

# **BALAJI INSTITUTE OF I.T AND MANAGEMENT KADAPA**

**FINANCIAL MANAGEMENT  
(17E00204)**

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**ICET CODE: BIMK**

**FIRST INTERNAL**

ALSO DOWLOAD AT <http://www.bimkadapa.in/materials.html>



Name of the Faculty: **S.RIYAZ BASHA**

Units covered: **1<sup>st</sup> , 2<sup>nd</sup> & half of 3<sup>rd</sup> Units**

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**SYLLABUS****(17E00204)FINANCIAL MANAGEMENT**

The objective of the course is to provide the necessary basic tools for the students so as to manage the finance function. The students should be able to understand the management of the financing of working capital needs and the long term capital needs of the business organization

**\* Standard Discounting Table and Annuity tables shall be allowed in the examination**

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**2. The Investment Decision:** Investment decision process – Project generation, Project evaluation, Project selection and Project implementation. Capital Budgeting methods– Traditional and DCF methods. The NPV Vs IRR Debate.

**3. The Financing Decision:** Sources of Finance – A brief survey of financial instruments. The Capital Structure Decision in practice: EBIT-EPS analysis. Cost of Capital: The concept, Measurement of cost of capital – Component Costs and Weighted Average Cost. The Dividend Decision: Major forms of Dividends

**4. Introduction to Working Capital:** Concepts and Characteristics of Working Capital, Factors determining the Working Capital, Working Capital cycle-Management of Current Assets – Cash, Receivables and Inventory, Financing Current Assets

**5. Corporate Restructures:** Corporate Mergers and Acquisitions and Take-overs-Types of Mergers, Motives for mergers, Principles of Corporate Governance.

**Textbooks:**

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**References**

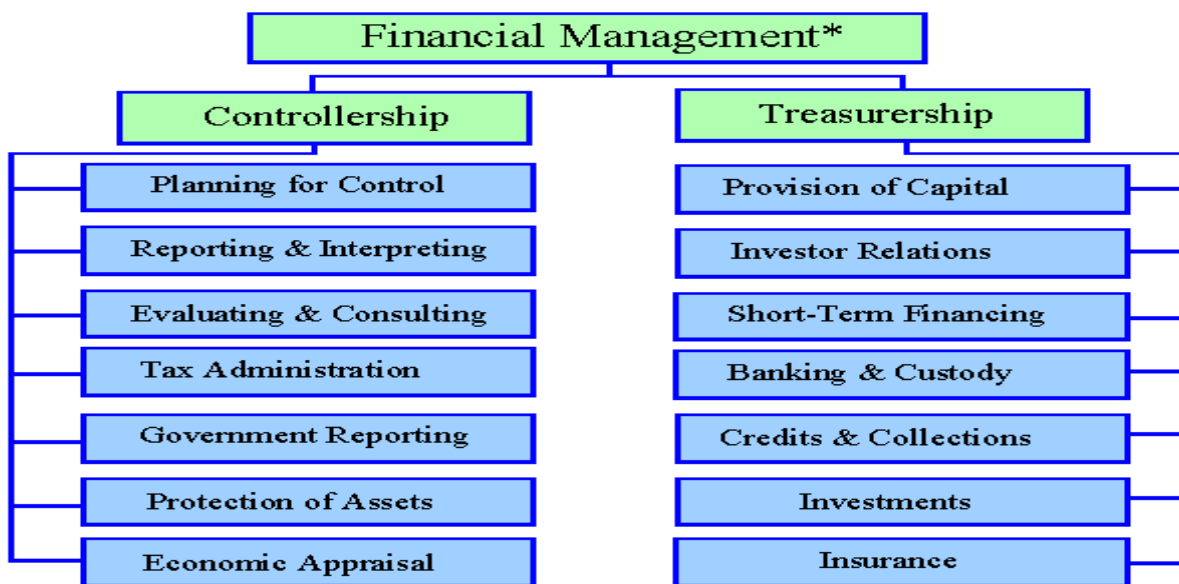
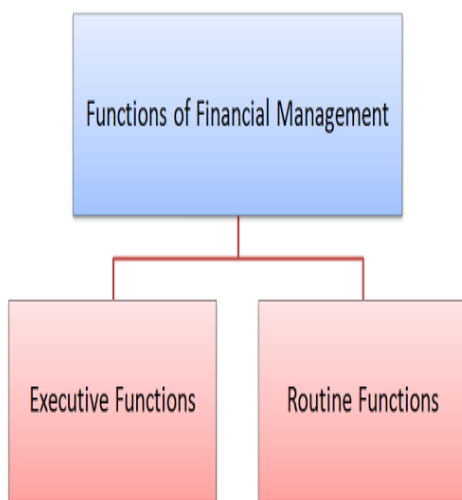
- Financial Management , Dr.V.R.Palanivelu ,S.Chand
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- Financial Managemen , William R.Lasheir ,Cengage.
- Financial Management – Text and cases, Bringham&Ehrhardt, Cengage.
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- Financial management , Dr.M.K.Rastogi ,Laxmi Publications

# BALAJI INSTITUTE OF I.T & MANAGEMENT KADAPA (BIMK)

## MBA- II- SEMESTER

### Subject: FINANCIAL MANAGEMENT

#### UNIT-1 -The Finance Function



## UNIT-1

### THE FINANCE FUNCTION

#### INTRODUCTION TO FINANCIAL MANAGEMENT:

Finance may be defined as the provision of money at the time it is wanted. For example, recruitment of workers in a factory is clearly a responsibility of the management, but it requires payment of wages and other benefits and thus involves finance.

The major areas of finance are financial services and managerial finance/corporate finance/financial management. While financial service is concerned with the design and delivery of advice and financial products to individuals, businesses and governments within the areas of banking and related institutions, personal financial planning, investments, real estate, insurance and so on, financial management is concerned with the duties of the financial managers in the business. Financial managers actively manage the financial affairs of any type of business, namely financial and non-financial, private and public, large and small businesses.

#### **WHAT IS MEANT BY FINANCIAL MANAGEMENT?**

Money makes many things is the oldest proverb which explains the importance of money. Business needs money to make more money. But it is true only when the money so generated is effectively and efficiently managed. Therefore, the job of finance manager is compared to the human heart. As the human heart receives more blood from all the organs purify it and re-circulated the pure blood to all the organs. Similarly the finance manager has to gather the monetary resources and utilize these resources in a proper way for the survival and growth of the business. Thus, the finance manager occupies the central/key position in the organization.

#### **MEANING:**

Financial management is concerned with the proper management of financial resources. Thus, the financial manager must see that the funds are procured in a manner that the risk, cost and control considerations are properly balanced in a given situation and there is optimum utilization of funds.

#### **DEFINITION:**

“Finance Management is concerned with the efficient use of an important economic resource Through. Captive funds”- **Soloman**

“Finance Management is the process of organizing the flow of funds so that a business enterprise Carry out its obligations as they fall due”- **Kenneth and Ronald.**

### NEED OF FINANCE?

Finance plays vital role in every enterprise. Finance is essential to carry out the economic activities of an enterprise in the production of goods and service as the their distribution to achieve its targets. The important of finance is as follows.

1. Finance is required to carry out the business operations without difficulty.
2. Finance is required to meet the working capital obligation in a shorter period.  
Finance is required in every organization for various ventures and project.
3. Finance is required for the growth and development of industry, trade business and agriculture of a nation.

### DOES FINANCIAL MANAGEMENT IS an SCIENCE OR an ART?

The financial management is neither a pure science nor an art. It deals with various methods and techniques which can be adopted depending on the situation of business and purpose of the decision. As a science it uses various statistical, mathematical models and computer applications for solving the financial problems relating to the firm, for example, capital investment appraisal, capital structure mix, portfolio management etc., along with the above a Finance manager is required to apply his analytical skills in decision – making. Hence, financial management is both a science as well as an art.

## 1.1 NATURE OF FINANCIAL MANAGEMENT

Financial management is now regarded both as a science and as an art. It is based on certain fundamental theories propounded by financial experts. As a science it heavily draws on related branches of knowledge like *economics accounting. Statistics, operations research and decision making.*

- 1) **Financial management and accounting:** Financial management and accounting are closely related and are complimentary to each other. While accounting is concerned with recording, classifying and summarizing financial transactions and interpreting the results thereof, financial management is concerned with decision making and wealth maximization.
- 2) **Financial management and cost accounting:** Financial management is concerned not only with procurement of funds but also with their effective utilization. The cost data



furnished by the costing department helps the finance manager to evaluate how effectively the funds are utilized and suggest measures to keep costs under control.

3) **Financial management and statistics:** Statistics provide detailed data for decision making. The probability theory of statistics offers the logic for dealing with uncertainty of future events. It enables the finance manager to understand the variables affects decision making.

4) **Financial management and operation research:** This is a branch of quantitative science used to analyze business situation to find an optimal solution. For example, problems, like allocation of storage space, utilization of transport facilities, choice of inventory etc. can be solved with the help of operations research. Linear programming is useful in making best use of scarce resources.

5) **Financial management and decision making:** Financial management involves decision making. The theory of decision making deals with the processes by which expectations under conditions of uncertainty are formed. Finance is the life blood of an organization it is all pervasive in nature and affects all the activities in the organization.

6) **Financial management and production:** Production of goods requires large amounts of working capital, for which funds have to be procured by the finance manager. Diversification of production, changes in production process necessitate capital expenditure, for which the finance manager should make funds available after proper evaluation.

7) **Financial management and marketing:** The success of firm depends not only on the efficient utilization of funds, but also its marketing effort and pricing policy. The marketing manager provides the finance manager with information as to how different prices affect the demand for products, so that an appropriate pricing policy can be formulated based on costs estimated at different levels of production.

8) **Financial management and economics:** Financial management is in fact an integral part of managerial economics i.e., economics applied to decision making. Financial management draws heavily both from macro and micro economics. Macroeconomics provides the finance manager with an insight into the general economic environment and the variables like national income, general price levels etc., which influence the business activity. Micro economics enables the finance manager to know how forces like elasticity of demand, supply and demand influence the economies of a firm and its pricing policy.

9) **Financial management and personnel management:** Recruitment, training and placement of staff require finance. Decisions on these issues can only be taken after considering the financial implications involved. In the face of ever increasing competition,

heavy investments have to be made on development of human resources. Revision of pay scales, schemes for voluntary retirement etc., require funds on a massive scale. Hence the finance manager should identify new sources to procure the funds required.

## **1.2 SCOPE AND FUNCTIONS OF FINANCIAL MANAGEMENT**

The approach to the scope and functions of financial management is divided for the purpose of exposition into two broad categories:

1. Traditional approach
2. The modern approach

**1) Traditional approach:** The traditional approach to the scope of financial management refers to its subject matter in academic literature, in the initial stages of its evolution as a separate branch of academic study. The term corporation finance was used to describe what is now known in the academic world as 'financial management'.

The traditional approach to the scope of finance function evolved during the 1920's and 1930's and dominated academic thinking during the 1940's and through the early 1950's now, it has been discarded as it suffers from serious limitations. The weakness of the traditional approach fall into two broad categories.

1. Those relating to the treatment of the various topics and the emphasis attached to them.
2. Those relating to the basic concept and analytical framework of the definitions and scope of finance function.

**2) Modern approach:** Under the modern concept, finance function is concerned with the financial activities of planning, raising, allocating and controlling of funds and using them for generating returns. Thus, finance function according to modern experts may be classified into two groups:

- I. Executive finance function.
- II. Incidental/routine finance function.

### **I) Executive finance function:**

The executive finance function calls for administrative skills in planning and execution of finance functions. It includes the following decisions.

- A. Financing decisions.
- B. Investment decisions.
- C. Liquidity decisions

D. Dividend decisions.

**A. Financing decisions:** The important decision to be performed by the Finance manager is the financing decision broadly speaking he must decide when, where and how to acquire funds to meet the firm's investment needs. Generally, the finance manager obtained funds through primary markets, financial institutions and, commercial banks. A proper balance has to be kept between the fixed and non-fixed cost bearing securities.

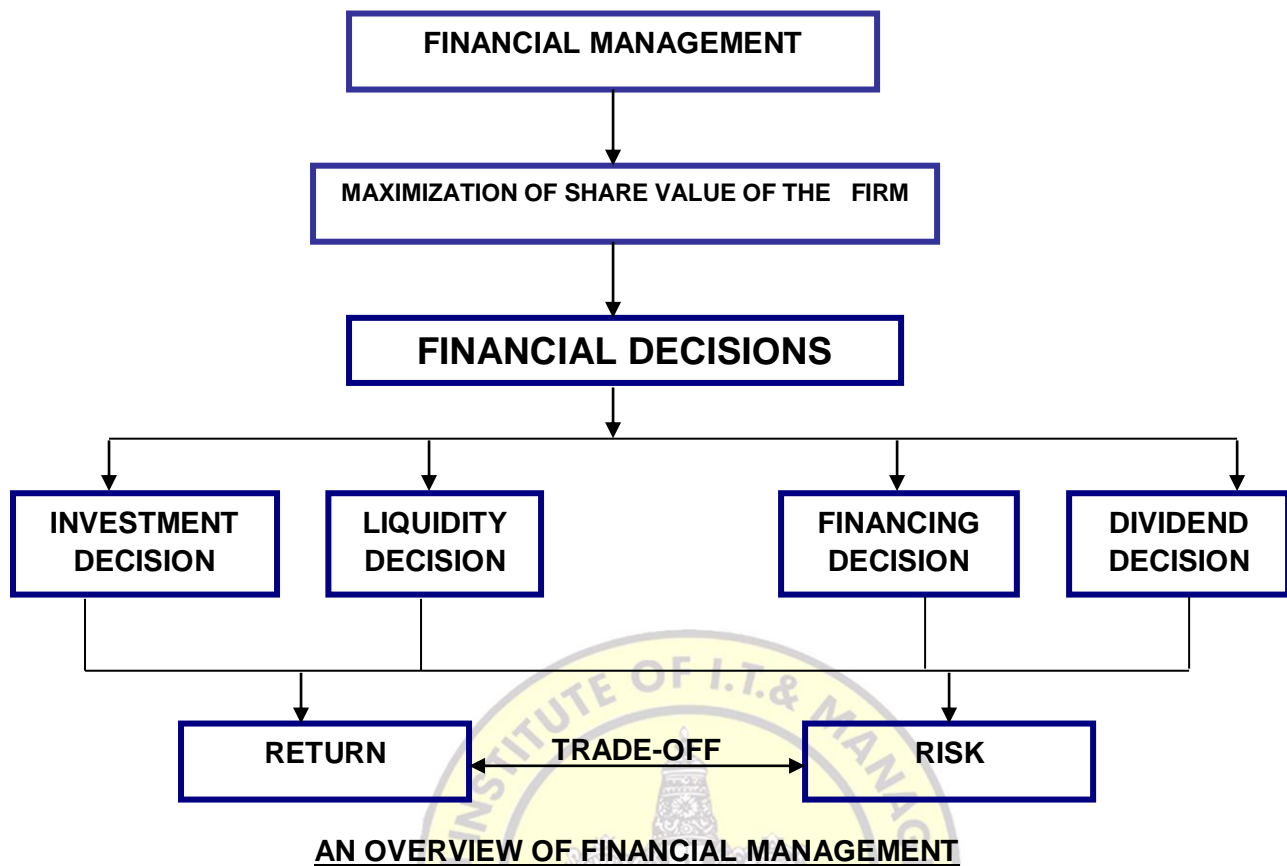
**B. Investment decisions:** It is concerned with the allocation of funds to both capital and current assets. Capital assets are financed through long term funds and the current assets are financed through short term funds. Thus, it consists of the following:

- i) **Capital Budgeting:** efficient allocation of capital is one of the most important functions of the financial management in modern times. This function involves the firm's decision to commit its funds in long-term assets. The investment in long-term assets (fixed assets) will be quite heavy and to be made immediately but the returns will be available after a certain period. The investment decisions of a company are commonly called as the capital budgeting decisions or capital expenditure decisions.
- ii) **Working capital management:** The management of current assets is known as working capital management. Managing current assets requires more attention than managing fixed assets. Management of current assets can be costly. Too large an investment in current assets means tying – up capital that can be used productively elsewhere. For example, lack of inventory may results in loss of sales as the goods that a customer wants to buy may not be available.

**C) Liquidity decision:** the investment in current assets affects firm's profitability, liquidity and risk. A conflict exists between profitability and liquidity. If the firm does not invest sufficient funds in current assets, the firm may become liquidity, but it would lose profitability, as idle current assets would not earn anything.

**D) Dividend decisions:** the return on shareholder's capital is known as 'dividend'. The decisions of finance manager relating to the distribution of earnings to the shareholders and the amounts to be retained in the firm is termed as dividend decisions.





The investment, finance and dividend decisions are inter related to each other and therefore, the finance manager while taking any decision should consider the impact from all the three angles simultaneously.

## II) Incidental/ Routing finance function:

It does not require a great managerial ability to carry out finance functions. These are chiefly clerical and are incidental to the effective handling of managerial finance functions. Some of these functions are listed below:

- Supervision of cash receipts and payments.
- Safe custody of securities, insurance policies etc.
- Maintenance of records.
- Reporting to management etc.,

### Conclusion:-

Thus, the primary responsibility of Financial Management or Manager is to acquire the monetary resources and utilize these resources in a proper way for the survival and growth of the business. Money makes many things is the oldest proverb which explains the importance

of money. Business needs money to make more money. But it is true only when the money so generated ineffectively and efficiently managed.

### **1.3 IMPORTANCE OF FINANCIAL MANAGEMENT**

- ✚ It is necessary for smooth running of an enterprise.
- ✚ It is important to enhance the credit worthiness of the business concern.
- ✚ It helps to determine the financial soundness of the firm.
- ✚ It helps the top management to evaluate profitability of operational activities of the organization.
- ✚ It is important to all levels of management for decision-making in the light of profitability.
- ✚ It provides complete coordination between various functional areas such as production, marketing, purchases and stores etc.

#### **1.3.1 EVOLUTION OF FINANCIAL MANAGEMENT**

Financial management emerged as a distinct field of study at the turn of the 20<sup>th</sup> century. Its evolution may be divided into three broad phases;

- 1. The Traditional Phase:** The phase was found its first manifestation in 1897 in the book 'Corporate finance' written **Thomas Greene**. A typical work of the traditional phase is the 'Financial policy of corporations' by **Arthur S. Dewing**. This book discusses types of securities, procedures used in issuing these securities etc.,
- 2. Transitional Phase;** The transitional phase began around the early 1940's and continued through the early 1950's. Though the nature of Financial Management during this phase was similar to that of the traditional phase. In this phase greater emphasis was placed on the day-to-day problems faced by a financial manager in the areas of funds analysis, planning and control. A representative work of this phase is 'Essays on Business' by **Wilfred J. Witman et.al**
- 3. The Modern phase;** the modern phase began in the 1950's. Since the beginning of this phase, many significant developments have occurred in the fields of capital budgeting, working capital management, capital structure theories etc.

## 1.4 THE ROLE IN THE CONTEMPORARY SCENARIO

- ✚ Today's highly dynamic business environment is driven by opening and expanding global markets; multiple corporate governance requirements; pressure on improving efficiency, cost cutting, demand for higher return on investment; greater stress on timely valuable information.
- ✚ Rapid changes in technology and increased use of technology; sharp focus on aligning the companies towards the customer needs and increasing focus on core unpredictable activities. It indicates that the business environment is diverse multi-faced and unpredictable.
- ✚ Not only the business environment at the same time, we have seen major accounting scandals around the world — Enron, Parmalat, WorldCom, Qwest Communications, Tyco International, Health South Corporation, Adelphia, Peregrine Systems, WorldCom, AIG and Satyam Computer Services.
- ✚ These scandals have occurred due to the misdeeds like overstating revenues, understating expenses, overstating the value of assets, underreporting the liabilities, misuse or misdirecting funds, some cases with the billions of dollars due to the collapsed share prices, shook public confidence in the global security markets.
- ✚ Therefore, today's business environment place extraordinary demands on corporate executives and particularly the burden of finance function is accelerated without limit.
- ✚ As a result, in recent years, executive roles have been forced to evolve and in some instances, change dramatically and companies restructured their traditional models to become leaner, faster, and more responsive.
- ✚ Finance function plays a pivotal role in restructuring traditional models and it has become core of business operations, reporting and ensuring financial integration than ever before.
- ✚ The role of finance (manager) is no longer confined to accounting; number crunching, financial reporting and risk management and finance manager, once considered as an executive with proficiency in figures, is no longer confined to the game of numbers.
- ✚ Having undergone changes over the period of time, they now play a major role in driving the business for their organization by acting as a strategic business partner of the chief executive officer (CEO).
- ✚ Put in simple words, the role and responsibilities finance manager have become complex and demanding and require constant reinvention of the role.

**The following are the new functions of finance (manager):**

- ✚ Continuous focus on margins and ensure that the organization stays committed to value creation.
- ✚ Work across the functional divide of the company and exhibit leadership skills.
- ✚ Understand what's driving the numbers and provide operation insights, including a sense of external market issues and internal operating trends, and become key strategy player.
- ✚ A ware and use the highly innovative financial instruments.
- ✚ Know the emergence of capital market as central stage for raising money.
- ✚ Adding more value to the business through innovations in impacting human capital.
- ✚ Must balance the need to cut overhead with the need to create a finance organization able to meet long-term goals by — designing financial processes, systems and organization that can support the business in the future and initiating cost reductions that further cut organizational fat, but not operational muscle.
- ✚ Liaison to the financial community, investors and regulators (rating agencies, investment and commercial bankers and peers), which are valuable information sources for strategic and tactical decisions.
- ✚ Assess probable acquisitions, contemplating initial negotiation, carrying out due diligence, communicating to employees and investors about the horizontal integration.
- ✚ Deal with the post-merger integration in the light of people issues.
- ✚ Deal with the new legislation (New Companies Bill, Limited Liability Partnership), and regulations merely add more formality and, to an extent, bureaucracy, to what most already subscribe to as best practices in financial reporting.
- ✚ Be one of the undisputed arbiter in matters of financial ethics, with the backing of legislation and stiff penalties.
- ✚ Finance managers are central to changes in audit and control practices. Corporate governance is a key issue that must be continuously monitored and he/she should not push the limit of the P&L and growth.
- ✚ Be aware of the proposed changes in financial reporting systems such as International Financial

## 1.5 GOALS / OBJECTIVES OF FINANCIAL MANAGEMENT

### (Goals of finance functions)

The objectives of financial management are broadly classified into two categories:

- 1) Basic objectives
  - a. profit maximization
  - b. wealth maximization
- 2) Other objectives

#### 1) Basic objectives:

- Traditionally, the basic objectives of financial, management are the maintenance of liquid assets and maximization of profitability.
- Maintenance of liquid assets means that the firm has adequate cash in hand to meet its obligations at all times. And maximization of profitability can be explained in the following lines.

#### a) Profit maximization:

- The financial objective of a firm is to maximize the owner's economic welfare. There is a controversy as to how the economic welfare of owners can be maximized.
- According to this approach actions that increase profits should be undertaken and those that decrease profits should be avoided. Hence, maximization of profits is regarded as an operational criterion for maximizing the owner's economic welfare.
- Thus, profit is the central economic objective of any business enterprise. The objective of profit maximization is justified on account of the following reasons.

A human being performing any economic activity rationally aims at utility maximization. Utility can be measured in terms of profits. Thus, profit maximization is justified on the ground of rationality.

- The firm by pursuing its objective of profit maximization also maximizes social economic welfare.
- Profit maximization will be a motive force to acquire monopoly in the imperfect capital markets.
- Profit maximization is the process by which a firm determines the price and output
- Level that returns the greatest profit. There are several approaches to this problem.
- The total revenue -- total cost method relies on the fact that profit equals revenue minus cost, and the marginal revenue -- marginal cost method is based on the fact that



total profit in a perfectly competitive market reaches its maximum point where marginal revenue equals marginal cost.

- Any costs incurred by a firm may be classed into two groups: fixed cost and variable cost. Fixed costs are incurred by the business at any level of output, including zero output. These may include equipment maintenance, rent, wages, and general upkeep.
- Variable costs change with the level of output, increasing as more products is generated. Profit Maximization has to define after taking into account many things like:
  - i. Short-term, midterm, and long term profits
  - ii. Profits over period of time

### **Limitations of profit maximization:**

1. it is vague
2. it ignores the timing of returns
3. It ignores the risk.

### ***b) Wealth maximization:***

- It is commonly agreed that the objective of a firm is to maximize value or wealth. Value of a firm is represented by the market price of the company's common stock.
- The market price of a firm's stock represents the focal judgment of all market participants as to what the value of the particular firm is.
- It takes in to account present and prospective future earnings per share, the timing and risk of these earning.
- The dividend policy of the firm and many other factors that bear upon the market price of the stock. Market price acts as the performance index or report card of the firm's progress.
- Prices in the share markets are largely affected by many factors like general economic outlook, outlook of particular company, technical factors and even mass psychology.
- Maximization instead of profit maximization should be considered as an operational criterion for the managerial financial decisions.
- This is the objective of modern corporate enterprises. The wealth or the net present value is obtained by the following formula.
- Wealth maximization benefits the suppliers of capital labour, society and management.
- They wealth maximization objective is consistent with the objective for maximizing the owners' economic welfare.

- Apart from this, the wealth maximization objective is also consistent with the interest of :-
  - (i) *Suppliers of loan capital*
  - (ii) *Labor or Employees*
  - (iii) *Society*
  - (iv) *Management*
- Let us have an idea of how the interests of all these stakeholders are served.
- Suppliers of loan capital include trade creditors, debenture holders, banks and financial institutions.
- These parties are entitled to a fixed rate of interest on the capital provided by them and they would have prior claim on the company's earnings and they are entitled to a fixed rate of interest.
- The payment of such interest charges is a legal obligation.
- If a company pursues, the policy of maximizing the wealth of shareholders who get residual earnings, the relative position of the suppliers of the loan capital is much safer.
- Wealth maximization objective is also consistent with the interests of management. The management can survive in the long run only when it manages efficiently the resources of the company and creates wealth.
- This process simultaneously facilitates the satisfaction of the interests of the all parties/stakeholders connected with the functioning of the company
- Thus, the wealth maximization. Objective is in harmony with the interests of various groups i.e. owners, employees, society and management.

**2) Other objectives:** Besides the above basic objectives, the following are the other objectives of financial management.

- Ensuring return on capital employed (ROI)
- Value addition and profitability.
- Growth in earnings per share and price earnings ratio.
- Growth in dividends to share holders.
- Efficient utilization of short-term, medium and long term finances.
- Maximization of finance charges.
- Ensuring financial discipline in the organization.

## 1.6 PROFIT MAXIMIZATION VS. WEALTH MAXIMIZATION

- ❖ Profit maximization is a traditional approach which is claimed to be the main goal of any kind of business, small or big. Profit equals to revenues subtracted by expenses. It is needed for business survival; pay rents, employees salary, capital, research and development. If a business doesn't yield any profit, it can be said that they're on danger in term of survival because profit is the main objective.
- ❖ Wealth maximization is the new approach and claimed to be superior to profit maximization. Wealth maximization means increasing shareholder's wealth. The term wealth here is the market price of capital invested by shareholders. When the net worth of a business increased the wealth of shareholder are also increased. Unlike profit maximization, wealth maximization serves shareholder's objective; get good return and safety of their capital. If profit maximization is an objective of a business, wealth maximization is the tools to maintain the objectives. Wealth equals to present value of cash flows subtracted by cost.
- ❖ Since wealth maximization is based on cash flow, it can avoids any ambiguity in accounting the profit. While profit maximization is based on profit, it is kind of hazy. There are many kind of profit It can be gross profit, net profit, before the tax profit, etc. Wealth maximization also considers risk of a business while profit maximization ignores it. Profit maximization presents a shorter term view as compared to wealth maximization. Short term profit maximization can be achieved by the managers at the cost of long term sustainability of the business. Wealth maximization considers the time value of money. A dollar today and a dollar one year latter do not have the same value. In wealth maximization, the future cash flows are discounted at an appropriate discounted rate to represent their present value

**Profit maximization**– It is one of the basic objectives of financial management. Profit maximization aims at improving profitability, maintaining the stability and reducing losses and inefficiencies.

Profit in this context can be seen in 2 senses.

1. Profit maximization for the owner.
2. Profit maximization is for others.

**Normally profit is linked with efficiency, so it is the test of efficiency.**

However this concept has certain limitations like ambiguity i.e. the term is not clear as it is nowhere defined, it changes from person to person.

- ❖ Quality of profit – normally profit is counted in terms of rupees. Normally amount earned is called as profit but it ignores certain basic ideas like wastage, efficiency, employee skill, employee's turnover, product mix, manufacturing process, administrative setup.
- ❖ Timing of benefit / time value of profit – in inflationary conditions the value of profit will decrease and hence the profits may not be comparable over a longer period span.
- ❖ Some economists argue that profit maximization is sometimes leads to unhealthy trends and is harmful to the society and may result into exploitation, unhealthy competition and taking undue advantage of the position.

### **Wealth maximization –**

- ❖ Approaches of financial management, by wealth maximization we mean the accumulation and creation of wealth, property and assets over a period of time.
- ❖ thus if profit maximization is aimed after taking care , of its limitations it will lead to wealth maximization in real sense, it is a long term concept based on the cash flows rather than profits.
- ❖ Hence there can be a situation where a business makes losses every year but there are cash profits because of heavy depreciation which indirectly suggests heavy investment in fixed assets and that is the real wealth and it takes into account the time value of money and so is universally accepted.

### **UNIT-1-IMPORTANT QUESTIONS**

- ✓ Elucidate Scope and function of financial management?
- ✓ Explain Goals & objectives of financial management?
- ✓ The new role of financial management in contemporary scenario?

**-NO CASE STUDY IN FIRST UNIT-**

# **SYLLABUS**

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## MBA - II - SEMESTER

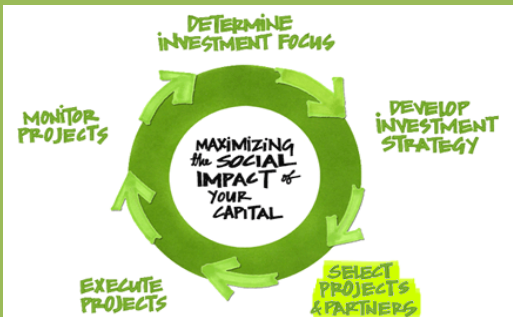
### Subject: FINANCIAL MANAGEMENT

#### UNIT-2-The Investment Decision

Investment?

YES

NO



## UNIT-2

### THE INVESTMENT DECISION

#### 1.1 INVESTMENT DECISION /CAPITAL BUDGETINGPROCESS

The capital budgeting process involves generation of investment proposals, estimation of cash flows for the proposals, evaluation of cash flows, selection of proposals and execution of the projects. However, the modern finance managers, the capital budgeting process may be divided into six broad phases, viz., planning/ idea generation, evaluation/analysis, selection, financing, execution/implementation and review.

- 1) **Project generation:** Investments proposals of various types may originate at different levels within a firm. The investment proposals may fall into one of the following categories:
  - a. Proposals to add new product to the product line.
  - b. Proposal to expand capacity in existing product lines.
  - c. Proposals to reduce the costs of the output of the existing at any levels; from top management level to the lower level management.
- 2) **Project evaluation:** In the preliminary screening, when a project proposal is found to be worthwhile, then it is required to go for evaluation. Project evaluation involves two steps:
  - a. Estimation of costs and benefits.
  - b. Selection of an appropriate criterion to judge the desirability of the project.
- 3) **Project selection:** There is no standard administrative procedure for approving the investment proposals. The screening and selection procedure of the projects would differ from firm to firm. Due to the importance of capital budgeting decisions, the final approval of the project may generally rest on the top management. However, the proposals are scrutinized at multiple levels.
- 4) **Project financing:** After the selection of the project, the next step is financing. Generally, the amount required is known after the selection of the project. Under this phase financing arrangements have to be made. There are two broad sources available such as equity (own funds) and debt (borrowed funds).
- 5) **Project implementation:** In the project execution the top management or the project execution committee is responsible for effective utilization of funds allocated for the

project. It must see that the funds are spent in accordance with the appropriation made in the capital budgeting plan. The funds for the purpose of the project execution must be spent only after obtaining the approval of the finance controller.

- 6) **Project review:** Once the project is converted from paper work to concrete work, then, there is need to review the project. Performance review should be done periodically, under this performance review, actual performance is compared with predetermined or projected performance.

**1.2 CAPITAL BUDGETING - MEANING:-** The term capital budgeting refers to the long-term planning for proposed capital outlays or expenditures for the maximizing the return on investments. The capital expenditure may be of the following types:

1. Cost of mechanization, automation and replacement.
2. Cost of acquisition of fixed assets (land, building, machinery etc.).
3. Investment on research and development.
4. Cost of development and expansion of existing and new products.
5. Capital Budgeting decision is also known as ‘investment decision making’ or capital expenditure decisions normally are such decisions where invest o money and expected benefits arising there from are spread more than one year. It includes both the raising of funds and utilization.

**1.2.1 CAPITAL BUDGETING & DEFINITION:-**

- ❖ The term capital investment refers to the investment in various fixed assets whose returns would be available only after a year.
- ❖ The investment in fixed assets will be quite heavy and to be made immediately, but the returns will be available after a period of one year.
- ❖ The investment decisions of a company are commonly called as the capital budgeting decisions or capital expenditure decisions.
- ❖ The term capital budgeting is used interchangeably with “capital expenditure decision”, “capital expenditure management”, this represents planning in advance to secure additional funds required for implementation of specific projects.



- ✚ **Charles T. Horngren** has capital budgeting as “long-term planning for making and financing capital outlays.”
- ✚ **John j Hampton** define that “capital budgeting is concerned with the firms formal process for the acquisition and investment of capital”
- ✚ **According to J.Lawrence Gitman**, Capital budgeting refers to the total process of generating, evaluating, selecting and follow up of expenditure alternatives. A business concern sets apart or budgets financial resources to new investment proposals.

### **1.2.2 OBJECTIVES OF CAPITAL BUDGETING**

- 1) To ensure the selection of the possible profitable capital projects.
- 2) To ensure the effective control of capital expenditure, achieved by forecasting the long-term financial requirements.
- 3) To make an estimation of capital expenditure during the budget period and to see that the benefits and costs are measures in terms of cash flow.
- 4) To determine that the required quantum takes place as per authorization and sanctions.
- 5) To facilitate coordination of inter-departmental project funds among the competing capital projects.
- 6) To ensure the maximization of the profit by allocating the available investment.

### **1.2.3 FEATURES OF CAPITAL BUDGETING:**

**a) Nature:** generally, the company’s capital budgeting decisions include additions, disposition, modification and replacement of fixed assets. The budgeting decisions include the following proposals.

**b) Replacement:** Replacement of fixed assets on account of the existing assets either being worn out or become out dated.

**c) Expansion:** the company may have to expand its production capacities on account of high demand for its products or inadequate production capacity. This will need additional capital investment.

**d) Diversification:** A company may intend to reduce its risk by operating in several markets. In such case, capital investment may become necessary for purchase of new machinery and facilities to handle the new products.

**e)R & D:** Large sums of money may have to be spent for research and development, in case of those industries where technology is rapidly changing. In such cases, large sums of money are needed for these proposals.

**f) Potentially large anticipated benefits**

**g) Relatively high degree of risk**

**h) Relatively long term between the initial outlay and the anticipated return.**

#### **1.2.4 KINDS OF CAPITAL BUDGETING DECISIONS:**

Basically, capital budgeting decisions can be classified into 3 types viz., accept-reject decisions, mutually exclusive choice decisions and capital rationing decision.

##### **1) Accept – reject decision:**

- ✚ This type of decision is basic to capital budgeting. If the proposed project is accepted by the top management, the company proceeds with the investment of funds therein.
- ✚ Alternatively, if the project is rejected, the company does not make any investment. Generally speaking, all those proposals which yield a rate of return greater than the expected rate or cost of capital, are accepted and the rest are rejected.
- ✚ By adopting this criterion, all independent proposals are accepted or rejected.

##### **2) Mutually exclusive project decision:**

- ✚ This relates to projects which compete with others in such a manner that the acceptance, of one automatically excludes the acceptance of other projects.
- ✚ The alternative proposals are mutually exclusive and only one can be implemented. Suppose, a company running a printing press decides to buy a cutting machine.
- ✚ There are three competing brands all of which involve different initial capital outlays and operating costs.
- ✚ The three machines represent mutually exclusive alternatives, as only one of the three machines can be selected.
- ✚ It should also be remembered that the mutually exclusive project decisions are not independent of the above accept-reject decisions.

##### **3) Capital rationing decisions:**

- ✚ Capital budgeting becomes a very simple process for companies with unlimited funds, since all independent investment proposals yielding return greater than the expected rate or cost of capital are implemented.



- ✚ But the real situation is entirely different. Many companies have only limited funds and resort to fixed capital budgets.
- ✚ Whenever a large number of investment proposals complete for the limited funds, they necessitated the capital rationing to them.
- ✚ The company allocates the limited funds to all the projects in such a manner that the long-term returns are maximized. Capital rationing relates to selection of a group of investment proposals out of many acceptable under accept-reject decision method.
- ✚ This leads to ranking of investment proposals whereby projects can be ranked on the basis of predetermined rate of return. Conceptually, capital budgeting has three aspects.
- ✚ Different investment proposals are ranked on the basis of their profitability in the descending order using the companies predetermined rate of cost capital as the cut off point for determining whether it should be accepted or rejected.
- ✚ In this process the availability of funds or the limitations imposed by the top management on volume of funds to be utilized for the purpose will be taken into consideration.
- ✚ Thus, these three aspects are interlined and it is a difficult process to bring them together to facilitate optimum investment decision.

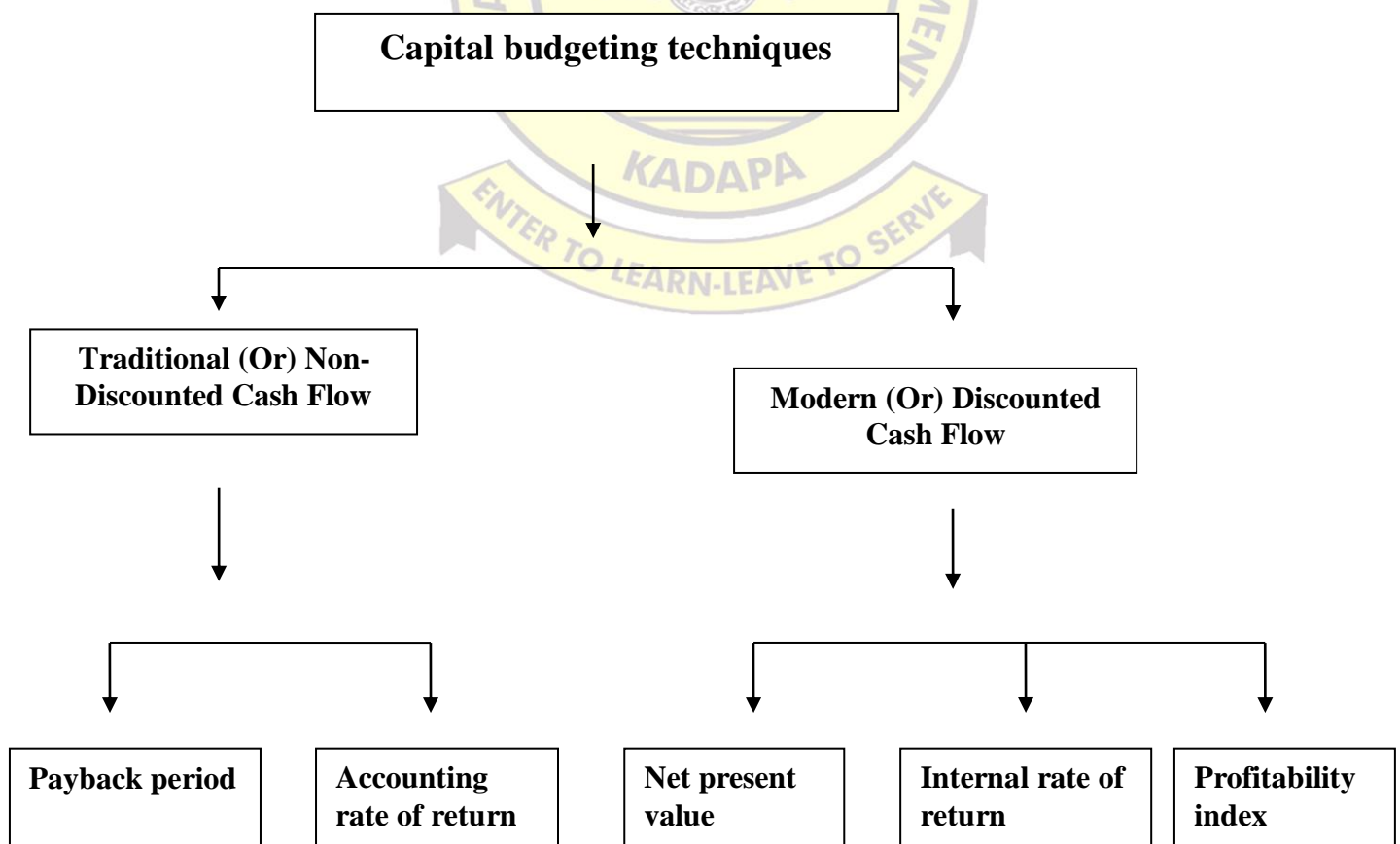
#### **1.2.5 NEED AND IMPORTANCE OF CAPITAL BUDGETING**

1. **Large investment:** these decisions, generally involve large investment funds. But these funds are scarce position. Hence, it is very important for the firm to plan and control its capital expenditure.
2. **Long term commitment of funds:** it involves not only large amount of funds but also for long term funds. Long term funds increases the financial risk. Greater the risk involved, greater the need for careful capital expenditure.
3. **Irreversible nature:** the capital expenditure decisions irreversible nature. Once the decision for acquiring a permanent asset is taken, it becomes very difficult to dispose of these assets without incurring heavy losses.
4. **Long term effect on profitability:** capital budgeting decisions have a long term and significant effect on the profitability of the concern.

5. **Difficulties of investment decisions:** the long term investment decisions are difficult to be taken because decisions extend to a series of years beyond the current accounting period, uncertainties of future and higher degree of risk.
6. Capital budgeting decisions involve long-term implication for the firms and influence its risk complexion.
7. It involves commitment of large amount of funds.
8. Capital decisions are required to make assessment of future events that are uncertain.
9. In most cases capital budgeting techniques are irreversible(permanent)
10. Capital budgeting ensures the selection of right source of finance at the right time.
11. Wrong sales forecast may lead to over or under investment of resources.
12. They affect risk of the firm.

### **1.2.6 CAPITAL BUDGETING TECHNIQUES/METHODS:**

There are various methods of evaluating profitability of capital investment proposals. The criteria for the appraisal of investment proposals are grouped into two types, viz.



**I) Traditional (Or) Non-Discounted Cash Flow Method (NDCF):-** these methods are based on the principles to determine the desirability of an investment project on the basis of its useful life and expected returns. These methods depend upon the accounting information available from the books of accounts of the company. The following are the traditional methods of capital budgeting:

**a) payback period method(PBP):**It is also called as payout or pay off period method. It may be defined as minimum required number of years to recover the original cash outlay invested in a project or the payback period is the time required for the income to equal the capital invested. It is calculated in the following ways.

i) if cash flows are even

$$\text{PBP} = \frac{\text{Original investment}}{\text{Cash inflows per year}}$$

ii) when cash in flows are uneven

in this case the PBP can be find out by adding the cash inflows until the total cash in flows are equal to the initial investment of a project.

$$\text{PBP} = \frac{E + B}{S}$$

Where E= period for which the part of the investment is recovered.

B = balance of the investment still to be recovered.

S = cash inflows in the succeeding year in which part of investment is recovered.

**Advantages:**

- i) The pay back method is an improvement over the criterion of urgency.
- ii) It is easy to understand and simple to adopt in any concern. It is used as an effective tool for evaluating investment proposals such that the investment with the shorter PBP is preferred to investment with longer PBP.

- iii) The short term approach involved in the pay back method greatly minimizes the possibility of losses through obsolescence.
- iv) The use of pay back method is preferred for the simple reason that the returns beyond three or four years or quite uncertain and the same are disregarded in any planning decision.
- v) A company which is running short of funds with no other sources of raising the required funds must necessarily select only those projects yielding quick returns and hence, more importance is attached to this method of evaluating investment proposals.

**Disadvantages:**

The pay back method suffers from certain shortcomings which are as follows.

- i) This method completely ignores all cash inflows occurring from the project after the payback period. The application of this method in the case of a project with a longer gestation period will be misleading. From this point of view, heavy and basic industries with longer gestation periods can never be launched since they begin to yield the returns after lapse of considerable period of time.
- ii) This method fails to take into account the total period of time over which the investment is likely to yield the returns. As such, this method ignores the interest factor which is more vital for evaluating investment decisions.
- iii) Another limitation of pay back method is that it does not measure precisely even the cash flows expected to be received within the pay back period, in the sense that does not differentiate between projects in terms of the timing or magnitude of cash flows. It takes into consideration only the recovery period.

**Note:** minimum payback period is accepted, otherwise rejected.

**b) Accounting rate of return (ARR) method:** It is also called as average rate of return method. This method takes into account the earning expected from the investment over their whole life. In this method the accounting concept of profit i.e., net profit after tax and depreciation is used rather than cash inflows. It is also known as return on investment (ROI) method.

$$i) \quad ARR = \frac{\text{Average annual net earnings}}{\text{Average investments}} \times 100$$

$$ii) \quad ARR = \frac{\text{Total Earnings}}{\text{Original investment}} \times 100$$

$$iii) \quad ARR = \frac{\text{Incremental Income}}{\text{Incremental investment}} \times 100$$

Where average annual net earnings =  $\frac{\text{Total Earnings}}{\text{No. of years}}$

The amount of average investment can be calculated according any of the following methods.

$$i) \quad \text{If scrap value is given} = \frac{\text{Original investment} + \text{Scraps value}}{2}$$

ii) If there is additional working capital and scrap is give

$$\text{Average investment} = \frac{(\text{Opening investment} - \text{scrap value}) + \text{Net Working capital} + \text{Scrap Value}}{2}$$

**Advantages:**

- 1) The ARR method is also simple to understand and easy to adopt. What are required are only the accounting profits in a project after providing for taxes. This figure can be easily obtained.



- 2) This method is considered superior to the payback method in the sense that it takes into consideration the earnings over the lifespan of project and hence, the facilitates the comparison of the values of different projects.
- 3) This method takes into consideration only the net earnings after providing for depreciation, as it is of vital importance in the appraisal of investment proposals.

**Disadvantages:**

The ARR method suffers from the same shortcomings as that of the pay back method.

**NOTE:** projects having higher ARR would be preferred to projects which have low ARR.

**II) Modern techniques / discounted cash flow method (DCF):**

The discounted cash flow method (DCF) takes into consideration the time value of money and provides a more objectives basis for evaluating investment proposals. This method is considered superior to payback method as well as average rate of return method. Since the former eliminates the short comings of both. All these methods require the cash flows discounted at certain rate, often referred to as “cost of capital”. The cost of capital is the minimum discount rate that must be earned on a project so that the value of a company remains constant over a period of time.

**a) Net present value (NPV) Method:**

Under this method all the cash inflows and outflows are expressed in terms of their present values. Cash inflows a mean profit after tax but before depreciation (PAT+ Depreciation) and cash outflows consists of initial investment, commitment of cash at various points of time. The difference between these present values of cash inflows and the present value of each outflow is known as ‘net present value’.

The equation for the net present value, assuming that all cash outflows are made in the initial year (t=0), will be:

$$NPV = \frac{A_1}{(1+K)^1} + \frac{A_2}{(1+K)^2} + \frac{A_3}{(1+K)^3} + \dots + \frac{A_n}{(1+K)^n} - C$$

Where,

A1, A2.... Represents cash inflows,

K is the firm's cost of capital

C is the cost of the investment proposal and

N is the expected life if the capital.

**Note:** it should be assumed that the cost of capital, k is known; otherwise, the net present value cannot be determined.

1. NPV > ZERO- PROJECT ACCEPTED
2. NPV < ZERO –PROJECT IS REJECTED
3. NPV=ZERO –DISCRETION OF THE MANAGER

**Steps:** 1. calculate the cost of capital for discounting cash flows.

1. Finding out the present value of cash inflows.
2. Deduct the initial outlay from present value of cash inflows we will get the NPV.

it is known as Discounted Cash Flow technique.

**Process of NPV Computation:-**

- 1) An appropriate rate of return should be selected to discount cash flows. Generally the appropriate rate of return is the cost capital of the company.
- 2) An estimation of cash flows should be made.
- 3) The present value of cash inflows and the present value of investment (cash outflows) should be calculated using the discount rate.
- 4) The NPV can be found out by subtracting the present value of cash outflows from the present value of cash inflows.
- 5) Accept the projects with '0' or 'positive' NPV and reject if NPV is 'negative'.

So, NPV method is a process of calculating the present value of cash flows of an investment proposal using cost of capital as the appropriate discount rate, and finding the net present value by subtracting the present value of cash outflows from the present value of cash inflows. The market value of the firms increases when NPV is maximized.

**Accept or Reject Criterion:**

The NPV method can be used as an accept or reject criterion. In case, NPV is positive or zero, the project should be accepted. If the NPV is negative, the project should be rejected. Accept or reject criterion can be pasteurized as follows:

NPV > Zero - Accept the project

NPV < Zero - Reject the project

The NPV technique can be used to select between mutually exclusive projects by considering whether the incremental investment generates a positive net present value. Investment proposals can be ranked in order of net present values i.e., first rank will be given to the project with the highest positive NPV and last rank to the project with the lowest NPV.

### **Advantages:**

1. Firstly, the NPV method recognized the time value of money, this is the most significant advantage since pay back method and the ARR method have ignored this factor.
2. This method considers all cash flows over the entire lifespan of the project in its calculation unlike the payback method.
3. The changing discount rate can be built into the NPV calculations by altering the denominator. When the lifespan of the project is longer the value of money becomes low and the selection of mutually exclusive projects.
4. Finally this method is consistent with the objective of maximizing the wealth of the shareholders of the company.

### **Disadvantages:**

1. This method is difficult to understand as well as use, when compared to the pay back method or even the ARR method.
2. In the computation of net present value of project, the discount rate is the most important element used since different discount rates will give different present values. As such, the relative desirability of a proposal will change with a change in the discount rate. Again, the calculation of a required rate of return, often referred to as cost of capital, presents serious problems. In fact, there is a considerable difference of opinion relating to the exact method of calculation of the same.
3. This method may not provide satisfactory solution when the projects compared involve different amounts of investment. For a project with a higher net present value may not be desirable, since it may involve huge initial capital outlay.

**b) Internal rate of return (IRR) Method:** The internal rate of return method (IRR) is yet another discounted cash flow technique which takes into consideration the magnitude and

timing of cash flows. It is also known as time adjusting rate of return, marginal efficiency of capital, marginal productivity of capital, yield on investment and so on. It is employed when the cost of investment and the annual cash inflows are known while the unknown rate of earnings is to be ascertained.

The internal rate of return can be defined as that rate which equates the present value of cash inflows with the present value of cash outflows of an investment. In other words, the internal rate of return will be that rate at which the present value of the investment is zero.

It is defined as that rate of return which equates the present value of cash inflows with the present value of cash outflows, at this rate the NPV is ZERO.

In order to find out the exact IRR between two nearer rates, the following formula is to be used.

$$\text{IRR} = L + \frac{P1-C}{P1-P2} \times D$$

Where,

L= lower rate of interest rate

P1 = present value of cash inflows at lower rate of interest rate

P2= present value of cash inflows at higher rate of interest rate.

C= capital outlay

D= difference between interest rates.

**c) Profitability index or cost benefit ratio method:** The profitability index (PI), is yet another method of evaluating the investment proposals. It is also known as the benefit – cost ratio (B/C) or desirability factor. It represents a ratio of the present value of future cost benefit at the required rate of return to the initial cash outflow of the investment. This is similar to NPV approach. The PI approach measures present value of returns per rupee invested while the NPV is based on the difference the present value of future cash inflows and the present value of cash outlays. Where projects with different initial investments are to be evaluating the PI method proves to be the best technique. The formula to calculate the profitability index is as follows.

$$\text{PI} = \frac{\text{Present value of cash inflows}}{\text{Present value of cash outflows.}}$$

This method is also known as benefit cost ratio because the numerator measures the benefits and the denominator measures the costs.

$$PI = \frac{\text{Present. Value of cash inflows}}{\text{Initial investment}}$$

**NOTE:** If the profitability index > 1 or more than, the project is accepted, otherwise rejected.

**d) Tabular method:** IRR can also be find out by using table values in the following ways.

**Case 1-** when cash inflows are uniform

Project generates uniform cash inflows, the IRR can be calculated by locating the factor in the present value of annuity table.(Table – D).

$$F = I/C.$$

Where F= factor to be located in present value of annuity table on the line representing number of years corresponding to estimated life.

I= initial investment

C= cash inflows per year.

**Case 2 –** where cash inflows are uneven

When project generates uneven cash inflows, the IRR can be calculated by locating the factor in the present value of annuity table.

$$F = I/C$$

Where F = factor to be located in present value of annuity table on the line representing No. of years corresponding to estimated life.

I= Initial investment

C = average cash inflows

The factor thus calculated will be located in the present value of an annuity table on the line representing number of years corresponding to the estimated life of the project. This would give us the estimated rate of return to be applied for discounting the cash inflows for IRR.



**CAPITAL BUDGETING METHODS-PROBLEMS****I. TRADITIONAL (OR) NON-DISCOUNTED CASH FLOW (NDCF)****A. PAYBACK PERIOD METHOD:**

**a) When annual cash inflows are equal or even the following formula to calculate payback period**

$$\text{Payback period} = \frac{\text{Initial investment}}{\text{Average Annual Cash inflow}}$$

**Example 1:**

The Delta Company is planning to purchase a machine known as machine X. Machine X would cost 25,000 and would have a useful life of 10 years with zero salvage value. The expected annual cash inflow of the machine is 10,000.

Required: Compute payback period of machine X and conclude whether or not the machine would be purchased if the maximum desired payback period of Delta company is 3 years.

**Solution:**

Since the annual cash inflow is even in this project, we can simply divide the initial investment by the annual cash inflow to compute the payback period. It is shown below:

$$\begin{aligned} \text{Payback period} &= 25,000/10,000 \\ &= 2.5 \text{ years} \end{aligned}$$

According to payback period analysis, the purchase of machine X is desirable because its payback period is 2.5 years which is shorter than the maximum payback period of the company.

**Example 2:**

**Due to increased demand, the management of Rani Beverage Company is considering to purchase a new equipment to increase the production and revenues. The useful life of the equipment is 10 years and the company's maximum desired payback period is 4 years. The inflow and outflow of cash associated with the new equipment is given below:**

**Initial cost of equipment: 37,500**

**Annual cash inflows:**

Sales: 75,000

**Annual cash Outflows:**

Cost of ingredients: 45,000

Salaries expenses: 13,500

Maintenance expenses: 1,500

**Non-cash expenses:**

Depreciation expense: 5,000

Required: Should Rani Beverage Company purchase the new equipment? Use payback method for your answer.

**Solution:**

Step 1: In order to compute the payback period of the equipment, we need to workout the net annual cash inflow by deducting the total of cash outflow from the total of cash inflow associated with the equipment.

$$\text{Payback period} = \frac{\text{Initial investment}}{\text{Average Annual Cash inflow}}$$

**Computation of net annual cash inflow:**  $75,000 - (45,000 + 13,500 + 1,500) = 15,000$

Step 2: Now, the amount of investment required to purchase the equipment would be divided by the amount of net annual cash inflow (computed in step 1) to find the payback period of the equipment.

$= 37,500 / 15,000$

$= 2.5$  years

Depreciation is a non-cash expense and has therefore been ignored while calculating the payback period of the project.

According to payback method, the equipment should be purchased because the payback period of the equipment is 2.5 years which is shorter than the maximum desired payback period of 4 years.

**b) When annual cash inflows are unequal or uneven the following formula to calculate payback period**

$$\text{Payback period} = \text{Near to payback period} + \frac{\text{Balance of outflow}}{\text{Next year cash inflow}}$$

**Example 1:** Company C is planning to undertake another project requiring initial investment of 50 million and is expected to generate 10 million in Year 1, 13 million in Year 2, 16 million in year 3, 19 million in Year 4 and 22 million in Year 5. Calculate the payback value of the project.

Solution

<i>(cash flows in millions)</i>		Cumulative cash flows
Year	Cash Flows (Million)	Cumulative cash flows (Million)
0	-50	
1	10	10
2	13	23
3	16	39
4	19	58
5	22	60

$$\begin{aligned} \text{Payback period} &= \text{Near to payback period} + \frac{\text{Balance of outflow}}{\text{Next year cash inflow}} \\ &= 3 + (11\text{M} \div 19\text{M}) \\ &\approx 3 + 0.58 \\ &\approx 3.58 \text{ years} \end{aligned}$$

#### B) ACCOUNTING RATE OF RETURN (ARR) METHOD:

**Example 1:** The managing director of Narmada Co. Ltd reached a proposal to purchase an automatic machine at a cost of Rs. 10,00,000. It is estimated that erection charges are Rs. 10,250 and scrap value at the end of 5 years Rs. 54,000. Estimated working capital to run the machinery Rs. 12,000 p.a. the projected cash flows are:

Year	Net profit after taxes
1	2,04,750
2	1,68,750
3	1,32,750
4	96,750
5	60,750

Calculate ARR and give your advice if standard ARR in the industry is 62.8%

**Solution:**

$$\text{Depreciation} = \frac{(\text{cost of the Asset} + \text{Erction charges}) - \text{Scrap value}}{\text{Life of the Asset}}$$

$$\frac{(10,00,000 + 10,250) - 54,000}{5} = 1,91,250$$

Year	Profits After Taxes	Depreciation	CFAT+ depreciation
1	2, 04,750	1,91,250	3,96,000
2	1, 68,750	1,91,250	3,60,000
3	1, 32,750	1,91,250	3,24,000
4	96,750	1,91,250	2,88,000
5	60,750	1,91,250	2,52,000
			<b>16,20,000</b>

Calculation of average annual cash flows:

$$\text{Average annual cash flows} = \frac{\text{total cash flows}}{\text{no.of years}} = \frac{16,20,000}{5} = 3, 24,000$$

Calculating net working capital:  $12,000 \times 5 = 60,000$

Calculating average investment:

$$\text{Average investment} = \text{Net WC} + \text{scrap} + \left( \frac{\text{cost of asset} - \text{scrap}}{2} \right) =$$

$$60000 + 54000 + \left( \frac{10,10,250 - 54000}{2} \right) = 5,92,125$$

Calculating ARR:

$$\text{ARR} = \frac{\text{Average cash flows}}{\text{Average investment}} \times 100$$

$$\frac{3,24,000}{5,92,250} \times 100 = 54.72\%$$

**Comment:** the proposal should be rejected as ARR (54.72%) is much less than the standard ARR (62.8%)

**Example 2:** RK industries Ltd proposed to take up an investment of Rs. 5,20,000 in a machinery, The expected life period is 5 years with a scrap value nil, income tax rate is 30% (education Cess) profits before depreciation and after taxes are: 1,60,000; 1,75,000; 1,96,000; 2,24,000 and 2,50,000. Calculate ARR?

**Solution:**

Calculating depreciation

$$\text{Depreciation} = \frac{(\text{cost of the Asset} + \text{Erction charges}) - \text{Scrap value}}{\text{Life of the Asset}}$$

$$\frac{(5,20,000 + 0) - 0}{5} = 1,04,000$$

Calculation of average annual profits:

Year	Profits	Depreciation	Taxable income	Tax	PAT
1	160000	104000	56,000	16,800	39200
2	175000	104000	71,000	21300	49700
3	196000	104000	92,000	27600	64400
4	224000	104000	1,20,000	36000	84000
5	250000	104000	1,46,000	43800	102200

$$\text{Total profits} = 39200 + 49700 + 64400 + 84000 + 102200 = 67900$$

$$\text{Average annual profits} = \frac{\text{total profits}}{\text{no. of years}} = \frac{339500}{5} = \text{Rs. } 67900$$

$$\text{Average investment} = \text{Net WC} + \text{scrap} + \left( \frac{\text{cost of asset} - \text{scrap}}{2} \right) = 0 + 0 + \left( \frac{520000 - 0}{2} \right) = 2,60,000$$

$$\text{ARR} = \frac{\text{Average Profits}}{\text{Average investment}} \times 100$$

$$\frac{67900}{260000} \times 100 = 26.11\%$$



## II. MODERN (OR) DISCOUNTED CASH FLOW

### A. NET PRESENT VALUE METHOD

**Example 1:** A project requires an investment of Rs. 3,00,000. The life span of the project is 5 years and expected cash flows and PV factor @ 10% cost of is as under. Determine the feasibility of the project by NPV?

Year	1	2	3	4	5
PV @ 10%	0.909	0.826	0.751	0.683	0.621
CFAT	70000	80000	90000	100000	125000

#### Solution:

Year	CFAT	PV @ 10%	Present Values	NPV=
1	70000	0.909	63630	Total present Values = 3,43,225 (-): initial investment = 3,00,000 Profit <u>43,225</u>
2	80000	0.826	66080	
3	90000	0.751	67590	
4	100000	0.683	68300	
5	125000	0.621	77625	
			<b>343225</b>	

**Comment:** The total present values are more than the initial investment, hence project can be accepted.

**Example 2:** Mr. Bangaram has made an enquiry to purchase a Xerox machine. The cost of machine is Rs. 75,000. The cost of borrowed capital is 9%. From the following cash inflows advise him whether to buy or not by using NPV?

Year	1	2	3	4	5
PV @ 9%	0.917	0.842	0.772	0.708	0.650
CFAT	13500	16000	18100	20200	23000

Solution:

Year	CFAT	PV @ 9%	Present Values	NPV=
1	13500	0.917	12380	Total present Values = 69,077 (-): initial investment = <u>75,000</u> Loss <u>5,923</u>
2	16000	0.842	13472	
3	18100	0.772	13973	
4	20200	0.708	14302	
5	23000	0.650	14950	
			<b>69077</b>	

**Comment:** The total present values are less than the initial investment, hence project should be rejected.

**Example 3:** No project is acceptable unless the yield is 10%. Cash inflows of certain project along with cash out flows are given below?

Year	Outflows	Inflows
0	150000	-
1	30000	20000
2		30000
3		60000
4		80000
5		30000

The salvage value at the end of the 5<sup>th</sup> year is Rs. 40,000. Calculate NPV?

Solution:

Present values of outflows			
Year	Outflows	PV @ 10%	Present Values
0	150000	1	150000
1	30000	0.909	27270
			<b>1,77,270</b>

Present values of inflows				NPV=	Profitability Index=
Year	Outflows	PV @ 10%	Present Values		
1	20000	0.909	18180	inflows = 1, 86,060 (-)outflows = <u>1,77,270</u>  Profit <u>8,790</u>	$\frac{PV\ Inflows}{Initial\ investment}$  $= \frac{186060}{177270}$  $= 1.04$
2	30000	0.826	24780		
3	60000	0.751	45060		
4	80000	0.683	54640		
5	30000	0.621	18600		
5 <sup>th</sup> year Scrap	40000	0.621	24800		
			<b>1,86,060</b>		

B. INTERNAL RATE OF RETURN:

**Example 1:** From the following particulars submitted to you, advice whether the project can be accepted or not, by following IRR method.

Initial investment      1, 80,000                      cutoff rate      5.1

Expected cash flows of the project during its life time are as under.

Year	cash inflows
1	30000
2	45000
3	30000
4	75000
5	30000
6	15000

**Solution:**

Calculating average annual cash inflows:

Total cash inflows/ no of years= 30000+45000+30000+75000+30000+5000= 2, 25,000/6 = 37,500

Calculating fake payback period:

$$\text{Payback period} = \frac{\text{Initial investment}}{\text{Average Annual Cash inflow}} = \frac{180000}{37500} = 4.8 \text{ Years}$$

Note: For 4.28 years referring A4 table for 6 years the payback period is lying in between 7% & 8%.

Year	Present values @ 7% discount rate			Present values @ 8% discount rate		
	cash inflows	PV @ 7%	Present Values	cash inflows	PV @ 8%	Present Values
1	30000	0.935	28,050	30000	0.926	27,780
2	45000	0.873	39,285	45000	0.857	38,565
3	30000	0.816	24,480	30000	0.794	23,820
4	75000	0.763	57,225	75000	0.735	55,125
5	30000	0.713	21,390	30000	0.681	20,430
6	15000	0.666	9,990	15000	0.630	9,450
<b>Present value of inflow</b>			<b>1,80,420</b>			
<b>Less: initial investment</b>			<b>1,80,000</b>			
<b>Net present value</b>			<b>420</b>			
				<b>1,75,170</b>		
				<b>1,80,000</b>		
				<b>-4830</b>		

As the net present value at 8% discount rate is negative. Hence the internal rate of return falls in between 7% and 8%. The correct internal rate of return can be calculated as follows:

$$\text{IRR} = r_L + \left( \frac{\text{positive PV CFAT} - \text{Initial Investment}}{\text{Difference between Present Values}} \right) \times \text{Rate difference}$$

$$\text{IRR} = 7 + \left( \frac{1,80,420 - 1,80,000}{1,80,420 - 1,75,170} \right) \times 8 - 7$$

$$\text{IRR} = 7 + \left( \frac{420}{5,250} \right) \times 1 = 7 + 0.08 = 7.08$$

Comment: As the IRR (7.08) is more than the cut off rate (5.1). So the project is accepted.

C.PROFITABILITY INDEX METHOD:

**Example 1:**A machine costing Rs.1, 00,000 is estimated to work for 5 years with a scrap value of Rs. 50,000. The expected cash flows during its life time and present value of Re. 1/- @ 10% are given bellow. Calculate Profitability Index and comment upon the same?

Year	1	2	3	4	5
PV @ 10%	0.909	0.826	0.751	0.683	0.621
Cash Flows	50000	40000	30000	30000	20000

**Solution:**

Year	Cash Flows	PV @ 10%	Present Values	profitability Index=
1	50000	0.909	45450	$\frac{PV \text{ Inflows}}{\text{Initial investment}}$ $= \frac{164980}{100000}$ $= 1.64$
2	40000	0.826	33040	
3	30000	0.751	22530	
4	30000	0.683	20490	
5	20000	0.621	12420	
	50000	0.621	31050	
			<b>164980</b>	

**Comment:** the profitability is more than 1, hence machine can be purchased.

COMPREHENSIVE ILLUSTRATIONS:

1. Rank the following projects in order of their desirability according to Payback period method and Net Present Value and profitability Index method (Discount rate @ 30%)

Project	Initial outlay	Annual cash flow	Life in years
A	10,000	2,500	5
B	8,000	2,600	7
C	4,000	1,000	15
D	10,000	2,400	20
E	5,000	1,125	15
F	6,000	2,400	6
G	2,000	1,000	2



Solution:

Ranking the projects according to the payback period					
Project	Initial outlay	Annual cash flow	Outlay/cash flow	Payback period	Ranks
A	10,000	2,500	10000/2500	4.0	4
B	8,000	2,600	8000/2600	3.1	3
C	4,000	1,000	4000/1000	4.0	4
D	10,000	2,400	10000/2400	4.2	5
E	5,000	1,125	5000/1125	4.4	6
F	6,000	2,400	6000/2400	2.5	2
G	2,000	1,000	2000/1000	2.0	1

Ranking the projects According to NPV								
Project	Initial outlay	Life in years	Annual cash flow	PV @ 10%	Present values	PV Inflows - Outlay	NPV	Ranks
A	10,000	5	2,500	3.791	9,478	9,478-10,000	-522	7
B	8,000	7	2,600	4.868	12,657	12,657-8,000	4,657	2
C	4,000	15	1,000	7.606	7,606	7,606-4,000	3,606	4
D	10,000	20	2,400	8.514	20,434	20,434-10,000	10,434	1
E	5,000	15	1,125	7.606	8,557	8,557-5,000	3,557	5
F	6,000	6	2,400	4.355	10,452	10,452-6,000	4,452	3
G	2,000	2	1,000	1.736	1,736	1,736-2,000	-264	6

Ranking the projects According to PI								
Project	Initial outlay	Life in years	Annual cash flow	PV @ 10%	Present values	PV Inflows / Outlay	NPV	Ranks
A	10,000	5	2,500	3.791	9,478	9,478/10,000	0.9478	6
B	8,000	7	2,600	4.868	12,657	12,657/8,000	1.58	5
C	4,000	15	1,000	7.606	7,606	7,606/4,000	1.90	2
D	10,000	20	2,400	8.514	20,434	20,434/10,000	2.04	1
E	5,000	15	1,125	7.606	8,557	8,557/5,000	1.71	4
F	6,000	6	2,400	4.355	10,452	10,452/6,000	1.74	3
G	2,000	2	1,000	1.736	1,736	1,736/2,000	0.87	7

### **1.3 NET PRESENT VALUE VS INTERNAL RATE OF RETURN:**

1. The NPV takes interest rate as a known factor while IRR takes interest as an unknown factor.
2. In NPV the discount rate is constant while it is variable in IRR.
3. The NPV involves the computation of amount that can be invested in a given project, so that the anticipated profits will be sufficient to repay the cost of capital. On the other hand, IRR seeks to find the maximum rate of interest at which the funds invested in the project could be repaid from the cash inflows of this project.
4. The NPV assumes that cash inflows can be reinvested at the cost of capital in the new project. On the other hand, IRR assumes that cash inflows can be reinvested at the IRR rate in the new project.
5. The NPV provides net returns quantitatively while IRR provides net returns in percentages.
6. In case of any conflict between acceptance and rejection of a project, the result given by the NPV method should be relied upon. This is because the objective of a firm is to maximize its shareholders wealth. IRR is concerned with the rate of return on investment rather than total yield on investment; hence it is not compatible with the goal of wealth maximization.

### The NPV VS IRR Debate

NPV Method	IRR Method
1. Discount rate is known factor in NPV method	1. Discount rate is as unknown factor in IRR method.
2. This method involves computation of the amount that can be invested in a given project. So that the anticipated earnings will be sufficient to repay the cost of capital.	2. This method attempts to find out the maximum rate of interest at which funds are invested in The project.
3. It assumes that the cash inflows can be reinvested at the cost of capital in the new projects.	3. It assumes that the cash inflows can be Reinvested at the IRR rate in the new projects.
4. Discount rate is constant in NPV method.	4. IRR changes from project to project depending upon cash inflows.
5. NPV provides net returns quantitatively.	5. IRR provides percentages

#### **CASE STUDY**

1. A company has investment opportunity costing Rs. 40,000 with the following expected net cash flow after taxes and before depreciation.

Year	Net cash flow
1	7,000
2	7,000
3	7,000
4	7,000
5	7,000
6	8,000
7	10,000
8	15,000
9	10,000
10	4,000

Using 10% as the cost of capital determine the following:

- Payback period
- Net present value @ 10% discount factor
- Profitability Index at 10% discount factor
- Internal rate of return with the help of 10% and 15% discount factor

### STEP-1 -

**Solution:**

Year	Net cash flow	Cumulative	PV at 10%	Present Values	PV at 15%	Present Values
1	7,000	7,000	0.909	6,363	0.870	6090
2	7,000	14,000	0.826	5782	0.756	5292
3	7,000	21,000	0.751	5257	0.658	4606
4	7,000	28,000	0.683	4781	0.572	4004
5	7,000	35,000	0.621	4347	0.497	3479
6	8,000	43,000	0.564	4512	0.432	3456
7	10,000	53,000	0.513	5130	0.376	3760
8	15,000	68,000	0.457	7005	0.327	4905
9	10,000	78,000	0.424	4240	0.284	2840
10	4,000	82,000	0.386	1544	0.247	988
	PV cash Inflows			<b>48,961</b>		<b>39,420</b>
	(Less)Initial investment			40,000		40,000
				<b>8,961</b>		<b>-580</b>

### STEP-2

(a) Calculation of Payback period:

Initial investment	40,000
Up to 5 <sup>th</sup> year	35,000
Amount to be recovered	5000
Income from proceeding year	8000
	$5000/8000=0.625 \times 12= 7.5$ months or 8 months
Payback period is 5.8 OR 5 Years 8 Months	

**STEP-3**

(b) Calculation of NPV

NPV=	PV cash Inflows	48,961
	(Less)Initial investment	40,000
		<b>8,961</b>

**STEP-4**

(c) Calculation of PI

PI Method	$\frac{PV\ Inflows}{Initial\ investment}$	$\frac{48,961}{40,000}$
		<b>1.22</b>

(d) Calculation of IRR

As the net present value @ 15% discount rate is negative, hence the internal rate of return falls in between 10% and 15%. The exact IRR can be calculated as follows:

$$IRR = rL + \left( \frac{\text{positive PV CFAT} - \text{Initial Investment}}{\text{Difference between Present Values}} \right) \times \text{Rate difference}$$

$$IRR = 10 + \left( \frac{48,961 - 40,000}{48,961 - 39,420} \right) \times 15 - 10$$

$$IRR = 10 + \left( \frac{8,961}{9,541} \right) \times 5 = 10 + 0.939 \times 5$$

$$IRR = 10 + 4.7 = 14.7$$

**UNIT-2-IMPORTANT QUESTIONS**

- ✓ Explain Investment decision process /capital budgeting process?
- ✓ Methods, tools & techniques of capital budgeting?
- ✓ NPV Vs IRR?
- ✓ **Problems from Capital budgeting?**



**SYLLABUS****(17E00204) FINANCIAL MANAGEMENT**

The objective of the course is to provide the necessary basic tools for the students so as to manage the finance function. The students should be able to understand the management of the financing of working capital needs and the long term capital needs of the business organization

**\* Standard Discounting Table and Annuity tables shall be allowed in the examination**

- 1. The Finance function:** Nature and Scope. Importance of Finance function – The role in the contemporary scenario – Goals of Finance function; Profit Vs Wealth maximization.
- 2. The Investment Decision:** Investment decision process – Project generation, Project evaluation, Project selection and Project implementation. Capital Budgeting methods– Traditional and DCF methods. The NPV Vs IRR Debate.
- 3. The Financing Decision:** Sources of Finance – A brief survey of financial instruments. The Capital Structure Decision in practice: EBIT-EPS analysis. Cost of Capital: The concept, Measurement of cost of capital – Component Costs and Weighted Average Cost. The Dividend Decision: Major forms of Dividends
- 4. Introduction to Working Capital:** Concepts and Characteristics of Working Capital, Factors determining the Working Capital, Working Capital cycle-Management of Current Assets – Cash, Receivables and Inventory, Financing Current Assets
- 5. Corporate Restructures:** Corporate Mergers and Acquisitions and Take-overs-Types of Mergers, Motives for mergers, Principles of Corporate Governance.

**Textbooks:**

- Financial management –V.K.Bhalla ,S.Chand
- Financial Management, I.M. Pandey, Vikas Publishers.
- Financial Management--Text and Problems, MY Khan and PK Jain, Tata McGraw- Hill

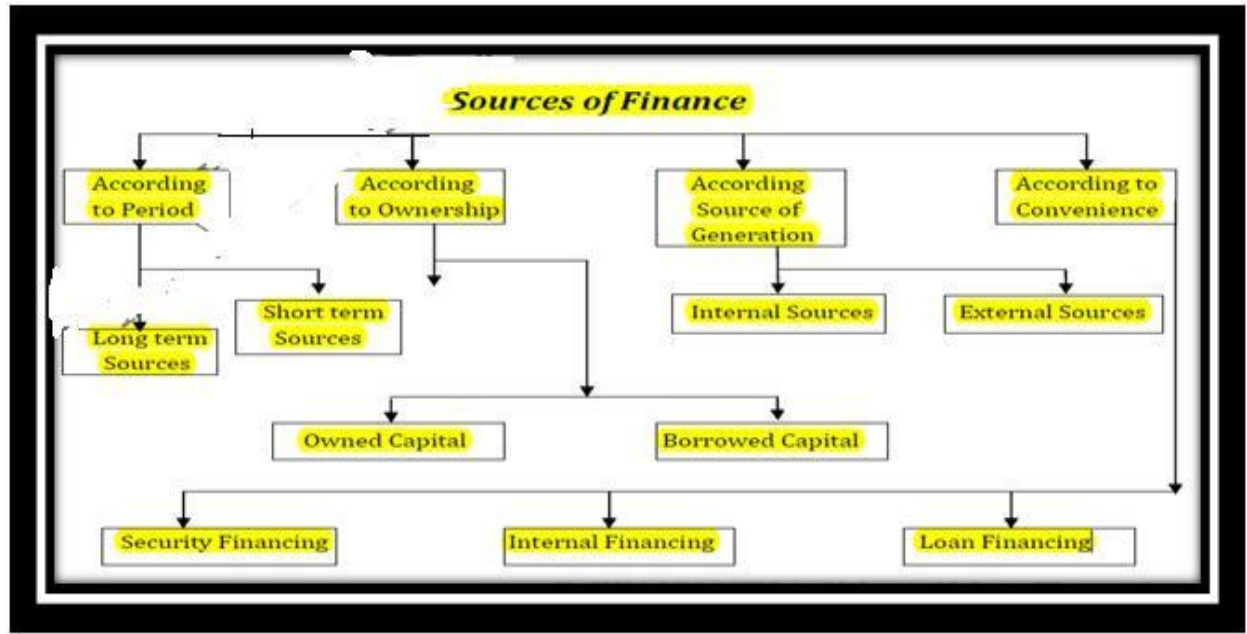
**References**

- Financial Management , Dr.V.R.Palanivelu ,S.Chand
- Principles of Corporate Finance, Richard A Brealeyetal., Tata McGraw Hill.
- Fundamentals of Financial Management, Chandra Bose D, PHI
- Financial Managemen , William R.Lasheir ,Cengage.
- Financial Management – Text and cases, Bringham&Ehrhardt, Cengage.
- Case Studies in Finance, Bruner.R.F, Tata McGraw Hill, New Delhi.
- Financial management , Dr.M.K.Rastogi ,Laxmi Publications

## UNIT-3

### THE FINANCING DECISION

#### 1.1 CLASSIFICATION OF SOURCES OF FINANCE



#### 1) According to period

- A. Short term sources ( advances from bank customers and credit)
- B. Medium term Source
- C. Long term sources ( shares, debentures, and long term loans )

#### A. SHORT/ MEDIUM TERM SOURCES:

Short term sources of finance are used to meet the working capital needs of the project. The various working capital needs of a unit are financed through the following short term sources:

- 1. Own funds or equity:** The owner's fund goes partly to meet expenses towards acquisition of fixed assets like land, building, plant and machinery, equipment etc. Remaining amount is called as margin money which issued to meet the working capital requirements of the project.
- 2. Sundry creditors:** Trade creditors available against purchase of materials go to meet the working capital needs of the project. It is considered as the largest source of short term funds. In an advanced economy, most buyers are not required to pay for goods on delivery.
- 3. Accrual Accounts:** Accrual accounts are self generating source of financing. The most common accrual accounts are wages and taxes. In both the cases the amount becomes due but is not paid immediately. The time gap between receipt of income and making payment for the expenditure incurred in earning that income, helps the business in meeting some of its short term financial requirements.

**4. Indigenous Bankers:** Indigenous bankers are private money lenders engaged in the business of financing small and local business units. They provide short term finance and charge exorbitant rates of interest. Hence, the entrepreneurs consider these indigenous bankers as a last resort of short term source of financiers.

**5. Bank borrowings:** Bank finance is a major external source of finance. The commercial banks in our country mostly provide short-term credit to the business. Commercial banks makes advances to the entrepreneurs in the form of loan, cash credit, hypothecation, pledge, overdrafts, and bills discounted and purchased etc. Short-term credit from commercial banks is cheaper as compared to any other source of short-term finance.

**6. Advances from Customers:** Manufacturers engaged in producing costly goods involving considerable length of manufacturing time usually demand advance money from their customers at the time of accepting their orders. This is a cost free source of finance and useful in those business where it has become customary to receive advance payment from the customers.

**7. Short-term Borrowings:** Working capital requirements fluctuate on a day-to-day basis. Therefore, a business firm may resort to miscellaneous source of finance in periods of pressing needs. Short-term borrowings may include borrowings from may include borrowings from friends and relatives, loan from directors or sister business units. Specialized financial institutions also provide short-term finance to their clients in times of need. The cost of these funds is usually nominal.

### **C. LONG TERM SOURCES:-**

The long term sources of finance used for meeting the cost of the project are referred as the means of finance. To meet the cost of project, the following long term sources of finance is available to the entrepreneurs,

**1. Equity Capital:** Equity capital refers to ownership capital which does not carry any special or preferential right in respect of annual dividend or the return of capital in the event of winding up of the company. The liability of equity share holders is limited to their capital contribution.

**2. Preference Capital:** Preference capital is the capital on which the preferential shareholders carry the following preferential rights over other classes of shareholders. A preferential right in respect of a fixed dividend. A preferential right as to repayment of capital in case of winding up of the company in priority to other classes of shares.

**3. Debentures:** Debentures are credit worship securities representing long term indebtedness of a company. It is a contractual obligation to pay a fixed amount on a specified date at stated rate of interest at regular intervals. Debenture holder claims ranks priority to preference and equity shareholders. If the debentures are secured, they are paid on priority in comparison with other creditors of the company. Debenture holders do not carry any voting rights and no share in the prosperity of the company.

**4. Term loans:** term loans are provided by Development Financial Institutions and Commercial banks. Rupee term loans which represent secured borrowings are a very important source of raising finance for a new project. These loans are also useful for expansion, modernization and renovation schemes of existing units. These loans are normally repayable over a period of 8 to 10 years which includes a moratorium period of 1 to 3 years.

**5. Foreign currency term loans:** Financial institutions also provide foreign currency term loan to meet the foreign currency Expenditure towards import of plant, machinery and equipment and also towards payment of foreign technical knowhow fees. Under this scheme, the currency of the loan and is translated into rupees at the then prevailing rate of exchange for making payments to the financial institution.

**6. Deferred credit:** Normally, the suppliers of machinery provide deferred credit facility under which payment for the purchase of machinery is made over a period of time. The interest rate on deferred credit and period of payment varies rather widely. Normally the supplier of machinery when he offers deferred credit facility insists on bank guarantee which is to be offered by the buyer of machinery. This is becoming available through various deferred payment schemes of Small Industries Development Bank of India (SIDBI) for small units. For large units, ICICI has been operating a similar scheme with the help of commercial banks.

**7. Suppliers line of credit:** This is administered by ICICI. The supplier's line of credit resembles the IDBI's. Bill Rediscounting scheme. Under this arrangement, ICICI directly pays to the machinery manufacturer against since bills duly accepted or guaranteed by the bank of the purchaser.

**8. Government subsidies:** The Central and State Governments are providing subsidies to industrial units located in backward areas. The central subsidy is not exceeding **15%** of the fixed capital or Rs.15 lakhs. The State subsidies vary between **5%** to **25%** of the fixed capital investment in the project, subject to a ceiling varying between Rs.0.5 million and Rs.**2.5** million depending on the location of the project.



**9. Unsecured Loans and Deposits:** Unsecured loans are provided by the promoters to fill the gap between the promoter's contribution required by financial institutions and the equity capital subscribed by the promoters. These loans are considered as subsidiary to the institutional loans. The rate of interest chargeable on these loans is less than the rate of interest charged by the financial institutions.

#### **10. Leasing and Hire Purchase Finance:**

With the emergence of huge number of finance companies engaged in the business of leasing and hire purchasing finance, it has become easy for the promoters of the project to get the assets financed under a lease or a hire purchase arrangement.

- Lease financing and Hire purchase finance is the earliest way of financing capital expenditure without going through the time consuming process of obtaining term loan assistance from the financial institutions and banks.
- The equipment of machinery is purchased by the lessor from the manufacturer or seller and leased to the lessee.
- The lessee pays the lessor the pre-determined rent over a specified period which normally ranges between 3 to 5 years.

#### **12. Venture Capital Assistance:**

- Venture capital refers to equity support to fund new concepts that involves a high risk and at the same time has high growth and profit potential.
- The basic objective of venture capital is to help professionals and small and medium entrepreneurs to launch enterprises with a specific promise.
- Hence, venture capital is very much related to innovation, high growth and profit. It helps to convert the business idea into a commercial venture.

#### **II) According To Ownership**

- a) Own capital (share capital, retained earnings, surpluses)
- b) Borrowed capital ( debentures , public deposits and loans )

#### **III) According to sources of generation:**

- a) Internal sources ( retained earnings, depreciation and provisions)
- b) External sources ( shares and debentures)

**IV) According to Convenience:** According to this classification, the sources of funds can be categorized as security financing viz., shares and debentures; internal financing viz., retained earnings, depreciation funds etc; and loan financing viz., short term and long term financing.



## **1.2 SOURCES OF FINANCE-A BRIEF SURVEY ON FINANCIAL INSTRUMENTS**

Capital required for establishing a business enterprise and ensuring its smooth working can be classified into two main categories viz., fixed capital and working capital.

**INTRODUCTION:** finance is the life blood of a business. The business cannot run efficiently if it does not have adequate finance to meet its requirements of a business can be classified in to two categories:

- 1) Short term financial requirements
- 2) Long term financial requirements

1) **Short term financial requirements:** Short term funds required for meeting working capital needs. They are usually required over a period up to one year. The requirement of these funds is usually met by taking short-term loans or getting the bills discounted from the commercial banks.

2) **Long term financial requirements:** Long term funds required for meeting the fixed capital requirements of business. They are required for a period of exceeding one year. There also sometimes classified as

- a) Short term financial requirements
- b) Intermediate (or) medium term funds and
- c) Long term funds – these funds are generally raised by shares, debentures, loans from specialized financial institutions.

## **1.3 THE CAPITAL STRUCTURE DECISION IN PRACTICE: EBIT-EPS ANALYSIS**

- The term structure has been associated with the term capital. Capital may be defined as the long term sources of funds of the firm. In the other worlds it is the aggregation of the total items appearing on the left hand side of the balance sheet less current liabilities. Thus
- Capital = assets – liabilities
- Capital = total assets – current liabilities

- Further the capital of a firm may be broadly characterized into debt and equity. Equity consists of equity share capital, preferential capital, reserves and surplus, provisions for contingency etc., on the other hand debt consists of debentures, term loans, borrowings from government semi government or financial institutions. Therefore capital structure is a proportion of debt and equity of a company.

#### Capital structure Vs Financial structure:

- The term capital structure differs from financial structure. Financial structure includes both long term and short term sources of funds. While the capital structure includes only long term sources of funds thus capital structure is a part of financial structure.

#### Optimum capital structure:

- The management of any enterprise has the responsibility to maximize its shareholders wealth. Therefore the finance manager should plan an optimum capital structure. The optimum capital structure is the combination of debt and equity that leads to the maximum value of the firm. At optimum capital structure the value will be maximum.

### **1.3.1 TOOLS FOR DESIGNING OPTIMUM CAPITAL STRUCTURE:**

EBIT – EPS analysis is an important tool for designing the optimum capital structure framework of the firm.

#### **1. EBIT – EPS Analysis:**

- It is one of the basic objectives of financial management to design an appropriate capital structure which can provide highest EPS over the expected range of EBIT-EPS is a yard stick to evaluate the firm's performance for the investors.
- It is widely used by the finance manager because it provides a simple picture of the consequences of alternative financing methods for designing an optimum capital structure or financial breakeven point and indifference point analysis.

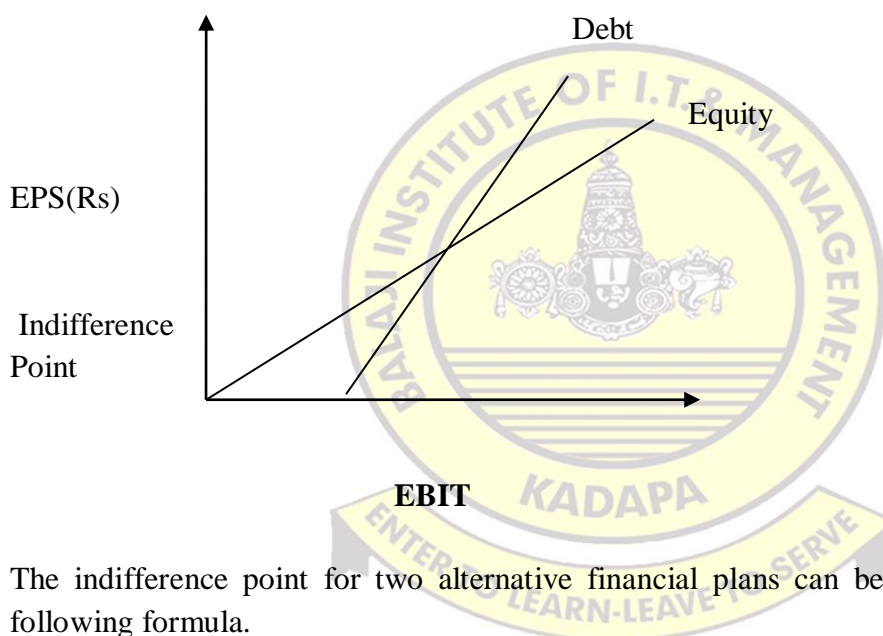
#### **2. Financial breakeven point analysis:**

- Financial breakeven point is the minimum level of EBIT needed to satisfy the fixed financial charges.

- It denotes the level of EBIT for which the firm's EPS is equals to zero.
- If EBIT is less than the financial breakeven point then the EPS will be negative and vice versa.

### 3. Indifference point analysis:

- When two alternative financial plans to produce the same level of EBIT where EPS is same, this situation is referred to as indifference point level.
- In case the use of debt finance would be advantage to maximize the EPS.
- Therefore indifference point may be defined as the level of EBIT beyond which the benefits to operate with respect to EPS.



The indifference point for two alternative financial plans can be calculated by using the following formula.

$$\frac{(EBIT - I_1)}{E_1} = \frac{(EBIT - I_2)(1 - T_2)}{E_2}$$

Where  $I_1$  = interest charges in alternative \_\_\_\_\_ 1

$I_2$  = interest change of in alternative \_\_\_\_\_ 2

$T_1$  = tax rate in alternative \_\_\_\_\_ 1

$T_2$  = tax rate in alternative \_\_\_\_\_ 2

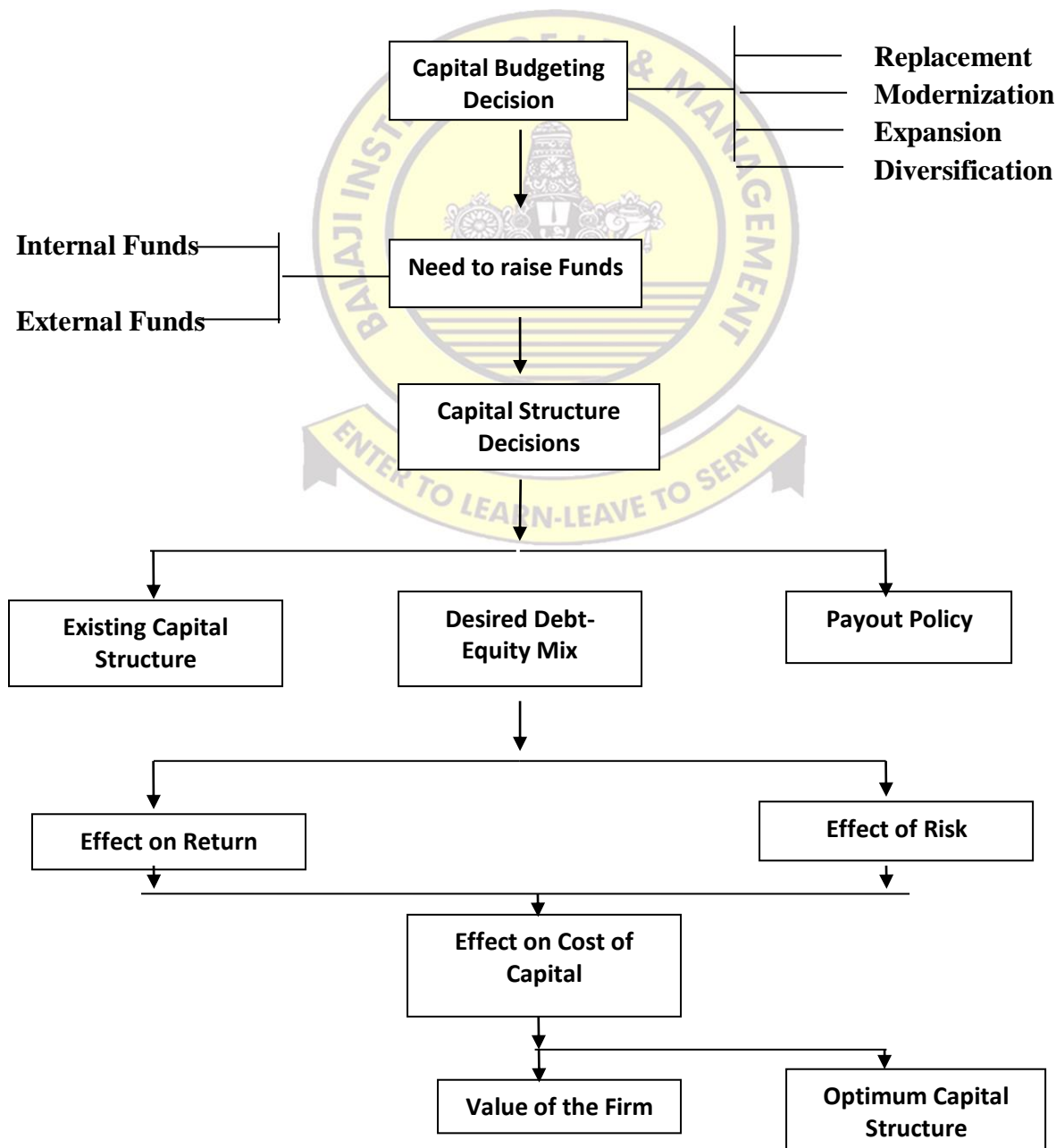
$E_1$  = no. of equity shares in alternative \_\_\_\_\_ 1

$E_2$  = no. of equity shares in alternative \_\_\_\_\_ 2

**1.3.1 CAPITAL STRUCTURE:** The first and far most decision of any finance manager was financing decision.

- This decision involves rising of funds into organization by using different alternative sources which are available to the company.
- In simple terms getting capital into organization by means of sources is called financing decision.
- The FD is also called as capital structure decision. The term capital structure means the proportion of debt and equity.
- The main objective of financial manager is to maximize shareholder wealth or firms value. Capital structure decision will play a vital role to meet the finance manager objective.
- So the financial manager has to construct optimum capital structure. Optimum capital structure means the combination of debt and equity which will maximize firm’s value.

**1.3.2 PROCESS OF CAPITAL STRUCTURE DECISIONS:**



**1.3.4 FACTORS INFLUENCING CAPITAL STRUCTURE DECISIONS:**

- 1) growth and stability of sales
- 2) cost of capital
- 3) cash flow ability to service debt
- 4) control
- 5) flexibility
- 6) nature and size of the firm
- 7) assets structure
- 8) purpose of financier
- 9) requirement of investors
- 10) corporate tax rate
- 11) legal requirement
- 12) period of finance
- 13) cost of fluctuation

**UNIT-3-IMPORTANT QUESTIONS**

- ✓ Sources of finance?
- ✓ Capital structure decision in practices?
- ✓ Briefly explain about components of cost of capital?

**-CASE STUDY STARTS AFTER 2.5 UNIT-**

