizing individual and corporate savings.

Nowadays financial management is also popularly known as business finance or corporate finances. The business concern or corporate sectors cannot function without the importance of the financial management.

1.8 FIELDS OF FINANCE

The academic discipline of financial management may be viewed as made up of five specialized fields. In each field, the financial manager is dealing with the management of money and claims against money. Distinctions arise because different organizations pursue different objectives and do not face the same basic set of problems. There are five generally recognized areas of finance.

1. **Public Finance.** Central, state and local governments handle large sums of money, which are received from many sources and must be utilized in accordance with detailed policies and procedures. Governments have the

authority to tax and otherwise raise funds, and must dispense funds according to legislative and other limitations. Also, government do not conduct their activities to achieve the same goals as private organizations. Businesses try to make profits, whereas a government will attempt to accomplish social or economic objectives. As a result of these and other differences, a specialized field of public finance has emerged to deal with government financial matters.

2. **Securities and Investment Analysis.** Purchase of stocks, bonds, and other securities involve analysis and techniques that are highly specialized. An investor must study the legal and investment characteristics of each type of security, measure the degree of risk involved with each investment, and forecast probable performance in the market. Usually this analysis occurs without the investor having any direct control over the firm or institution represented by the form of security. The field of investment analysis deals with these matters and attempts to develop techniques to help the investor reduce the risk and increase the likely return from the purchase of selected securities.

3. **International Finance.** When money crosses international boundaries individuals, businesses, and governments must deal with special kinds of problems. Each country has its own national currency; thus a citizen of the United States must convert dollars to French francs before being able to purchase goods or services in Paris. Most governments have imposed restrictions on the exchange of currencies, and these may affect business transactions. Governments may be 8 Financial Management facing financial difficulties, such as balance-of-payments deficits, or may be dealing with economic problems, such as inflation or high levels of unemployment. In these cases, they may require detailed accounting for the flows of funds or may allow only certain types of international transactions. The study of flows of funds between individuals and organizations across national borders and the development of methods of handling the flows more efficiency are properly within the scope of international finance.

4. **Institutional Finance.** A nation's economic structure contains a number of

financial institutions, such as banks, insurance companies, pension funds, credit unions. These institutions gather money from individual savers and accumulate sufficient amounts for efficient investment. Without these institutions, funds would not be readily available to finance business transactions, the purchase of private homes and commercial facilities, and the variety of other activities that require organizations that perform the financing function of the economy.

5. **Financial Management.** Individual businesses face problems dealing with the acquisition of funds to carry on their activities and with the determination of optimum methods of employing the funds. In a competitive marketplace, businesses and actively manage their funds to achieve their goals. Many tools and techniques have been developed to assist financial managers to recommend proper courses of action. These tools help the manager determine which sources offer the lowest cost of funds and which activities will provide the greatest return on invested capital. Financial management is the field of greatest concern to the corporate financial officers and will be the major thrust of the approach we shall use in studying finance.

1.9 GLOSSARY

Financial management: It is concerned with the duties of the financial managers in the business firm.

1.10 SELF ASSESSMENT QUESTIONS

1. What do you understand by the term financial management?

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2. Discuss the various fields of financial management.

1.11 LESSON END EXERCISES

1. Describe the evolution of financial management.

2. Discuss the nature and scope of financial management.

3. Explain the importance of financial management.

1.12 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : I **Lesson No. 2**

FINANCE FUNCTION

Structure

2.1 INTRODUCTION

The finance function is the process of acquiring and utilizing funds of a business. Finance functions are related to overall management of an organization. Finance function is concerned with the policy decisions such as line of business, size of firm, type of equipment used, use of debt, liquidity position. These policy decisions determine the size of the profitability and riskiness of the business of the firm.

2.2 OBJECTIVES

After going through this chapter you will be able to:

i. Analyze the content of finance function.

ii. Know the objectives of finance function.

iii. Discuss the scope of the finance function.

iv. Describe the organization of finance function.

v. Know the meaning of controller and treasurer.

vi. Understand the new perspective of finance function.

2.3 MEANING OF FINANCE FUNCTION

The finance function is the process of acquiring and utilizing funds of a business. Finance functions are related to overall management of an organization. Finance function is concerned with the policy decisions such as line of business, size of firm, type of equipment used, use of debt, liquidity position. These policy decisions determine the size of the profitability and riskiness of the business of the firm. The areas of responsibility covered by finance functions may be regarded as the content of finance function. These areas are specific functions of finance. The main objective of finance function is to assess the financial needs of an organization and then finding out suitable sources for raising them. The funds should be used in such a way that maximum benefit is derived from them. Finance function also aims at

maximizing the value of the firm. It is generally said that a concern's value is linked with its profitability.

2.4 OBJECTIVES OF FINANCE FUNCTIONS

The objective of finance function is to arrange as much funds for the business as are required from time to time. This function has the following objectives.

1. **Assessing the Financial requirements.** The main objective of finance function is to assess the financial needs of an organization and then finding out suitable sources for raising them. The sources should be commensurate with the needs of the business. If funds are needed for longer periods then long-term sources like share capital, debentures, term loans may be explored.

2. **Proper Utilization of Funds:** Though raising of funds is important but their effective utilization is more important. The funds should be used in such a way that maximum benefit is derived from them. The returns from their use should be more than their cost. It should be ensured that funds do not remain idle at any point of time. The funds committed to various operations should be effectively utilized. Those projects should be preferred which are beneficial to the business.

3. **Increasing Profitability.** The planning and control of finance function aims at increasing profitability of the concern. It is true that money generates money. To increase profitability, sufficient funds will have to be invested. Finance function should be so planned that the concern neither suffers from inadequacy of funds nor wastes more funds than required. A proper control should also be exercised so that scarce resources are not frittered away on uneconomical operations. The cost of acquiring funds also influences profitability of the business.

4. **Maximizing Value of Firm.** Finance function also aims at maximizing the value of the firm. It is generally said that a concern's value is linked with its profitability.

2.5 SCOPE OF FINANCE FUNCTION

The scope of finance function is very wide. While accounting is concerned with the routine type of work, finance function is concerned with financial planning, policy formulation and control. Earnest W. Walker and William are of the opinion that the financial function has always been important in business management. The financial organization depends upon the nature of the organization - whether it is a proprietary organization, a partnership firm or corporate body. The significance of the finance function depends on the nature and size of a business firm. The role of various finance officers must be clearly defined to avoid conflicts and the overlapping of responsibilities. The operational functions of finance include:

Financial planning

Deciding the capital structure

Selection of source of finance

Selection of pattern of investment

i) **Financial Planning.** The first task of a financial manager is to estimate short-term and long-term financial requirements of his business. For this purpose, he will prepare a financial plan for present as well as for future. The amount required for purchasing fixed assets as well as needs of funds for working capital will have to be ascertained. The estimations should be based on sound financial principles so that neither there are inadequate nor excess funds with the concern. The inadequacy of funds will adversely affect the day-to-day operations of the concern whereas excess funds may tempt a management to indulge in extravagant spending or speculative activities.

ii) **Deciding Capital Structure.** The Capital structure refers to the kind and proportion of different securities for raising funds. After deciding about the quantum of funds required it should be decided which type of securities should

be raised. It may be wise to finance fixed assets through long-term debts. Even if gestation period is longer, then share capital may be most suitable. Long-term funds should be raised. It may be wise to finance fixed assets through long-term debts. Even here if gestation period is longer, then share capital may be most suitable. Long-term funds should be employed to finance working capital also, if not wholly then partially. Entirely depending upon overdrafts and cash creditors for meeting working capital needs may not be suitable. A decision about various sources for funds should be linked to the cost of raising funds. If cost of raising funds is very high then such sources may not be useful for long.

iii) **Selection of Source of Finance.** After preparing a capital structure, an appropriate source of finance is selected. Various sources from which finance may be raised, include: share capital, debentures, financial institutions, commercial banks, public deposits, etc. If finances are needed for short periods then banks, public deposits and financial institutions may be appropriate; on the other hand, if long-term finances are required then share capital and debentures may be useful. If the concern does not want to tie down assets as securities then public deposits may be a suitable source. If management does not want to dilute ownership then debentures should be issued in preference to share.

iv) **Selection of Pattern of Investment.** When funds have been procured then a decision about investment pattern is to be taken. The selection of an investment pattern is related to the use of funds. A decision will have to be taken as to which assets are to be purchased ? The funds will have to be spent first on fixed assets and then an appropriate portion will be retained for Working Capital. The decision-making techniques such as Capital Budgeting, Opportunity Cost Analysis, etc. may be applied in making decisions about capital expenditures. While spending on various assets, the principles of safety, profitability and liquidity should not he ignored. A balance should be struck even in these principles.

2.6 ORGANIZATION OF FINANCE FUNCTION

Today, finance function has obtained the status of a science and an art. As finance function has far reaching significance in overall management process, structural organization for further function becomes an outcome of an important organization problem. The ultimate responsibility of carrying out the finance function lies with the top management. However, organization of finance function differs from company to company depending on their respective requirements. In many organizations one can note different layers among the finance executives such as Assistant Manager (Finance), Deputy Manager (Finance) and General Manager (Finance). The designations given to the executives are different. They are

i. Chief Finance Officer (CFO)

ii. Vice-President (Finance)

iii. Financial Controller

iv. General Manager (Finance)

v. Finance Officers

Finance, being an important portfolio, the finance functions is entrusted to top management. The Board of Directors, who are at the helm of affairs, normally constitutes a 'Finance Committee' to review and formulate financial policies. Two more officers, namely ***'treasurer'*** and ***'controller'*** - may be appointed under the direct supervision of CFO to assist him/her. In larger companies with modern management, there may be Vice-President or Director of finance, usually with both controller and treasurer. The organization of finance function is portrayed below:

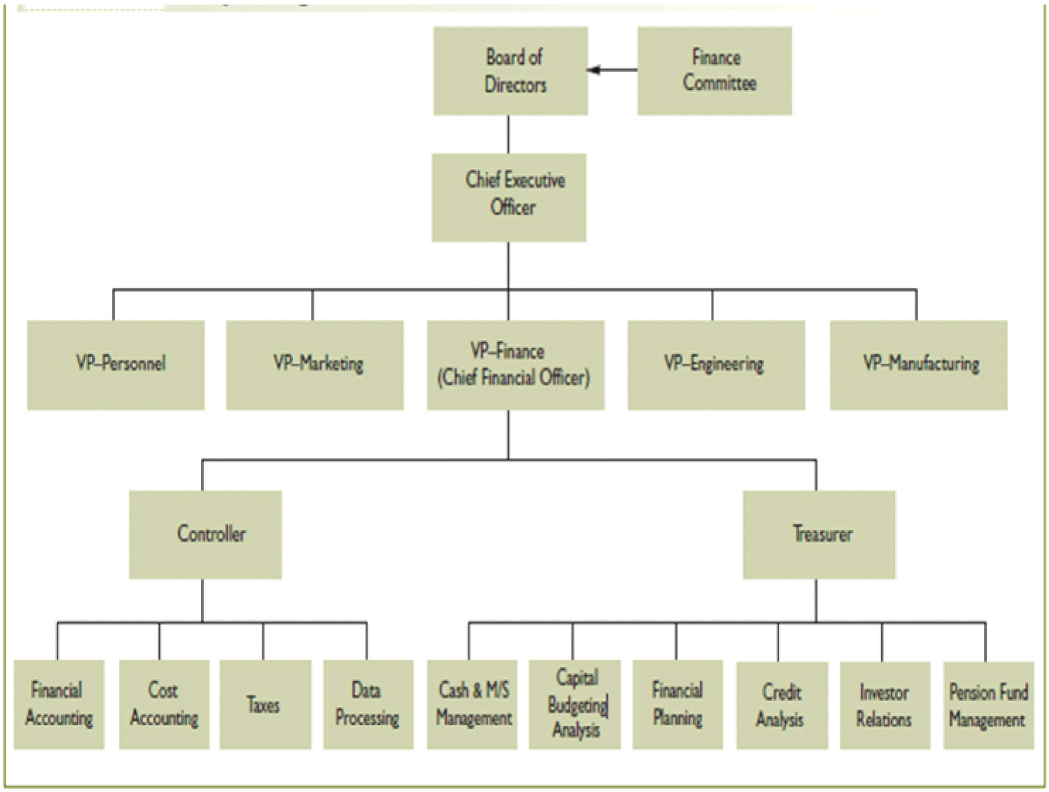

Fig: Organization of Finance Function

It is evident from the above that Board of Directors is the supreme body under whose supervision and control Managing Director, Production Director, Personnel Director, Financial Director, Marketing Director perform their respective duties and functions. Further while auditing credit management, retirement benefits and cost control banking, insurance, investment function under treasurer, planning and budgeting, inventory management, tax administration, performance evaluation and accounting functions are under the supervision of controller.

2.7 MEANING OF CONTROLLER AND TREASURER

The terms 'controller' and 'treasurer' are in fact used in USA. This pattern is not popular in Indian corporate sector. Practically, the controller / financial

controller in India carried out the functions of a Chief Accountant or Finance Officer of an organization. Financial controller who has been a person of executive rank does not control the finance, but monitors whether funds so augmented are properly utilized. The function of the treasurer of an organization is to raise funds and manage funds. The treasures functions include forecasting the financial requirements, administering the flow of cash, managing credit, flotation of securities, maintaining relations with financial institutions and protecting funds and securities. The controller's functions include providing information to formulate accounting and costing policies, preparation of financial reports, direction of internal auditing, budgeting, inventory control payment of taxes, etc. According to Prof. I.M. Pandey, while the controller's functions concentrate the asset side of the balance sheet, the treasurer's functions relate to the liability side.

2.8 FINANCE FUNCTION - A NEW PERSPECTIVE

The designation Finance Manager or Director (Finance) is very popular in Indian Corporate sector. The key function of any financial manager in India is management of funds. It means given the constraints, he must ensure optimum utilization of funds. The financial managers have significant involvement in injecting financial discipline in corporate management processes. They are responsible for emphasizing the need for rational use of funds and the necessity for monitoring the operations of the firm to achieve expected results. The finance functions of augmenting resources and utilization of funds, no doubt, have a significant impact on other functions also. In fact, between finance on one side and production, marketing and other functions on the other side, an inseparable relationship exists. The Board of Directors have been bestowed with the onerous responsibility of reviewing financial procedures, formulation of financial policies, selection of right finance personnel with professional capabilities like Chartered Accountant, Cost Accountant and Company Secretaries. The Board of Directors with counsel and direction given by the financial manager finalize decisions pertaining to formulation of new projects, diversification of projects, expansion of undertaking, introduction of new

products, widening the branch areas, diversification of new product lines. It should be remembered that the financial controller, in fact, does not control finance. For management control and planning, the financial controller develops, uses and interprets information.

2.9 SUMMARY

Finance, today, is best characterized as ever changing with new ideas and techniques. The role of financial manager is considerably different from what it was a few years ago and from what it will no doubt be in another coming years. Academicians and financial managers must grow to accept the changing environment and master its challenge. Finance, being an important portfolio, the finance functions is entrusted to top management. The Board of Directors, who are at the helm of affairs, normally constitutes a 'Finance Committee' to review and formulate financial policies. Two more officers, namely 'treasurer' and 'controller' - may be appointed under the direct supervision of CFO to assist him/her. The Board of Directors have been bestowed with the onerous responsibility of reviewing financial procedures, formulation of financial policies, selection of right finance personnel with professional capabilities like Chartered Accountant, Cost Accountant and Company Secretaries. The Board of Directors with counsel and direction given by the financial manager finalize decisions pertaining to formulation of new projects, diversification of projects, expansion of undertaking, introduction of new products, widening the branch areas, diversification of new product lines.

2.10 GLOSSARY

Finance Function: The finance function is the process of acquiring and utilizing funds of a business.

Content of finance function: The areas of responsibility covered by finance functions may be regarded as the content of finance function.

Controller: He is concerned with the management and control of firm's assets.

Treasurer: He is concerned with managing the firm's funds and safeguarding

assets.

2.11 SELF ASSESSMENT QUESTIONS

1. What is finance function?

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2. State the objectives of finance function.

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3. Explain the significance of finance function

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2.12 LESSON END EXERCISES

1. Discuss the support extended by the Board of Directors in managing finance.

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2. Explain the scope of finance function.

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3. Elucidate the changing facet of finance function.

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2.13 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : I **Lesson No. 3**

FIRM'S OBJECTIVES

Structure

3.1 INTRODUCTION

We believe that the preferable goal of the firm should be *maximization of shareholder wealth*, by which we mean maximization of the price of the existing common stock. Not only will this goal be in the best interest of the shareholders, but it will also provide the most benefits to society. This will come about as scarce resources are directed to their most productive use by businesses competing to create wealth. To better understand this goal, we will first discuss profit maximization as a possible goal for the firm. Then we will compare it to maximization of shareholder wealth to see why, in financial management, the latter is the more appropriate goal for the firm.

3.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of profit maximization and wealth maximization.

ii. Discuss about the objectives of financial management.

3.3 FIRM'S OBJECTIVES

To put it simply, we might say that the goal of any business is to maximise the returns to the owners of the business. So the goal of finance is to help the business in maximising returns. But if you talk to the companies, you also hear about many other goals that they are pursuing at the same time. These goals could include maximisation of sales, maximisation of market share, maximisation of growth rates of sales, maximisation of the market price of the share (whether real or specifically pushed up to benefit the owners), etc. Individually speaking, managers would be more concerned with the money that they are making from the organization and the benefits that they are receiving rather than care about what the owners are making! As there could be many goals for the organization, we should try and summarize the organizational goals in financial terms so that we can call them the financial goals. They boil down to two:

1. Profit Maximization.

2. Wealth-Maximization.

3.3.1 PROFIT MAXIMIZATION.

In microeconomics courses, profit maximization is frequently given as the goal of the firm. Profit maximization stresses the efficient use of capital resources, but it is not specific with respect to the time frame over which profits are to be measured. Do we maximize profits over the current year, or do we maximize profits over some longer period? A financial manager could easily increase current profits by eliminating research and development expenditures and cutting down on' routine maintenance. In the short run, this might result in increased profits, but this clearly is not in the best long-run interests of the firm. If we are to base financial decisions on a goal, that goal must be precise, not allow for misinterpretation, and deal with all the complexities of the real world.

In microeconomics, profit maximization functions largely as a theoretical goal, with economists using it to prove how firms behave rationally to increase profit. Unfortunately, it ignores many real-world complexities that financial managers must address in their decisions. In the more applied discipline of financial management, firms must deal every day with two major factors not considered by the goal of profit maximization: uncertainty and timing. Microeconomics courses ignore uncertainty and risk to present theory more easily. Projects and investment alternatives are compared by examining their expected values or weighted average profits. Whether one project is riskier than another does not enter into these calculations; economists do discuss risk, but only tangentially. In reality, projects differ a great deal with respect to risk characteristics, and to disregard these differences in the practice of financial management can result in incorrect decisions. As we will discover later in the following units, there is a very definite relationship between risk and expected return-that is, investors demand a higher expected return for taking on added risk-and to ignore this relationship would lead to improper decisions.

Another problem with the goal of profit maximization is that it ignores the timing of the project's returns. If this goal is only concerned with this

year's profits, we know it inappropriately ignores profit in future years. If we interpret it to maximize the average of future profits, it is also incorrect. In as much as investment opportunities are available for money in hand, we are not indifferent to the timing of the returns. Given equivalent cash flows from profits, we want those cash flows sooner rather than later. Thus the real-world factors of uncertainty and timing force us to look beyond a simple goal of profit maximization as a decision criterion.

Finally, and possibly most important, accounting profits fail to recognize one of the most important costs of doing business. When we calculate accounting profits, we consider interest expense as a cost of borrowing money, but we ignore the cost of the funds provided by the firm's shareholders (owners). If a company could earn 8 percent on a new investment, that would surely increase the firm's profits. However, what if the firm's shareholders could earn 12 percent with that same money in another investment of similar risk? Should the company's managers accept the investment because it will increase the firm's profits? Not if they want to act in the best interest of the firm's owners (shareholders). To conclude, the profit maximization criterion is inappropriate and unsuitable as an operational objective of investment, financing and dividend decisions of a firm. It is not only vague and time value of money. It follows from the above that an appropriate operational decision criterion for financial management should (i) be precise and exact, (ii) be based on the 'bigger the better' principal, (iii) consider both quantity and quantity dimensions of benefits, and (iv) recognize the time value of money. The alternative to profit maximization that is wealth maximization is one such measure.

3.3.1.1 Favorable Arguments for Profit Maximization

The following important points are in support of the profit maximization objectives of the business concern:

(i) Main aim is earning profit.

(ii) Profit is the parameter of the business operation.

(iii) Profit reduces risk of the business concern.

(iv) Profit is the main source of finance.

(v) Profitability meets the social needs also.

3.3.1.2 Unfavorable Arguments for Profit Maximization

The following important points are against the objectives of profit maximization:

(i) Profit maximization leads to exploiting workers and consumers.

(ii) Profit maximization creates immoral practices such as corrupt practice, unfair trade practice, etc.

(iii) Profit maximization objectives leads to inequalities among the stake holders such as customers, suppliers, public shareholders, etc.

3.3.1.3 Drawbacks of Profit Maximization

Profit maximization objective consists of certain drawback also:

(i) It is vague: In this objective, profit is not defined precisely or correctly. It creates some unnecessary opinion regarding earning habits of the business concern.

(ii) It ignores the time value of money: Profit maximization does not consider the time value of money or the net present value of the cash inflow. It leads certain differences between the actual cash inflow and net present cash flow during a particular period.

(iii) It ignores risk: Profit maximization does not consider risk of the business concern. Risks may be internal or external which will affect the overall operation of the business concern.

3.3.2 WEALTH MAXIMIZATION

In formulating the goal of maximization of shareholder wealth, we are

doing nothing more than modifying the goal of profit maximization to deal with the complexities of the operating environment. We have chosen maximization of shareholder wealth-that is, maximization of the market value of the existing shareholders' common stock-because the effects of all financial decisions are thereby included. Investors react to poor investment or dividend decisions by causing the total value of the firm's stock to fall, and they react to good decisions by pushing up the price of the stock. In effect, under this goal, good decisions are those that create wealth for the shareholder. Obviously, there are some serious practical problems in implementing this goal and in using changes in the firm's stock to evaluate financial decision. Wealth maximization is one of the modern approaches, which involves latest innovations and improvements in the field of the business concern. The term wealth means shareholder wealth or the wealth of the persons those who are involved in the business concern. Wealth maximization is also known as value maximization or net present worth maximization. This objective is universally accepted concept in the field of business. This is also known as value maximization or net present worth maximization. In current academic literature value maximization is almost universally accepted as an appropriate operations decision criterion for financial management decisions as it removes the technical limitations which characterize earlier profit maximization criterion Its operational features satisfy all the three requirement of a suitable operation objective of financial courses of action, namely, exactness, quality of benefits and the time value of money. The value of an asset should be viewed in terms of the benefits it can produce. The worth of a course of action can similarly be judged in terms of the value of the benefits it produces less the cost of undertaking it. A significant element in computing the value of a financial course of action is the precise estimation of the benefits associated with it. The wealth maximization criterion is based on the measurement of benefits in the case of the profit maximization criterion. Cash flow is a precise concept with a definite connotation. Measuring benefits in terms of cash flow avoids the ambiguity associated with accounting profits. This is the first operational feature of the net present worth maximization

criterion. The second important feature of the wealth maximization criterion is that it considers is that it considers both the quantity and quality dimensions of benefit. At the same, it also incorporates the time value of money. The operational implication of the uncertainty and timing dimensions of the benefits emanating from a financial decision is that adjustment should be made in the cash flow pattern, firstly, to incorporate risk and, secondly, to make an allowance for differences in the timing of benefits. The value of a course of action must be viewed in teams of its worth to those providing the resources necessary for its undertaking. In applying the value maximization criterion, the term value is used in terms of worth to the owners, that is, ordinary shareholders. The capitalization (discount) rate that is employed is, therefore, the rate that reflects the time and risk preferences of the result of higher risk longer time period. Thus, a stream of cash flows that is quite certain might be associated with a rate a 5 per cent, while a very risky stream may carry a 15 per cent discount rate. For the above reason the net present value maximization is superior to the profits maximization as an operational objective. As a decision criterion, it involves a comparison of value to cost. An action that has a discounted value - reflecting both time and risk that exceeds its cost can be said to create value. Such actions should be undertaking. Conversely, actions, with lees value than cost, reduce wealth and should be alternative with the greatest net present value should be selected. In the words of Ezra Solomon, "The gross present worth of a course of action is equal to the capitalized value of the flow of future expected benefit, discounted (or capitalized) at a rate which reflects their certainty or uncertainty. Wealth or net present worth is the difference between gross present worth and the amount of capital investment required to achieve the benefits being discussed. Any financial action which creates wealth or which has a net present worth above zero is a desirable one and should be undertaken. Any financial action which does not meet this test should be rejected.

3.3.2.1 Favorable Arguments for Wealth Maximization

(i) Wealth maximization is superior to the profit maximization because

the main aim of the business concern under this concept is to improve the value or wealth of the shareholders.

(ii) Wealth maximization considers the comparison of the value to cost associated with the business concern. Total value detected from the total cost incurred for the business operation. It provides extract value of the business concern.

(iii) Wealth maximization considers both time and risk of the business concern.

(iv) Wealth maximization provides efficient allocation of resources.

(v) It ensures the economic interest of the society.

3.3.2.2 Unfavorable Arguments for Wealth Maximization

(i) Wealth maximization leads to prescriptive idea of the business concern but it may not be suitable to present day business activities.

(ii) Wealth maximization is nothing, it is also profit maximization, and it is the indirect name of the profit maximization.

(iii) Wealth maximization creates ownership-management controversy.

(iv) Management alone enjoys certain benefits.

(v) The ultimate aim of the wealth maximization objectives is to maximize the profit.

(vi) Wealth maximization can be activated only with the help of the profitable position of the business concern.

3.4 SUMMARY

Profit maximization functions largely as a theoretical goal, with economists using it to prove how firms behave rationally to increase profit. Unfortunately,

it ignores many real-world complexities that financial managers must address in their decisions. Wealth maximization is one of the modern approaches, which involves latest innovations and improvements in the field of the business concern.

3.5 GLOSSARY

Profit Maximization: Profit maximization stresses the efficient use of capital resources.

Wealth Maximization: Wealth maximization is also known as value maximization or net present worth maximization.

3.6 SELF ASSESSMENT QUESTIONS

1. Discuss in detail profit maximization vs. wealth maximization. Also highlight the arguments in favor and against wealth maximization.

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3.7 LESSON END EXERCISES

1. Explain various objectives of the firm in detail. What are the various problems with the goal of profit maximization?

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2. What are the differences between the goals of profit maximization and maximization of shareholder wealth? Which goal do you think is more appropriate?

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3.8 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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EMERGING ROLE OF FINANCE MANAGER

Structure

4.1 INTRODUCTION

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. The finance manager does not cover the routine duties of finance and accounting. As a member of top management he is also responsible for formulation and implementation of policies and decision making. The finance manager job has

vastly changed. Earlier it was a support function now it is mainline. And finance itself has been a profit center. In these competitive times, survival depends largely on an organization's capabilities to anticipate and prepare for change rather than just react to it. The role of the financial officer, thus, becomes crucial to meet these technological, economic and political, changes.

4.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the emerging role of financial manager.

ii. Know about the key challenges faced by financial manager.

4.3 EMERGING ROLE OF FINANCIAL MANAGER

Innovative financial planning has become a sine qua non for companies to adapt to the changing business environment caused by liberalization, globalization and de-regulation.

In these competitive times, survival depends largely on an organization's capabilities to anticipate and prepare for change rather than just react to it. The role of the financial officer, thus, becomes crucial to meet these technological, economic and political, changes. Observe how these changes affect an organization:

i. Many companies have become technologically obsolete. High launching costs and short product lives make it more challenging for the Chief Financial Officer to ensure cost effective operations.

ii. Today, economic changes have become major structural forces in the development and growth of the world economy. However, these changes have had profound effects on the developing economy creating higher competition in strategic areas, larger markets and different currency alignments. The economic changes that effect the financial planning of a business enterprise are: Direction of trade, GNP position, creation and distribution of wealth cost, price of material, etc.

iii. The changes in the distribution of wealth, raw material prices and mergers acquisitions also affect the investment and the consequences of these for the finance managers are several. He has to juggle several variables, such as the type, period, locations rate of return and other conditions.

iv. Political stability is recognized as one of the vital factors for the rapid socio-economic development of any country. Political instability and uncertainty have jeopardized India's economy, and disabled the corporate sector.

The finance manager's role is undergoing enormous change. He is transforming from a steward of financial assets into an internal venture capitalist because tomorrow's finance managers will be much more involved in deciding the future of their companies. He will have to assess the risks in funding these opportunities and be prepared to justify investments based on the value they will create as options in the future.

Because of these challenges, a finance manager is a partner to the CEO who is actively involved in anticipating industry trends, launching new ventures, valuing intangible assets, and managing business options far more dynamic.

4.4 KEY CHALLENGES OF FINANCIAL MANAGER

i. Designing and fine-tuning a more responsive "Rolling Forecast" budgeting process.

ii. Breeding new economy businesses from within and releasing value through M&As, planning, negotiating and overseeing strategic alliances.

iii. Managing physical and even working capital will become less and less important as the focus of finance shifts increasingly to intangible assets.

iv. How these assets are valued and nurtured will have little to do with accounting goals.

v. Dramatic changes in resource allocation.

vi. Dynamically balancing investments between old and new economy ventures will be essential to fuelling growth and shareholder value.

Leading the effort to align the strategic plan with the new operating mode, change the organization structure, build the information systems and infrastructure, and develop the reporting and measures required to enable the enterprise to operate as smaller, independent business units.

The fortification of finance is the driver of change. From safeguarding the assets of the company to being answerable to investors, finance is the voice of organization. The meteoric growth in the use of Internet has compelled corporates to take a second look at the factors that drive their businesses. The old rules no longer work in the new arena.

In the hi-tech age, one can no longer group fundamental activities and manage them collectively.

4.5 SUMMARY

The Indian financial system is currently undergoing a period of revolutionary changes to the extent that by the turn of millennium its face may be totally unrecognizable. In view of the strategy facts of a firm today should not be merely aiming at customer's satisfaction by meeting the current and contractual need but it should also be to delight the customer by meeting their intended needs. In this changing scenario, the role of a finance manager has also changed. He has to be an active player and vociferous participant and not just a by-stander in the corporate world. The finance professional must now be conversant with both theoretical and analytical issues existing in the market, e.g. funding of investment channels, risk and rewards attached with a variety of financial instrument channels, legal and tax parameters.

4.6 GLOSSARY

i. Financial Planning: It is the process of framing financial policies in relation to procurement, investment and administration of funds of an enterprise.

ii. *sine qua non*: an indispensable and essential action.

4.7 SELF ASSESSMENT QUESTIONS

1. Throw light on the key challenges faced by financial manager in the today's scenario. Elaborate.

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4.8 LESSON END EXERCISES

1. Discuss in detail the emerging role of financial manager in Indian context.

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4.9 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : I **Lesson No. 5**

FINANCIAL DECISION: AN OVERVIEW

Structure

5.11 Suggested Readings

5.1 INTRODUCTION

Finance comprises of blend of knowledge of credit, securities, financial related legislations, financial instruments, financial markets and financial system. As finance is a scarce resource, it must be systematically raised form the cheapest source of funds and must be judiciously utilized for the development and growth of the organization. Charles Gertenberg visualizes the significance of scientific arrangement of records with the help of which the inflow and outflow of funds can be efficiently managed, stocks and bonds can be efficiently marketed and the efficacy of the organization can be greatly improved.

The financial manager in his new role, is concerned with the efficient allocation of funds. The firm's investment and financing decisions are continuous. The financial manager according to Ezra Solomon must find a rationale for answering the following three questions.

1) How large should an enterprise be and how fast should it grow?

2) In what form should it hold its assets?

3) How should the funds required be raised?

It is therefore clear from the above discussion that firms take different financial decisions continuously in the normal course of business. Liquidity, solvency, profitability and flexibility optimization goals and risk, would lead to reaping of wealth maximization goal.

5.2 OBJECTIVES

After reading this lesson, you should be able to:

i. Understand the various types of financial decisions

ii. Describe the relationship of Financial decisions

iii. Identify the various factors influencing financial decisions.

5.3 MEANING OF FINANCIAL DECISION

Financial decisions refer to decisions concerning financial matters of a business firm. There are many kinds of financial management decisions that the firm makers in pursuit of maximizing shareholder's wealth, viz., kind of assets to be acquired, pattern of capitalization, distribution of firm's income etc.

5.4 TYPES OF FINANCIAL DECISION

We can classify these decisions into three major groups :

1. Investment decisions
2. Financing decision.
3. Dividend decisions.
4. Liquidity decisions.

5.4.1 INVESTMENT DECISIONS

Investment Decision relates to the determination of total amount of assets to be held in the firm, the composition of these assets and the business risk complexities of the firm as perceived by the investors. It is the most important financial decision. Since funds involve cost and are available in a limited quantity, its proper utilization is very necessary to achieve the goal of wealth maximization.

The investment decisions can be classified under two broad groups;

(i) Long-term investment decision and

(ii) Short-term investment decision.

The long-term investment decision is referred to as the capital budgeting and the short-term investment decision as working capital management.

Capital budgeting is the process of making investment decisions in capital

expenditure. These are expenditures, the benefits of which are expected to be received over a long period of time exceeding one year. The finance manager has to assess the profitability of various projects before committing the funds. The investment proposals should be evaluated in terms of expected profitability, costs involved and the risks associated with the projects. The investment decision is important not only for the setting up of new units but also for the expansion of present units, replacement of permanent assets, research and development project costs, and reallocation of funds, in case, investments made earlier, do not fetch result as anticipated earlier.

5.4.2 FINANCING DECISION

Once the firm has taken the investment decision and committed itself to new investment, it must decide the best means of financing these commitments. Since, firms regularly make new investments, the needs for financing and financial decisions are ongoing, and hence, a firm will be continuously planning for new financial needs. The financing decision is not only concerned with how best to finance new asset, but also concerned with the best overall mix of financing for the firm.

A finance manager has to select such sources of funds which will make optimum capital structure. The important thing to be decided here is the proportion of various sources in the overall capital mix of the firm. The debt equity ratio should be fixed in such a way that it helps in maximizing the profitability of the concern. The raising of more debts will involve fixed interest liability and dependence upon outsiders. It may help in increasing the return on equity but will also enhance the risk. The raising of funds through equity will bring permanent funds to the business but the shareholders will expect higher rates of earnings. The financial manager has to strike a balance between anxious sources so that the overall profitability of the concern improves. If the capital structure is able to minimize the risk and raise the profitability then the market prices of the shares will go up maximizing the wealth of shareholders.

5.4.3 DIVIDEND DECISION

The third major financial decision relates to the disbursement of profits back to investors who supplied capital to the firm. The term dividend refers to that part of profits of a company which is distributed by it among its shareholders. It is the reward of shareholders for investments made by them in the share capital of the company. The dividend decision is concerned with the quantum of profits to be distributed among shareholders. A decision has to be taken whether ail the profits are to be distributed, to retain all the profits in business or to keep a part of profits in the business and distribute others among shareholders. The higher rate of dividend may raise the market price of shares and thus, maximize the wealth of shareholders. The firm should also consider the question of dividend stability, stock dividend (bonus shares) and cash dividend.

5.4.4 LIQUIDITY DECISIONS

Liquidity and profitability are closely related. Obviously, liquidity and profitability goals conflict in most of the decisions. The finance manager always perceives / faces the task of balancing liquidity and profitability. The term liquidity implies the ability of the firm to meet bills and the firm's cash reserves to meet emergencies. Whereas the profitability means the ability of the firm to obtain highest returns within the funds available. As said earlier, striking a proper balance between liquidity and profitability is an arduous task. If a finance manager wants to meet all the bills, then profitability will decline similarly where he wants to invest funds in short term securities he may not be having adequate funds to pay-off its creditors. Lack of liquidity in extreme situations can lead to the firm's insolvency.

5.5 RELATIONSHIP OF FINANCIAL DECISIONS

The financial manager is concerned with the optimum utilization of funds and their procurement in a manner that the risk, cost and control considerations are properly balanced in a given situation. Irrespective of nature of decisions,

i.e. investment decisions, financing or capital structure decisions / dividend decisions all these decisions are interdependent. All these decisions are interrelated. All are intended to maximize the wealth of the shareholders. An efficient financial manager has to ensure optimal decision by evaluating each of the decision involved in relation to its effect on shareholders wealth.

5.6 FACTORS INFLUENCING FINANCIAL DECISIONS

Every business organization can achieve its ultimate goal, if it can perfectly perform their activities of financial management. In this purpose of achievement finance manager has to play a vital role by taking some major financial decisions like, investment decision, financing decision and dividend decision. These financial decisions are influenced by some factors. For the convenience of analysis let us classify these factors into two factors-

1. Internal Factors
2. External Factors

Internal Factors: Internal factors are those, which ate possible to control by the business organization itself. The major internal factors those influences the financial decision are given below-

1. **Size of the firm:** To implement the future plan as well as the daily activity and to implement the financial decision the organization management accounting, budgeting and financial management strategies. To implement those policies or strategies, the size of the firms plays a vital role. The large organization gets more facilities compare to small organization because of their financial ability by raising more funds market.

2. **Nature of business:** We can find the nature of business of an organization from their normal activities. Such as the volume assets On the others hand, few organizations may require more current assets as well as some may require more fixed assets like manufacturing organization. So financial decision largely influenced by the nature of business.

3. **The forms of legal organization:** Financial decision also influenced by the form of legal organization. If the organization is a joint venture then get extra facilities regarding loan and some other case rather than a sole partnership or partnership business.

4. **Situation of business cycle:** The financial decision is also influenced by the business cycle. The boom or depression situation of the economy has controlled the business velocity.

5. **Assets structure:** The financial decision influences in determining the types of asset structure and how the assets should be financed of whether it be financed. A business organization can collect their funds more form long term sources because of their amount of fixed assets and vice versa.

6. **Regularity and adequacy of income:** If the income of any business is regular and adequate then it won't face any kind of difficulties to collect further loan. On the other hand, if the income of any business is irregular and lower then definitely it will face problem in financing thus it will be forced to issue shares in markets to raise money.

7. **Economic life of business:** The business, which has long economic life, has got high priority in getting loan. Because the risk of investors get long time to know that organization.

8. **Terms of credit:** The financial activities of any business are influenced by the rules and regulation or the terms of credit. Business the procedure of collection of funds largely depends on the terms of credit.

9. **Management philosophy:** In this case management implies the board of directors and the top level manager of an organization. If the objective of management is to control the organization only by them then it won't increase the ownership by issuing shares. And thus funds will be not that much interest to control the business then they will increase the funds by selling shares keeping the low risk aspect their mind.

External factors: External factors are those which can't be controlled by

the business organization. Such as economic condition of the country, government regulation, tax system etc. the most influential external factors are given bellow-

1. **Government regulation:** Business finance activities are influenced by government rules and regulations. There are government control and regulation are not restriction on investment in socialism economy. But, government rules and regulation are not restricted to invest in market economy. In other word in case of market economy the policy of export import industrial policy, company, labor law are not that much controlled by the government.

2. **Tax system:** The tax system of a country can influence the function of financial management. If the tax system is very tight ten it will demodulate the investment tax credit, depreciation tax credit etc, also motivate the investors.

3. **Economic condition of the country:** The economic condition of a country influences the financial decision taken by the financial manager. If the economy condition is good than the investors of that country will invest more and they will reluctance to invest in worse economic condition. However, n good economic condition company can declare higher dividend and follow the conservative approach in bad situation.

4. **Condition of money market and capital market:** The economic condition of a country highly depends on the condition of money market and capital market. In a developed money and capital market investors are willing to take high risk. Thus short term and long term financing become very easy to get. Generally in a good economic condition money and capital market become developed. That financial manager to take financial decision.

Above are the factors those must be considered while decision regarding finance. So financial manager has to be efficient enough to deal with these external and internal factors and take most effective financial decision to implement.

5.7 SUMMARY

Finance comprises of blend of knowledge of credit, securities, financial related legislations, financial instruments, financial markets and financial system. As finance is a scarce resource, it must be systematically raised form the cheapest source of funds and must be judiciously utilized for the development and growth of the organization. Financial decisions refer to decisions concerning financial matters of a business firm. There are many kinds of financial management decisions that the firm makers in pursuit of maximizing shareholder's wealth, viz., kind of assets to be acquired, pattern of capitalization, distribution of firm's income etc

5.8 GLOSSARY

i. Financial decisions: It refer to decisions concerning financial matters of a business firm.

ii. Risk Free Rate: It is a compensation for time and risk premium for risk.

5.9 SELF ASSESSMENT QUESTIONS

1. Discuss the significance of various financial decisions.

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2. What is meant by liquidity decision?

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5.10 LESSON END EXERCISES

1. Discuss in detail the various factors affecting financial decisions of a company?

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5.11 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : II **Lesson No. 6**

TIME VALUE OF MONEY: PRESENT AND FUTURE VALUE

Structure

6.1 INTRODUCTION

The language of finance has unique terms and concepts that are based on mathematics. It is critical that you understand this language, because it can help you develop, analyze, and monitor your personal financial goals and objectives so you can get your personal financial house in order.

6.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the term investment.

ii. Understand the importance of compound interest and time.

iii. Grasp basic financial terminology (the language of finance).

iv. Solve problems related to present value (PV) and future value (FV)

6.3 MEANING OF TERM INVESTMENT

An investment is a current commitment of money or other resources with the expectation of reaping future benefits. For the most part, we will be working with financial investments in this course-stocks (or equities), bonds, mutual funds, cash, treasury bills and notes, options, futures, and so on. However, we will make reference to other important investments such as education and

relationships. It is important that we have a broader view of what an investment is so that we recognize those investments that are of most worth-those that bring true joy in this life and in the life to come. You should have priorities when it comes to investments, and the most important investments you will make involve your family, your religion, and your relationship with God. The Book of Mormon prophet Jacob wisely counseled: "Wherefore, do not spend money for that which is of no worth, nor your labor for that which cannot satisfy."

6.4 UNDERSTAND THE IMPORTANCE OF COMPOUND INTEREST AND TIME

Time is the only tool that everyone has an equal amount of each day. However, you must have the discipline and foresight to use time to your advantage by investing early and not stopping for "diversions" in your spending and your goals. Interest is similar to rent. Just as tenants pay rent to landlords in exchange for the use of an apartment or house, people will pay you interest in exchange for the use of your money. You can either invest your money yourself or you can lend it to others who will then invest your money and pay you an agreed upon rate. The key investing principle states that a dollar in hand is worth more than a dollar received in the future. This principle is true because you can invest that dollar today and begin earning interest on it. The sooner your money can earn interest, the faster your interest can earn interest, and the more money you will have.

6.5 GRASP BASIC FINANCIAL TERMINOLOGY (I.E., THE LANGUAGE OF FINANCE)

For you to understand the language of finance, you must understand thirteen key terms: Amortized loan: A loan paid off in equal installments composed of both principal and interest. It may also be called an installment loan.

6.5.1 Annuity: A series of equal payments; these payments are made at the end of a specific time period for a specified number of time periods (generally months or years).

6.5.2 Compound annuity: An investment that involves depositing the same amount of money at the end of each year for a certain number of years. Compounding (annually, quarterly, daily, etc.): The number of periods during the year where interest is calculated. Compound interest is where interest is paid on previously earned interest as well as on the principal. The shorter the compounding period, the higher the effective annual rate of interest.

6.5.3 Effective interest rate: The actual rate (as opposed to the stated or nominal rate) that is received after the effects of compounding are taken into account. Future value (FV): The value of an investment at some point in the future. Interest or discount rate: The stated rate you will receive for investing at a specified compounding period for a specified period of time.

6.5.4 Nominal return: The return on your investment before the impact of inflation and taxes is taken into account.

6.5.5 Present value (PV): The current value (today's value) of a future sum of money.

6.5.6 Time Value of Money: The money you have available to invest or save, or the stated amount on a bond or deposit instrument. Real return: The rate of return on an investment after the impact of inflation is accounted for. The formula for approximating the real return is the nominal return minus inflation.

6.5.7 Tax-adjusted return: The return on your investment after the impact of federal and state taxes has been taken into account.

6.6 COMPOUNDING

How will different compounding periods impact your investment and investment returns? Compounding periods refer to the frequency with which interest is applied to your investment. Interest may be compounded daily, weekly, monthly, semiannually, or annually. A key relationship exists between time and interest rate. The shorter the compounding period, the higher the effective annual interest rate (the actual rate you are earning on your investment after taking the effect of compounding into account). For example, if interest is compounded daily, the investment will grow faster than if the interest is

compounded monthly or annually.

The formula for calculating the effective interest rate (EIR) is as follows:

EIR = [(1 + (nominal return or APR / periods)] periods - 1

6.6.1 Impact of Compounding

Let's illustrate the effect of compounding and the effective interest rate. The following are examples of four investments with four different nominal returns. Which of these investments would you rather own?

Investment A earns 12.0 percent annually.

Investment B earns 11.9 percent semiannually.

Investment C earns 11.8 percent quarterly.

Investment D earns 11.7 percent daily.

To figure out which investment is best for you, you must determine the effective interest rate of each investment.

For Investment A, the effective rate would be (1 + .12 / 1)1 - 1, or 12.00 percent.

For Investment B, the effective rate would be (1 + .119 / 2)2 - 1, or 12.25 percent. For Investment C, the effective rate would be (1 + .118 / 4)4 - 1, or 12.33 percent. For Investment D, the effective rate would be (1 + .117 / 365)365 - 1, or 12.41 percent.

Even though Investment D has the lowest nominal return, because of compounding, it has the highest effective interest rate. Investment D would be the best vehicle, assuming you were lending money at this rate. Compounding makes an important difference!

6.7 SOLVE PROBLEMS RELATED TO PRESENT VALUE (PV) AND FUTURE VALUE (FV)

6.7.1 Present Value (PV): Let's suppose you want to determine the current value of the ultimate earnings on an investment. This question could be restated in

the following manner:

What is the present value of my investment that will mature in N years at I percent interest (or discount rate)?

To solve this problem, you will need to know the future value of your investment, how many years are required for the investment to reach maturity, and what interest or discount rate your investment has. The result of the equation will be a dollar amount that is smaller than the future amount of principal and interest you will have earned; it is the amount the investment is worth at the present time.

The present value (PV) equation is as follows:

PV = FV / (1 + I) N

The key inputs in the PV equation are as follows:

FV = the future value of the investment at the end of N years

N = the number of years in the future

I = the interest rate, or the annual interest rate or discount rate

PV = the present value, in today's dollars, of a sum of money you have invested or plan to invest.

After you find these inputs, you can solve for the present value (PV).

Problem : Determining Present Value

Let's suppose your rich uncle promises to give you $500,000 in 40 years. Assuming a six percent interest rate, what is the present value of the amount your uncle is promising to give you in 40 years?

To solve this problem, use the equation given above, which would appear as follows: PV = 500,000 / (1 +.06)40, or $48,611. You can also use a financial calculator. Set your calculator to end mode, meaning payments are at the end of each period, and clear the memory registers to make sure you have no old

data in the calculator memories. Set $500,000 as your future value (FV), 40 as your number of years (N), and 6 as your interest rate (I); then solve for the present value (PV). You should get the same result as you did when you used the PV equation.

6.7.2 FUTURE VALUE (FV)

Let's suppose you want to determine what an investment will be worth at some point in the future, i.e., what will the value of my investment be in N years if my interest rate is I percent?

You will need to know how many years it will be until you have the investment, the interest rate, and the amount of the investment (the present value of the investment). The result of the equation will be a dollar amount that is larger than the original investment, since your money will earn interest and will then earn interest on that interest. For an approximation, remember the rule of 72, which states that an investment will double approximately each time you multiply the number of years of investment by the interest rate (in percentage terms) and get a number that is greater than 72. For example, if your investment is earning 8 percent interest, it will take nine years for it to double (72 divided by 8 = 9).

The future value (FV) equation is as follows: FVN = PV * (1 + I) N

The key inputs in the FV equation are as follows:

FV = future value of the investment at the end of N periods (years)

N = number of years in the future

I = interest rate, or the annual interest (or discount) rate

PV = present value, in today's dollars, of a sum of money you have already invested or plan to invest

Problem: Determining Future Value

Let's look at two similar problems:

1. Calculate the future value (in 15 years) of $5,000 that is earning 10 percent; assume an annual compounding period.

2. Calculate the future value (in 15 years) of $5,000 that is earning 10 percent; assume simple interest (the interest earned does not earn interest).

3. How much did interest on interest earn in the first problem?

Solution 1: To solve this problem, we must consider compound interest. On your calculator, clear your registers and your memory. Set -$5,000 as the present value (PV), 10 percent as the interest rate (I), and 15 as the number of years in the future (N); then solve for the future value (FV), which is $20,886. With a standard calculator, the result is 5,000 * (1 +.10)15, or the same sum of $20,886.

Solution 2: To solve for simple interest, which does not accrue interest on interest, it is easiest to use a standard calculator. First, calculate your annual interest, which is $5,000 times 10 percent (5,000 * .10), or $500. Multiply $500 by 15 years; the result should be $7,500. Then add the amount of the original investment of $5,000 to get $12,500.

Solution 3: The difference between $20,886 and $12,500 is $8,386, which is the amount of interest that your interest has earned. This concept is the key to financial success-earn interest on your interest.

6.8 SUMMARY

In this chapter, we have become familiar with the language of finance. The language of finance comprises many different concepts and terms, and understanding these concepts and terms can help you to develop, analyze, and monitor your personal and financial goals successfully.

6.9 GLOSSARY

i. Investment: It is the current commitment of money or other resources with the expectation of reaping future benefits.

ii. Compounding: Compounding periods are the frequency with which interest is applied to your investment. Interest may be compounded daily, weekly, monthly, semiannually, or annually.

iii. Present value: of an investment refers to the current value of a future sum of money.

iv. Future value (FV) is the value an investment will have at some point in the future.

6.10 SELF ASSESSMENT QUESTIONS

1. Write short notes on Present value and Future value.

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6.11 LESSON END EXERCISES

1. Calculate the future value (in 15 years) of $5,000 that is earning 10 percent; assume an annual compounding period.

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2. Suppose your rich uncle promises to give you $500,000 in 40 years. Assuming a six percent interest rate, what is the present value of the amount your uncle is promising to give you in 40 years?

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6.12 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

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UNIT : II **Lesson No. 7**

INVESTMENT DECISIONS

Structure

7.1 INTRODUCTION

Money has time value. A rupee today is more valuable than a year hence. It is on this concept "the time value of money" is based. The recognition of the time value of money and risk is extremely vital in financial decision making. Most financial decisions such as the purchase of assets or procurement of funds, affect the firm's cash flows in different time periods. For example, if a fixed asset is purchased, it will require an immediate cash outlay and will generate cash flows during many future periods. Similarly if the firm borrows funds from a bank or from any other source, it receives cash and commits an obligation to pay interest and repay principal in future periods. The firm may also raise funds by issuing equity shares. The firm's cash balance will increase at the time shares are issued, but as the firm pays dividends in future, the outflow of cash will occur. Sound decision-making requires that the cash flows which a firm is expected to give up over period should be logically comparable. In fact, the absolute cash flows which differ in timing and risk are not directly comparable. Cash flows become logically comparable when they are appropriately adjusted for their differences in timing and risk.

7.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of time value of money.

ii. Discuss various techniques of time value of money.

7.3 CONCEPT OF TIME VALUE OF MONEY

The difference in the value of money today and tomorrow is referred as time value of money. The recognition of the time value of money and risk is extremely vital in financial decision-making. If the timing and risk of cash flows is not

considered, the firm may make decisions which may allow it to miss its objective of maximizing the owner's welfare. The welfare of owners would be maximized when Net Present Value is created from making a financial decision. It is thus, time value concept which is important for financial decisions. Thus, we conclude that time value of money is central to the concept of finance. It recognizes that the value of money is different at different points of time. Since money can be put to productive use, its value is different depending upon when it is received or paid. In simpler terms, the value of a certain amount of money today is more valuable than its value tomorrow. It is not because of the uncertainty involved with time but purely on account.

7.4 REASONS FOR TIME VALUE OF MONEY

Money has time value because of the following reasons:

1. **Risk and Uncertainty:** Future is always uncertain and risky. Outflow of cash is in our control as payments to parties are made by us. There is no certainty for future cash inflows. Cash inflows are dependent out on our Creditor, Bank etc. As an individual or firm is not certain about future cash receipts, it prefers receiving cash now.

2. **Inflation:** In an inflationary economy, the money received today, has more purchasing power than the money to be received in future. In other words, a rupee today represents a greater real purchasing power than a rupee a year hence.

3. **Consumption:** Individuals generally prefer current consumption to future consumption.

4. **Investment opportunities:** An investor can profitably employ a rupee received today, to give him a higher value to be received tomorrow or after a certain period of time. Thus, the fundamental principle behind the concept of time value of money is that, a sum of money received today, is worth more than if the same is received after a certain period of time. For example, if an individual is given an alternative either to receive Rs. 10,000 now or after one

year, he will prefer Rs. 10,000 now. This is because, today, he may be in a position to purchase more goods with this money than what he is going to get for the same amount after one year.

Thus, time value of money is a vital consideration in making financial decision. Let us take some examples:

EXAMPLE 1: A project needs an initial investment of Rs. 1, 00,000. It is expected to give a return of Rs. 20,000 per annum at the end of each year, for six years. The project thus involves a cash outflow of Rs. 1, 00,000 in the 'zero year' and cash inflows of Rs. 20,000 per year, for six years. In order to decide, whether to accept or reject the project, it is necessary that the Present Value of cash inflows received annually for six years is ascertained and compared with the initial investment of Rs. 1, 00,000. The firm will accept the project only when the Present Value of cash inflows at the desired rate of interest exceeds the initial investment or at least equals the initial investment of Rs.1, 00,000.

EXAMPLE 2: A firm has to choose between two projects. One involves an outlay of Rs. 10 lakhs with a return of 12% from the first year onwards, fo ten years. The other requires an investment of Rs. 10 lakhs with a return of 14% per annum for 15 years commencing with the beginning of the sixth year of the project. In order to make a choice between these two projects, it is necessary to compare the cash outflows and the cash inflows resulting from the project. In order to make a meaningful comparison, it is necessary that the two variables are strictly comparable. It is possible only when the time element is incorporated in the relevant calculations. This reflects the need for comparing the cash flows arising at different points of time in decision-making.

7.5 TIMELINES AND NOTATION

When cash flows occur at different points in time, it is easier to deal with them using a timeline. A timeline shows the timing and the amount of each cash flow

in cash flow stream. Thus, a cash flow stream of Rs. 10,000 at the end of each of the next five years can be depicted on a timeline like the one shown below.

As shown above, 0 refers to the present time. A cash flow that occurs at time 0 is already in present value terms and hence does not require any adjustment for time value of money. You must distinguish between a period of time and a point of time1. Period 1 which is the first year is the portion of timeline between point 0 and point 1. The cash flow occurring at point 1 is the cash flow that occurs at the end of period 1. Finally, the discount rate, which is 12 per cent in our example, is specified for each period on the timeline and it may differ from period to period. If the cash flow occurs at the beginning, rather than the end of each year, the timeline would be as shown in Part B. Note that a cash flow occurring at the end of the year 1 is equivalent to a cash flow occurring at the beginning of year 2. Cash flows can be positive or negative. A positive cash flow is called a cash inflow; and a negative cash flow, a cash outflow.

7.6 VALUATION CONCEPTS

The time value of money establishes that there is a preference of having money at present than a future point of time. It means

(a) That a person will have to pay in future more, for a rupee received today.

For example: Suppose your father gave you Rs. 100 on your tenth birthday. You deposited this amount in a bank at 10% rate of interest for one year. How much future sum would you receive after one year? You would receive Rs. 110 Future sum = Principal + Interest = 100 + 0.10 × 100 = Rs. 110 What would be the future sum if you deposited Rs.100 for two years? You would now receive interest on interest earned after one year. Future sum = 100 × 1.102 = Rs.121. We express this procedure of calculating as Compound Value or Future Value of a sum.

(b) A person may accept less today, for a rupee to be received in the future. Thus, the inverse of compounding process is termed as discounting. Here we can find the value of future cash flow as on today.

7.7 TECHNIQUES OF TIME VALUE OF MONEY

There are two techniques for adjusting time value of money. They are:

1. Compounding Techniques/Future Value Techniques
2. Discounting/Present Value Techniques

The value of money at a future date with a given interest rate is called future value. Similarly, the worth of money today that is receivable or payable at a future date is called Present Value. Compounding Techniques/Future Value Technique In this concept, the interest earned on the initial principal amount becomes a part of the principal at the end of the compounding period. FOR EXAMPLE: Suppose you invest Rs.1000 for three years in a saving account that pays 10 per cent interest per year. If you let your interest income be reinvested, your investment will grow as follows:

First year:	Principal at the beginning	1,000
	Interest for the year (Rs. 1,000 × 0.10)	100
	Principal at the end	1,100
Second year:	Principal at the beginning	1,100
	Interest for the year (Rs. 1,100 × 0.10)	110
	Principal at the end	1210
Third year:	Principal at the beginning	1210
	Interest for the year (Rs. 1210 × 0.10)	121
	Principal at the end	1331

This process of compounding will continue for an indefinite time period. The process of investing money as well as reinvesting interest earned there on is called Compounding.

But the way it has gone about calculating the future value will prove to be cumbersome if the future value over long maturity periods of 20 years to 30

years is to be calculated.

A generalized procedure for calculating the future value of a single amount compounded annually is as follows:

Formula:

$$FVn = PV(1 + r) n$$

In this equation (1 + r) n is called the future value interest factor (FVIF).

where, FVn = Future value of the initial flow n year hence

PV = Initial cash flow

r = Annual rate of Interest

n = number of years.

By taking into consideration, the above example, we get the same result.

$$FVn = PV (1 + r) n = 1,000 (1.10)3$$

$$FVn = 1331$$

To solve future value problems, we consult a future value interest factor (FVIF) table. The table shows the future value factor for certain combinations of periods and interest rates. To simplify calculations, this expression has been evaluated for various combinations of 'r' and 'n'.

7.8 MULTIPLE COMPOUNDING PERIODS

Interest can be compounded monthly, quarterly and half-yearly. If compounding is quarterly, annual interest rate is to be divided by 4 and the number of years is to be multiplied by 4. Similarly, if monthly compounding is to be made, annual interest rate is to be divided by 12 and number of years is to be multiplied by 12.

The formula to calculate the compound value is

$$FVn = PV(1+ r/m)_{mxn}$$

where,

FVn = Future value after 'n' years

PV = Cash flow today

r = Interest rate per annum

m = Number of times compounding is done during a year

n = Number of years for which compounding is done.

7.9 EFFECTIVE RATE OF INTEREST IN CASE OF MULTI-PERIOD COMPOUNDING

Effective interest rate brings all the different bases of compounding such as yearly, half-yearly, quarterly, and monthly on a single platform for comparison to select the beneficial base. Now, the question is which works out highest interest amount? When interest is compounded on half-yearly basis, interest amount works out more than the interest calculated on yearly basis. Quarterly compounding works out more than half-yearly basis. Monthly compounding works out more than even quarterly compounding. So, if compounding is more frequent, then the amount of interest per year works out more.

7.10 SIMPLE AND COMPOUND INTEREST

In compound interest, each interest payment is reinvested to earn further interest in future periods. However, if no interest is earned on interest, the investment earns only simple interest. In such a case, the investment grows as follows:

Future value = Present value [1 + Number of years × Interest rate]

For example, if Rs.1, 000 is invested @ 12% simple interest, in 5 years it will become 1,000 [1 + 5 × 0.12] = Rs.1, 600.

Mr. Rahul has deposited Rs.1,00,000 in a saving bank account at 6 per cent simple interest and wishes to keep the same, for a period of 5 years. Calculate the accumulated Interest.

SOLUTION:

S1 = P0 (I) (n)

where S1 = Simple interest

P0 = Initial amount invested

I = Interest rate

n = Number of years

S1 =Rs.1,00,000 × 0.06 × 5 years

S1 =Rs.30,000

If the investor wants to know his total future value at the end of 'n' years. Future value is the sum of accumulated interest and the principal amount.

Symbolically

FVn = P0 + P0(I) (n) OR S1 + P0

7.11 SUMMARY

The recognition of the time value of money and risk is extremely vital in financial decision-making. If the timing and risk of cash flows is not considered, the firm may make decisions which may allow it to miss its objective of maximizing the owner's welfare. The welfare of owners would be maximized when Net Present Value is created from making a financial decision. It is thus, time value concept which is important for financial decisions. Thus, we conclude that time value of money is central to the concept of finance. It recognizes that the value of money is different at different points of time. Since money can be put to productive use, its value is different depending upon when it is received or paid. In simpler terms, the value of a certain amount of money today is more valuable than its value tomorrow

7.12 GLOSSARY

i. Time value of money: The difference in the value of money today and tomorrow is referred as time value of money.

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7.13 SELF ASSESSMENT QUESTIONS

1. Mr. Abhisekh deposits Rs.5, 00,000 for a period of 10 years at 10% rate of interest. What would be the value of his sum after 10 years?

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2. Mr. Dhiraj depositsRs.1, 00,000 at the end of each year for 10 years. What will be the value of his money at the end of 10 years at (a) 9%, (b) 10% and (c) 12%?

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7.14 LESSON END EXERCISES

1. Why is the consideration of time important in financial decision-making? How can time be adjusted? Illustrate your answer.

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2. Explain the meaning and importance of valuation concept. How does valuation concept help in decision making?

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7.15 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

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UNIT : II **Lesson No. 8**

ANALYSIS OF CAPITAL BUDGETING DECISIONS

Structure

8.1 INTRODUCTION

The exercise involves ascertaining / estimating cash inflows and outflows, matching the cash inflows with the outflows appropriately and evaluation of desirability of the project. It is a managerial technique of meeting capital expenditure with the overall objectives of the firm.

8.2 OBJECTIVES

After reading this lesson you should be able to:

i. Understand the meaning of Capital budgeting.

ii. Know about capital expenditure.

iii. Understand the need for capital investment.

iv. Point out the significance of capital budgeting

v. Describe the capital budgeting process

vi. Spell out the factors influencing investment decision.

vii. Describe the kinds of capital budgeting decisions

8.3 MEANING OF CAPITAL BUDGETING

Capital budgeting decisions are of paramount importance in financial decisions, because efficient allocation of capital resources is one of the most crucial decisions of financial management. Capital budgeting is budgeting for capital projects. It is significant because it deals with right kind of evaluation of projects. It is a complex process as it involves decisions relating to the investment of current funds for the benefit to be achieved in future. The overall objective of capital budgeting is to maximize the profitability of the firm / the return on investment.

"Capital budgeting is long-term planning for making and financing proposed capital outlay".

Charles T. Horngreen

"The capital budgeting generally refers to acquiring inputs with long term returns".

- Richards & Greenlaw

"Capital budgeting involves the planning of expenditure for assets, the returns from which will be realized in future time periods".

- Milton H. Spencer

The long-term activities are those activities that influence firms operation beyond the one year period. The basic features of capital budgeting decisions are:

i. There is an investment in long term activities.

ii. Current funds are exchanged for future benefits.

iii. The future benefits will be available to the firm over series of years.

8.4 NEED FOR CAPITAL INVESTMENT

The factors that give rise to the need for capital investments are:

i. Expansion

ii. Diversification

iii. Obsolescence

iv. Wear and tear of old equipment

v. Productivity improvement

vi. Learning - curve effect

vii. Product improvement

viii. Replacement and modernization

The firm's value will increase in investments that are profitable. They add to

the shareholders' wealth. The investment will add to the shareholders' wealth if it yields benefits, in excess of the minimum benefits as per the opportunity cost of capital.

It is clear from the above discussion what capital investment proposals involve

a) Longer gestation period

b) Substantial capital outlay

c) Technological considerations

d) Irreversible decisions

e) Environmental issues

8.5 SIGNIFICANCE OF CAPITAL BUDGETING

1. Capital budgeting involves capital rationing. This is the available funds that have to be allocated to competing projects in order of project potential. Normally the individuality of project poses the problem of capital rationing due to the fact that required funds and available funds may not be the same.

2. Capital budget becomes a control device when it is employed to control expenditure. Because manned outlays are limits to actual expenditure, the concern has to investigate the variation in order to keep expenditure under control.

3. A firm contemplating a major capital expenditure programme may need to arrange funds many years in advance to be sure of having the funds when required.

4. Capital budgeting provides useful tool with the help of which the management can reach prudent investment decision.

5. Capital budgeting is significant because it deals with right mind of evaluation of projects. A good project must not be rejected and a bad project must not

be selected. Capital projects need to be thoroughly evaluated as to costs and benefits.

6. Capital projects involve investment in physical assets such as land, building plant, machinery etc. for manufacturing a product as against financial investments which involve investment in financial assets like shares, bonds or mutual funds. The benefits from the projects last for few to many years.

7. Capital projects involve huge outlay and last for years.

8. Capital budgeting thus involves the making of decisions to earmark funds for investment in long term assets yielding considerable benefits in future, based on a careful evaluation of the prospective profitability / utility of such proposed new investment.

8.6 CAPITAL BUDGETING PROCESS

The important steps involved in the capital budgeting process are

1. Project generation,
2. Project evaluation,
3. Project selection and
4. Project execution.

1. Project Generation: Investment proposals of various types may originate at different levels within a firm. Investment proposals may be either proposals to add new product to the product line or proposals to expand capacity in existing product lines. Secondly, proposals designed to reduce costs in the output of existing products without changing the scale of operations. The investment proposals of any type can originate at any level. In a dynamic and progressive firm there is a continuous flow of profitable investment proposals.

2. Project evaluation: Project evaluation involves two steps:

i) Estimation of benefits and costs and

ii) Selection of an appropriate criterion to judge the desirability of the projects.

The evaluation of projects should be done by an impartial group. The criterion selected must be consistent with the firm's objective of maximizing its market value.

3. **Project Selection:** There is no uniform selection procedure for investment proposals. Since capital budgeting decisions are of crucial importance, the final approval of the projects should rest on top management.

4. **Project Execution:** After the final selection of investment proposals, funds are earmarked for capital expenditures. Funds for the purpose of project execution should be spent in accordance with appropriations made in the capital budget.

8.7 FACTORS INFLUENCING INVESTMENT DECISIONS

The main factors which, influence capital investment are:

1. **Technological change:.** In modem times, one often finds fast obsolescence of technology. New technology, which is relatively more efficient, takes the place of old technology; the latter getting downgraded to some less important applications. However, in taking a decision of this type, the management has to consider the cost of new equipment vis-a-vis the productive efficiencies of the new as well as the old equipments. However, while evaluating the cost of new equipment, the management should not take into, account its full accounting cost (as the equipment lasts for years) but its incremental cost. Also, the cost of new equipment is often partly offset by the salvage value of the replaced equipment.

2. **Competitors 'strategy:** Many a time an investment is taken to maintain the competitive strength of the firm; If the competitors are installing new equipment to expand output or to improve quality of their products, the firm under consideration will have no alternative but to follow suit, else it will perish. It is,

therefore, often found that the competitors' strategy regarding capital investment plays a very significant role in forcing capital decisions on a firm.

3. **Demand forecast:** The long-run forecast of demand is one of the determinants of investment decision. If it is found that there is a market potential for the product in the long run, the dynamic firm will have to take decisions for capital expansion.

4. **Type of management:** Whether capital investment would be encouraged or not depends, to a large extent, on the viewpoint of the management. If the management is modern and progressive in its outlook, the innovations will be encouraged, whereas a conservative management discourages innovation and fresh investments.

5. **Fiscal policy:** Various tax policies of the government (like tax concessions on investment income, rebate on new investment, and method of allowing depreciation deduction allowance) also have favorable or unfavorable influence on capital investment.

6. **Cash flows:** Every firm makes a cash flow budget. Its analysis influences capital investment decisions. With its help the firm plans the funds for acquiring the capital asset. The budget also shows the timing of availability of cash flows for alternative investment proposals, thereby helping the management in selecting the desired project.

7. **Return expected from the investment:** In most of the cases, investment decisions are made in anticipation of increased return in future. While evaluating investment proposals, it is therefore essential for the firm to estimate future returns or benefits accruing from the investment.

8.8 KINDS OF CAPITAL BUDGETING DECISIONS

The overall objective of capital budgeting is to maximize the profitability of a firm or the return on investment. This objective can be achieved either by increasing the revenues or by reducing costs. Thus, capital budgeting decisions

can be broadly classified into two categories:

(a) those which increase revenue, and

(b) those which reduce costs

The first category of capital budgeting decisions is expected to increase revenue of the firm through expansion of the production capacity or size of operations by adding a new product line. The second category increases the earnings of the firm by reducing costs and includes decisions relating to replacement of obsolete, outmoded or worn out assets. In such cases, a firm has to decide whether to continue with the same asset or replace it. Such a decision is taken by the firm by evaluating the benefit from replacement of the asset in the form of reduction in operating costs and the cost/cash outlay needed for replacement of the asset. Both categories of above decisions involve investment in fixed assets but the basic difference between the two decisions lies in the fact that increasing revenue investment decisions are subject to more uncertainty as compared to cost reducing investment decisions.

Further, in view of the investment proposals under consideration, capital budgeting decisions may also be classified as.

(i) Accept / Reject Decisions

(ii) Mutually Exclusive Project Decisions

(iii) Capital Rationing Decisions.

(i) **Accept / Reject Decisions:** Accept / reject decisions relate to independent project which do not compete with one another. Such decisions are generally taken on the basis of minimum return on investment. All those proposals which yield a rate of return higher than the minimum required rate of return or the cost of capital are accepted and the rest are rejected. If the proposal is accepted the firm makes investment in it, and if it is rejected the firm does not invest in the same.

(ii) **Mutually Exclusive project Decisions:** Such decisions relate to proposals which compete with one another in such a way that acceptance of one automatically excludes the acceptance of the other. Thus, one of the proposals is selected at the cost of the other. For example, a company may have the option of buying a new machine, or a second hand machine, or taking an old machine on hire or selecting a machine out of more than one brand available in the market. In such a case, the company may select one best alternative out of the various options by adopting some suitable technique or method of capital budgeting. Once one alternative is selected the others are automatically rejected.

(iii) **Capital Rationing Decisions:** A firm may have several profitable investment proposals but only limited funds to invest. In such a case, these various investments compete for limited funds and, thus, the firm has to ration them. The firm effects the combination of proposals that will yield the greatest profitability by ranking them in descending order of their profitability.

8.9 SUMMARY

Capital budgeting is budgeting for capital projects. It is significant because it deals with right kind of evaluation of projects. The exercise involves ascertaining / estimating cash inflows and outflows, matching the cash inflows with the outflows appropriately and evaluation of desirability of the project. It is a managerial technique of meeting capital expenditure with the overall objectives of the firm.

8.10 GLOSSARY

i. Capital budgeting: It is decision-making process concerned with "whether or not (i) the firm should invest funds in an attempt to make profit?" and (ii) how to choose among competing projects.

ii. Risk: Refers to a situation in which there are several possible outcomes, each outcome occurring with a probability that is known to the decision-maker.

8.11 SELF ASSESSMENT QUESTIONS

1. What is capital budgeting?

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2. Explain the significance of budgeting.

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2. What are capital revisions?

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3. Explain the nature and features of capital budgeting.

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4. What are the various kinds of capital budgeting decisions?

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8.12 LESSON END EXERCISES

1. Analyze the importance steps involved in capital budgeting.

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2. Describe the Factors Influencing Investment Decisions.

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3. Explain need for investment decisions.

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4. Explain the process involved in capital budgeting.

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8.13 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : II **Lesson No. 9**

NPV and IRR

Structure

9.1 INTRODUCTION

Capital projects need to be thoroughly evaluated as to costs and benefits. The capital budgeting process begins with assembling of investment proposals of different departments of a firm. The departmental head will have innumerable alternative projects available to meet his requirements. He has to select the best alternative from among the conflicting proposals. This selection is made after estimating return on the projects and comparing the same with the cost of capital. Investment proposal which gives the highest net marginal return will be chosen.

9.2 OBJECTIVES

After reading this lesson you should be able to:

i. Understand the Investment evaluation criteria.

ii. Spell out the features required by Investment evaluation criteria.

iii. To analyze Techniques of investment Appraisal Methods

iv. To make a comparison between NPV and IRR.

v. To identify the similarities of results under NPV and IRR

9.3 INVESTMENT EVALUATION CRITERIA

The capital budgeting process begins with assembling of investment proposals of different departments of a firm. The departmental head will have innumerable alternative projects available to meet his requirements. He has to select the best alternative from among the conflicting proposals. This selection is made after estimating return on the projects and comparing the same with the cost of capital. Investment proposal which gives the highest net marginal return will be chosen.

Following are the steps involved in the evaluation of an investment:

1) Estimation of cash flows

2) Estimation of the required rate of return

3) Application of a decision rule for making the choice

9.4 FEATURES REQUIRED BY INVESTMENT EVALUATION CRITERIA

A sound appraisal technique should be used to measure the economic worth of an investment project. Porterfield, J.T.S. in his book, Investment Decisions and Capital Costs, has outlined some of the features that must be had by sound investment evaluation criteria.

1. It should consider all cash flows to determine the true profitability of the project.
2. It should provide for an objective and unambiguous way of separating good projects from bad projects.
3. It should help ranking of projects according to their true profitability.
4. It should recognize the fact that bigger cash flows are preferable to smaller ones and early cash flows are preferable to later ones.
5. It should help to choose among mutually exclusive projects that project which maximizes the shareholders' wealth.
6. It should be a criterion which is applicable to any conceivable investment project independent of others.

9.5 TECHNIQUES OF INVESTMENT APPRAISAL

The important method of computing expected rates of return is the present value method. The method is popularly known as Discounted Cash flow Method also. This method involves calculating the present value of the cash benefits discounted at a rate equal to the firm's cost of capital. In other words, the "present value of an investment is the maximum amount a firm could pay for the opportunity

of making the investment without being financially worse off."

The financial executive compares the present values with the cost of the proposal. If the present value is greater than the net investment, the proposal should be accepted. Conversely, if the present value is smaller than the net investment, the return is less than the cost of financing. Making the investment in this case will cause a financial loss to the firm.

There are four methods to judge the profitability of different proposals on the basis of this technique.

1. **Net Present Value Method:** This method is also known as Excess Present Value or Net Gain Method. To implement this approach, we simply find the present value of the expected net cash inflows of an investment discounted at the cost of capital and subtract from it the initial cost outlay of the project. If the net present value is positive, the project should be accepted: if negative, it should be rejected.

NPV = Total Present value of cash inflows - Net investment

If the two projects are mutually exclusive the one with higher net present value should be chosen.

The following example will illustrate the process:

Assumed that the cost of capital after taxes of a firm is 6%.

Assume further, that the net cash-inflow (after taxes) on a Rs. 5,000 investment is forecasted as being Rs. 2,800 per annum for 2 years.

The present value of this stream of net cash-inflow discounted at 6% comes to Rs. 5,272 (1,813 x Rs.2800).

Therefore, the present value of the cash inflow	= Rs. 5,272
Less present value of net investment	= Rs. 5,000
Net Present value	= Rs. 272

2. **Internal Rate of Return Method:** This method is popularly known as time adjusted rate of return method/discounted rate of return method also. The internal rate of return is defined as the interest rate that equates the present value of expected future receipts to the cost of the investment outlay. This internal rate of return is found by trial and error. First we compute the present value of the cash-flows from an investment, using an arbitrarily elected interest rate. Then we compare the present value so obtained with the investment cost. If the present value is higher than the cost figure, we try a higher rate of interest and go through the procedure again. Conversely, if the present value is lower than the cost, lower the interest rate and repeat the process. The interest rate that brings about this equality is defined as the internal rate of return. This rate of return is compared to the cost of capital and the project having higher difference, if they are mutually exclusive, is adopted and other one is rejected. As the determination of internal rate of return involves a number of attempts to make the present value of earnings equal to the investment, this approach is also called the Trial and Error Method.

3. **Profitability Index Method:** One major disadvantage of the present value method is that it is not easy to rank projects on the basis of net present value particularly when the cost of projects differs significantly. To compare such projects the present value profitability index is prepared. The index establishes relationship between cash-inflows and the amount of investment as per formula given below:

$$\text{V. Index} = \frac{\text{NPV}}{\text{Investment}} \times 100 \quad \text{or} \quad \frac{\text{GPV}}{\text{Investment}} \times 100$$

For example, the profitability index of the Rs. 5000 investment discussed in Net Present Value Method above would be :

$$\frac{272}{3000} \times 100 = 5.44 \qquad \text{or} \quad \frac{5272}{5000} \times 100 = 105.44$$

The higher profitability index, the more desirable is the investment.

Thus, this index provides a ready compatibility of investment having various magnitudes. By computing profitability indices for various projects, the financial manager can rank them in order of their respective rates of profitability.

4. **Terminal Value Method -** This approach separates the timing of the cash-inflows and outflows more distinctly. Behind this approach is the assumption that each cash-inflow is re-invested in other assets at the certain rate of return from the moment it is received until the termination of the project. Then the present value of the total compounded sum is calculated and it is compared with the initial cash-outflow. The decision rule is that if the present value of the sum total of the compounded re-invested cash-inflows is greater than the present value of cash-outflows, the proposed project is accepted otherwise not. The firm would be different if both the values are equal. This method has a number of advantages. It incorporates the advantage of re-investment of cash-inflows by compounding and then discounting it.

Further, it is best suited to cash budgeting requirements. The major practical problem of this method lies in projecting the future rates of interest at which the intermediate cash inflows received will be re-invested.

Discounted Cashflow Techniques - Merits

1. This method takes into account the entire economic life of an investment and income there from. It gives the rate of return offered by a new project.

2. It gives due weight to time factor of financing. In the words of Charles Horngreen "Because the discounted cash-flow method explicity and routinely weights the time value of money, it is the best method to use for long-range decisions.

3. It permits direct comparison of the projected returns on investments with the cost of borrowing money which is not possible in other methods.

4. It makes allowance for differences in the time at which investment generate their income.

5. This approach by recognizing the time factor makes sufficient provision for uncertainty and risk. It offers a good measure of relative profitability of capital expenditure by reducing the earnings to the present values.

Discounted Cashflow Techniques - Demerits

This method is criticised on the following grounds :

1. It involves a good amount of calculations. Hence it is difficult and complicated one. But this criticism has no force.

2. It is very difficult to forecast the economic life of any investment exactly.

3. The selection of cash-inflow is based on sales forecasts which are in itself an indeterminable element.

4. The selection of an appropriate rate of interest is also difficult.

9.6 COMPARISON BETWEEN NPV & IRR

The Net Present value method and the Internal Rate of Return Method are similar in the sense that both are modern techniques of capital budgeting and both take into account the time value of money. In fact, both these methods are discounted cash flow techniques. However, there are certain basic differences between these two methods of capital budgeting:

i. In the net present value method the present value is determined by discounting the future cash flows of a project at a predetermined or specified rate called the cut off rate based on cost of capital. But under the internal rate of return method, the cash flows are discounted at a suitable rate by hit and trial method which equates the present value so calculated to the amount of the investment.

Under IRR method, discount rate is not predetermined.

ii. The NPV method recognizes the importance of market rate of interest or cost of capital. It arrives at the amount to be invested in a given project so that its anticipated earnings would recover the amount invested in the project at market rate. Contrary to this, the IRR method does not consider the market rate of interest and seeks to determine the maximum rate of interest at which funds invested in any project could be repaid with the earnings generated by the project.

iii. The basic presumption of NPV method is that intermediate cash inflows are reinvested at the cut off rate, whereas, in the case of IRR method, intermediate cash flows arc presumed to be reinvested at the internal rate of return.

iv. The results shown by NPV method are similar to that of IRR method under certain situations, whereas, the two give contradictory results under some other circumstances. However, it must be remembered that NPV method using a predetermined cut-off rate is more reliable than the IRR method for ranking two or more capital investment proposals.

9.7 SIMILARITIES OF RESULTS UNDER NPV AND IRR

Both NPV and IRR methods would show similar results in terms of accept or reject decisions in the following cases :

i. Independent investment proposals which do not compete with one another and which may be either accepted or-rejected on the basis of a minimum required rate of return.

ii. Conventional investment proposals which involve cash outflows or outlay in the initial period followed by a series of cash inflows.

The reason for similarity of results in the above cases lies on the basis of decision-making in the two methods. Under NPV method, a proposal is accepted if its net present value is positive, whereas, under IRR method it is accepted if the internal rate of return is higher than the cut off rate. The projects

which have positive net present value, obviously, also have an internal rate of return higher than the required rate of return.

Conflict Between NPV and IRR Results

In case of mutually exclusive investment proposals, which compete with one another in such a manner that acceptance of one automatically excludes the acceptance of the other, the NPV method and IRR method may give contradictory results. The net present value may suggest acceptance of one proposal whereas, the internal rate of return may favour another proposal. Such conflict in rankings may be caused by any one or more of the following problems:

a. Significant difference in the size. (amount) of cash outlays of various proposals under consideration.

b. problem of difference in the cash flow patterns or timings of the various proposals and

c. difference in service life or unequal expected lives of the projects.

9.8 PROBLEM

1. Given the cash flows of the four projects, A, B, C, and D, and using the Payback Period decision model, which projects do you accept and which projects do you reject with a three year cut-off period for recapturing the initial cash outflow? Assume that the cash flows are equally distributed over the year for Payback Period calculations.

Projects	*A*	*B*	*C*	*D*
Cost	$10,000	$25,000	$45,000	$100,000
Cash Flow Year One	$4,000	$2,000	$10,000	$40,000
Cash Flow Year Two	$4,000	$8,000	$15,000	$30,000

Cash Flow Year Three	$4,000	$14,000	$20,000	$20,000
Cash Flow Year Four	$4,000	$20,000	$20,000	$10,000
Cash Flow year Five	$4,000	$26,000	$15,000	$0
Cash Flow Year Six	$4,000	$32,000	$10,000	$0

Solution

Project A: Year One: -$10,000 + $4,000 = $6,000 left to recover

Year Two: -$6,000 + $4,000 = $2,000 left to recover

Year Three: -$2,000 + $4,000 = fully recovered

Year Three: $2,000 / $4,000 = ½ year needed for recovery

Payback Period for Project A: 2 and ½ years, ACCEPT!

Project B: Year One: -$25,000 + $2,000 = $23,000 left to recover

Year Two: -$23,000 + $8,000 = $15,000 left to recover

Year Three: -$15,000 + $14,000 = $1,000 left to recover

Year Four: -$1,000 + $20,000 = fully recovered

Year Four: $1,000 / $20,000 = 1/20 year needed for recovery

Payback Period for Project B: 3 and 1/20 years, REJECT!

Project C: Year One: -$45,000 + $10,000 = $35,000 left to recover

Year Two: -$35,000 + $15,000 = $20,000 left to recover

Year Three: -$20,000 + $20,000 = fully recovered

Year Three: $20,000 / $20,000 = full year needed

Payback Period for Project B: 3 years, ACCEPT!

Project D: Year One: -$100,000 + $40,000 = $60,000 left to recover

Year Two: -$60,000 + $30,000 = $30,000 left to recover

Year Three: -$30,000 + $20,000 = $10,000 left to recover

Year Four: -$10,000 + $10,000 = fully recovered

Year Four: $10,000 / $10,000 = full year needed

Payback Period for Project B: 4 years, REJECT!

2. Payback Period - What are the Payback Periods of Projects E, F, G and H? Assume all cash flows are evenly spread throughout the year. If the cut-off period is three years, which projects do you accept?

Projects	E	F	G	H
Cost	$40,000	$250,000	$75,000	$100,000
Cash Flow Year One	$10,000	$40,000	$20,000	$30,000
Cash Flow Year Two	$10,000	$120,000	$35,000	$30,000
Cash Flow Year Three	$10,000	$200,000	$40,000	$30,000
Cash Flow Year Four	$10,000	$200,000	$40,000	$20,000
Cash Flow year Five	$10,000	$200,000	$35,000	$10,000
Cash Flow Year Six	$10,000	$200,000	$20,000	$0

Solution

Project E: Year One: -$40,000 + $10,000 = $30,000 left to recover

Year Two: -$30,000 + $10,000 = $20,000 left to recover

Year Three: -$20,000 + $10,000 = $10,000 left to recover

Year Four: -$10,000 + $10,000 = fully recovered

Year Four: $10,000 / $10,000 = full year needed

Payback Period for Project A: 4 years

Project F: Year One: -$250,000 + $40,000 = $210,000 left to recover

Year Two: -$210,000 + $120,000 = $90,000 left to recover

Year Three: -$90,000 + $200,000 = fully recovered

Year Three: $90,000 / $200,000 = 0.45 year needed

Payback Period for Project B: 2.45 years

Project G: Year One: -$75,000 + $20,000 = $55,000 left to recover

Year Two: -$55,000 + $35,000 = $20,000 left to recover

Year Three: -$20,000 + $40,000 = fully recovered

Year Three: $20,000 / $40,000 = 0.5 year needed

Payback Period for Project B: 2.5 years

Project H: Year One: -$100,000 + $30,000 = $70,000 left to recover

Year Two: -$70,000 + $30,000 = $40,000 left to recover

Year Three: -$40,000 + $30,000 = $10,000 left to recover

Year Four: -$10,000 + $20,000 = fully recovered

Year Four: $10,000 / $20,000 = 0.5 year needed

Payback Period for Project B: 3.5 years

With a three year cut-off period, ACCEPT F and G, REJECT E and H.

9.9 SUMMARY

The capital budgeting process begins with assembling of investment proposals of different departments of a firm. The departmental head will have innumerable alternative projects available to meet his requirements. He has to select the best alternative from among the conflicting proposals. This selection is made after estimating return on the projects and comparing the same with the cost of capital. Investment proposal which gives the highest net marginal return will be chosen. Following are the steps involved in the evaluation of an investment:1) Estimation of cash flows, 2) Estimation of the required rate of return and 3) Application of a decision rule for making the choice. A sound appraisal technique should be used to measure the economic worth of an investment project. The

9.10 GLOSSARY

i. Net Present Value: A method of evaluation consisting of comparing the present value of all net cash flows (discounted by cost of capital as the interest rate) to the initial investment cost.

ii. Internal rate of return: The IRR is a method of evaluating investment proposals. It is that rate of discount (or interest rate) that equals the present value of outflows to the present value of inflows, thus making NPV=Q.

iii. Mutually exclusive projects: A situation in which the acceptance of one investment proposal leaves out the acceptance of another proposal.

9.11 SELF ASSESSMENT QUESTIONS

1. Under what circumstances do the net present value and internal rate of return methods differ? Which method would you prefer and why?

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2. What are the mutually exclusive projects? Explain the conditions when conflicting ranking would be given by the internal rate of return and net present value methods to such projects.

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3. Mention the features required by investment evaluation criteria.

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9.12 LESSON END EXERCISES

1. Discuss the various methods of appraisal of investment proposals.

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2. Differential between NPV and IRR method.

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9.13 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : II **Lesson No. 10**

Payback and ARR

Structure

10.1 INTRODUCTION

The overall objective of capital budgeting is to maximize the profitability. If a firm concentrates return on investment, this objective can be achieved either by increasing the revenues or reducing the costs. The increasing revenues can be achieved by expansion or the size of operations by adding a new product line. Reducing costs mean representing obsolete return on assets. By matching the available resources and projects it can be invested. The funds available are always living funds. There are many considerations taken for investment decision process such as environment and economic conditions.

10.2 OBJECTIVES

After going through this chapter you will be able to:

i. Get an insight into Payback period.

ii. Understand the concept of ARR.

10.3 PAYBACK PERIOD METHOD

This method is popularly known as pay off, pay-out, recoupment period method also. It gives the number of years in which the total investment in a particular capital expenditure pays back itself. This method is based on the principle that every capital expenditure pays itself back over a number of years. It means that it generates income -within a certain period. When the total earnings (or net cash-inflow) from investment equals the total outlay, that period is the payback period of the capital investment. An investment project is adopted so long as it pays for itself within a specified period of time - say 5 years or less. This standard of recoupment period is settled by the management taking into account a number of considerations.

While *there is a* comparison between two or more *projects, the lesser the number of payback years, the project will be* acceptable. The formula for the payback period calculation is simple.

First of all, net-cash-inflow is determined.

Then we divide the initial cost (or any value we wish to recover) by the annual cash-inflows and the resulting quotient is the payback period.

As per formula:

$$\text{Payback period} = \frac{\text{Original Investment}}{\text{Annual Cash-inflows}}$$

If the annual cash-inflows are uneven, then the calculation of payback period takes a cumulative form. We accumulate the annual cash-inflows till the recovery of investment and as soon as this amount is recovered, it is the expected number of payback period years. An asset or capital expenditure outlay that pays back itself early comparatively is to be preferred.

10.3.1 Merits of Payback period Method

The payback period method for choosing among alternative projects is very popular among corporate managers and according to Quirin even among Soviet planners who call it as the recoupment period method. In U.S.A and U.K. this method is widely accepted to discuss the profitability of foreign investment. Following are some of the advantages of pay back method:

1. It is easy to understand, compute and communicate to others. Its quick computation makes it a favorite among executive who prefer snap answers.

2. It gives importance to the speedy recovery of investment in capital assets. So it is useful technique in industries where technical developments are in full swing necessitating the replacements at an early date.

3. It is an adequate measure for firms with very profitable internal investment opportunities, whose sources of funds are limited by internal low availability and external high costs.

4. It is useful for approximating the value of risky investments whose rate of capital wastage (economic depreciation and obsolescence rate) is hard to predict. Since the payback period method weights only return heavily and ignores distant returns it contains a built-in hedge against the possibility of limited economic life.

5. When the payback period is set at a large "number of years and incomes streams are uniform each year, the payback criterion is a good approximation to the reciprocal of the internal rate of discount.

10.3.2 Demerits of Payback period Method

This method has its own limitations and disadvantages despite its simplicity and rapidity. Here are a number of demerits and disadvantages claimed by its opponents:-

1. It treats each asset individually in isolation with the other assets, while assets in practice cannot be treated in isolation.

2. The method is delicate and rigid. A slight change in the division of labor and cost of maintenance will affect the earnings and such may also affect the payback period.

3. It overplays the importance of liquidity as a goal of the capital expenditure decisions. While no firm can ignore its liquidity requirements but there are more direct and less costly means of safeguarding liquidity levels. The overlooking of profitability and over stressing the liquidity of funds can in no way be justified.

4. It ignores capital wastage and economic life by restricting consideration to the projects' gross earnings.

5. It ignores the earning beyond the payback period while in many cases these earnings are substantial. This is true particularly in respect of research and welfare projects.

6. It overlooks the cost of capital which is the main basis of sound investment decisions.

In perspective, the universality of the payback criterion as a reliable index of profitability is questionable. It violates the first principle of rational investor behavior-namely that large returns are preferred to smaller ones.

However, it can be applied in assessing the profitability of short and medium term capital expenditure projects.

10.4 ACCOUNTING RATE OF RETURN METHOD

It is also an important method. This method is known as Accounting Rate of Return Method / Financial Statement Method/ Unadjusted Rate of Return Method also. According to this method, capital projects are ranked in order of earnings. Projects which yield the highest earnings are selected and others are ruled out. The return on investment method can be expressed in several ways a follows:

(i) Average Rate of Return Method - Under this method we calculate the average annual profit and then we divide it by the total outlay of capital project. Thus, this method establishes the ratio between the average annual profits and total outlay of the projects.

As per formula,

$$\text{Rate of Return} = \frac{\text{Average Annual Profits}}{\text{Outlay of the Project}} \times 100$$

Thus, the average rate of return method considers whole earnings over the

entire economic life of an asset. Higher the percentage of return, the project will be acceptable.

(ii) Earnings per unit of Money Invested - As per this method, we find out the total net earnings and then divide it by the total investment. This gives us the average rate of return per unit of amount (i.e. per rupee) invested in the project.

As per formula:

$$\text{Earnings per unit of investment} = \frac{\text{Total Earnings}}{\text{Total Outlay of the Project}}$$

The higher the earnings per unit, the project deserves to be selected.

(iii) Return on Average Amount of Investment Method - Under this method, the percentage return on average amount of investment is calculated. To calculate the average investment the outlay of the projects is divided by two. As per formula:

$$\text{Average Investment} = \frac{\text{Unrecovered Capital at the beginning} + \text{Unrecouped capital at the end}}{2}$$

$$\text{Or} = \frac{\text{Initial investment} + \text{scrap value}}{2}$$

$$\text{Or} = \frac{\text{Investment}}{2}$$

$$\text{Rate of Return} = \frac{\text{Average Annual Net Income (Savings)}}{\text{Average Investment}} \times 100$$

Here:

Average Annual Net Income = Average Annual Cash- inflow - Depreciation

Thus, we see that the rate of return approach can be applied in various ways. But, however, in our opinion the third approach is more reasonable and consistent.

10.4.1 Merits of Accounting rate of return (ARR) method

This approach has the following merits of its own :

1. Like payback method it is also simple and easy to understand.
2. It takes into consideration the total earnings from the project during its entire economic life.
3. This approach gives due weight to the profitability of the project.
4. In investment with extremely long lives, the simple rate of return will be fairly close to the true rate of return. It is often used by financial analysis to measure current performance of a firm.

10.4.2 Demerits of Accounting rate of return (ARR) method

1. One apparent disadvantage of this approach is that its results by different methods are inconsistent.
2. It is simply an averaging technique which does not take into account the various impacts of external factors on over-all profits of the firm.
3. This method also ignores the time factor which is very crucial in business decision.

4. This method does not determine the fair rate of return on investments. It is left to the discretion of the management.

10.5 PROBLEM

1. Given the following four projects and their cash flows, calculate the discounted payback period with a 5% discount rate, 10% discount rate, and 20% discount rate. What do you notice about the payback period as the discount rate rises? Explain this relationship.

Projects	**A**	**B**	**C**	**D**
Cost	$10,000	$25,000	$45,000	$100,000
Cash Flow Year One	$4,000	$2,000	$10,000	$40,000
Cash Flow Year Two	$4,000	$8,000	$15,000	$30,000
Cash Flow Year Three	$4,000	$14,000	$20,000	$20,000
Cash Flow Year Four	$4,000	$20,000	$20,000	$10,000
Cash Flow year Five	$4,000	$26,000	$15,000	$10,000
Cash Flow Year Six	$4,000	$32,000	$10,000	$0

Solution at 5% discount rate

Project A: PV Cash flow year one -- $4,000 / 1.05 = $3,809.52

PV Cash flow year two -- $4,000 / 1.052 = $3,628.12

PV Cash flow year three -- $4,000 / 1.053 = $3,455.35

PV Cash flow year four -- $4,000 / 1.054 = $3,290.81

PV Cash flow year five -- $4,000 / 1.055 = $3,134.10

PV Cash flow year six -- $4,000 / 1.056 = $2,984.86

Discounted Payback Period: -$10,000 + $3,809.52 + $3,628.12 + $3,455.35 =

$ 892.99 and fully recovered

Discounted Payback Period is 3 years.

Project B: PV Cash flow year one -- $2,000 / 1.05 = $1,904.76

PV Cash flow year two -- $8,000 / 1.052 = $7,256.24

PV Cash flow year three -- $14,000 / 1.053 = $12,093.73

PV Cash flow year four -- $20,000 / 1.054 = $16,454.05

PV Cash flow year five -- $26,000 / 1.055 = $20,371.68

PV Cash flow year six -- $32,000 / 1.056 = $23,878.89

Discounted Payback Period: -$25,000 + $1,904.76 + $7,256.24 + $12,093.73 + $16,454.05 = $12,708.78 and fully recovered

Discounted Payback Period is 4 years.

Project C: PV Cash flow year one -- $10,000 / 1.05 = $9,523.81

PV Cash flow year two -- $15,000 / 1.052 = $13,605.44

PV Cash flow year three -- $20,000 / 1.053 = $17,276.75

PV Cash flow year four -- $20,000 / 1.054 = $16,454.05

PV Cash flow year five -- $15,000 / 1.055 = $11,752.89

PV Cash flow year six -- $10,000 / 1.056 = $7,462.15

Discounted Payback Period: -$45,000 + $9,523.81 + $13,605.44 + $17,276.75 +

$16,454.05 = $11,860.05 and fully recovered

Discounted Payback Period is 4 years.

Project D: PV Cash flow year one -- $40,000 / 1.05 = $38,095.24

PV Cash flow year two -- $35,000 / 1.052 = $31,746.03

PV Cash flow year three -- $20,000 / 1.053 = $17,276.75

PV Cash flow year four -- $10,000 / 1.054 = $8,227.02

PV Cash flow year five -- $10,000 / 1.055 = $7,835.26

PV Cash flow year six -- $0 / 1.056 = $0

Discounted Payback Period: -$100,000 + $38,095.24 + $31,746.03 + $17,276.75 + $8,227.02 + $7,835.26 = $3,180.30 and fully recovered.

Discounted Payback Period is 5 years.

Solution at 10% discount rate

Project A: PV Cash flow year one -- $4,000 / 1.10 = $3,636.36

PV Cash flow year two -- $4,000 / 1.102 = $3,307.79

PV Cash flow year three -- $4,000 / 1.103 = $3,005.26

PV Cash flow year four -- $4,000 / 1.104 = $2,732.05

PV Cash flow year five -- $4,000 / 1.105 = $2,483.69

PV Cash flow year six -- $4,000 / 1.106 = $2,257.90

Discounted Payback Period: -$10,000 + $3,636.36 + $3,307.79 + $3,005.26 + $2,732.05 = $2,681.46 and fully recovered

Discounted Payback Period is 4 years.

Project B: PV Cash flow year one -- $2,000 / 1.10 = $1,818.18

PV Cash flow year two -- $8,000 / 1.102 = $6,611.57

PV Cash flow year three -- $14,000 / 1.103 = $10,518.41

PV Cash flow year four -- $20,000 / 1.104 = $13,660.27

PV Cash flow year five -- $26,000 / 1.105 = $16,143.95

PV Cash flow year six -- $32,000 / 1.106 = $18,063.17

Discounted Payback Period: -$25,000 + $1,818.18 + $6,611.57 + $10,518.41 + $13,660.27 = $7,608.43 and fully recovered

Discounted Payback Period is 4 years.

Project C: PV Cash flow year one -- $10,000 / 1.10 = $9,090.91

PV Cash flow year two -- $15,000 / 1.102 = $12,396.69

PV Cash flow year three -- $20,000 / 1.103 = $15,026.30

PV Cash flow year four -- $20,000 / 1.104 = $13,660.27

PV Cash flow year five -- $15,000 / 1.105 = $9,313.82

PV Cash flow year six -- $10,000 / 1.106 = $5,644.74

Discounted Payback Period: -$45,000 + $9,090.91 + $12,396.69 + $15,026.20 + $13,660.27 = $5174.07 and fully recovered

Discounted Payback Period is 4 years.

Project D: PV Cash flow year one -- $40,000 / 1.10 = $36,363.64

PV Cash flow year two -- $35,000 / 1.102 = $28,925.62

PV Cash flow year three -- $20,000 / 1.103 = $15,026.30

PV Cash flow year four -- $10,000 / 1.104 = $6,830.13

PV Cash flow year five -- $10,000 / 1.105 = $6,209.21

PV Cash flow year six -- $0 / 1.106 = $0

Discounted Payback Period: -$100,000 + $36,363.64 + $28,925.62 + $15,026.30 + $6,830.13 + $6,209.21 = -$6,645.10 and never recovered.

Initial cash outflow is never recovered.

Solution at 20% discount rate

Project A: PV Cash flow year one -- $4,000 / 1.20 = $3,333.33

PV Cash flow year two -- $4,000 / 1.202 = $2,777.78

PV Cash flow year three -- $4,000 / 1.203 = $2,314.81

PV Cash flow year four -- $4,000 / 1.204 = $1,929.01

PV Cash flow year five -- $4,000 / 1.205 = $1,6075.10

PV Cash flow year six -- $4,000 / 1.206 = $1,339.59

Discounted Payback Period: -$10,000 + $3,333.33 + $2,777.78 + $2,314.81+

$1,929.01 = $354.93 and fully recovered

Discounted Payback Period is 4 years.

Project B: PV Cash flow year one -- $2,000 / 1.20 = $1,666.67

PV Cash flow year two -- $8,000 / 1.202 = $5,555.56

PV Cash flow year three -- $14,000 / 1.203 = $8,101.85

PV Cash flow year four -- $20,000 / 1.204 = $9,645.06

PV Cash flow year five -- $26,000 / 1.205 = $10,448.82

PV Cash flow year six -- $32,000 / 1.206 = $10,716.74

Discounted Payback Period: -$25,000 + $1,666.67 + $5,555.56 + $8,101.85 + $9,645.06 + $10,448.82 = $10,417.96 and fully recovered

Discounted Payback Period is 5 years.

Project C: PV Cash flow year one -- $10,000 / 1.20 = $8,333.33

PV Cash flow year two -- $15,000 / 1.202 = $10,416.67

PV Cash flow year three -- $20,000 / 1.203 = $11,574.07

PV Cash flow year four -- $20,000 / 1.204 = $9,645.06

PV Cash flow year five -- $15,000 / 1.205 = $6,028.16

PV Cash flow year six -- $10,000 / 1.206 = $3,348.97

Discounted Payback Period: -$45,000 + $8,333.33 + $10,416.67 + $11,574.07 +

$9,645.06 + $6,028.16 = $997.29 and fully recovered

Discounted Payback Period is 5 years.

Project D: PV Cash flow year one -- $40,000 / 1.20 = $33,333.33

PV Cash flow year two -- $35,000 / 1.202 = $24,305.56

PV Cash flow year three -- $20,000 / 1.203 = $11,574.07

PV Cash flow year four -- $10,000 / 1.204 = $4,822.53

PV Cash flow year five -- $10,000 / 1.205 = $4,018.78

PV Cash flow year six -- $0 / 1.206 = $0

Discounted Payback Period: -$100,000 + $33,333.33 + $24,305.56 + $11,574.07 + $4,822.53 + $4,018.78 = -$21,945.73 and initial cost is never

recovered.

Discounted Payback Period is infinity.

As the discount rate increases, the Discounted Payback Period also increases. The reason is that the future dollars are worth less in present value as the discount rate increases requiring more future dollars to recover the present value of the outlay.

2. **Discounted Payback Period -** Graham Incorporated uses discounted payback period for projects under $25,000 and has a cut off period of 4 years for these small value projects. Two projects, R and S are under consideration. The anticipated cash flows for these two projects are listed below. If Graham Incorporated uses an 8% discount rate on these projects are they accepted or rejected? If they use 12% discount rate? If they use a 16% discount rate? Why is it necessary to only look at the first four years of the projects' cash flows?

Cash Flows	***Project R***	***Project S***
Initial Cost	$24,000	$18,000
Cash flow year one	$6,000	$9,000
Cash flow year two	$8,000	$6,000
Cash flow year three	$10,000	$6,000
Cash flow year four	$12,000	$3,000

Solution at 8%

Project R: PV Cash flow year one -- $6,000 / 1.08 = $5,555.56

PV Cash flow year two -- $8,000 / 1.082 = $6,858.71

PV Cash flow year three -- $10,000 / 1.083 = $7,938.32

PV Cash flow year four -- $12,000 / 1.084 = $8,820.36

Discounted Payback Period: -$24,000 + $5,555.56 + $6,858.71 + $7,938.32 + $8,820.36 = $5,172.95 and initial cost is in first four years, project accepted.

Project S: PV Cash flow year one -- $9,000 / 1.08 = $8,333.33

PV Cash flow year two -- $6,000 / 1.082 = $5,144.03

PV Cash flow year three -- $6,000 / 1.083 = $4,762.99

PV Cash flow year four -- $3,000 / 1.084 = $2,205.09

Discounted Payback Period: -$18,000 + $8,333.33 + $5,144.03 + $4,762.99 + $2,205.09 = $2,445.44 and initial cost is in first four years, project accepted.

Solution at 12%

Project R: PV Cash flow year one -- $6,000 / 1.12 = $5,357.14

PV Cash flow year two -- $8,000 / 1.122 = $6,377.55

PV Cash flow year three -- $10,000 / 1.123 = $8,541.36

PV Cash flow year four -- $12,000 / 1.124 = $7,626.22

Discounted Payback Period: -$24,000 + $5,357.14 + $6,377.55 + $8,541.36 + $7,626.22 = $3,902.27 and initial cost is in first four years, project accepted.

Project S: PV Cash flow year one -- $9,000 / 1.12 = $8,035.71

PV Cash flow year two -- $6,000 / 1.122 = $4,783.16

PV Cash flow year three -- $6,000 / 1.123 = $4,270.68

PV Cash flow year four -- $3,000 / 1.124 = $1,906.55

Discounted Payback Period: -$18,000 + $8,035.71 + $4,783.16 + $4,270.68 + $1,906.55 = $996.10 and initial cost is in first four years, project accepted.

Solution at 16%

Project R: PV Cash flow year one -- $6,000 / 1.16 = $5,172.41

PV Cash flow year two -- $8,000 / 1.162 = $5,945.30

PV Cash flow year three -- $10,000 / 1.163 = $6,406.58

PV Cash flow year four -- $12,000 / 1.164 = $6,627.49

Discounted Payback Period: -$24,000 + $5,172.41 + $5,945.30 + $6,406.58 + $6,627.49 = $151.78 and initial cost is in first four years, project accepted.

Project S: PV Cash flow year one -- $9,000 / 1.16 = $7,758.62

PV Cash flow year two -- $6,000 / 1.162 = $4,458.98

PV Cash flow year three -- $6,000 / 1.163 = $3,843.95

PV Cash flow year four -- $3,000 / 1.164 = $1,656.87

Discounted Payback Period: -$18,000 + $7,758.62 + $4,458.98 + $3,843.95 + $1,656.87 = -$251.58 and initial cost is not recovered in first four years, project rejected.

Because Graham Incorporated is using a four year cut-off period, only the first four years of cash flow matter. If the first four years of anticipated cash flows are insufficient to cover the initial outlay of cash, the project is rejected regardless of the cash flows in years five and forward.

10.6 SUMMARY

Capital budgeting is a double-edged tool that analyses investment opportunities and cost of capital simultaneously while evaluating worth wholeness of a project. A wide range of criteria has been suggested to judge the worth wholeness of investment projects. Capital projects need to be thoroughly evaluated as to costs and benefits.

10.7 GLOSSARY

i. Payback period: A method of evaluating investment proposal which determines the time a project's cash inflows will take to repay the original investments of the project.

ii. Average rate of return: Also known as the accounting rate of return *(ARK)*, return on investment *(ROI)* or return on assets *(ROA)*, is obtained by dividing average annual post-tax profit by the average investment.

10.8 SELF ASSESSMENT QUESTIONS

1. What is meant by pay back method? State its advantages.

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2. How do you calculate the accounting rate of return? What are its limitations?

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10.9 LESSON END EXERCISES

1. What are the mutually exclusive projects? Explain the conditions when conflicting ranking would be given by the internal rate of return and net present value methods to such projects.

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10.10 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : III **Lesson No. 11**

FINANCIAL PLANNING

CONCEPTS AND STEPS IN FINANCIAL PLANNING

Structure

11.1 INTRODUCTION

Financial Planning is an ongoing process to help you make sensible decisions about money that can help you achieve your goals in life; it's not just about buying products like a pension or an ISA. It might involve putting appropriate wills in place to protect your family, thinking about how your family will manage without your income should you fall ill or die prematurely, spending money differently, but it involves thinking about all of these things together i.e. your 'plan'. The financial planning begins with determination of total capital requirement. For this the finance managers do the sales forecast and if the future prospects appear to be bright and expect increase in sale, then firm needs to increase its production capacity which means more requirement of long term funds. Higher level of production and increase in sales will require higher fixed as well as working capital. After estimating the requirement of funds the next step of financial planning is deciding how to raise this finance. Finance may be internally generated by the business or capital may have to be raised from external sources such as equity shares, preference shares, debentures, loans, etc. Financial planning is broader in scope as it does not end by raising estimated finance. It includes long term investment decision. In financial planning finance manager analyses various investments plans and selects the most appropriate. Finance managers make short term financial plan called budgets.

11.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of financial planning.

ii. Discuss the steps involved in financial planning.

iii. Highlight the importance of financial planning.

11.3 MEANING OF FINANCIAL PLANNING

Financial planning is an important part of financial management. It is the process

of determining the objectives; policies, procedures, programmes and budgets to deal with the financial activities of an enterprise. Financial planning reflects the needs of the business and is integrated with the overall business planning. Proper financial planning is necessary to enable the business enterprise to have right amount of capital to continue its operations efficiently. Financial planning involves taking certain important decisions so that funds are continuously available to the company and are used efficiently. These decisions highlight the scope of financial planning.

Thus, Financial Planning is the process of estimating the capital required and determining it's competition. It is the process of framing financial policies in relation to procurement, investment and administration of funds of an enterprise.

In the words of Gerestenburg financial planning includes:

(i) Determination of amount of finance needed by an enterprise to carry out its operations smoothly.

(ii) Determination of sources of funds, i.e., the pattern of securities to be issued.

(iii) Determination of suitable policies for proper utilization and administration of funds.

11.4 FEATURES OF SOUND FINANCIAL PLAN

Sound financial planning is necessary for the success of any business enterprise. It entails policies and procedures for proper co-ordination between the various functional areas of business. This involves proper allocation of resources among various departments and thus leads to minimization of waste of resources.

Some of the important characteristics of a sound financial planning are:

1. **Simplicity:** A sound financial structure should provide simple financial structure which could be managed easily and understandable even to a layman. "Simplicity' is an essential sine qua non which helps the promoters and the management in acquiring the required amount of capital. It is also easy to

work out a simple financial plan.

2. **Foresight:** Foresight must be used in planning the scope of operation in order that the needs for capital may be estimated as accurately as possible. A plan visualised without foresight spells disaster for the company, if it fails to meet the needs for both fixed and working capital. In simple words, the canon of foresight means that besides the needs of 'today' the requirements of 'tomorrow' should also be kept in view.

3. **Flexibility:** Financial readjustments become necessary often. The financial plan must be easily adaptable to them. There should be a degree of flexibility so that financial plan can be adopted with a minimum of delay to meet changing conditions in the future.

4. **Optimum use of funds:** Capital should not only be adequate but should also be productively employed. Financial plan should prevent wasteful use of capital, avoid idle capacity and ensure proper utilization of funds to build up earning capacity of the enterprise. It means that a reasonable percentage of the current assets must be kept in the form of liquid cash. Cash is required to finance purchases, to pay salaries, wages and other incidental expenses. The degree of liquidity to be maintained is determined by the size of the company, its age, its credit status, the nature of its operations, the rate of turnover etc.

5. **Anticipation of contingencies:** The planners should visualise contingencies or emergency situations in designing their financial plan. This may lead to keeping of some surplus capital for meeting the unforeseen events. It would be better if these contingencies are anticipated in advance.

6. **Economy:** Last but not the least, the financial open be made in such a manner that the cost of capital procurement should be minimum. The capital mobilised should not impose disproportionate burden on the company. The fixed dividend on preference shares, the interest on loans and debentures should be related to the earning capacity. The fixed interest payments should not reduce the profits of the company and hamper its sustained growth.

11.5 OBJECTIVES OF FINANCIAL PLANNING

Financial planning is done to achieve the following two objectives:

1. **To ensure availability of funds whenever these are required:** The main objective of financial planning is that sufficient fund should be available in the company for different purposes such as for purchase of long term assets, to meet day-to- day expenses, etc. It ensures timely availability of finance. Along with availability financial planning also tries to specify the sources of finance.

2. **To see that firm does not raise resources unnecessarily:** Excess funding is as bad as inadequate or shortage of funds. If there is surplus money, financial planning must invest it in the best possible manner as keeping financial resources idle is a great loss for an organization.

Financial Planning includes both short term as well as the long term planning. Long term planning focuses on capital expenditure plan whereas short term financial plans are called budgets. Budgets include detailed plan of action for a period of one year or less.

11.6 IMPORTANCE OF FINANCIAL PLANNING

Sound financial planning is essential for success of any business enterprise. Its need is felt because of the following reasons:

1. **It facilitates collection of optimum funds:** The financial planning estimates the precise requirement of funds which means to avoid wastage and over-capitalization situation.

2. **It helps in fixing the most appropriate capital structure:** Funds can be arranged from various sources and are used for long term, medium term and short term. Financial planning is necessary for tapping appropriate sources at appropriate time as long term funds are generally contributed by shareholders and debenture holders, medium term by financial institutions and short term by commercial banks.

3. **Helps in investing finance in right projects:** Financial plan suggests how the funds are to be allocated for various purposes by comparing various investment proposals.

4. **Helps in operational activities:** The success or failure of production and distribution function of business depends upon the financial decisions as right decision ensures smooth flow of finance and smooth operation of production and distribution.

5. **Base for financial control:** Financial planning acts as basis for checking the financial activities by comparing the actual revenue with estimated revenue and actual cost with estimated cost.

6. **Helps in proper utilization of finance:** Finance is the life blood of business. So financial planning is an integral part of the corporate planning of business. All business plans depend upon the soundness of financial planning.

7. **Helps in avoiding business shocks and surprises:** By anticipating the financial requirements financial planning helps to avoid shock or surprises which otherwise firms have to face in uncertain situations.

8. **Link between investment and financing decisions:** Financial planning helps in deciding debt/equity ratio and by deciding where to invest this fund. It creates a link between both the decisions.

9. **Helps in coordination:** It helps in coordinating various business functions such as production, sales function etc.

10. **It links present with future:** Financial planning relates present financial requirement with future requirement by anticipating the sales and growth plans of the company.

11.7 STEPS IN FINANCIAL PLANNING

1. **Determine Your Current Financial Situation:** In this first step of the financial planning process, you will determine your current financial situation with regard

to income, savings, living expenses, and debts. Preparing a list of current asset and debt balances and amounts spent for various items gives you a foundation for financial planning activities.

2. **Develop Financial Goals:** You should periodically analyze your financial values and goals. This involves identifying how you feel about money and why you feel that way. The purpose of this analysis is to differentiate your needs from your wants. Specific financial goals are vital to financial planning. Others can suggest financial goals for you; however, you must decide which goals to pursue. Your financial goals can range from spending all of your current income to developing an extensive savings and investment program for your future financial security.

3. **Identify Alternative Courses of Action:** Developing alternatives is crucial for making good decisions. Although many factors will influence the available alternatives, possible courses of action usually fall into these categories:

   * Continue the same course of action.

   * Expand the current situation.

   * Change the current situation.

   * Take a new course of action.

   Not all of these categories will apply to every decision situation; however, they do represent possible courses of action. Creativity in decision making is vital to effective choices. Considering all of the possible alternatives will help you make more effective and satisfying decisions.

4. **Evaluate Alternatives:** You need to evaluate possible courses of action, taking into consideration your life situation, personal values, and current economic conditions.

   * Consequences of Choices. Every decision closes off alternatives. For example, a decision to invest in stock may mean you cannot take a

vacation. A decision to go to school full time may mean you cannot work full time. Opportunity cost is what you give up by making a choice. This cost, commonly referred to as the trade-off of a decision, cannot always be measured in dollars.

* Decision making will be an ongoing part of your personal and financial situation. Thus, you will need to consider the lost opportunities that will result from your decisions.

5. **Evaluating Risk:** Uncertainty is a part of every decision. Selecting a college major and choosing a career field involve risk. What if you don't like working in this field or cannot obtain employment in it?

   * Other decisions involve a very low degree of risk, such as putting money in a savings account or purchasing items that cost only a few dollars. Your chances of losing something of great value are low in these situations.

   * In many financial decisions, identifying and evaluating risk is difficult. The best way to consider risk is to gather information based on your experience and the experiences of others and to use financial planning information sources.

   * Relevant information is required at each stage of the decision-making process. Changing personal, social, and economic conditions will require that you continually supplement and update your knowledge.

6. **Create and Implement a Financial Action Plan:** In this step of the financial planning process, you develop an action plan. This requires choosing ways to achieve your goals. As you achieve your immediate or short-term goals, the goals next in priority will come into focus. To implement your financial action plan, you may need assistance from others. For example, you may use the services of an insurance agent to purchase property insurance or the services of an investment broker to purchase stocks, bonds, or mutual funds.

7. **Reevaluate and Revise Your Plan:** Financial planning is a dynamic process

that does not end when you take a particular action. You need to regularly assess your financial decisions. Changing personal, social, and economic factors may require more frequent assessments. When life events affect your financial needs, this financial planning process will provide a vehicle for adapting to those changes. Regularly reviewing this decision-making process will help you make priority adjustments that will bring your financial goals and activities in line with your current life situation.

11.8 SUMMARY

For effective financial planning, it is essential to clearly lay down the financial objectives sought to be achieved. Sound financial planning is essential for the success of any business enterprise. It will provide policies and procedures to achieve close coordination between the various functional areas of business. This will lead to minimization of wastage of resources. Management can follow an integrated approach in the formulation of financial policies, procedures and programmes only if there is a sound financial plan.

11.9 GLOSSARY

Financial Planning: It is the process of determining the objectives; policies, procedures, programmes and budgets to deal with the financial activities of an enterprise.

11.10 SELF ASSESSMENT QUESTIONS

1. Explain in detail the concepts of financial planning.

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2. Discuss the relevance of financial planning.

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11.11 LESSON END EXERCISES

1. Discuss in detail the process involved in financial planning.

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11.12 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : III Lesson No. 12

DETERMINANTS OF CAPITAL STRUCTURE

Structure

12.1 INTRODUCTION

Any business or a company or firm requires capital to acquire assets. These assets could also be obtained with loans from financial institutions. The company operates those assets to earn economic returns by fulfilling customer needs. The capital structure decision centers on the allocation between debt and equity

in financing the business needs. An efficient mixture of capital reduces the price of capital. Lowering the cost of capital increases net economic returns which ultimately increase business value. An unleveled business uses only equity capital. A levered business uses a mix of equity and various forms of other liabilities. Apart from deciding on a target capital structure, a business must manage its capital structure. Imperfections or opportunities in capital markets, taxes and other practical factors influence the managing of capital structure. Imperfections may suggest a capital structure less than the theoretical optimal. Operation of assets and the business's financing of those assets jointly dictate its (business) value. Understanding why the current proportion of debt in the capital structure lowers the cost of capital and increases stock price holds attention.

12.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of capital structure.

ii. Discuss the determinants of capital structure.

12.3 MEANING OF CAPITAL STRUCTURE

Capital structure refers to the way a firm chooses to finance its assets and investments through some combination of equity, debt, or internal funds. It is in the best interests of a company to find the optimal ratio of debt to equity to reduce their risk of insolvency, continue to be successful and ultimately remain or to become profitable. The capital structure of a concern depends upon a large number of factors such as leverage or trading on equity, growth of the company, nature and size of business, the idea of retaining control, flexibility of capital structure, requirements of investors, cost of floatation of new securities, timing of issue, corporate tax rate and the legal requirements. It is not possible to rank hem because all such factors are of different important and the influence of individual factors of a firm changes over a period of time.

12.4 COMPOSITION OF CAPITAL STRUCTURE

The following are some important components of a company's capital structure and they will therefore need proper analysis, consideration, evaluation and scrutiny.

1. **Capital mix:** It consists of the equity and debt capital. The debt capital which can be raised from a variety of sources like banks and financial institutions, friends and relatives, etc forms an important item of the capital mix. The percentage of debt capital to the total capital mix will depend on the extent of dependence of debt affordable by the company. And this dependence will in turn depend on the risks undertaken by the company. The lenders will on their part consider these risks before lending their resources to the company. Issues like reasonableness of the debt terms, its mechanism and level and the policies, systems and procedures of the company will also be looked into. Ratios like debt ratio, debt service coverage ratio, etc will be handy and helpful in framing up the action plan on capital mix. Cash flow and funds flow statements will also help one in analyzing the capital mix for decision making.

2. **Terms and conditions:** A debt can be acquired with many choices on hand. The interest thereon can be either on fixed or floating rate basis. In the case of equity, the investors would prefer regular return by way of dividends. The company will have to decide its preference either for payment of interest or payment of dividends. In case debt capital can be raised at a lower rate of interest than the return on such borrowed capital, then it would be advisable to prefer debt capital to ensure maximum return for the owners. Again, the company's expectation of future interest rates will be yet another consideration. If the future interest rates are to remain neutral and if the company's earnings are at a growing pace, then it may be ideal to go in for debt capital. Therefore, the company's choice will depend on the management's assessment of future interest rates and its earnings potential. Of course, the management will take into account hedging instruments available at its disposal for managing such interest rate exposures. There are certain covenants in the loan documentation

like what the company can do and cannot do. And these may inhibit the freedom of the management of the company. They normally cover payment of dividends, disposal of fixed assets, raising of fresh debt capital, etc. How these covenants prohibit and limit the company's future strategies including competitive positioning.

3. **Selection of currency of the debt:** The currency of the debt capital is yet another factor to reckon with. Now a days, a well run company can easily have access to international debt markets through external commercial borrowings. Such recourse to international markets enables the company to globalize its operations. However, the most important consideration in the selection of the appropriate currency in which such international loans are granted and accepted is the exchange risk factor. Of course, the management can have access to foreign exchange hedging instruments like forward contracts, options, swaps, etc.

4. **Profile and priority:** The profile of the instruments used in the capital mix may differ from each other. Equity is the permanent capital. Under debt, there are short term instruments like commercial papers and long term instruments like term loans. In the same manner the priorities of the instruments also differ. Repayment of equity will have the least priority when the company is winding up - either on its own or by legal force.

   Instruments such as hire purchase or leasing are quite safe from the provider's (lender's) point of view. The assets backing such instruments provide the protection or safety net to the lenders. Therefore secured debts are relatively safe and have priority over unsecured debt in the event of company closure. Normally the profile of the assets and liabilities of the company do not match. The company is deemed to have obtained risk neutral position by matching the maturities (profile) of the various assets and liabilities. That is why it is always advised that short term liabilities should be used to acquire current assets and long term liabilities for fixed assets. However in practice, the companies do not exactly match the profile of sources and uses of funds.

12.5 DETERMINANTS OF CAPITAL STRUCTURE OF A FIRM

There are numerous factors, both qualitative and quantitative, including the subjective judgment, of financial managers which conjointly determine a firm's capital structure. We may now briefly discuss the key factors governing a firm's capital structure decisions.

The main factors are the following:

1. **Profitability:** The key word in capital structure is leverage. It can be defined as the employment of an asset or sources of funds for which the firm has to incur a fixed cost or pay a fixed sum (as the return per period).

   Operating v. Financial: Leverage is of two types 'operating' and 'financial'. The leverage associated with investment (or acquisition of assets) activities is referred to as operating leverage, while leverage associated with financing activities is called financial leverage. In general, the higher the level of (EBIT) and the lower the chance of downward fluctuation the larger the amount of debt that can be employed.

2. **Liquidity:** The analysis of the cash flow ability of the firm to service fixed charges is of considerable importance to carry out capital structure planning.

   The Coverage Ratio: In assessing the liquidity position of a firm in terms of its cash flow analysis, we use a ratio called the coverage ratio. It is the ratio of fixed charges to net cash inflows. It measures the coverage of fixed financial charges (interest plus repayment of principal, if any) to net cash inflows.

   In other words, it indicates the number of times the fixed financial requirements are covered by the net cash inflows. The higher the coverage ratio the larger the amount of debt (and other sources of funds carrying a fixed rate of interest) that a firm can use.

3. **Control:** Another consideration in planning the types of funds to use is the attitude of existing management towards control. Lenders have no direct voice in the management of a company. In most cases, the power to choose the

management team rests with the equity holders.

Accordingly, if the main objective of management is to maintain control, they may like to have a greater weight-age for debt and preference share in additional capital requirements. This is so because by obtaining funds through them the management sacrifices little or no control.

4. **Competitive Parity:** Another factor determining a company's optimal capital structure is the debt-equity ratios of other companies belonging to the same industry and facing a similar business risk. The rationale here is that the debt-equity ratios appropriate for other firms in a similar line of business should be appropriate for the company (under consideration) as well. The use of industry standards provides a benchmark.

   If a firm is deviating from its optimal capital structure, the market will give a red signal to the management that there is something wrong in the company's debt-equity mix. If the firm is out of line, it should identify the causes of such deviation and be satisfied that the reasons are genuine.

5. **The Nature of Industry:** The fifth determinant of a firm's optimal capital structure is the nature of the industry to which it belongs. The nature of industry largely determines the degree of financial leverage the firm can carry safely without any risk of bankruptcy. If an industry's sales are subject to periodic fluctuations, the firm should have a low degree of financial leverage. Such firms will always have high operating leverage.

6. **Timing of Issue:** The question of timing of issue is also of considerable importance in determining a company's capital structure. It is often possible to make substantial savings through proper timing of security issues. It is in the Tightness of things to make public offering at a time when the state of the economy as well as the capital market is ideal for providing the required funds.

   However, timing should not be the only consideration. "Timing analysis, for example, may suggest use of debt. But the company cannot go in for debt if its existing capital structure is already overloaded with debt.

7. **Characteristics of the Company:** The nature and characteristics of the company in terms of its size, capital structure and goodwill (credit-standing) also play a very important role in determining the share of old securities and equity in its capital structure.

In general, firms enjoying a higher credit-standing among investors and lenders in the capital market are in a better position to get funds from their choicest sources. If the credit-standing is poor, the firm has limited choice regarding acquisition of funds.

12.6 SUMMARY

Companies which do not plan their capital structure may prosper in the short run as they develop as a result of financial decisions taken by the manager without any proper policy and planning. In these companies, the financing decisions are reactive and they evolve in response to the operating decisions. But ultimately they face considerable difficulties in raising funds to finance their activities. With an unplanned capital structure, they will fail to economize use of funds. And this will impact the company's earning capacity considerably. Our finance manager should be in a position to plan a suitable or optimum capital structure for a company. As we have seen, an optimum structure is one that can maximize the value of the firm in the market. In practice the establishment of an optimum capital structure of a company is indeed a difficult one. It is different and varying among industries and among companies in the same industry.

12.7 GLOSSARY

Capital Structure: refers to the way a firm chooses to finance its assets and investments through some combination of equity, debt, or internal funds.

Capital mix: It consists of the equity and debt capital.

12.8 SELF ASSESSMENT QUESTIONS

1. Explain the concept of capital structure of a firm.

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12.9 LESSON END EXERCISES

1. Discuss in detail the determinants of capital structure of a firm.

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12.10 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : III **Lesson No. 13**

OVERCAPITALIZATION AND UNDERCAPITALIZATION

Structure

13.1 INTRODUCTION

Capitalization is one of the most important parts of financial decision, which is related to the total amount of capital employed in the business concern. Understanding the concept of capitalization leads to solve many problems in the field of financial management. Because there is a confusion among the

capital, capitalization and capital structure.

13.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of capitalization

ii. Discuss the concept of overcapitalization

iii. Discuss the concept of under capitalization.

13.3 MEANING OF CAPITALIZATION

Capitalization refers to the process of determining the quantum of funds that a firm needs to run its business. Capitalization is only the par value of share capital and debenture and it does not include reserve and surplus.

Capitalization can be defined by the various financial management experts. Some of the definitions are mentioned below:

According to **Guthman and Dougall**, "capitalization is the sum of the par value of stocks and bonds outstanding".

"Capitalization is the balance sheet value of stocks and bonds outstands".

- Bonneville and Dewey

According to **Arhur. S. Dewing**, "capitalization is the sum total of the par value of all shares".

13.4 TYPES OF CAPITALIZATION

Capitalization may be classified into the following three important types based on its nature:

1. **Over Capitalization**

2. **Under Capitalization**

1. **Over Capitalization:** Over capitalization refers to the company which possesses an excess of capital in relation to its activity level and requirements. In simple means, over capitalization is more capital than actually required and the funds are not properly used.

According to **Bonneville, Dewey and Kelly**, over capitalization means, "when a business is unable to earn fair rate on its outstanding securities".

Example

A company is earning a sum of Rs. 50,000 and the rate of return expected is 10%. This company will be said to be properly capitalized. Suppose the capital investment of the company is Rs. 60,000, it will be over capitalization to the extent of Rs. 1, 00,000. The new rate of earning would be:

$$50,000/60,000 \times 100 = 8.33\%$$

When the company has over capitalization, the rate of earnings will be reduced from 10% to 8.33%.

Causes of Over Capitalization

Over capitalization arise due to the following important causes:

1. Over issue of capital by the company.
2. Borrowing large amount of capital at a higher rate of interest.
3. Providing inadequate depreciation to the fixed assets.
4. Excessive payment for acquisition of goodwill.
5. High rate of taxation.
6. Under estimation of capitalization rate.

Effects of Over Capitalization

Over capitalization leads to the following important effects:

1. Reduce the rate of earning capacity of the shares.
2. Difficulties in obtaining necessary capital to the business concern.
3. It leads to fall in the market price of the shares.
4. It creates problems on re-organization.
5. It leads under or misutilization of available resources.

Remedies for Over Capitalization

Over capitalization can be reduced with the help of effective management and systematic design of the capital structure. The following are the major steps to reduce over capitalization.

1. Efficient management can reduce over capitalization.
2. Redemption of preference share capital which consists of high rate of dividend.
3. Reorganization of equity share capital.
4. Reduction of debt capital.

2. Under Capitalization

Under capitalization is the opposite concept of over capitalization and it will occur when the company's actual capitalization is lower than the capitalization as warranted by its earning capacity. Under capitalization is not the so called inadequate capital.

Under capitalization can be defined by **Gerstenberg,** "a corporation may be undercapitalized when the rate of profit is exceptionally high in the same industry".

Hoagland defined under capitalization as "an excess of true assets value over the aggregate of stocks and bonds outstanding".

Causes of Under Capitalization

Under capitalization arises due to the following important causes:

1. Under estimation of capital requirements.
2. Under estimation of initial and future earnings.
3. Maintaining high standards of efficiency.
4. Conservative dividend policy.
5. Desire of control and trading on equity.

Effects of Under Capitalization

Under Capitalization leads certain effects in the company and its shareholders.

1. It leads to manipulate the market value of shares.
2. It increases the marketability of the shares.
3. It may lead to more government control and higher taxation.
4. Consumers feel that they are exploited by the company.
5. It leads to high competition.

Remedies of Under Capitalization

Under Capitalization may be corrected by taking the following remedial measures:

1. Under capitalization can be compensated with the help of fresh issue of shares.
2. Increasing the par value of share may help to reduce under capitalization.
3. Under capitalization may be corrected by the issue of bonus shares to the existing shareholders.
4. Reducing the dividend per share by way of splitting up of shares.

13.5 SUMMARY

Capitalization is one of the most important parts of financial decision, which is related to the total amount of capital employed in the business concern. Over capitalization refers to the company which possesses an excess of capital in relation to its activity level and requirements. Under capitalization is the opposite concept of over capitalization and it will occur when the company's actual capitalization is lower than the capitalization as warranted by its earning capacity.

13.6 GLOSSARY

Capitalization: refers to the process of determining the quantum of funds that a firm needs to run its business.

Over capitalization: refers to the company which possesses an excess of capital in relation to its activity level and requirements.

Under capitalization: refers to an excess of true assets value over the aggregate of stocks and bonds outstanding.

13.7 SELF ASSESSMENT QUESTIONS

1. Explain the effects of under capitalization.

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2. Discuss the causes of over capitalization

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13.8 LESSON END EXERCISES

1. Discuss in detail the causes and effects of under capitalization of a firm?

2. Discuss overcapitalization. Also state its causes and effects for a firm.

13.9 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : III **Lesson No. 14**

WORKING CAPITAL

Structure

14.1 INTRODUCTION

Working capital management is also one of the important parts of the financial management. It is concerned with short-term finance of the business concern which is a closely related trade between profitability and liquidity. Efficient working capital management leads to improve the operating performance of the business concern and it helps to meet the short term liquidity. Hence, study of working capital management is not only an important part of financial management but also is overall management of the business concern. Working capital is described as the capital which is not fixed but the more common uses of the working capital is to consider it as the difference between the book value of current assets and current liabilities.

14.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of working capital.

ii. Get an insight into types of working capital.

iii. Discuss the various factors influencing working capital.

iv. Approaches to working capital.

14.3 CONCEPT OF WORKING CAPITAL

Capital of the concern may be divided into two major headings.

1. Fixed Capital

2. Working Capital

1. **Fixed Capital:** means that capital, which is used for long-term investment of the business concern. For example, purchase of permanent assets. Normally it consists of non-recurring in nature.

2. **Working Capital:** is another part of the capital which is needed for meeting

day to day requirement of the business concern. For example, payment to creditors, salary paid to workers, purchase of raw materials etc., normally it consists of recurring in nature. It can be easily converted into cash. Hence, it is also known as short-term capital.

Definitions

According to the definition of **Mead, Baker and Malott**, "Working Capital means Current Assets".

According to the definition of **J.S.Mill,** "The sum of the current asset is the working capital of a business".

According to the definition of **Weston and Brigham,** "Working Capital refers to a firm's investment in short-term assets, cash, short-term securities, accounts receivables and inventories".

According to the definition of **Bonneville,** "Any acquisition of funds which increases the current assets, increase working capital also for they are one and the same".

According to the definition of **Shubin,** "Working Capital is the amount of funds necessary to cover the cost of operating the enterprises".

According to the definition of **Genestenberg,** "Circulating capital means current assets of a company that are changed in the ordinary course of business from one form to another, for example, from cash to inventories, inventories to receivables, receivables to cash".

14.4 COMPONENT OF WORKING CAPITAL

Working capital constitutes various current assets and current liabilities. This can be illustrated by the following chart.

Current assets	Current Liabilities
1.Cash and bank balances. 2. Investment held in the form of money market instrument like, Treasury bills, commercial bill, and commercial paper and gilt edged securities. 3.Short-term fixed deposits maturing within a year. 4. Sundry Debtors. 5.Raw materials in godowns and in transit. 6.Stock of Work-in-progress. 7.Finished goods in godown and in transit. 8. Consumable stores. 9. Prepaid expenses	1.Creditors for raw materials consumables etc., 2.Advance received from customers. 3. Deferred installments payable within a year for repayment of term loans and debentures. 4. Interest, tax, dividend, salary and wages payable. 5.Public deposits payable within a year. 6.Unsecured loans payable within a year. 8. Statutory liabilities like ESI, PPF, Co-op dues, sales tax, Excise duty etc

Fig: Components of working capital

14.5 TYPES OF WORKING CAPITAL

Working Capital may be classified into two important types on the basis of concept and time.

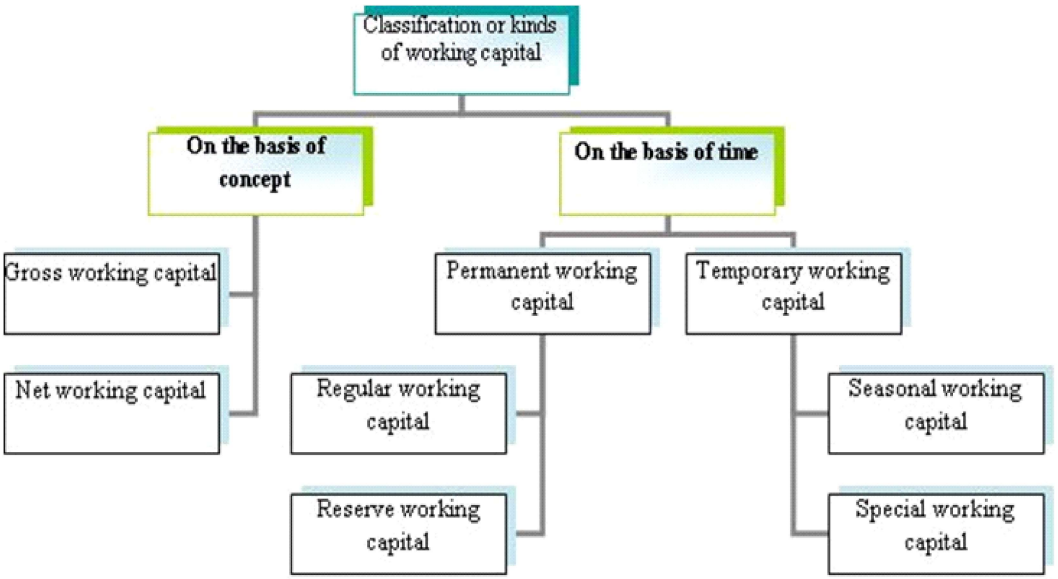

Fig. Types of Working Capital

Working capital can be classified or understood with the help of the following two important concepts.

On the basis of concept

1. Gross Working Capital: Gross Working Capital is the general concept which determines the working capital concept. Thus, the gross working capital is the capital invested in total current assets of the business concern. Gross Working Capital is simply called as the total current assets of the concern.

GWC = CA

2. **Net Working Capital:** Net Working Capital is the specific concept, which considers both current assets and current liability of the concern. Net Working Capital is the excess of current assets over the current liability of the concern during a particular period. If the current assets exceed the current liabilities it is said to be positive working capital; it is reverse, it is said to be Negative

working capital.

NWC = C A - CL

On the basis of time:

1. **Permanent or fixed working capital:** A part of the investment in current assets is as permanent as the investment in fixed assets. It covers the minimum amount necessary for maintaining the circulation of the current assets. Working capital invested in the circulation of the current assets and keeping it moving is permanently locked up.

   The permanent or fixed working capital is of two kinds:

   (a) Regular working capital, and

   (b) Reserve margin or cushion working capital.

(a) **Regular working capital:** It is the minimum amount of liquid capital required to keep up the circulation of the capital from cash to inventories to receivables and back again to cash. This would include a sufficient amount of cash to maintain reasonable quantities of raw materials for processing into finished goods to ensure quick delivery etc.

(b) **Reserve margin or cushion working capital:** It is extra capital required to meet unforeseen contingencies that may arise in future. These contingencies may crop up on account of rise in prices, business depression, strikes, lock-outs, fires and unexpected competition. It is needed over and above the regular working capital requirements.

2. **Variable working capital:** The variable working capital fluctuates with the volume of business. It may be sub-divided into:

   (a) Seasonal and

   (b) Special working capital.

(a) **Seasonal working capital:** It refers to liquid capital needed during the particular season. According to Gestenberg, "Beyond initial and regular working capital, most businesses will require at stated intervals a large amount of current assets to fill the demands of the seasonal busy periods".

During the season, the business enterprises have to push up purchase of raw materials (sugarcane by sugar mills, wool by woolen mills) and employ more people to convert them into finished goods and thus require large amount of working capital.

(b) **Special working capital:** It is that part of the variable capital which is needed for financing special operations such as the organization of special campaigns for increasing sales through advertisement or other sale promotion activities for conducting research experiments or execution of special orders of Government that will have to be financed by additional working capital.

The distinction between permanent and variable working capital is important in arranging the finance for an enterprise. Permanent working Capital should be raised in the same way as fixed capital is procured.

It is undesirable to bring regular working capital into business on a short-term basis because a creditor can seriously handicap the business by refusing to continue lending permanently. Its only recourse is to curtail operations unless another lender can be found. Variable capital requirement can, however be financed out of short term loans from the banks or inviting public deposits.

14.6 NEEDS OF WORKING CAPITAL

Working Capital is an essential part of the business concern. Every business concern must maintain certain amount of Working Capital for their day-to-day requirements and meet the short-term obligations.

Working Capital is needed for the following purposes.

1. **Purchase of raw materials and spares:** The basic part of manufacturing process is, raw materials. It should purchase frequently according to the needs

of the business concern. Hence, every business concern maintains certain amount as Working Capital to purchase raw materials, components, spares, etc.

2. **Payment of wages and salary:** The next part of Working Capital is payment of wages and salaries to labour and employees. Periodical payment facilities make employees perfect in their work. So a business concern maintains adequate the amount of working capital to make the payment of wages and salaries.

3. **Day-to-day expenses:** A business concern has to meet various expenditures regarding the operations at daily basis like fuel, power, office expenses, etc.

4. **Provide credit obligations:** A business concern responsible to provide credit facilities to the customer and meet the short-term obligation. So the concern must provide adequate Working Capital.

14.7 FACTORS DETERMINING WORKING CAPITAL REQUIREMENTS

Working Capital requirements depends upon various factors. There are no set of rules or formula to determine the Working Capital needs of the business concern. The following are the major factors which are determining the Working Capital requirements.

1. **Nature of Business:** The requirement of working capital depends on the nature of business. The nature of business is usually of two types: Manufacturing Business and Trading Business. In the case of manufacturing business it takes a lot of time in converting raw material into finished goods. Therefore, capital remains invested for a long time in raw material, semi-finished goods and the stocking of the finished goods.

   Consequently, more working capital is required. On the contrary, in case of trading business the goods are sold immediately after purchasing or sometimes the sale is affected even before the purchase itself. Therefore, very little working capital is required. Moreover, in case of service businesses, the working capital

is almost nil since there is nothing in stock.

2. **Scale of Operations:** There is a direct link between the working capital and the scale of operations. In other words, more working capital is required in case of big organizations while less working capital is needed in case of small organizations.

3. **Business Cycle:** The need for the working capital is affected by various stages of the business cycle. During the boom period, the demand of a product increases and sales also increase. Therefore, more working capital is needed. On the contrary, during the period of depression, the demand declines and it affects both the production and sales of goods. Therefore, in such a situation less working capital is required.

4. **Seasonal Factors:** Some goods are demanded throughout the year while others have seasonal demand. Goods which have uniform demand the whole year their production and sale are continuous. Consequently, such enterprises need little working capital. On the other hand, some goods have seasonal demand but the same are produced almost the whole year so that their supply is available readily when demanded. Such enterprises have to maintain large stocks of raw material and finished products and so they need large amount of working capital for this purpose. Woolen mills are a good example of it.

5. **Production Cycle:** Production cycle means the time involved in converting raw material into finished product. The longer this period, the more will be the time for which the capital remains blocked in raw material and semi-manufactured products. Thus, more working capital will be needed. On the contrary, where period of production cycle is little, less working capital will be needed.

6. **Credit Allowed:** Those enterprises which sell goods on cash payment basis need little working capital but those who provide credit facilities to the customers need more working capital.

7. **Credit Availed:** If raw material and other inputs are easily available on credit,

less working capital is needed. On the contrary, if these things are not available on credit then to make cash payment quickly large amount of working capital will be needed.

8. **Operating Efficiency:** Operating efficiency means efficiently completing the various business operations. Operating efficiency of every organization happens to be different. Some such examples are: (i) converting raw material into finished goods at the earliest, (ii) selling the finished goods quickly, and (iii) quickly getting payments from the debtors. A company which has a better operating efficiency has to invest less in stock and the debtors. Therefore, it requires less working capital, while the case is different in respect of companies with less operating efficiency.

9. **Availability of Raw Material:** Availability of raw material also influences the amount of working capital. If the enterprise makes use of such raw material which is available easily throughout the year, then less working capital will be required, because there will be no need to stock it in large quantity. On the contrary, if the enterprise makes use of such raw material which is available only in some particular months of the year whereas for continuous production it is needed all the year round, then large quantity of it will be stocked. Under the circumstances, more working capital will be required.

10. **Growth Prospects:** Growth means the development of the scale of business operations (production, sales, etc.). The organisations which have sufficient possibilities of growth require more working capital, while the case is different in respect of companies with less growth prospects.

11. **Level of Competition:** High level of competition increases the need for more working capital. In order to face competition, more stock is required for quick delivery and credit facility for a long period has to be made available.

12. **Inflation:** Inflation means rise in prices. In such a situation more capital is required than before in order to maintain the previous scale of production and sales. Therefore, with the increasing rate of inflation, there is a corresponding increase in the working capital.

14.8 SUMMARY

The basic objective of financial management is to maximize the shareholders' wealth. This is possible only when the company increases the profit. Higher profits are possible only by way of increasing sales. However sales does not convert into cash instantaneously. So some amount of funds is required to meet the time gap arrangement in order to sustain the sales activity, which is known as working capital. In case adequate working capital is not available for this period, the company will not be in a position to sustain stocks as it is not in a position to purchase raw materials, pay wages and other expenses required for manufacturing goods to be sold. Working capital, thus, is a life-blood of a business. As a matter of fact, any organization, whether profit oriented or otherwise, will not be able to carry on day-to-day activities without adequate working capital.

14.9 GLOSSARY

Gross current assets: It means the aggregate of all current assets including cash

Net current assets: It means the aggregate of all current assets less current liabilities. This is same as working capital.

Fixed working capital: is the amount that remains more or less permanently invested as working capital in business.

Fluctuating working capital: is the amount of working capital over and above the fixed amount of working capital. It may keep on fluctuating from period to period depending upon several factors.

Current liabilities: which are due for payment in the short run, say one year.

14.10 SELFASSESSMENT QUESTIONS

1. What is working capital? Define it.

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2. Discuss the concept of working capital?

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3. What are the types of working capital.

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4. Explain the needs of working capital.

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14.11 Lesson End Exercises

1. Discuss in detail the various factors influencing working capital decision?

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2. Explain the various approaches of financing working capital in detail.

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14.12 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : III **Lesson No. 15**

APPROACHES TO WORKING CAPITAL

Structure

15.1 INTRODUCTION

Working capital refers to excess of current assets over current liabilities. Management of working capital therefore is concerned with the problems that arise in attempting to manage current assets, current liabilities and inter relationship that exists between them. The basic goal of working capital management is to manage the current assets and current of a firm in such a way that satisfactory level of working capital is maintained i.e. it is neither inadequate nor excessive. This is so because both inadequate as well as excessive working capital positions are bad for any business. Inadequacy of working capital may lead the firm to insolvency and excessive working capital implies idle funds which earns no profits for the business. Working capital Management policies of a firm have a great effect on its profitability, liquidity and structural health of organization. In this context, evolving capital management is three dimensional in nature.

15.2 OBJECTIVES

After going through this chapter you will be able to:

i. Get an insight into various approaches to working capital.

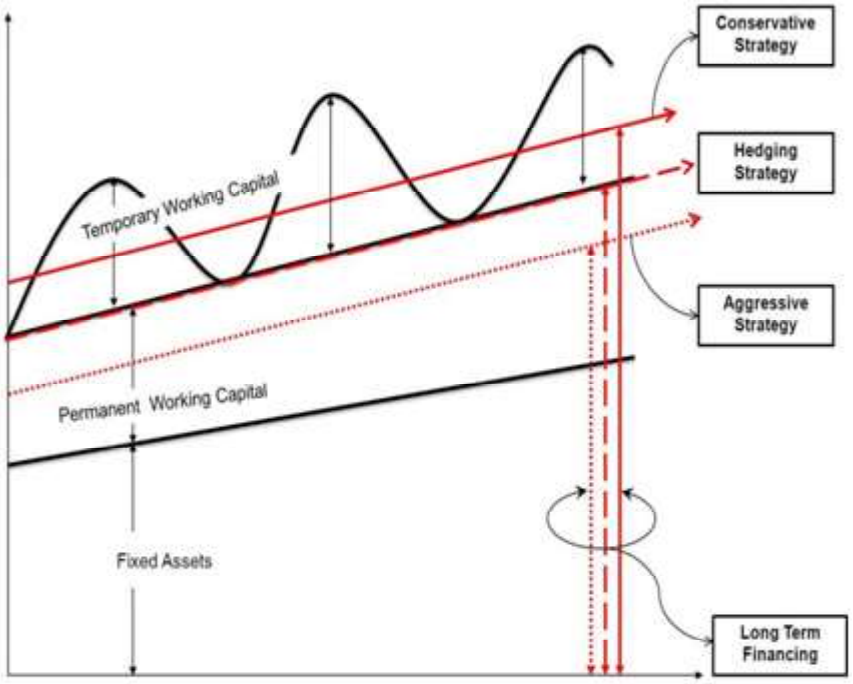
15.3 WORKING CAPITAL MANAGEMENT APPROACHES

There are broadly 3 working capital management strategies / approaches to choose the mix of long and short term funds for financing the net working capital of a firm.

1. Hedging or Matching Approach
2. Conservative Approach
3. Aggressive Approach

These three working capital approaches are best explained with the help of the following graph and equations. First, we need to understand the graph properly. The red horizontal lines represent the lines of 3 strategies. The simple

line is Conservative strategy, below that line with spaces, is hedging strategy and below that dotted line is an aggressive strategy. These lines indicate the extent of utilization of long-term sources. Higher the line, bigger is the investment through the long-term source of finance.



For equations, we will use the following abbreviations:

FA= Fixed Assets

PWC = Permanent Working Capital

TWC = Temporary Working Capital

15.4 HEDGING (OR MATURITY MATCHING) APPROACH.

The term 'hedging' refers to two off-selling transactions of a simultaneous but opposite nature which counterbalance effect of each other. With reference to financing mix, the term hedging refers to 'process of matching of maturities of

debt with maturities of financial needs'. According to this approach the maturity of sources of funds should match the nature of assets to be financed. This approach is also known as 'matching approach' which classifies the requirements of total working capital into permanent and temporary working capital. The hedging approach suggests that permanent working capital requirements should be financed with funds from long-term sources while temporary working capital requirements should be financed with short-term funds. This is a meticulous strategy of financing the working capital with moderate risk and profitability. In this strategy, each of the assets would be financed by a debt instrument of almost the same maturity. It means if the asset is maturing after 30 days, the payment of the debt which has financed it will also have its due date of payment after almost 30 days. Hedging strategy works on the cardinal principle of financing i.e. utilizing long-term sources for financing long-term assets i.e. fixed assets and a part of permanent working capital and temporary working capital are financed by short-term sources of finance. Here, funds are applied as below and can be clearly seen in the above diagram.

Long Term Funds will Finance >> FA + PWC

Short Term Funds will Finance >> TWC

Hedging approach classifies the requirements of total working capital into two categories:

i. Permanent or fixed working capital which is the minimum amount required to carry out the normal business operations. It does not vary over time.

ii. Temporary or seasonal working capital which is required to meet special exigencies. It fluctuates over time.

iii. The hedging approach suggests that the permanent working capital requirements should be financed with funds from long-term sources while the temporary or seasonal working capital requirements should be financed with short-term funds.

15.5 CONSERVATIVE APPROACH

As the name suggests, it is a conservative strategy of financing the working capital with low risk and low profitability. In this strategy, apart from the fixed assets and permanent current assets, a part of temporary working capital is also financed by long-term financing sources. It has the lowest liquidity risk at the cost of higher interest outlay. Here, funds are applied as below and can be clearly seen in the above diagram.

Long Term Funds will Finance>> FA + PWC + Part of TWC

Short Term Funds will Finance >> Remaining Part of TWC

This approach suggests that the entire estimated investments in current assets should be financed from long-term sources and short-term sources should be used only for emergency requirements. The distinct features of this approach are:

i. Liquidity is greater.

ii. Risk is minimized.

iii. The cost of financing is relatively more as interest has to be paid even on seasonal requirements for entire period.

15.6 TRADE OFF BETWEEN HEDGING AND CONSERVATIVE APPROACHES

The hedging approach implies low cost, high profit and high risk while the conservative approach leads to high cost, low profits and low risk. Both the approaches are the two extremes and neither of them serves the purpose of efficient working capital management. A tradeoff between the two will then be an acceptable approach. The level of trade off may differ from case to case depending upon the perception of risk by the persons involved in financial decision making. However, one way of determining the trade off is by finding the average of maximum and the minimum requirements of current assets. The average requirements so calculated may be financed out of long-term funds and excess over the average from short-term funds.

15.7 AGGRESSIVE APPROACH

The aggressive approach suggests that entire estimated requirements of current asset should be financed from short-term sources even a part of fixed assets investments be financed from short-term sources. This approach makes the finance - mix more risky, less costly and more profitable. This strategy is the most aggressive strategy out of all the three. The complete focus of the strategy is in profitability. It is a high-risk high profitability strategy. In this strategy, the dearer funds i.e. long term funds are utilized only to finance fixed assets and a part of the permanent working capital. Complete temporary working capital and a part of permanent working capital also are financed by the short-term funds. It saves the interest cost at the cost of high risk. Here, funds are applied as below and can be clearly seen in the above diagram.

Long Term Funds will Finance >> FA + Part of PWC

Short Term Funds will Finance >> Remaining Part of PWC + TWC

15.8 HEDGING VS CONSERVATIVE APPROACH

Hedging Approach	Conservative Approach
1. The cost of financing is reduced.	1. The cost of financing is higher
2. The investment in net working capital is nil.	2. Large Investment is blocked in temporary working capital.
3. Frequent efforts are required to arrange funds.	3. The firm does not face frequent financing problems.
4. The risk is increased as firm is vulnerable to sudden shocks.	4. It is less risky and firm is able to absorb shocks.

In short, These three strategies are plotted on a number line with one side as 'risk' and the other side as 'profitability'. Conservative strategy is on the side of lower profitability and lower risk. On the contrary, an aggressive strategy is on the side of higher profitability and higher risk. The hedging strategy is somewhere between the two. Executing the hedging strategy in its true sense is not practically possible. The management attitude towards risk and other factors would decide their place on this number line.

15.9 SUMMARY

The Hedging Approach says that permanent requirement should be financed by long term sources while the temporary requirement should be financed by short-term sources of finance. The Conservative approach on the other hand says that the working capital requirement be financed from long-term sources. The Aggressive approach says that even a part of permanent requirement may be financed out of short-term funds.

15.10 GLOSSARY

i. Hedging Approach: It says that permanent requirement should be financed by long term sources while the temporary requirement should be financed by short-term sources of finance.

ii. Conservative approach: It states that the working capital requirement be financed from long-term sources.

iii. Aggressive approach: It states that even a part of permanent requirement may be financed out of short-term funds.

15.11 SELF ASSESSMENT QUESTIONS

1. Write short notes on:

   i. Hedging Approach

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ii. Conservative Approach

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15.12 LESSON END EXERCISES

1. Explain in detail the various approaches to working capital.

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15.13 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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FINANCIAL DECISIONS

SOURCES OF FINANCE

Structure

16.1 INTRODUCTION

Finance is the lifeblood of business concern, because it is interlinked with all activities performed by the business concern. In a human body, if blood circulation is not proper, body function will stop. Similarly, if the finance not being properly arranged, the business system will stop. Arrangement of the

required finance to each department of business concern is highly a complex one and it needs careful decision. Quantum of finance may be depending upon the nature and situation of the business concern.

16.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of sources of finance.

ii. Know about the various sources of finance.

16.3 SOURCES OF FINANCE

Sources of finance may be classified under various categories according to the following important heads:

1. **Based on the Period:** Sources of Finance may be classified under various categories based on the period.

   i. **Long-term sources:** Finance may be mobilized by long-term or short-term. When the finance mobilized with large amount and the repayable over the period will be more than five years, it may be considered as long-term sources. Share capital,issue of debenture, long-term loans from financial institutions and commercial banks come under this kind of source of finance. Long-term source of finance needs to meet the capital expenditure of the firms such as purchase of fixed assets,land and buildings, etc.

   Long-term sources of finance include:

   × Equity Shares

   × Preference Shares

   × Debenture

   × Long-term Loans

- × Fixed Deposits

ii. **Short-term sources:** Apart from the long-term source of finance, firms can generate finance with the help of short-term sources like loans and advances from commercial banks, moneylenders, etc. Short-term source of finance needs to meet the operational expenditure of the business concern.

Short-term source of finance include:

- × Bank Credit
- × Customer Advances
- × Trade Credit
- × Factoring
- × Public Deposits
- × Money Market Instruments

2. **Based on Ownership:** Sources of Finance may be classified under various categories based on the period:

i. **An ownership source of finance include**

- × Shares capital, earnings
- × Retained earnings
- × Surplus and Profits

ii. **Borrowed capital include**

- × Debenture
- × Bonds
- × Public deposits

× Loans from Bank and Financial Institutions.

3. **Based on Sources of Generation:** Sources of Finance may be classified into various categories based on the period.

i. Internal source of finance includes

× Retained earnings

× Depreciation funds

× Surplus

ii. External sources of finance may be include

× Share capital

× Debenture

× Public deposits

× Loans from Banks and Financial institutions

4. **Based in Mode of Finance**

i. Security finance may be include

× Shares capital

× Debenture

ii. Retained earnings may include

× Retained earnings

× Depreciation funds

iii. Loan finance may include

× Long-term loans from Financial Institutions

- Short-term loans from Commercial banks.

The above classifications are based on the nature and how the finance is mobilized from various sources. But the above sources of finance can be divided into three major classifications:

- Security Finance
- Internal Finance
- Loans Finance

16.4 FACTORS TO BE CONSIDERED WHILE CHOSING A SOURCE OF FINANCE

There are a number of ways to finance a business and a range of lenders and investors to choose from when a business owner is making financing decisions. Financing can come in the form of debt or investment, and the terms of the financing can vary significantly between the two. Important factors to consider when choosing methods of financing a business include the repayment terms, the total cost of capital and the requirements of the lender or investor. Repayment Terms

Consider how long the financing arrangement is structured to last. Longer loans can build up a significant amount of interest over time, but loans with shorter terms can require larger periodic payments. Consider the amount of the periodic payment and how often you are required to pay. Also take into account the allocation of each payment to principal and interest; look for loans with a higher allocation to principal to minimize the total long-term cost.

1. **Interest and Fee Structures:** Add up all of the costs associated with each financing method before making a decision. Common costs for loans include interest rates, origination fees and brokers' fees. Financing through investment can carry much different costs. Money from venture capitalists, for example, may not require repayment for years, at which time the investor may expect

to be repaid at a steep premium all at once. Financing through stock offerings can lead to a change in management and a shifting in strategic focus.

2. **Financing Requirements:** Consider the personal requirements each lender and investor places on applicants. Pursue financing from sources whose requirements you meet in full. Common financing requirements include credit score requirements and specific financial ratio tests, such as the debt-to-equity or interest coverage ratios. Discuss the requirements placed on applicants with each lender before preparing a loan application package.

3. **Additional Requirements:** If you are thinking about financing your business through investment, look into all the ramifications of your decision before moving ahead. Venture capitalists often require an ownership stake in the company, which they expect you to buy back at a premium after a period of rapid growth. Before you buy the ownership stake back, however, the investor may assert a great deal of influence on managerial and strategic decisions. Selling shares of stock to finance a business has its own set of vital considerations, including the possibility of losing managerial control in the future and falling victim to a takeover from a larger company.

16.5 SUMMARY

A business can raise funds from various sources. Each of the source has unique characteristics, which must be properly understood so that the best available sources of raising funds can be identified. There is not a single best source of funds for all organizations.

16.6 GLOSSARY

Retained earnings: is a permanent source of funds available to an organization and does not involve any explicit cost in the form of interest, dividend or floatation cost.

Leasing: It enables the lessee to acquire the asset with a lower investment from the lessor.

16.7 SELF ASSESSMENT QUESTIONS

1. What are the various factors to be considered while choosing a source of finance?

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16.8 LESSON END EXERCISES

1. Explain in detail the various sources of finance.

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16.9 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : IV **Lesson No. 17**

BANK FINANCE AND NON- BANKING FINANCE COMPANIES

Structure

17.1 INTRODUCTION

Non-bank financial companies (NBFCs) are financial institutions that provide banking services without meeting the legal definition of a bank, i.e. one that does not hold a banking license. NBFCs include a loan company, an investment company, asset finance company (i.e. a company conducting the business of equipment leasing or hire purchase finance) and Residuary Non-Banking Companies. NBFCs operate almost like banks, except for running accounts, where money can be easily withdrawn by writing cheques or using a debit card. NBFCs are doing functions akin to that of banks; however there are a few differences:An NBFC cannot accept demand deposits. An NBFC is not a part of the payment and settlement system and as such an NBFC cannot issue cheques drawn on it; and deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available for NBFC depositors unlike in case of bank.

17.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of bank finance companies.

ii. Discuss about Non-banking finance companies (NBFCs).

iii. Get an insight into the functioning of NBFCs.

17.3 CONCEPT OF BANK FINANCE

Bank finance definition gives us information about the definition of banking and the definition of finance. Banking refers to that process in which a bank which is a commercial or government institution offers financial services that include lending money, collection of deposits, issue of currencies and debit cards, and transaction processing etc. The majority of banks works as profit-seeking enterprises, however, a few government banks work as non-profit

organizations. Central banks function as government agencies and they regulate the interest rates and circulation of money in the total economy.

17.4 ROLE OF BANK FINANCE IN A DEVELOPING COUNTRY

Some of the major important role of bank finance companies in a developing country is as follows:

1. **Mobilizing Saving for Capital Formation:** The commercial banks help in mobilizing savings through network of branch banking. People in developing countries have low incomes but the banks induce them to save by introducing variety of deposit schemes to suit the needs of individual depositors. They also mobilize idle savings of the few rich. By mobilizing savings, the banks channelize them into productive investments. Thus they help in the capital formation of a developing country.

2. **Financing Industry:** The commercial banks finance the industrial sector in a number of ways. They provide short-term, medium-term and long-term loans to industry. In India they provide short-term loans. Income of the Latin American countries like Guatemala, they advance medium-term loans for one to three years. But in Korea, the commercial banks also advance long-term loans to industry.

   In India, the commercial banks undertake short-term and medium-term financing of small scale industries, and also provide hire- purchase finance. Besides, they underwrite the shares and debentures of large scale industries. Thus they not only provide finance for industry but also help in developing the capital market which is undeveloped in such countries.

3. **Financing Trade:** The commercial banks help in financing both internal and external trade. The banks provide loans to retailers and wholesalers to stock goods in which they deal. They also help in the movement of goods from one place to another by providing all types of facilities such as discounting and accepting bills of exchange, providing overdraft facilities, issuing drafts, etc. Moreover, they finance both exports and imports of developing countries by

providing foreign exchange facilities to importers and exporters of goods.

4. **Financing Agriculture:** The commercial banks help the large agricultural sector in developing countries in a number of ways. They provide loans to traders in agricultural commodities. They open a network of branches in rural areas to provide agricultural credit. They provide finance directly to agriculturists for the marketing of their produce, for the modernization and mechanization of their farms, for providing irrigation facilities, for developing land, etc.

   They also provide financial assistance for animal husbandry, dairy farming, sheep breeding, poultry farming, pisciculture and horticulture. The small and marginal farmers and landless agricultural workers, artisans and petty shopkeepers in rural areas are provided financial assistance through the regional rural banks in India. These regional rural banks operate under a commercial bank. Thus the commercial banks meet the credit requirements of all types of rural people.

5. **Financing Consumer Activities:** People in underdeveloped countries being poor and having low incomes do not possess sufficient financial resources to buy durable consumer goods. The commercial banks advance loans to consumers for the purchase of such items as houses, scooters, fans, refrigerators, etc. In this way, they also help in raising the standard of living of the people in developing countries by providing loans for consumptive activities.

6. **Financing Employment Generating Activities:** The commercial banks finance employment generating activities in developing countries. They provide loans for the education of young person's studying in engineering, medical and other vocational institutes of higher learning. They advance loans to young entrepreneurs, medical and engineering graduates, and other technically trained persons in establishing their own business. Such loan facilities are being provided by a number of commercial banks in India. Thus the banks not only help inhuman capital formation but also in increasing entrepreneurial activities in developing countries.

7. **Help in Monetary Policy:** The commercial banks help the economic development of a country by faithfully following the monetary policy of the central bank. In fact, the central bank depends upon the commercial banks for the success of its policy of monetary management in keeping with requirements of a developing economy.

Thus the commercial banks contribute much to the growth of a developing economy by granting loans to agriculture, trade and industry, by helping in physical and human capital formation and by following the monetary policy of the country.

17.5 IMPORTANCE OF BANK FINANCE COMPANIES

On the basis of these Important Functions of Banks, we may easily describe the importance of banks in today's global life.

1. **Collections of Savings and Advancing Loans:** Acceptance of deposit and advancing the loans is the basic function of commercial banks. On this function, all other functions depend accordingly. Bank operates different types of accounts for their customers.

2. **Money Transfer:** Banks have facilitated the making of payments from one place or persons to another by means of cheques, bill of exchange and drafts, instead of cash. Payment though cheques, draft is more safe and convenient, especially in case of huge payments, this facility is a great help for traders and businessmen. It really enhances the importance of banks for business community.

3. **Encourages Savings:** Banks perform an invaluable service by encouraging savings among the people. They induce them to save for profitable investment for themselves and for national interest. These savings help in capital formation.

4. **Transfer Savings into Investment:** Bank transfer the savings collected from the people into investment and thus increase the amount of effective capital, which helps the process of economic growth.

5. **Overdraft Facilities:** The banks allow the overdraft facilities to their trusted customers and thus help them in overcoming of temporary financial difficulties.

6. **Discounting Bill of Exchange:** Importance of banks can be seen through the facility of discounting bill of exchange. Banks discount their bill of exchange of consumers and help them in the financial difficulties. By discounting bill of exchange, they able to get the desire amount for investment they want.

7. **Financing Internal & External Trade:** Banks help merchants and traders in financing internal and external trade by discounting foreign bill of exchange, issuing of letter of credit and other guarantees for their customers.

8. **Act as an Agent:** The bank act as a agent and help their customers in the purchase and sales of shares, provision of lockers payment of monthly and dividends on stock.

9. **Issue of Traveler's Cheques:** For the convenience and security of money for travelers and tourists, bank provides the facility of traveler's cheques. These cheques enable the travelers and tourists to meet their expenses during their journey, as these are accepted by issuing bankers, restaurants, and other businessmen both at home and abroad. No doubt, this is also one of the great functions of banks and shows the importance of banks for us in more precise ways.

10. **General Utility Services:** Existence of commercial banks is essential for contribution to general prosperity. Banks are the main factors in raising the level of economic development of the world. In addition to above-cited advantages, banks also provide many services of general utilities to the customers and the general public.

17.6 MEANING OF NON-BANKING FINANCIAL COMPANY

A non-bank financial company is a financial company that does not have a full banking license or is not supervised by a national or international banking regulatory agency. NBFCs facilitate bank-related financial services, such as

investment, risk pooling, contractual savings, and market brokering. Examples of these include insurance firms, pawn shops, cashier's check issuers, check cashing locations, payday lending, currency exchanges, and microloan organizations.

17.7 TYPES OF NBFCS

The Non-Banking Finance Companies operating in India fall in the following broad categories.

1. **Leasing Company:** is a company which carries on as its principal business, the business of leasing of equipments or the financing of such activity. Apart from their Net Owned Funds (NOF), the leasing companies raise funds in the form of deposits from other companies, banks and the financial institutions. Public deposits and inter-corporate deposits account for 74 percent of their total funds. Leasing is a form of rental system. A lease is a contractual arrangement whereby the lessor grants the lessee the right to use an asset in return for periodical lease-rent payments.

   There are two types of leases (i) operating lease, and (ii) financial or capital lease. The operating lease is a short-term lease which can be cancelled. Financial lease is a non-concealable contractual commitment.

2. **Hire Purchase Finance Company:** is a company which carries on as its principle business, hire purchase transactions or the financing of such transactions. The sources of hire-purchase finance are

   i. Hire purchase Finance Companies.

   ii. Retails and Wholesale Traders.

   iii. Bank and Financial Institutions.

   Hire-purchase finance or credit is a system under which term loans for purchase of goods, producer goods or consumer goods and services are advanced which have to be liquidated under an installment plan. The period of credit is

generally one to three years. The hire purchase credits available for a wide range of products and services. Hire-purchase finance companies are the public or private limited companies or partnership firms engaged in giving credit for acquiring durable goods.

3. **Housing Finance Company:** is a company which carries on as its principle business, the financing of the acquisition or construction of houses including the acquisition or development of plots of lands for construction of houses. These companies are supervised by National Housing Bank, which refinances housing loans by scheduled commercial banks, co-operative banks, housing finance companies and the apex co-operative housing finance societies.

4. **Investment Company:** means any company which carries on as its principle business the acquisition of securities. These types of companies are investment holding companies formed by business houses. As such they provide finance mainly to companies associated with these business houses.

   As compare to open-end investment companies or mutual funds/units trust, these investment companies are close end companies having a fixed amount of share capital. Almost all prominent industrial groups have their own investment companies.

5. **Loan Company:** is a company which carries on as its principle business, the providing of finance whether by making loans or advances or otherwise for any activity other than its own. (This category excludes No.1 to No. 3 above categories).These types of companies are generally small partnership concerns which obtain funds in the form of deposits from the public and give loans to wholesale and retail traders, small scale industries and self-employed persons. These companies collect fixed deposits from the public by offering higher rates of interest and give loans to others at relatively higher rates of interest.

6. **Mutual Benefit Finance Company (i.e. Nidhi Company):** means any company which is notified by the Central Government under section 620A of the Companies Act, 1956. The main sources of funds for nidhis are share

capital, deposits from their members and deposits from the public. Nidhis give, loans to their members-for several purposes like marriages, redemption of old debts, construction and etc. The nidhis normally follow the easy procedures and offer saving schemes and make credits available to those whose credit needs remain unmet by his commercial banks.

7. **Chit Fund Company:** is a company which collects subscriptions from specified number of subscribers periodically and in turn distributes the same as prizes amongst them. Any other form of chit or kuri is also included in this category. The chit fund companies operations are governed by the Chit Fund Act, 1982, which is administered by State Governments. Their deposit taking activities are regulated by the Reserve Bank. The chit fund companies enter into an agreement with the subscribers that everyone of them shall subscribe a certain amount in installments over a definite period and that every one of such subscriber shall in his turn, as determined by lot or by auction or by tender, be entitled to a prize amount.

8. **Residuary Non-Banking Company:** is a company which receives deposits under any scheme by way of subscriptions/contributions and does not fall in any of the above categories.

There are few unhealthy features of the operations of these companies;

(i) Negative NOF (Net Owned Fund).

(ii) Understatement of their deposit liability.

(iii) Forfeiture of deposits.

(iv) Levy of service charges on the depositors.

(v) Payment of high rates of commission, etc.

To remove these features, RBI has extended prudential norms to these companies, introduced compulsory registration requirement, specified minimum rates of interest payable on their deposits under different schemes. Under the

RBI (Amendment) Act, 1997, the RBI directly inspects and monitoring the activities of these companies.

17.8 REGISTRATION OF NBFCs

The Reserve Bank of India (Amendment) Act, 1997 provides for compulsory registration with the Reserve Bank of all NBFCs, irrespective of their holding of public deposits, for commencing and carrying on business, minimum entry point norms, maintenance of a portion of deposits in liquid assets, creation of Reserve Fund and transfer of 20 percent of profit after tax annually to the fund.

The act provides for an entry point norm of Rs. 25 lakhs as the minimum Net Owned Fund (NOF). Subsequently, for new NBFC's seeking registration with the Reserve Bank to commence business on or after April 21, 1999, the requirement of minimum level of NOF was revised upwards to Rs. 2 crores.

No NBFC can commence or carry on business of a financial institution including acceptance of public deposit without obtaining a Certificate of Registration (COR) from the Reserve Bank.

17.9 RBI DIRECTIONS TO NBFCS

Reserve Bank of India announced a set of measures to protect the interest of depositors and provide more effective supervision over NBFCs on January 2, 1998. The regulations stipulate on the NBFCs, an upper limit both on public deposits to be accepted, on the rate of interest to deposits, in order to restrain then from offering incentives and mobilize excessive deposits.

The disclosure requirements have been strengthened and responsibilities cast on the Board of Directors and auditors of the companies to ensure proper conformation deposit regulations and prudential norms prescribed by RBI.

The salient features of the Director are stated hereunder:

Categorization of Companies:

For the purpose of the new regulations, NBFCs have been divided into three broad categories an indicated below:

1. NBFCs accepting public deposits.

2. NBFCs not accepting public deposits are engaged in loan, investment, hire purchase finance and equipment leasing activities.

3. NBFCs not accepting public deposits and has acquired shares/securities in their own group/ holding/subsidiary companies of not less than 90 percent of their total assets and are not trading in these shares/securities.

While NBFCs accepting public deposits will be subjected to all the provisions of the Directors, those which do not accept public deposits will be supervised in a limited manner.

17.10 SUMMARY

Banking plays an important role in the financial life of a business, and the importance of banks can be seen from the fact that they are considered as to be the life-blood of modern economy. Although no wealth is created by Bank, but their essential activities facilitates the process of production, exchange and distribution of wealth. In this way they become the effective partners in the process of economic development and growth The Non-Banking Financial Companies (NBFCs) which are heterogeneous in nature in terms of activity and size are important financial intermediaries and an integral part of the Indian Financial system.

17.11 GLOSSARY

NBFCs: NBFIs facilitate bank-related financial services, such as investment, risk pooling, contractual savings, and market brokering

17.12 SELF ASSESSMENT QUESTIONS

1. What do you understand by the term bank finance companies?

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2. Compare and contrast the roles played by bank and non-banking finance companies.

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17.13 LESSON END EXERCISES

1. Explain the various role of banking companies in a developing country.

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2. Discuss in detail the framework of Non-banking financial companies.

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17.14 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : IV **Lesson No. 18**

EQUITY SHARES AND PREFERENCE SHARES

Structure

18.1 INTRODUCTION

Shares refer to the units into which the total share capital of a company is divided. Thus, a share is a fractional part of the share capital and forms the basis of ownership interest in a company. The persons who contribute money through shares are called shareholders. As per Section 86 of The Companies Act, a company can issue two types of shares equity shares (also called ordinary shares) and preference shares.

18.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of equity shares.

ii. Discuss about preference shares in detail.

iii. Compare equity shares and preference shares.

18.3 MEANING OF EQUITY SHARES

Equity Shares also known as ordinary shares, which means, other than preference shares.

Equity shareholders are the real owners of the company. They have a control over the management of the company. Equity shareholders are eligible to get dividend if the company earns profit. Equity share capital cannot be redeemed during the lifetime of the company. The liability of the equity shareholders is the value of unpaid value of shares.

18.4 FEATURES OF EQUITY SHARES

Equity shares consist of the following important features:

1. **Maturity of the shares:** Equity shares have permanent nature of capital, which has no maturity period. It cannot be redeemed during the lifetime of the company.

2. **Residual claim on income:** Equity shareholders have the right to get income left after paying fixed rate of dividend to preference shareholder. The earnings or the income available to the shareholders is equal to the profit after tax minus preference dividend.

3. **Residual claims on assets:** If the company wound up, the ordinary or equity shareholders have the right to get the claims on assets. These rights are only available to the equity shareholders.

4. **Right to control:** Equity shareholders are the real owners of the company. Hence, they have power to control the management of the company and they have power to take any decision regarding the business operation.

5. **Voting rights:** Equity shareholders have voting rights in the meeting of the company with the help of voting right power; they can change or remove any decision of the business concern. Equity shareholders only have voting rights in the company meeting and also they can nominate proxy to participate and vote in the meeting instead of the shareholder.

6. **Pre-emptive right:** Equity shareholder pre-emptive rights. The pre-emptive right is the legal right of the existing shareholders. It is attested by the company in the first opportunity to purchase additional equity shares in proportion to their current holding capacity.

7. **Limited liability:** Equity shareholders are having only limited liability to the value of shares they have purchased. If the shareholders are having fully paid up shares, they have no liability. For example: If the shareholder purchased 100 shares with the face value of Rs. 10 each. He paid only Rs. 900. His liability is only Rs. 100.

Total number of shares 100

Face value of shares Rs. 10

Total value of shares 100 × 10 = 1,000

Paid up value of shares 900

Unpaid value/liability 100

Liability of the shareholders is only unpaid value of the share (that is Rs. 100).

18.5 ADVANTAGES OF EQUITY SHARES

Equity shares are the most common and universally used shares to mobilize finance for the company. It consists of the following advantages.

1. **Permanent sources of finance:** Equity share capital is belonging to long-term permanent nature of sources of finance; hence, it can be used for long-term or fixed capital requirement of the business concern.

2. **Voting rights:** Equity shareholders are the real owners of the company who have voting rights. This type of advantage is available only to the equity shareholders.

3. **No fixed dividend:** Equity shares do not create any obligation to pay a fixed rate of dividend. If the company earns profit, equity shareholders are eligible for profit, they are eligible to get dividend otherwise, and they cannot claim any dividend from the company.

4. **Less cost of capital:** Cost of capital is the major factor, which affects the value of the company. If the company wants to increase the value of the company, they have to use more share capital because, it consists of less cost of capital (Ke) while compared to other sources of finance.

5. **Retained earnings:** When the company have more share capital, it will be suitable for retained earnings which is the less cost sources of finance while

compared to other sources of finance.

18.6 DISADVANTAGES OF EQUITY SHARES

1. **Irredeemable:** Equity shares cannot be redeemed during the lifetime of the business concern. It is the most dangerous thing of over capitalization.

2. **Obstacles in management:** Equity shareholder can put obstacles in management by manipulation and organizing themselves. Because, they have power to contrast any decision which are against the wealth of the shareholders.

3. **Leads to speculation:** Equity shares dealings in share market lead to secularism during prosperous periods.

4. **Limited income to investor:** The Investors who desire to invest in safe securities with a fixed income have no attraction for equity shares.

5. **No trading on equity:** When the company raises capital only with the help of equity, the company cannot take the advantage of trading on equity.

18.7 MEANING OF PREFERENCE SHARES

The parts of corporate securities are called as preference shares. It is the shares, which have preferential right to get dividend and get back the initial investment at the time of winding up of the company. Preference shareholders are eligible to get fixed rate of dividend and they do not have voting rights.

Preference shares may be classified into the following major types:

1. **Cumulative Preference Shares:** Cumulative preference shares have right to claim dividends for those years which have no profits. If the company is unable to earn profit in any one or more years, C.P. Shares are unable to get any dividend but they have right to get the comparative dividend for the previous years if the company earned profit.

2. **Non-cumulative Preference Shares:** Non-cumulative preference shares have no right to enjoy the above benefits. They are eligible to get only dividend

if the company earns profit during the years. Otherwise, they cannot claim any dividend.

3. **Redeemable Preference Shares:** When, the preference shares have a fixed maturity period it becomes redeemable preference shares. It can be redeemable during the lifetime of the company. The Company Act has provided certain restrictions on the return of the redeemable preference shares.

4. **Irredeemable Preference Shares:** Irredeemable preference shares can be redeemed only when the company goes for liquidator. There is no fixed maturity period for such kind of preference shares.

5. **Participating Preference Shares:** Participating preference shares holders have right to participate extra profits after distributing the equity shareholders.

6. **Non-Participating Preference Shares:** Non-participating preference shareholders are not having any right to participate extra profits after distributing to the equity shareholders. Fixed rate of dividend is payable to the type of shareholders.

7. **Convertible Preference Shares:** Convertible preference shareholders have right to convert their holding into equity shares after a specific period. The articles of association must authorize the right of conversion.

8. **Non-convertible Preference Shares:** There shares, cannot be converted into equity shares from preference shares.

18.8 FEATURES OF PREFERENCE SHARES

The following are the important features of the preference shares:

1. **Maturity period:** Normally preference shares have no fixed maturity period except in the case of redeemable preference shares. Preference shares can be redeemable only at the time of the company liquidation.

2. **Residual claims on income:** Preferential shareholders have a residual claim on income. Fixed rate of dividend is payable to the preference shareholders.

3. **Residual claims on assets:** The first preference is given to the preference shareholders at the time of liquidation. If any extra Assets are available that should be distributed to equity shareholder.

4. **Control of Management:** Preference shareholder does not have any voting rights. Hence, they cannot have control over the management of the company.

18.9 ADVANTAGES OF PREFERENCE SHARES

Preference shares have the following important advantages.

1. **Fixed dividend:** The dividend rate is fixed in the case of preference shares. It is called as fixed income security because it provides a constant rate of income to the investors.

2. **Cumulative dividends:** Preference shares have another advantage which is called cumulative dividends. If the company does not earn any profit in any previous years, it can be cumulative with future period dividend.

3. **Redemption:** Preference Shares can be redeemable after a specific period except in the case of irredeemable preference shares. There is a fixed maturity period for repayment of the initial investment.

4. **Participation:** Participative preference shareholders can participate in the surplus profit after distribution to the equity shareholders.

5. **Convertibility:** Convertibility preference shares can be converted into equity shares when the articles of association provide such conversion.

18.10 DISADVANTAGES OF PREFERENCE SHARES

1. **Expensive sources of finance:** Preference shares have high expensive source of finance while compared to equity shares.

2. **No voting right:** Generally preference shareholders do not have any voting rights. Hence they cannot have the control over the management of the company.

3. **Fixed dividend only:** Preference shares can get only fixed rate of dividend. They may not enjoy more profits of the company.

4. **Permanent burden:** Cumulative preference shares become a permanent burden so far as the payment of dividend is concerned. Because the company must pay the dividend for the unprofitable periods also.

5. **Taxation:** In the taxation point of view, preference shares dividend is not a deductible expense while calculating tax. But, interest is a deductible expense. Hence, it has disadvantage on the tax deduction point of view.

18.11 DIFFERENCE BETWEEN EQUITY & PREFERENCE SHARES

The following are some of the difference between equity shares and preference shares.

BASIS	EQUIITY SHARES	PREFERENCE SHARES
1.Term of financing	Used as a method of long term financing	Used for both long term and medium term financing.
2.Nature of return	Rate of return is fluctuating, depending upon the earning	Dividend at fixed rate may be paid or accumulated.
3.Owners	Equity shareholders are the owners. They have voting rights.	These shareholders are not owners. They have no voting rights.
4. Redeemability	They are not subject to redemption during the lifetime of the company.	It can be redeemed after achieving the purpose or at the end of a certain period.
5. Type of Investors	Suitable for those investors who are adventurous by nature.	It has appeal for relatively less adventurous investors.
6. Right of receiving dividend	Residual claimant. Rank next to preference shares.	Entitled for first preference

7. Right of receiving back invested capital during liquidation.	Entitled for first preference	Entitled for first preference
8. Financial burden	Payment of equity dividends is optional. It is dependent on the discretion of the Board of Directors. Therefore there is no fixed financial commitment.	Payment of preference dividend is a fixed financial commitment.
9. Voting rights	Enjoy voting rights	Do not enjoy voting rights
10. Reduction of capital	By reorganization	By repayment
11. Denomination	Generally of lower denomination.	Generally of higher

18.12 SUMMARY

Equity shares get dividend at a rate fixed at the Annual General Meeting (AGM) depending on the profit available for a particular year. The rate of dividend also varies from year to year. The preference shareholders contribute capital to the company. According to section 85 of the Companies Act, 1956, persons holding preference shares, called preference shareholders. They are assured of a preferential dividend at a fixed rate during the life of the company. This type share holders carry preferential right over other shareholders to be paid first in case of liquidation of the company. Companies use this mode of financing as it is cheaper than raising debt.

18.13 GLOSSARY

Redeemable Preference Shares: A company may issue this type of shares on the

condition that the company will repay the amount of share capital to the holders of this category of shares after the fixed period or even earlier at the discretion of the company.

Irredeemable Preference Shares: The preference shares, which do not carry the agreement of redemption, are known as irredeemable preference shares.

Convertible Preference Shares: This type of shares enjoys the right to the holder to get them converted into equity shares according to the terms and conditions of the issue.

Non-convertible Preference Shares: The holders of these shares do not enjoy the right to get the shares converted into equity shares. Unless otherwise stated, Preference shares are non-convertible.

Participating Preference Shares: The holder of this type of preference shares enjoy the right to participate in the surplus profits, if any, after the equity shareholders have been paid dividend at a rate fixed in the AGM. So the shareholders get additional dividend with their normal dividend.

Non-participating Preference Shares: These shares carry only a fixed rate of dividend without any right to get additional dividend. Unless otherwise stated, The preference shares are non-participating.

Cumulative Preference Shares: The cumulative preference shares carry the right to a fixed amount of dividend. The holders of these shares are entitled to get dividend out of future profit if current year's profit is insufficient for the same. So, the dividend on these shares accumulates till the final payment.

Non-cumulative Preference Share: In this case the dividend for the shareholders does not accumulate. If there is no sufficient profit, this type of preference shareholders will not get any dividend. In this case, the dividend will be lapsed and there will be no arrear dividend.

18.14 SELF ASSESSMENT QUESTIONS

1. What do you understand by the term equity shares?

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2. Highlight the characteristics of preference shares.

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18.15 LESSON END EXERCISES

1. Distinguish between equity shares and preference shares.

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2. Discuss in detail various kinds of preference shares. Also state its advantages and disadvantages.

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3. Critically examine the advantages and disadvantages of equity shares.

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18.16 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : IV **Lesson No. 19**

DEBENTURES AND OTHER DEBT INSTRUMENTS

Structure

19.1 INTRODUCTION

Creditorship Securities also known as debt finance which means the finance is mobilized from the creditors. Debenture and Bonds are the two major parts of the Creditorship Securities.

19.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of debentures.

ii. Get an insight into various types of debt instruments.

19.3 MEANING OF DEBENTURES

A Debenture is a document issued by the company. It is a certificate issued by the company under its seal acknowledging a debt. According to the Companies Act 1956, "debenture includes debenture stock, bonds and any other securities of a company whether constituting a charge of the assets of the company or not."

19.4 TYPES OF DEBENTURES

Debentures may be divided into the following major types:

1. **Unsecured debentures:** Unsecured debentures are not given any security on assets of the company. It is also called simple or naked debentures. This type of debentures are treated as unsecured creditors at the time of winding up of the company.

2. **Secured debentures:** Secured debentures are given security on assets of the company. It is also called as mortgaged debentures because these debentures are given against any mortgage of the assets of the company.

3. **Redeemable debentures:** These debentures are to be redeemed on the expiry of a certain period. The interest is paid periodically and the initial investment is

returned after the fixed maturity period.

4. **Irredeemable debentures:** These kind of debentures cannot be redeemable during the life time of the business concern.

5. **Convertible debentures:** Convertible debentures are the debentures whose holders have the option to get them converted wholly or partly into shares. These debentures are usually converted into equity shares. Conversion of the debentures may be:

   i. Non-convertible debentures

   ii. Fully convertible debentures

   iii. Partly convertible debentures

6. **Other types:** Debentures can also be classified into the following types. Some of the common types of the debentures are as follows:

   i. Collateral Debenture

   ii. Guaranteed Debenture

   iii. First Debenture

   iv. Zero Coupon Bond

   v. Zero Interest Bond/Debenture

19.5 FEATURES OF DEBENTURES

1. **Maturity period:** Debentures consist of long-term fixed maturity period. Normally, debentures consist of 10-20 years maturity period and are repayable with the principle investment at the end of the maturity period.

2. **Residual claims in income:** Debenture holders are eligible to get fixed rate of interest at every end of the accounting period. Debenture holders have priority of claim in income of the company over equity and preference

shareholders.

3. **Residual claims on asset:** Debenture holders have priority of claims on Assets of the company over equity and preference shareholders. The Debenture holders may have either specific change on the Assets or floating change of the assets of the company. Specific change of Debenture holders are treated as secured creditors and floating change of Debenture holders are treated as unsecured creditors.

4. **No voting rights:** Debenture holders are considered as creditors of the company. Hence they have no voting rights. Debenture holders cannot have the control over the performance of the business concern.

5. **Fixed rate of interest:** Debentures yield fixed rate of interest till the maturity period. Hence the business will not affect the yield of the debenture.

19.6 ADVANTAGES OF DEBENTURES

Debenture is one of the major parts of the long-term sources of finance which of consists the following important advantages:

1. **Long-term sources:** Debenture is one of the long-term sources of finance to the company. Normally the maturity period is longer than the other sources of finance.

2. **Fixed rate of interest:** Fixed rate of interest is payable to debenture holders, hence it is most suitable of the companies earn higher profit. Generally, the rate of interest is lower than the other sources of long-term finance.

3. **Trade on equity:** A company can trade on equity by mixing debentures in its capital structure and thereby increase its earning per share. When the company apply the trade on equity concept, cost of capital will reduce and value of the company will increase.

4. **Income tax deduction:** Interest payable to debentures can be deducted from the total profit of the company. So it helps to reduce the tax burden of the

company.

5. **Protection:** Various provisions of the debenture trust deed and the guidelines issued by the SEB1 protect the interest of debenture holders.

19.7 DISADVANTAGES OF DEBENTURES

Debenture finance consists of the following major disadvantages:

1. **Fixed rate of interest:** Debenture consists of fixed rate of interest payable to securities. Even though the company is unable to earn profit, they have to pay the fixed rate of interest to debenture holders; hence, it is not suitable to those company earnings which fluctuate considerably.

2. **No voting rights:** Debenture holders do not have any voting rights. Hence, they cannot have the control over the management of the company.

3. **Creditors of the company:** Debenture holders are merely creditors and not the owners of the company. They do not have any claim in the surplus profits of the company.

4. **High risk:** Every additional issue of debentures becomes more risky and costly on account of higher expectation of debenture holders. This enhanced financial risk increases the cost of equity capital and the cost of raising finance through debentures which is also high because of high stamp duty.

5. **Restrictions of further issues:** The company cannot raise further finance through debentures as the debentures are under the part of security of the assets already mortgaged to debenture holders.

19.8 DIFFERENCE BETWEEN SHARES & DEBENTURES

The following are the main difference between a share and a debenture:

1. A person having the debentures is called debenture holder whereas a person holding the shares is called shareholder.

2. Debenture holder is a creditor of the company and cannot take part in the management of the company while a shareholder is the owner of the company. It is the basic distinction between a debenture and a share.

3. Debenture holders will get interest on debentures and will be paid in all circumstances, whether there is profit or loss will not affect the payment of interest on debentures. Shareholder will get a portion of the profits called dividend which is dependent on the profits of the company. It can be declared by the directors of the company out of profits only.

4. Shares cannot be converted into debentures whereas debentures can be converted into shares.

5. Debentures will get priority is getting the money back as compared to shareholder in case of liquidation of a company.

6. There is no restriction on issue of debentures at a discount, whereas shares at discount can be issued only after observing certain legal formalities.

7. Convertible debentures which can be converted into shares at the option of debenture holder can be issued whereas shares convertible into debentures cannot be issued.

8. There can be mortgage debentures i.e. assets of the company can be mortgaged in favor of debenture holders. But there can be no mortgage shares. Assets of the company cannot be mortgaged in favor of shareholders.

19.9 SUMMARY

A debenture is generally unsecured in the sense that there are no liens or pledges on specific assets. It is defined as a certificate of agreement of loans which is given under the company's stamp and carries an undertaking that the debenture holder will get a fixed return (fixed on the basis of interest rates) and the principal amount whenever the debenture matures. In finance, a debenture is a long-term debt instrument used by governments and large companies to obtain funds. The advantage of debentures to the issuer is they

leave specific assets burden free, and thereby leave them open for subsequent financing. Debentures are generally freely transferrable by the debenture holder. Debenture holders have no voting rights and the interest given to them is a charge against profit.

19.10 GLOSSARY

Debenture: a certificate issued by the company under its seal acknowledging a debt.

Treasury bond: Treasury bonds make up the smallest segment of the government debts.

Treasury bill: Treasury bills are short-term notes that mature in three months, six months, nine months and maximum one year from the date of issue.

19.11 SELF ASSESSMENT QUESTIONS

1. Write short notes on the following:

i. Treasury bills

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ii. Treasury notes

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2. Distinguish between shares and debentures.

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19.12 LESSON END EXERCISES

1. Describe in detail debt instruments and also explain the various types of debt instruments in India.

2. Critically examine the merits and demerits of debentures.

19.13 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : IV **Lesson No. 20**

OTHER DEBT INSTRUMENTS

Structure

20.1 INTRODUCTION

Debt Instruments are obligation of issuer of such instrument as regards certain future cash flow representing Interest & Principal, which the issuer would pay to the legal owner of the Instrument. Debt Instruments are of different types like Bonds, Debentures, Commercial Papers, Certificates of Deposit, Government Securities (G - Secs) etc. The Government Securities (G-Secs) market is the oldest and the largest element of the Indian debt market in terms of market capitalization, trading volumes and outstanding securities. The G-Secs market plays a very important role in the Indian economy as it provides the benchmark for determining the level of interest rates in the country through the yields on the government securities which are treated as the risk-free rate of return in any economy.

20.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the meaning of debt instruments.

ii. Know about various types of debt instruments.

20.3 MEANING OF DEBT INSTRUMENTS

Debt instruments include all types of fixed-income securities promising the investors that they will receive specific cash flows at specific times in the future. Securities generating one cash flow are known as pre-discount securities or zero-coupon securities. On the other hand, it may involve multiple cash flows. If all the cash flows are of the same size, they are generally referred to as coupon payments. The date beyond which the investors will no longer receive cash flows known as maturity date. On this date investors will receive the principal along with the last coupon payment. Although these cash flows are promised, they may not be received due to the risk associated with such investments. Financial assets issued by government, firms, and individuals often take the form of IOUs calling for fixed periodic payments, termed as interest and the repayment of the amount borrowed, termed as principal. Debt

instruments represent money loaned rather than ownership to the investors.

20.4 TYPES OF DEBT INSTRUMENTS

There are different kinds of Debt Instruments available in India.

Below given are the important debt instruments available in India

21 Bonds

22 Certificates of Deposit

23 Commercial Papers

24 Debentures

25 Certificate of indebtedness or Treasury Certificate

26 G - Secs (Government Securities)

27 Treasury bonds

20.4.1 BONDS

A Bond is simply an 'IOU' in which an investor agrees to lend money to a company or government in exchange for a predetermined interest rate. If a business wants to expand, one of its options is to borrow money from individual investors. The company issues bonds at different interest rates and sells them to the public. Investors purchase them with the understanding that the company will pay back their original principal with some interest that is due by a set date (this is known as the "maturity"). The interest a bondholder earns depends on the strength of the corporation. For example, a blue chip is more stable and has a lower risk of defaulting on its debt. Sometimes some big companies issue bonds and they may only pay 7% interest, but some other small companies may pay you 10%. A general rule of thumb when investing in bonds is that "the higher the interest rate, the riskier the bond."

Following are allowed to issue bonds

- Governments
- Municipalities
- Variety of institutions
- Corporations

There are many types of bonds, each having diverse features and characteristics. Bonds and stocks are both securities, but the major difference between the two is that stockholders have an equity stake in the company (i.e., they are owners), whereas bondholders have a creditor stake in the company (i.e., they are lenders). Another difference is that bonds usually have a defined term, or maturity, after which the bond is redeemed, whereas stocks may be outstanding indefinitely.

Returns in Bonds: Returns is depends on the nature of the bonds that have been purchased by the investor. Bonds may be secured or unsecured. Firstly, always check up the credit rating of the issuing company before purchasing the bond. This gives you a working knowledge of the company's financial health and an idea about the risk considerations of the instrument itself. Interest payments depend on the health and credit rating of the issuer. Therefore, it is essential to check the credit rating and financial health of the issuer before loosening up the bond. If you do invest in bonds issued by the top-rated Corporates, there is no guarantee that you will receive your payments on time.

Risks in Bonds: In certain cases, the issuer has a call option mentioned in the prospectus. This means that after a certain period, the issuer has the choice of redeeming the bonds before their maturity. In that case, while you will receive your principal and the interest accrued till that date, you might lose out on the interest that would have accrued on your sum in the future had the bond not been redeemed. Always remember that if interest rates go up, bond prices go down and vice-versa.

Buying and Holding of Bonds: Investors can subscribe to primary issues

of Corporates and Financial Institutions (FIs). It is common practice for FIs and corporates to raise funds for asset financing or capital expenditure through primary bond issues. Some bonds are also available in the secondary market. The minimum investment for bonds can either be Rs 5,000 or Rs 10,000. However, this amount varies from issue to issue. There is no prescribed upper limit to your investment. The duration of a bond issue usually varies between 5 and 7 years.

Selling of Bonds

Selling bonds in the secondary market has its own drawbacks. First, there is a liquidity problem which means that it is a tough job to find a buyer. Second, even if you find a buyer, the prices may be at a sharp discount to its intrinsic value. Third, you are subject to market forces and, hence, market risk. If interest rates are running high, bond prices will be down and you may well end up incurring losses. On the other hand, Debentures are always secured.

Liquidity of a Bond: Selling in the debt market is an obvious option. Some issues also offer Put and Call option.

× In Put option, the investor has the option to approach the issuing entity after a specified period (say, three years), and sell back the bond to the issuer.

× In Call option, the company has the right to recall its debt obligation after a particular time frame.

20.4.2 CERTIFICATES OF DEPOSIT

A certificate of deposit or CD is a time deposit, a financial product commonly offered to consumers by banks, thrift institutions, and credit unions. CDs are similar to savings accounts in that they are insured and thus virtually risk-free; they are "money in the bank". They are different from savings accounts in that the CD has a specific, fixed term (often 3 months, 6 months, or 1 to 5 years), and, usually, a fixed interest rate. It

is intended that the CD be held until maturity, at which time the money may be withdrawn together with the accrued interest. The maturity period of CDs issued by banks should be not less than 7 days and not more than one year. The FIs can issue CDs for a period not less than 1 year and not exceeding 3 years from the date of issue.

20.4.3 COMMERCIAL PAPERS

Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note. It was introduced in India in 1990 with a view to enable highly rated corporate borrowers/ to diversify their sources of short-term borrowings and to provide an additional instrument to investors. Subsequently, primary dealers and satellite dealers were also permitted to issue CP to enable them to meet their short-term funding requirements for their operations. CP can be issued in denominations of Rs.5 lakh or multiples thereof. Amount invested by a single investor should not be less than Rs.5 lakh (face value). It will be issued foe a duration of 30/45/60/90/120/180/270/364 days. Only a scheduled bank can act as an Issuing and Paying Agent IPA for issuance of CP. CP can be issued for maturities between a minimum of 7 days and a maximum up to one year from the date of issue. CP may be issued to and held by individuals, banking companies, other corporate bodies registered or incorporated in India and unincorporated bodies, Non-Resident Indians (NRIs) and Foreign Institutional Investors (FIIs). However, investment by FIIs would be within the limits set for their investments by Securities and Exchange Board of India. Banks still continue to be a major player in the CP market.

Features of Commercial Papers

Following are the important features of commercial papers

1. They are unsecured debts of corporates and are issued in the form of promissory notes, redeemable at par to the holder at maturity.

2. Only corporates who get an investment grade rating can issue CPs, as per RBI rules.

3. It is issued at a discount to face value.

4. Attracts issuance stamp duty in primary issue.

5. Has to be mandatorily rated by one of the credit rating agencies.

6. It is issued as per RBI guidelines.

7. It is held in Demat form.

8. CP can be issued in denominations of Rs.5 lakh or multiples thereof. Amount invested by a single investor should not be less than Rs.5 lakh (face value).

9. Issued at discount to face value as may be determined by the issuer.

10. Bank and FI's are prohibited from issuance and underwriting of CP's.

11. Can be issued for a maturity for a minimum of 15 days and a maximum up to one year from the date of issue.

Investment in CP

20.4.4 DEBENTURES

A debenture is similar to a bond except the securitization conditions are different. A debenture is generally unsecured in the sense that there are no liens or pledges on specific assets. It is defined as a certificate of agreement of loans which is given under the company's stamp and carries an undertaking that the debenture holder will get a fixed return (fixed on the basis of interest rates) and the principal amount whenever the debenture matures.

In finance, a debenture is a long-term debt instrument used by governments and large companies to obtain funds. The advantage of debentures to the issuer is they leave specific assets burden free, and thereby leave them open for subsequent financing. Debentures are generally freely transferrable by the debenture holder. Debenture holders have no voting

rights and the interest given to them is a charge against profit.

20.4.5 CERTIFICATE OF INDEBTNESS OR TREASURY CERTIFICATE

Certificate of indebtness differs from Treasury bills because they are issued at par value and pay fixed interest rates. These fixed interest rates are called coupon rates. Every bond issue of this type promises to pay a coupon rate of interest that is printed on the bond and never changes. The bond investor collects this interest income by tearing perforated coupon slip off the edge of the certificate and cashing the coupons at the banks and post offices or other government approved authorities. Treasury certificate matures within one year from the date of issue.

20.4.6 G - SECS (GOVERNMENT SECURITIES)

Government securities are those securities which are issued by the government to finance deficit in budget when revenues fall short of expenditures. Government securities are all most invariably bond issues of various types. These bonds are issued by the government at all levels. Because it can print money, the securities of the government are not subject to default. The government securities are riskless, default free and earn a fixed rate of interest income. Being issued by the government debt securities differ in quality, yield, and maturity.

20.4.7 TREASURY BONDS

Treasury bonds make up the smallest segment of the government debts. Bonds differ from notes and certificates with respect to maturity; bonds mature and repay their face value within a period from ten to thirty years from the date of issue. Some bond issues are callable or redeemable prior to maturity.

20.5 SUMMARY

Debt Instruments are obligation of issuer of such instrument as regards certain

future cash flow representing Interest & Principal, which the issuer would pay to the legal owner of the Instrument. Debt Instruments are of different types like Bonds, Debentures, Commercial Papers, Certificates of Deposit, Government Securities (G - Secs) etc. The Government Securities (G-Secs) market is the oldest and the largest element of the Indian debt market in terms of market capitalization, trading volumes and outstanding securities.

20.6 GLOSSARY

i. Treasury bond: Treasury bonds make up the smallest segment of the government debts.

ii. Government Securities: Government securities are those securities which are issued by the government to finance deficit in budget

20.7 SELF ASSESSMENT QUESTIONS

1. Write short notes on the following:

i. Certificates of deposits

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ii. Treasury bonds

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iii. Commercial Papers

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20.8 LESSON END EXERCISES

1. Describe in detail debt instruments and also explain the various types of debt instruments in India.

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20.9 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : V **Lesson No. 21**

DIVIDEND DECISIONS

DETERMINANTS OF DIVIDEND POLICY

Structure

21.1 INTRODUCTION

Dividend policy and decision are critical and crucial areas of management. Dividends are earnings which are distributed to the shareholders. The percentage of earnings paid or dividends declared is called payout ratio. A

high pay out means more dividends and this will lead to less funds internally generated and available for expansion and growth. A low pay out therefore should result in higher growth as retained earnings are significant internal sources of financing the growth of the firm. Such dividend policies affect the market value of the firm. Whether such dividend will result in increased value or not will be directly dependent on the profitable investment opportunities available and exploited by the firm. On the other hand, there is a predominant view that dividends are bad as they lead to the payment of higher taxes and they reduce the shareholders' wealth. Dividends when declared are taxed by the governments. Despite this there is a strong investor expectation that dividends are a form of rewards to them.

21.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the meaning of dividend.

ii. Discuss about the factors determining the dividend decision.

21.3 MEANING OF DIVIDEND

Dividend refers to the business concerns net profits distributed among the shareholders. It may also be termed as the part of the profit of a business concern, which is distributed among its shareholders.

According to the Institute of Chartered Accountant of India, dividend is defined as "a distribution to shareholders out of profits or reserves available for this purpose".

21.4 FACTORS DETERMINING DIVIDEND DECISIONS

Following are the main factors influencing dividend decisions:

1. **Growth and Profitability:** The amount of growth a firm can sustain and its profitability is related to its dividend decisions, so long as the firm (because of managerially imposed to external market constraints) cannot issue additional

equity.

Firms with strong growth prospects maintain low target payout ratios. In fact all the firms that experience above-average growth rates are expected to have low dividend payout ratios since, in line with the residual theory of dividends, a greater number of profitable investment opportunities should result other things being equal in a greater need for earnings retention.

This interrelationship among the firm's growth, its profitability, and its investment, financing, and dividend decisions cannot be overemphasized.

2. **Liquidity:** The liquidity position of a firm is often an important consideration in dividend decisions. Since dividends represent a cash outflow, it follows that the better the cash position and overall liquidity of the firm, the greater is the firm's ability to pay (and maintain) a cash dividend.

   A growing, profitable firm may not be liquid, since it needs funds for new capital expenditures and to build up its permanent working capital position.

   Likewise, firms in cyclical industries may experience times when they lack liquidity due to general economic conditions. Hence, the degree of liquidity is a variable of concern when a firm's dividend policy is being assessed.

3. **Cost and Availability of Alternative Forms of financing:** The ability of a firm to raise money externally will have a direct bearing on the level of dividends paid to shareholders. Clearly, a company that has easy access to the capital markets, and that can conveniently and economically raise funds in a number of alternative ways, will have greater latitude in setting dividend policy than a firm that has to rely heavily on earnings retention as a source of financing.

   In essence, the key question is whether or not a firm can (if the need arises) finance its dividend payments externally. Those that can are likely to set higher dividend levels than those that cannot.

   Two aspects that tend to work against this approach to dividend payments are the cost of financing and issue expenses. Financing dividends externally

may have merit so long as the cost of financing is relatively low.

However, when interest rates rise, the idea of financing dividends begins to lose its appeal. Moreover, issue expenses and other flotation costs will lower desired payout ratios, since they raise the cost of financing.

This is particularly true when the amount of external financing involved is fairly small, for flotation costs are inversely related to the size of the issue and tend to rise rapidly as the size of an issue declines.

4. **Managerial Control:** In some cases, control of the firm may be a factor to consider when establishing dividend policy. Suppose a fairly substantial proportion of the firm is owned by a controlling group, and the remainder of the stock is publicly held. Under these circumstances, the higher the payout ratio, the more likely that a subsequent issue of equity may be needed to finance capital expenditures.

   Those in control might prefer to minimize the likelihood of an offering of equity to avoid any dilution in their ownership position.

   Hence, they would prefer a low payout policy. On the other hand, a firm may establish a relatively high dividend payout ratio (if it believes that is what shareholders desire) as a way to keep the firm from being acquired in a merger or acquisition.

5. **Legal constraints:** The legal rules act as boundaries within which a company can declare dividends. In general, cash dividends must be paid from current earnings or from previous earnings that have been retained by the corporations after providing for depreciation. However, a company may be permitted to pay dividend in any financial year out of the profits of the company without providing for depreciation.

   Though the dividends should be paid in cash, but it doesn't prohibit a company from capitalizing its profits or reserves (retained earnings) for the purpose of issuing fully paid bonus shares (stock dividend).

6. **Access to the Capital Market:** Another matter for consideration by management in setting an appropriate dividend policy is the company's ability to obtain cash on relatively short notice. This may be achieved by the company negotiating for a bank overdraft limit or having access to other short-term sources of funds.

However, if a company's ability to make a new issue of shares or to issue debt is restricted, it is likely that it will retain a higher proportion of its profits than a company which has ready access to funds from the capital market.

Companies which are likely to have difficulties raising funds on the capital market include small companies, new companies, and companies in what may be termed venture capital fields.

7. **Inflation:** Inflation must be taken into account when a firm establishes its dividend policy. On the one hand, investors would like to receive larger cash dividends because of inflation.

But from the firm's viewpoint, inflation causes it to have to invest substantially more to replace existing equipment, finance new capital expenditures, and meet permanent working capital needs. Thus, in inflationary times, there may be a tendency to hold down cash dividends.

8. **External Restrictions:** The protective covenants in a bond indenture or loan agreement often include a restriction on the payment of cash dividends. This restriction is imposed to preserve the firm's ability to service its debt.

These restrictions may be in the form of coverage ratio, sinking fund etc. Presence of these restrictions forces a company to retain earnings and follow a low payout.

21.5 SUMMARY

The financial manager must take careful decisions on how the profit should be distributed among shareholders. It is very important and crucial part of the business concern, because these decisions are directly related with the value

of the business concern and shareholder's wealth. Like financing decision and investment decision, dividend decision is also a major part of the financial manager. When the business concerns decide dividend policy, they have to consider certain factors such as retained earnings and the nature of shareholder of the business concern.

21.6 GLOSSARY

Dividend: refers to the part of the profit of a business concern, which is distributed among its shareholders.

21.7 SELF ASSESSMENT QUESTIONS

1. What do you understand by the term dividend?

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2. List down all the factors that influence dividend decision.

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21.8 LESSON END EXERCISES

1. Explain in detail the various factors that affect dividend decisions.

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21.9 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : V **Lesson No. 22**

DIVIDEND POLICY OPTIONS

Structure

22.1 INTRODUCTION

Dividend policy of a company is the strategy followed to decide the amount of dividends and the timing of the payments. There are various factors that frame a dividend policy of the company. Availability of better investment opportunities, estimated volatility of future earnings, tax considerations, financial flexibility, flotation costs and various other legal restrictions affect a company's dividend policy.

22.2 OBJECTIVES

After going through this chapter you will be able to:

i. Know about the types of dividend policies.

ii. Discuss about the various dividend policy options.

22.3 TYPES OF DIVIDEND POLICIES

There are three types of dividend policies depending on the amount and the frequency of the dividend payouts:

1. Stable Dividend Policy
2. Constant Dividend Policy
3. Residual Dividend Policy

22.3.1 Stable Dividend Policy:

Under the stable dividend policy, the company aims for a steady dividend payout every year. It does not change even if the earnings are volatile every year. The approximate level of the dividend payout is determined by looking at a forecast of the company's long-term earnings. This approach aligns the dividend growth rate of the company with its long-run earnings growth rate.

The stable dividend policy is the most popular dividend policy. Under this approach, short-term earnings' volatility is not reflected in the payouts. Hence, the shareholders can be least uncertain about the future dividends' level. This policy has the following very real possibilities:

i. Dividends may rise even in periods when earnings of the company decline.

ii. Dividends may not increase at the same higher rate of earnings in the booming years.

Because of these, the stable dividend policy may gradually move towards a target payout ratio. A target payout ratio is defined as a strategic goal which represents the share of earnings that the company aims to distribute as dividends to shareholders over a long-term. One such model on these lines of gradual adjustment is the target payout ratio adjustment model. Under this model, if the earnings of the company are expected to rise and the current dividend payout ratio is below the target dividend payout ratio, the investor can calculate the estimated future dividends as follows:

Expected Dividend = (Previous Dividend) + [(Expected Increase in EPS) * (Target Payout Ratio) * (Adjustment Factor)]

Where adjustment factor = 1/ number of years over which the dividends adjustments will happen.

Stable Dividend Policy has advantages too: A Stable dividend policy is advantageous to both investors and company on account of the following:

(a) It is sign of continued normal operations of company.

(b) It stabilizes market value of shares.

(c) It creates confidence among investors.

(d) It improves credit standing and making financing easier.

(e) It meets requirements of institutional investors who prefer companies with stable dividends.

Stable dividend policy suffers from certain limitations as under:

Inspite of many advantages, the stable dividend policy suffers from certain limitations. Once a stable dividend policy is followed by a company, it is not easier to change it. If stable dividends are not paid to shareholders on any account including insufficient profits, the financial standing of company in minds of investors is damaged and they may like to dispose of their

holdings. It adversely affects the market price of shares of the company. And if companies pay stable dividends inspite of its incapacity it will be suicidal in long run.

22.3.2 Constant Dividend Policy:

Under the constant dividend policy, a specific percentage of the company's earning is paid out as dividends every year. The short-term earnings' volatility affects the dividends in this case and hence, the amount of dividends varies directly with the company's earnings. However, this policy is not used very frequently in companies.

22.3.3 Residual Dividend Policy:

Under the residual dividend policy, the company pays the dividends from the funds left after the finances for the capital expenditures of the current period are deducted from the internally generated funds of the company. This policy takes the company's investment opportunity schedule, target capital structure and the cost of capital raised externally into consideration.

The following steps determine the payout ratio to be implemented:

i. The optimal capital budget is identified.

ii. The equity required to finance the identified capital budget under a given capital structure is determined.

iii. Dividends are paid from the residual earnings available after the requirements of the optimal capital budget are met.

Residual dividend policy has the following advantages:

a. This model is very simple to use. The company utilizes the funds for profitable projects and then distributes the remaining to the shareholders.

b. The management is free to pursue profitable opportunities without

worrying about the dividend constraints.

However, there are few disadvantages as well:

a. The dividend payments are highly volatile as they fluctuate with the available investment opportunities.

b. The investors may demand a higher rate of return on their equity because of the ambiguity about future dividends. It may also result in a lower valuation.

22.5 SUMMARY

Dividend policy is an important factor in the valuation of the company. Moreover, the signals interpreted by the investors from the various changes in the dividend payments also affect the stock price of the company. It is important for the analyst to know the impact of various dividend policies and the share repurchases on the stock and its valuation.

22.6 GLOSSARY

Stable Dividend Policy: is the one in which the company aims for a steady dividend payout every year.

Constant Dividend Policy: is the one in which a specific percentage of the company's earning is paid out as dividends every year.

Residual Dividend Policy: is the one in which the company pays the dividends from the funds left after the finances for the capital expenditures of the current period are deducted from the internally generated funds of the company.

22.7 SELF ASSESSMENT QUESTIONS

1. What are the various types of dividend policy?

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22.8 LESSON END EXERCISES

1. Explain in detail the dividend policy options for a company.

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22.9 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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UNIT : V **Lesson No. 23**

STOCK SPLIT VS. REVERSE SPLIT

Structure

23.1 INTRODUCTION

Generally, the reason a company decides to split their stock is to make it more attractive for investors to purchase. The reasoning is that more people will want to buy the stock at 10 rather than 20. It's mostly psychological. Further, as more people buy the stock at the lower price, the stock will rise in price.

However, there is no guarantee that the stock will continue to rise in price after the stock split. If there were, we would all profit handsomely by buying the stock on the day it splits and selling afterward at a higher price. Unfortunately, just because the stock splits do not mean that it will rise in price after the split. Many times a stock declines in price after a split. Another reason a company may want to declare a stock split is to make more shares available and broaden its stockholder base. Thus, the stock becomes more marketable and liquid! Not all stocks split 2 for 1. Other popular ratios for stock splits are 3 for 1, 3 for 2, and 5 for 4. However, the same principle holds true regardless of the ratio. The stock price will decline, the par value will decline, and the amount of shares outstanding will increase In a reverse three-for-one stock split, three shares become one. It's important to note that the overall market capitalization of the company does not change. The only reason a company reverse splits its stock is to increase the stock's price by reducing the number of shares outstanding.

23.2 OBJECTIVES

After going through this chapter you will be able to:

i. Understand the concept of stock dividend.

ii. Understand about the concept of reverse dividend.

23.3 CONCEPT OF STOCK DIVIDEND

Instead of declaring cash dividends, the firm may decide to issue additional shares of stock free of payment to the shareholders. In this, the firm's number of outstanding shares would be increasing. In the case of cash dividends, the firm may not be able to recycle such earnings in its business. However, in the case of these stock dividends, such earnings are retained in the business. By this, the shareholders can expect to get increased earnings in the future years. This stock dividend is popularly known as bonus issue of shares in India. If such bonus issues are in the range or ratio up to 1:5 (a maximum of 20%), i.e. one share for every five shares held, it is treated as small stock dividend. In

case the stock dividend exceeds 20%, then it is called large stock dividend.

Let us examine this with an example:

If a firm declares 1:10 (10%) bonus, i.e. one share for every ten shares held,

If the initial balance sheet was

Common stock (100,000 shares) 1000,000

Retained Earnings 800,000

Total Equity 1,800,000

After the bonus issue, the new balance sheet would be

Common stock (110,000 shares) 1100,000

Retained Earnings 700,000

Total Equity 1,800,000

Following are some of the facts in the share dividends (bonus shares or issues)

i. shareholders' funds remain unaffected (prior to the bonus issue, the earnings were in the reserves and surplus account and after the bonus issue, the face value of the bonus shares issued is transferred from the reserves and surplus account to share issued account - virtually no change in the shareholders funds)

ii. it is costly (the firm has to make certain statutory payments like stamp duty, exchange fees, etc on the bonus share issued and naturally they will have to be paid out of the earnings of the firm only)

23.4 CONCEPT OF STOCK SPLIT

From shareholders' perspective, a stock split has the same effect as a stock dividend. From the firm's perspective, the change in the balance sheet will be different. A three-for-two stock split, for example, corresponds to a 50% stock dividend.

A 10% stock dividend is then equivalent to a eleven-for-ten stock split.

If the initial balance sheet was

Common stock (100,000 shares) 1000,000

Retained Earnings 800,000

Total Equity 1,800,000

With an 11-for-10 stock split, the new balance sheet would be

Common stock (110,000 shares) 1000,000

Retained Earnings 800,000

Total Equity 1,800,000

23.5 CONCEPT OF REVERSE SPLIT

A reverse stock split is a corporate action in which a company reduces the number of shares it has outstanding by a set multiple. This is the opposite of a stock split, in which a company increases its outstanding shares by a set multiple.

For example, if a company announces a reverse stock split of 1:100, this means that once the split occurs, investors will receive one share for every 100 shares they own. In other words, if the company has 100 million shares before the split, this number would be reduced to 1 million after the split. As in a regular stock split, a reverse split causes no actual change in the value of the company because the share price also changes. However, some investors can be cashed out of their positions if they hold a small number of shares. For example, if an investor holds 50 shares of a company that splits 1:100, that person would be left with only half a share, so the company would simply pay that investor the value of the 50 shares.

Reverse stock splits are often seen as negative corporate actions because they are a tactic used by companies that have seen their share prices fall into

the $1 range and, therefore, run the risk of being delisted from stock exchanges that have minimum share price rules. For example, if a company is listed on the Nasdaq and its shares fall below $1, it runs the risk of being delisted; companies sometimes reverse split to increase share price, allowing them to continue to trade on a reputable stock exchange.

23.6 SHARE DIVIDEND VS. SHARE SPLIT

SHARE DIVIDEND	SHARE SPLIT
The balance in paid up capital and share premium accounts go up. The balance in reserves and surplus account decreases due to transfer to the paid up capital and share premium	The balance in paid up capital and share premium accounts does not change The balance in reserves and surplus account does not undergo any change. The par value per share changes – it goes down

However, in both cases - share dividend and share split - the total value of the shareholders' funds remains unaffected.

23.7 SUMMARY

An integral part of dividend policy is the use of stock dividends and stock splits. Unlike cash dividends which distribute corporate assets to shareholders and reduce the shareholder's investments correspondingly, the stock dividends and stock splits are just recapitalizations; they do not distribute assets or change the total investment, although they change the equity accounts.

23.8 GLOSSARY

Stock split: when a company perceives that its stock price may be too high.

Reverse split: is a corporate action in which a company reduces the number of shares it has outstanding by a set multiple.

23.9 SELF ASSESSMENT QUESTIONS

1. Write short notes on:

   i. Stock split

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   ii. Reverse split

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23.10 LESSON END EXERCISES

1. Critically distinguish between stock split and reverse split.

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2. Discuss in detail stock split and reverse split with the help of examples.

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23.11 SUGGESTED READINGS

I.M. Pandey, "Financial Management", Vikas Publishing House Pvt. Ltd., Ninth Edition.

Prasanna Chandra, "Fundamentals of Financial Management", Tata McGraw Hill Ltd., 2006.

M.Y. Khan, "Fundamental of Financial Management", Tata McGraw Hill, New Delhi.

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