1.0 Objectives:

After studying this unit you will be able to:

- Understand the concept of Business Finance
- Know the scope and significance of Business Finance
- Understand the concept of Financial Goal
- Focus on Profit Maximization and Vs Wealth Maximization
- Know the relationship of finance with other areas of management
- Know the financial functions
- Understand the concept and theories of capitalization
- Know the concept, symptoms, causes, effects and remedies of over capitalization
- Know the concept symptoms, causes, effects and remedies of under capitalization

1.1 Introduction:

Every Business needs capital. Capital is required at the time of beginning of the business, is in operation and also it's grows in size and expands. Establishment of any business is not possible without finance. Business finance means the management of assets and money. Today, finance is crucial for any company. Its primary focus is to increase profit and minimize financial risks. Business finance refers to money and credit employed in business. It involves procurement and utilization of funds so that business may be able to carry out their operations effectively and efficiently. Business finance includes all types of funds used in business. Business finance is needed in all types of organisations large or small, manufacturing or trading and any other type. The amount of business finance varies from one business firm to another depending upon its nature and size. It also differs from time to time. Business finance involves estimation of funds. It is concerned with raising funds from different sources as well as investment of funds for different purposes. Funds are required for the purchase of land and building, machinery and other fixed assets. Besides this, money is also needed to meet day-to-day expenses e.g. purchase of raw material, payment of wages and salaries, electricity bills, telephone bills etc. Business aware the production continues in anticipation of demand. Expenses continue to be incurred in anticipation of the goods are sold and money is recovered. Money is required to bridge the time gap between production and sales. Besides producers, may be necessary to change the office set up in order to install computers. Renovation of facilities can be taken up only when adequate funds are available. To meet contingencies funds are always required meeting the ups and downs of the business. Finance decision regarding source of funds are very crucial for any business. The problems of determining the amount of capitalization is necessary both for a newly started company as well as for an established concern.

1.2 Presentation of Subject Matter

1.2.1 Concept of Business Finance

Business finance is encompasses a wide range of activities and disciplines regarding the management of money and other valuable assets. Small business owners must have a solid understanding of the principles of finance to keep their companies profitable. Business finance refers to money and credit employed in business. Finance is the basic of business. It is required to purchase assets, goods, raw materials and for the other flow of economic activities. Business finance programs in universities familiarize students with accounting methodologies, investing strategies and effective debt management.

Definitions:

Scott and Brigham

"Finance is concerned with decision about money or more appropriately cash flows."

Professor Gloss and Baker

Business finance is concerned with the sources of funds available to enterprises of all sizes and the proper use of money or credit obtained from such sources."

E.W Walker

"Business finance is to planning, coordinating, controlling and implementing of financial activities of business institution."

Henry Hoagland

Business Finance is concerned with the financing and investment decisions made by the management of companies in pursuit of corporate goals.

Wheeler,

"Business finance is that business activity which concerns with the acquisition and conversation of capital funds in meeting financial needs and overall objectives of a business enterprise".

Guthumann and Dougall

"Business finance can broadly be defined as the activity concerned with planning, raising, controlling, administering of the funds used in the business".

Parhter and Wert

"Business finance deals primarily with raising, administering and disbursing funds by privately owned business units operating in non-financial fields of industry".

Business finance can be defined as "The provision of money at the time when it is needed by a business".

The term 'business finance' is very comprehensive. It implies finances of business activities. Business can be categorized into three groups: commerce, industry and service. It is a process of rising, providing and managing of all the money to be used in connection with business activities. It encompasses finance of sole proprietary organizations, partnership firms and corporate organizations. No doubt, the abovementioned organizations have different characteristics, features, different regulations and rules and financial problems faced by them vary depending upon the nature of business and scale of operations. However, it should be remembered that the same principles of finance are applicable to large and small organizations, proprietary and non-proprietary organizations.

1.2.2. Scope of Business Finance

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

1. Financial Planning and Control: Any business firm must manage and make their financial analysis and planning. To make these planning's and management, the financial manager must have knowledge about the present financial situation of the firm. On the basis of this information, he/she regulates the plans and managing strategies for future financial situation of the firm with in different economic scenario. Financial budget also relies in these financial plans. Financial budget serves as the basis of control over financial plans. The firms on the basis of budget, finds out the deviation between the plan and the performance and tries to correct them. Hence, business finance consists of financial planning and control.

2. Deciding Capital Structure: The Capital structure refers to the kind and proportion of different securities for raising funds. After deciding about the quantum of funds required it should be decided which type of securities should be raised. It may be wise to finance fixed assets through long-term debts. Even if gestation period is longer, then share capital may be most suitable. Long-term funds should be raised. It may be wise to finance fixed assets through long-term debts. Even here if gestation period is longer, then share capital may be most suitable. Long-term funds should be employed to finance working capital also, if not wholly then partially. Entirely depending upon overdrafts and cash creditors for meeting working capital needs may not be suitable. A decision about various sources for funds should be linked to the cost of raising funds. If cost of raising funds is very high then such sources may not be useful for long.

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

4. Financial Statement Analysis: Another scope of business finance is to analyses the financial statements. However, it also analyses the financial situations and problems that arises in the promotion of the business firm. This statements consists the financial aspect related to the promotion of new business. Administrative difficulties arise at the time expansion, necessary adjustments for the rehabilitation of the firm also in difficulties.

5. Working Capital Management: The financial decision making that relates to current assets or short-term assets is known as working capital management. Short-term survival is a prerequisite of long term success and this is the important factor in business. Therefore the current assets should be efficiently managed so that the business won't suffer any inadequate or unnecessary funds locked up in future. This aspect implies that the individual current assets such as cash, receivable and inventory should be very efficiently managed. Hence, the efficiency in the management of working capital ensures the balance between liquidity and profitability.

6. Capital Building: Financial decision making related to long-term assets is known as capital budgeting or long-term investment decision. This scope s related tot eh selection of an investment proposal out of the many related alternatives available to the firm. However, the acceptance of the proposal depends on the returns associated with that particular proposal. Here, the capital budgeting technique measures the worth of the investment proposal. This technique studies the method of appraising investment proposals. It also analysis the risk and uncertainty, as the returns from the investment proposal extends into the future. All the returns are evaluated in relation to the risk.

7. Management of Financing: Managing financing is yet another important area of business finance. The management of finance is concerned with the mix of assets or structure of the assets of the firm. As the firm should always pay special attention to it's assets. The firm should properly mix the ratio of debt and equity capital while main investment. As capital structure is the ratio of debt and equity capital. Now, the capital structure consisting of the proper ratio of debt and equity is known as optimum capital structure. Hence, the financial manager should make decision regarding optimum capital structure and the ratio of fund to be raised to maximize the returns for the shareholders.

8. Dividend Management: Business finance also analyses the policies regarding the dividend, depreciation and reserve. Every dividend decisions are made on the basis of financing decision of the firm. The firm should decide, how much of profit should be distributed among shareholders as dividend and how much should be retained as earnings. This decision depends on the priority of the shareholders and the investment opportunities available to the firm. Here, the financial manager should develop a sound dividend policy.

These were some aspects and scopes of Business Finance. Though, Business Finance covers a wider scope than this above are limited and important scopes of the field.

1.2.3 Significance of Business Finance

Businesses have to consider their finances for so many purposes, ranging from survival in bad times to improving the next success in good ones. How you finance your business can affect your ability to employ staff, purchase goods, acquire licenses, expand and develop. While finances are not necessarily as important as vision and a great product, they are crucial to making the good issue happen.

1. Initial Capital: Every new venture needs seed money. Entrepreneurs only have dreams and ideas until they have some capital to put their ideas in motion. Whether it's a product or service, you will need a way to create and deliver it as well as enough money and time to lay the groundwork of selling and establishing important relationships. Most business owners face the critical choice between debt and equity financing. A small business loan leaves you free to own and have absolute control over your company while it also leaves you lasting financial obligations. Equity gives you cash, but you have to share the success. The critical decision in your financing will determine how your business will work from that point onward.

2. Debt Ratios: Finances are about more than money in your hand. While most businesses have some amount of debt especially in the beginning stages too much debt compared with revenues and assets can leave your with more problems than making your loan payments. Vendors and suppliers often run credit checks and may limit what you can buy on credit or keep tight payment terms. Debt ratios can affect your ability to attract investors including venture capital firms and to acquire or lease commercial space.

3. Business Cycles: No matter how well your business is doing, you have to prepare for rainy days and even storms. Business and economic cycles bring dark clouds you can't predict. That's why smart businesses create financial plans for downturns. Cash savings, good credit, smart investments, and favorable supply and real estate arrangements can help a business stay afloat or even maintain momentum when the business climate is unfavorable.

4. Growth: Success can bring a business to a difficult crossroads. Sometimes to take on more business and attain greater success, a company needs significant financial investment to acquire new capital, staff or inventory. When business managers hit this juncture, they have to wade through their financial options, which may involve infusions of equity capitals perhaps from venture capitalists. Every situation is different, but smart managers consider the cost of success and their options for obtaining growth financing.

5. Payroll: Nothing spells imminent death like a company being unable to make payroll. Even the most dedicated staff won't stick around long once the paychecks stop. The larger an organization gets, the larger the labor costs. Above all, companies have to ensure they have enough cash on hand to make payroll for at least two payroll cycles ahead if not more. Financial planning to ensure your payroll accounts are in strong shape are essential to the integrity and longevity of your company.

1.2.4 Concept of Financial Goal

Every firm has a predefined goal or an objective. Therefore the most important goal of a financial manager is to increase the owner's economic welfare. Here economics welfare may refer to maximization of profit or maximization of shareholders wealth. Therefore Shareholders wealth maximization (SWM) plays a very crucial role as far as financial goals of a firm are concerned.

Profit is the remuneration paid to the entrepreneur after deduction of all expenses. Maximization of profit can be defined as maximizing the income of the firm and minimizing the expenditure. The main responsibility of a firm is to carry out business by manufacturing goods and services and selling them in the open market. The mechanism of demand and supply in an open market determine the price of a commodity or a service. A firm can only make profit if it produces a good or delivers a service at a lower cost than what is prevailing in the market. The margin between these two prices would only increase if the firm strives to produce these goods more efficiently and at a lower price without compromising on the quality.

The demand and supply mechanism plays a very important role in determining the price of a commodity. A commodity which has a greater demand commands a higher price and hence may result in greater profits. Competition among other suppliers also effect profits. Manufacturers tend to move towards production of those goods which guarantee higher profits. Hence there comes a time when equilibrium is reached and profits are saturated. According to Adam Smith - business man in order to fulfill their profit motive in turn benefits the society as well. It is seen that when a firm tends to increase profit it eventually makes use of its resources in a more effective manner. Profit is regarded as a parameter to measure firm’s productivity and efficiency. Firms which tend to earn continuous profit eventually improvise their products according to the demand of the consumers. Bulk production due to massive demand leads to economies of scale which eventually reduces the cost of production. Lower cost of production directly impacts the profit margins. There are two ways to increase the profit margin due to lower cost. Firstly a firm can produce at lower sot but continue to sell at the original price, thereby increasing the revenue. Secondly a firm can reduce the final price offered to the consumer and increase its market thereby superseding its competitors. Both ways the firm will benefit. The second way would increase its sale and market share while the first way only tend to increase its revenue. Profit is an important component of any business. Without profit earning capability it is very difficult to survive in the market. If a firm continues to earn large amount of profits then only it can manage to serve the society in the long run. Therefore profit earning capacity by a firm and public motive in some way goes hand in hand. This eventually also leads to the growth of an economy and increase in National Income due to increasing purchasing power of the consumer.

1.2.5 Profit Maximization Vs Wealth maximization

In any company, the management is the decision taking authority. As a normal tendency the management may pursue its own personal goals (Profit maximization) but in an organization, where there is a significant outside participation (shareholders, lenders etc.) the management may not be able to exclusively pursue its personal goals due to the constant supervision of the various stakeholders of the company-employees, creditors, customers, Government etc.

Every entity associated with the company will evaluate the performance of the management from the fulfillment of its own objective. The survival of the management will be threatened if the objective of any of the entities remains unfulfilled.

The wealth maximization objective is generally in accord with the interests of the various groups such as owners, employees, creditors, and society, and thus, it may be consistent with the management objective of survival.

Due to limitation (timing and social consideration etc.) in profit maximization, in today's real world situations which is uncertain and multi-period in nature, wealth maximization is a better objective. Where the time period is short and degree of uncertainty is not great, wealth maximization and profit maximization amount to essentially the same.

Profit Maximization as its name signifies refers that the profit of the firm should be increased while Wealth Maximization aims at accelerating the worth of the entity. Profit maximization is the primary objective of the concern because of profit act as the measure of efficiency. On the other hand, wealth maximization aims at increasing the value of the stakeholders.

Definition of Profit Maximization

Profit Maximization is the capability of the firm in producing maximum output with the limited input, or it uses minimum input for producing stated output. It is termed as the foremost objective of the company.

It has been traditionally recommended that the apparent motive of any business organisation is to earn a profit, it is essential for the success, survival, and growth of the company. Profit is a long term objective, but it has a short-term perspective i.e. one financial year.

Profit can be calculated by deducting total cost from total revenue. Through profit maximization, a firm can be able to ascertain the input-output levels, which gives the highest amount of profit. Therefore, the finance officer of an organisation should take his decision in the direction of maximizing profit although it is not the only objective of the company.

Definition of Wealth Maximization

Wealth maximization is the ability of a company to increase the market value of its common stock over time. The market value of the firm is based on many factors like their goodwill, sales, services, quality of products, etc.

It is the versatile goal of the company and highly recommended criterion for evaluating the performance of a business organisation. This will help the firm to increase their share in the market, attain leadership, and maintain consumer satisfaction and many other benefits are also there.

It has been universally accepted that the fundamental goal of the business enterprise is to increase the wealth of its shareholders, as they are the owners of the undertaking, and they buy the shares of the company with the expectation that it will give some return after a period. This states that the financial decisions of the firm should be taken in such a manner that will increase the Net Present Worth of the company's profit.

Basis for Comparison	**Profit Maximization**	**Wealth Maximization**
Concept	The main objective of a concern is to earn a larger amount of profit.	The ultimate goal of the concern is to improve the market value of its shares.
Definition	Profit Maximization is the capability of the firm in producing maximum output with the limited input, or it uses minimum input for producing stated output.	Wealth maximization is the ability of a company to increase the market value of its common stock over time.
Objective	Profit Maximization objective leads to exploiting employees and consumers. it also leads to inequalities and lowers human values.	Wealth Maximization provides efficient allocation of resource; It ensures the economic interest of the society.
Emphasizes on	Achieving short term objectives.	Achieving long term objectives

Consideration of Risks and Uncertainty	No	Yes
Advantages	i. easy to calculate profits ii. easy to determine the link between financial decisions and profits	i. Emphasizes the long term gains ii. recognizes risk or uncertainty iii. recognizes the timing of returns iv. considers shareholders return
Disadvantages	i. emphasizes the short term gain ii. ignores risk or uncertainty iii. ignores the timing of returns iv. requires immediate resources	i. offers no clear relationship between financial between financial decisions and share price ii can lead to management anxiety and frustration
Recognition of Time Pattern of Returns	No	Yes
Focused on	Profit Maximization is based on the increase of sales and profits of the organization.	Wealth Maximization emphasizes on long term goals.
Time value of money	Profit Maximization ignores the time value of money. Time value of money refers the money receivable today is more valuable than the money which is going to be	Wealth Maximization considers the time value of money. In wealth maximization, the future cash flows are discounted at a suitable discounted rate to

	received in future.	represent their present value.
Risk	Profit Maximization ignores the risk and uncertainty.	Wealth Maximization considers the risk and uncertainty.
Reliability	In the new business environment Profit maximization is regarded as unrealistic, difficult, inappropriate and immoral.	Wealth maximization objective ensures fair return to the shareholders, reserve funds for growth and expansion, promoting financial discipline in the management.

There is always a contradiction between Profit Maximization and Wealth Maximization. We cannot say that which one is better, but we can discuss which is more important for a company. Profit is the basic requirement of any entity. Otherwise, it will lose its capital and cannot be able to survive in the long run. But, as we all know, the risk is always associated with profit or in the simple language profit is directly proportional to risk and the higher the profit, the higher will be the risk involved with it. So, for gaining the larger amount of profit a finance manager has to take such decision which will give a boost to the profitability of the enterprise.

In the short run, the risk factor can be neglected, but in the long-term, the entity cannot ignore the uncertainty. Shareholders are investing their money in the company with the hope of getting good returns and if they see that nothing is done to increase their wealth. They will invest somewhere else. If the finance manager takes reckless decisions regarding risky investments, shareholders will lose their trust in that company and sell out the shares which will adversely effect on the reputation of the company and ultimately the market value of the shares will fall.

Therefore, it can be said that for day to day decision making, Profit Maximization can be taken into consideration as a sole parameter but when it comes to decisions which will directly affect the interest of the shareholders, then Wealth Maximization should be exclusively considered.

1.2.6 Relationship of finance with other areas of management

There is a close relationship between the finance and other areas of management such as production, Human resource, marketing etc. Almost all business activities in an organization directly or indirectly involve the acquisition and use of funds. The determination of production, human resource and marketing strategies are the freedom of the chief of production, purchase and marketing divisions respectively, but for implementing their decisions funds are required. **For example,** the production department may decide to replace an old machine with a new one to increase the production capacity but it has financial implications too. Similarly, the purchase and sales promotion policies are laid down by the purchase and marketing divisions respectively, but procurement of materials, advertising and other sales promotion activities cannot be carried out without funds. Likewise, the recruitment and promotion of staff is the responsibility of the Human resource department but recruitment and promotion of employees require funds for the payment of wages, salaries and other benefits. Many times, it may be difficult to separate where the one function ends and other starts. It may, however be noted that although the finance of raising and using funds has a significant effect on other areas of management, it need not limit or obstruct the general functions of the business. It is possible that a firm facing financial difficulties may give more weightage to financial considerations and develop its own production and marketing strategies to suit the situation. On the other hand a firm with plenty of funds may not have much inflexibility with regard to financial considerations vis-à-vis other management functions. In such a firm, financial policies may be adjusted to the needs of the decisions relating to **production, Human resource, marketing** and other functions.

Relationship shows balanced behavior of officers of finance department and other department's officers. They should concentrate on one target of company and many other things, they should know for creating good relation.

Relationship of finance with other areas of management can be explained in following way:

1. Relationship of Finance with Production: Production department's main duty is to produce the goods. For producing goods, it needs raw material, labour and other expenses. For paying all expenses, production department needs money and fund which will be fulfilled by finance department. Finance department checks the budget of production department and allow funds for production department. With this view, we can understand that production department is dependent on finance department's decision. Now, if production department performs his duty honestly and products are produced and sold on time, it will be helpful for increase sale and profitability and it will again recycle the fund with high profit in finance department. So, we can say both are dependent on each other. Both are players of business team. Both should be adopt co-operative view for each other. After this, business team can succeed in business.

2. **Relationship of Finance with Marketing:** Marketing department's main duty is to sell maximum goods and satisfy the consumers. Its product's input cost will decrease if all products are sold by marketers of company. For developing the product, promotion activities and distribution activities of marketing department need some money for paying salesmen, advertising budget and other promotional expenses. For this marketing department makes his marketing budget and it is cleared by finance department, but sometime finance department will not all specific marketing expenses but marketing department need that type of expenses for promotion of sales. This will create confliction. Good relations will be helpful for both departments. If both department does meeting and show behavior like good relative, the problem can easily solve. Both departments should think that both are the part of company's organization and co-ordination between them is must. Sometime, marketing department obtains big order for supplying the goods, at that time finance department should help marketing department for arrangement of money for buying raw material and supplying quickly without any delay.

3. Relationship of Finance with Personnel: Personnel are that science which manages the employees of company and finance is that science which manages the money. If personnel department and finance department work together with co-operation, both departments can satisfy the objectives of company. It is the objective of company to satisfy employee by fulfilling their financial needs. It is also objective of company to reduce the misuse of fund by paying excess salary that required cost of doing work by employee. So, both department should understand each other's objective and should help other department for fulfilling the objectives. One more thing, financial decisions are also very necessary in human resource area. Corporate are moving to the development of employees. They are human resource capital of company. Now, investment in training of employees, incentive schemes and retirement schemes etc should be calculated like other investment and both departments should take maximum advantages from this asset.

The finance cannot work effectively unless it draws on the -disciplines which are closely associated with it. Management is heavily dependent on accounting for operating facts. Accounting' has been described by Richard M. Lynch and Robert W. Williamson as "the measurement and communication of financial and economical data. In fact, accounting information relates to the production, sales, expenses, investments, losses and gains of the business. Accounting has three branches namely, financial accounting, cost accounting and management accounting.

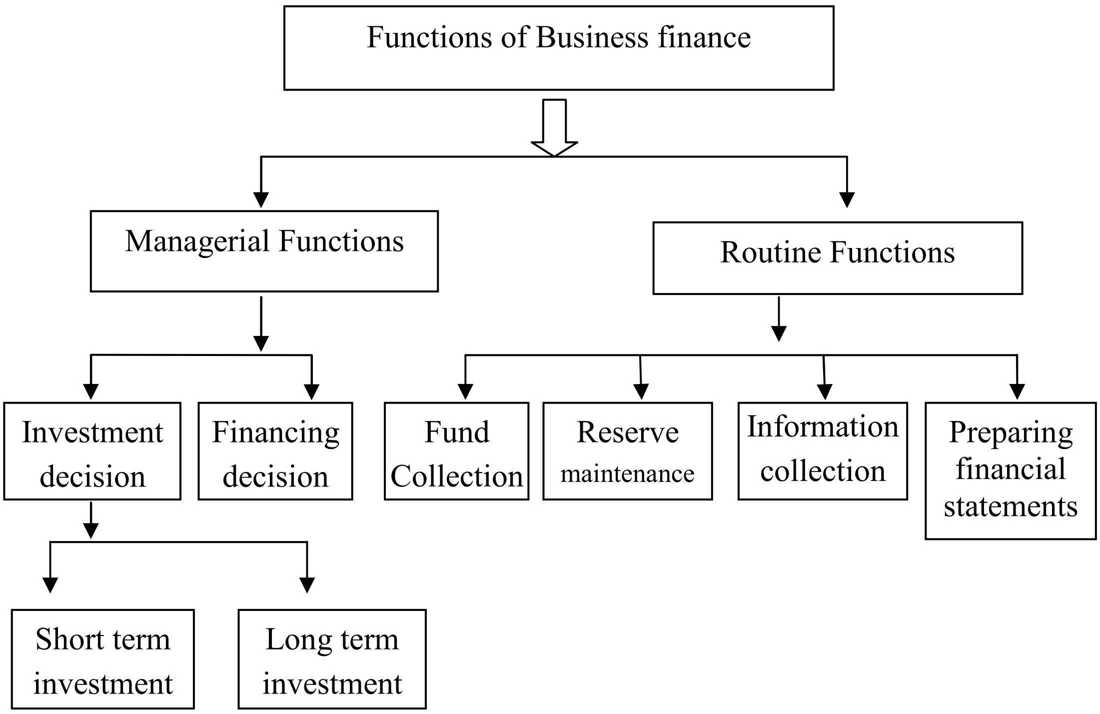
4. Financial Accounting: It is concerned with the preparation of reports which provide information to users outside the firm. The most common reports are the financial statements included in the annual reports of stock-holders and potential investors. The main objective of these-reports is to inform stockholders, creditors and other investors how assets are controlled by a firm. In the light of the financial statements and certain other information, the accountant prepares funds film statement, cash flow statement and budgets. A master plan (Budget) of the organization includes and coordinates the plans of every department in financial terms. According to Guthmann and Dougall, “Problems of finance are intimately connect ed while problems of purchasing, production and marketing”.

5. Cost Accounting: It deals primarily with cost data. It is the process of classifying, recording, allocating and reporting the various costs incurred in the operation of an enterprise. It includes a detailed system of control for material, labour and overheads. Budgetary control and standard casting are integral part of Primary Disciplines. The purpose of cost accounting is to provide information to the management for decision making, planning and control. It facilitates cost reduction and cost control. It involves reporting of cost data to the management.

6. Management Accounting: It refers to accounting for the management. It provides necessary information to assist the management in the creation of policy and in the day to day operations. It enables the management to discharge all its functions, namely, planning, organizing, staffing, direction and control efficiently with the help of accounting information. Functions of management accounting include all activities connected with collecting, processing, interpreting and presenting information to the management. According to J. Batty, ‘management accounting' is the term used to describe the accounting methods, systems and technique which coupled with special knowledge and ability, assist management in its task of maximizing profits or minimizing losses. Management accounting is related to the establishment of cost centres, preparation of budgets, and preparation of cost control accounts and fixing of responsibility for different functions.

1.2.7 Finance Functions

Fast ahead 20 years, and business have exchanged their tasks. Now, business finds their relying on another variety of fiscal entity: business finance. Although business finance still takes care of money and assets. They serve many other primary functions that can help firm realize growth. Raising and managing of stores by business organizations. Such movements are usually the concern of senior administrators, who must use financial forecasting to explain a long-term plan for the firm. Shorter-term resources are then devised to meet the plan's intentions. When a company plans to develop, it may rely on cash reserves, expected progress in sales, or bank loans and trade credits prolonged by suppliers. Managers may also decide to raise long-term capital in the form of either debt (bonds) or equity (stock).



A) Managerial functions:

a. Investment decision: Investment decisions relate to the selection of assets in which funds will be invested by a firm. Funds procured from different sources have to be invested in various kinds of assets. The investment of funds is used in a project for various fixed assets and also for current assets. The investment of funds in a project has to be made after careful assessment of the various projects through capital budgeting. A part of long term funds is also to be kept for financing the working capital requirements. Asset management policies are to be laid down regarding various items of current assets. The inventory policy would be determined by the production manager and the finance manager keeping in view the requirement of production and the future price estimates of raw materials and the availability of funds. One of the most important finance functions is to intelligently allocate capital to long term assets. This activity is also known as capital budgeting. It is important to allocate capital in those long term assets so as to get maximum yield in future.

a. Following are the two aspects of investment decision Evaluation of new investment in terms of profitability

b. Comparison of cut off rate against new investment and prevailing investment.

Since the future is uncertain therefore there are difficulties in calculation of expected return. Along with uncertainty comes the risk factor which has to be taken into consideration. This risk factor plays a very significant role in calculating the expected return of the prospective investment. Therefore while considering investment proposal it is important to take into consideration both expected return and the risk involved.

Investment decision not only involves allocating capital to long term assets but also involves decisions of using funds which are obtained by selling those assets which become less profitable and less productive. It wise decisions to decompose depreciated assets which are not adding value and utilize those funds in securing other beneficial assets. An opportunity cost of capital needs to be calculating while dissolving such assets. The correct cut off rate is calculated by using this opportunity cost of the required rate of return (RRR)

- **Short-term investment:** In this case investment is made in current assets for one or less than one year.

- **Long-term investment:** Capital budgeting is concerned for investing in term project where the following things are considered: overall assets and cost, expected the future return, the risk of expected return, cost of capital.

Factors Influencing Investment Decisions

The main factors which, influence capital investment are:

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

2. Competitors 'strategy: Many a time an investment is taken to maintain the competitive strength of the firm; If the competitors are installing new equipment to expand output or to improve quality of their products, the firm under consideration will have no alternative but to follow suit, else it will perish. It is, therefore, often found that the competitors' strategy regarding capital investment plays a very significant role in forcing capital decisions on a firm.

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

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

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

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

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

C) Finance decision:

These decisions relate to acquiring the optimum finance to meet financial objectives and seeing that fixed and working capital are effectively managed. The financial manager needs to possess a good knowledge of the sources of available funds and their respective costs and needs to ensure that the company has a sound capital structure. i.e. clear understanding as to the difference between profit and cash flow, bearing in mind that profit is the little avail unless the organisation is adequately supported by cash to pay for assets and sustain the working capital cycle. Financing decisions also call for a good knowledge of evaluation of risk e.g. excessive debt carried high risk for an organization's equity because of the priority rights of the lenders. A major area for risk related decisions is in overseas trading. Where an organisation is vulnerable to currency fluctuations, and the manager must be well aware of the various protective procedures such as hedging- it is a strategy designed to minimize, reduce or cancel out the risk in another investment available to him. For example, someone who has a shop takes care of the risk of the goods being destroyed by fire by hedging it via a fire insurance contract.

Financial decision is important function which a financial manger must perform. It is important to make wise decisions about when, where and how should a business acquire funds. Funds can be acquired through many ways and channels. Broadly speaking a correct ratio of an equity and debt has to be maintained. This mix of equity capital and debt is known as a firm's capital structure. A firm tends to benefit most when the market value of a company's share maximizes this not only is a sign of growth for the firm but also maximizes shareholders wealth. On the other hand the use of debt affects the risk and return of a shareholder. It is more risky though it may increase the return on equity funds. A sound financial structure is said to be one which aims at maximizing shareholders return with minimum risk. In such a scenario the market value of the firm will maximize and hence an optimum capital structure would be achieved. Other than equity and debt there are several other tools which are used in deciding a firm capital structure.

According to Henry Hoagland, The Financial decision affects both the profitability and risk of a firm's operation. An increase in cash holdings, for instance risk, but, because of cash is not an earning asset, converting other types of assets to cash reduces the other firm's profitability. Similarly, the issue of additional debt can raise the profitability of a firm, but more debt means more risk. Striking a balance between risk and profitability that will maintain the long term value of a firm's securities in the large of finance.

D) Dividend decision:

These decisions relate to the determination as to how much and how frequently cash can be paid out of the profits of an organization as income for its owners/shareholders. The owner of any profit making organization looks for reward for his investment in two ways, the growth of the capital invested and the cash paid out as income for a sole trader this income would be termed as drawings and for a limited liability company the term is dividends. The dividend decision thus has two elements- the amount to be paid out and the amount to be retained to support the growth of the organisation, the latter being also a financing decision, the level and regular growth of dividends represent a significant factor in determining a profit making company's market value, i.e. the value placed on its shares by the stock market. Earning profit or a positive return is a common aim of all the businesses. But the key function a financial manger performs in case of profitability is to decide whether to distribute all the profits to the shareholder or retain all the profits or distribute part of the profits to the shareholder and retain the other half in the business. It's the financial manager's responsibility to decide a optimum dividend policy which maximizes the market value of the firm. Hence an optimum dividend payout ratio is calculated. It is a common practice to pay regular dividends in case of profitability another way is to issue bonus shares to existing shareholders. The financial manager must take careful decisions on how the profit should be distributed among shareholders. It is very important and crucial part of the business concern, because these decisions are directly related with the value of the business concern and shareholder's wealth. Like financing decision and investment decision, dividend decision is also a major part of the financial manager. When the business concerns decide dividend policy, they have to consider certain factors such as retained earnings and the nature of shareholder of the business concern.

Factors which influence dividend decisions

1. Legal constraints: Normally all countries prohibit companies from paying out as cash dividends any portion of the firm's legal capital, which is measured by the par value of equity shares (common stock) Other countries define legal capital to include not only the par value of the equity shares (common stock), but also premium paid if any (any-paid in–capital in excess of par). These capital impairment restrictions are generally established to provide a sufficient equity base to protect creditor's claims. An earnings requirement limiting the amount of dividends to the sum of the firm's present and past earnings is sometimes imposed. In other words the firm cannot pay more in cash dividends than the sum of its most recent and past-retained earnings. However, the firm is not prohibited from paying more in dividends than its current earnings. Thus dividends can be paid only out of the profits earned during a financial year after providing for depreciation and after transferring to reserves such percentage of profits as prescribed by law. Due to inadequacy or absence of profits in any year, dividend may be paid out of the accumulated profits of the previous years. Dividends cannot be declared for past years for which the accounts have been closed.

2. Contractual constraints: Often, the firm's ability to pay cash dividends is constrained by restrictive provisions in a loan agreement. Generally, these constraints prohibit the payment of cash dividends until a certain level of earnings have been achieved, or they may limit dividends to a certain amount or a percentage of earnings. Constraints on dividends help to protect creditors from losses due to the firm's insolvency. The violation of a contractual constraint is generally grounds for a demand of immediate payment by the funds supplier.

3. Internal constraints: The firm's ability to pay cash dividends is generally constrained by the amount of excess cash available rather than the level of retained earnings against which to charge them. Although it is possible for a firm to borrow funds to pay dividends, lenders are generally reluctant to make such loans because they produce no tangible or operating benefits that will help the firm repay the loan. Although the firm may have high earnings, its ability to pay dividends may be constrained by a low level of liquid assets. (Cash and marketable securities)

4. Growth prospects: The firm's financial requirements are directly related to the anticipated degree of asset expansion. If the firm is in a growth stage, it may need all its funds to finance capital expenditures. Firms exhibiting little or no growth may never need replace or renew assets. A growth firm is likely to have to depend heavily on internal financing through retained earnings instead of distributing current income as dividends

5. Owner considerations: In establishing a dividend policy, the firm's primary concern normally would be to maximize shareholder's wealth. One such consideration is then tax status of a firm's owners. Suppose that if a firm has a large percentage of wealthy shareholders who are in a high tax bracket, it may decide to pay out a lower percentage of its earnings to allow the owners to delay the payments of taxes until they sell the stock. Of course, when the equity share is sold, the proceeds are in excess of the original purchase price, the capital gain will be taxed, possible at a more favorable rate than the one applied to ordinary income. Lower-income shareholders, however who need dividend income will prefer a higher payout of earnings. As of now, the dividend income is not taxed in the hands of the share holders in India. Instead, for paying out such dividends to its share holders, the company bears the dividend distribution tax.

6. Market Considerations: The risk-return concept also applies to the firm's dividend policy. A firm where the dividends fluctuate from period to period will be viewed as risky, and investors will require a high rate of return, which will increase the firm's cost of capital. So, the firm's dividend policy also depends on the market's probable response to certain types of policies. Shareholders are believed to value a fixed or increasing level of dividends as opposed to a fluctuating pattern of dividends. In other words, the market consideration is a kind of information content of the dividends. It's a kind of signal for the firm to decide its final policy. A stable and continuous dividend is a positive signal that conveys to the owners that the firm is in good in health. On the other side, if the firm skips in paying dividend due to any reason, the shareholders are likely to interpret this as a negative signal.

7. Taxation: the firm's earnings are taxable in many countries. This taxation is applied differently in different countries.

E) Liquidity decision:

It is very important to maintain a liquidity position of a firm to avoid insolvency. Firm's profitability, liquidity and risk all are associated with the investment in current assets. In order to maintain a tradeoff between profitability and liquidity it is important to invest sufficient funds in current assets. But since current assets do not earn anything for business therefore a proper calculation must be done before investing in current assets. Current assets should properly be valued and disposed of from time to time once they become non profitable. Currents assets must be used in times of liquidity problems and times of insolvency.

F) Routine Functions:

Routine function is also called incidental function. Some other functions are also accomplished by financial managers. These are commonly known as routine works:

- Fund collection
- Reserve maintenance
- Information collection
- Preparing financial statements, etc.

1.2.8 Concept of capitalization

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

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

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

Guthman and Dougall,

"Capitalization is the sum of the par value of stocks and bonds outstanding".

Bonneville and Dewey

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

Arhur. S. Dewing

"Capitalization is the sum total of the par value of all shares".

1.2.9 Theories of capitalization

The problems of determining the amount of capitalization is necessary both for a newly started company as well as for an established concern. In case of the new enterprise, the problem is more severe in so far as it requires the reasonable provision for future as well as for current needs and there arises the danger of either raising excessive or insufficient capital. But the case is different with established concerns.

They have to revise or modify their financial plan either by issuing of fresh securities or by reducing the capital and making it in conformity with the needs of the enterprises. However, to estimate the amount of capitalization two theories have been pronounced.

1. The cost theory of capitalization:

Under this theory, the capitalization of a company is determined by adding the initial actual expenses to be incurred in setting up a business enterprise as a going concern. It is aggregate of the cost of fixed assets (plant, machinery, building, furniture, goodwill, and the like), the amount of working capital (investments, cash, inventories, receivables) required to run the business, and the cost of promoting, organizing and establishing the business.

In other works, the original total outlay incurred on various items becomes the basis for determining the capitalization of a company. If the funds raised are sufficient to meet the initial costs and day to day expenses, the company is said to be adequately capitalized. This theory is very helpful for the new companies as it facilitates the calculation of the amount of funds to be raised initially.

Cost theory, no doubt, gives a concrete idea to determine the magnitude of capitalization, but it fails to provide the basis for assessing the net worth of the business in real terms. The capitalization determined under this theory does not change with earnings.

Moreover, it does not take into account the future needs of the business. This theory is not applicable to the existing concerns because it does not suggest whether the capital invested justifies the earnings or not. Moreover, the cost estimates are made at a particular period of time. They do not take into account the price level changes. For example, if some of the assets may be purchased at inflated prices, and some assets may remain idle or may not be fully utilized, earnings will be low and the company will not be able to pay a fair return on the capital invested. The result will be over-capitalization. In order to do away with these difficulties and arrive at a correct figure of capitalization, 'earnings approach' is used.

2. The earnings theory of capitalization:

This theory assumes that an enterprise is expected to make profit. According to it, its true value depends upon the company's earnings and/or earning capacity. Thus, the capitalization of the company or its value is equal to the capitalized value of its estimated earnings. To find out this value, a company, while estimating its initial capital needs, has to prepare a projected profit and loss account to complete the picture of earnings or to make a sales forecast.

Having arrived at the estimated earnings figures, the financial manager will compare with the actual earnings of other companies of similar size and business with necessary adjustments.

After this the rate at which other companies in the same industry, similarly situated are making earnings on their capital will be studied. This rate is then applied to the company's estimated earnings for determining its capitalization.

Under the earnings theory of capitalization, two factors are generally taken into account to determine capitalization (i) how much the business is capable of earning and (ii) What is the fair rate of return for capital invested in the enterprise. This rate of return is also known as 'multiplier' which is 100 per cent divided by the appropriate rate of return.

Thus, if a company is capable of making net profit of Rs. 30,000 annually and the rate of earnings is 10%, the capitalization of the company will be 3,00,000 (i.e. 30,000 x 100/ 10). But if the total investment during that period in the whole industry is ten crores of rupees and the total earnings of the industry rate Rs. 1.5 crores, the earning capacity of the industry are thus 15%.

But business under consideration is earning 10% only. This is a case of over capitalization as the earnings of Rs. 30,000 justify investment of Rs. 2,00,000 only Rs. 30,000 X 100/15) in view of earning capacity of the industry. Hence, the company is over- capitalized to the tune of Rs. 1, 00,000. Though earning theory is more appropriate for going concerns, it is difficult to calculate the amount of capitalization under this theory. It is based upon a 'rate' by which earnings are capitalized. This rate is difficult to estimate in so far as it is determined by a number of factors not capable of being calculated quantitatively.

These factors include nature of industry/ financial risks, competition prevailing in the industry and so on. New companies cannot depend upon this theory as it is difficult to estimate the expected returns in their case.

As regards capitalization, it is often said that "a concern should neither be overcapitalized, nor under-capitalized, the aim should be to achieve fair capitalization". To understand the significance of this statement, let us first look into the technicalities of over and under capitalization.

1.2.10 Over capitalization

It is a situation where a firm has more capital than it needs. Assets are worth less than its issued share capital, and earnings are insufficient to pay dividend and interest. This situation mainly arises when the existing capital is not effectively utilized on account of fall in earning capacity of the company while company has raised funds more than its requirements. The chief sign of overcapitalization is the fall in payment of dividend and interest leading to fall in value of the shares of the company.

Concept of overcapitalization

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

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

Example

A company is earning a sum of Rs. 50,000 and the rate of return expected is 10%. This company will be said to be properly capitalized. Suppose the capital investment of the company is Rs. 60,000, it will be over capitalization to the extent of Rs. 1,00,000. The new rate of earning would be: 50,000/60,000×100=8.33% When the company has over capitalization, the rate of earnings will be reduced from 10% to 8.33%.

According to Gerstenberg, **"A company is over-capitalized when its earnings are not large enough to yield a fair return on the amount of stock and bonds that have been issued, or when the amount of securities outstanding exceeds the current value of the assets".** Simply stated, over-capitalization means more capital than actually required, and therefore, in a over capitalized concern, the invested funds are not properly used. It is, therefore, quite clear that over-capitalization may be explained in terms of earnings as well as cost of assets.

Symptoms of overcapitalization

Generally, an entity is said to be overcapitalized when it has fixed assets in excess of its actual needs and a reasonable return is not being earned on the investments of these fixed assets. Sometimes, we might consider an entity overcapitalize when it has substantial amounts of intangibles represented by inflated values like in the case of patents, trademark, good will and other deferred assets. Hence instead of looking at the shareholder funds alone, there is a need for the deduction of these intangibles assets from the shareholder fund to get the real tangible worth of the entity.

1. High proprietary ratio (refer to my previous article on this)
2. Low earnings per share
3. Low assets utilization particularly with a lot of fixed assets and small revenue generated
4. Too much capital invested in unproductive fixed assets

Causes of overcapitalization: There are many factors which account for the situation of over-capitalization of a company. **Following are some of the important causes of over-capitalization:**

1. Over-issue of capital: while floating a new company, the promoters over-estimate the financial requirements, and as a result, they raise more capital than what is actually needed, resulting in over-capitalization.

2. Promotion, formation or development during inflation: If a company is to be floated during an inflationary period, or any development activity is carried out in such a period, it will be a victim of over-capitalization because it has to spend huge amounts.

3. Buying assets of lower value at higher prices: It promoters buy assets of lower values at higher prices; they are led to a situation of over-capitalization because assets of lower value will be shown at higher value in the Balance sheet.

4. High Promotion expenses: Incurring high promotional expenses, excessive preliminary expenses etc. may lead to over-capitalization.

5. Inadequate depreciation: Providing inadequate depreciation results in over-capitalization as it leaves insufficient provision for replacement of assets.

6. Liberal dividend policy: Many companies prefer to declare a higher rate of dividend instead of retaining a part of the profits and ploughing them back or reinvesting them. Such a practice should be discouraged as it leads to over-capitalization, because liberal dividends are paid at the cost of inadequate provision for depreciation.

7. Taxation Policy: High rates of taxation may leave little in the hands of the management to provide for depreciation, replacements and dividends. This will adversely affect earnings capacity and thus leads to over-capitalization.

8. Inadequate demand for products: If a company's products register a constant decline, it will bring down the profitability of the concern and as a result, returns on capital employed will be reduced which represents over-capitalization.

9. Payment of high rate of interest: Procurement of funds at high rate of interest will adversely affect the company resulting in over-capitalization.

10. Under-estimation of the capitalization rate: If the rate of capitalization is under-estimated, it will lead to a situation of over-capitalization.

Effects of Over-Capitalization: Over-capitalization affects not only the company and its owners (shareholders) but also the society as a whole. The evil effects of over-capitalization are discussed below:

A. Effects on the Company:

The effects of over-capitalization on the company itself are disastrous in many ways:

(i) Loss of goodwill: In an over-capitalized company, there is a reduced earning capacity resulting in the fall of market price of its shares and thereby shaking up the investor's confidence. A company whose shares sell below the face value may find it difficult to improve its goodwill in the market.

(ii) Poor creditworthiness: Reduced earnings of an over-capitalized concern affect its creditworthiness and as a result, it becomes difficult for it to get loans or credit at cheaper rates of interest.

(iii) Difficulties in obtaining capital: For a company faced with a situation of over-capitalization, it is very difficult to obtain further capital for its growth and expansion programmes. It is so because the investors have already lost confidence in the company. **(iv) Decline in efficiency of the company**: To cover for one loss, other losses are incurred by the company and in the process overall efficiency of the company declines. Such a company usually does not make adequate provisions for depreciation, repairs and renewals, etc., leading to further decline in its efficiency.

(v) Loss of market: Over-Capitalized companies fail to produce goods at competitive costs and, hence, often lose their market to competitors.

(vi) Inflated profits: In order to regain the confidence of its investors, over-capitalized companies generally resort to manipulation of accounts and over-statement of their profits. These inflated profits lead to payments of dividends out of capital.

(vii) Liquidation of company. An over-capitalized company goes into liquidation unless drastic steps are taken to re-organize the whole capital structure and re-organisation would itself lead to a lot of problems.

B. Effects on Shareholders:

As, shareholders are the real owners of a company, they suffer most on account of over-capitalization. Some of the major effects of over-capitalization on shareholders are:

(i) Reduced dividends: An over-capitalized company will not be able to pay a fair rate of dividend to its shareholders because it is earning a low rate of return (earnings) on its capital. More so, the payment of dividend becomes uncertain and irregular.

(ii) Fall in the value of shares: Low rate of earnings and reduced dividends cause fall in the market value of shares of the over-capitalized company. Thus, shareholders have to suffer a loss in capital due to depreciation of their investments.

(iii) Unacceptable as collateral security: The shares of an over-capitalized company have small value as collateral security. Banks and other financial institutions are reluctant to lend money against such securities. Hence, it is very difficult for the shareholders to borrow money against the security of their shares.

(iv) Loss on speculation: the prices of the shares of an over-capitalized company remain unstable because of speculative dealings in such shares. This malpractice further adds to the losses of the shareholders.

(v) Loss on re-organisation: An over-capitalized company has to often resort to organization and reduction of its capital in order to write off the accumulated losses. This results in the reduction of face value of shares and loss to its owners.

C. Effects on Society:

Over-capitalization affects not only the company and its owners but also the society as a whole.

(i) Loss to Consumers: In order to prevent declining trend of income, an over-capitalized concern resorts to increased prices and reduction in quality of its products.. Hence, consumers have to suffer by paying more for the poorer quality.

(ii) Loss to Workers: An over-capitalized company tends to reduce wages and welfare facilities of the workers to reduce losses of the earnings. No consideration is given to the demands of the workers and some of them even lose their jobs because of lay offs and retrenchment and closure of such units.

(iii) Under or misutilisation of Resources: An over-capitalized concern either misutilises or under utilizes its resources. Hence, the scarce resources of society are not properly utilized.

(iv) Gambling in Shares: Another social evil of over-capitalization is promotion of gambling habits by providing scope for gambling in shares of such a company.

(v) Recession: Over-capitalization leads to increased losses, poor quality of products, retrenchment or unemployment of workers, decline in wage rates and purchasing power of labour. This tendency gradually affects the entire industry and the society, and may lead to recession of economy.

Remedies for Over-Capitalization: The evil effects of over-capitalization are so grave that the management must take remedial measures to rectify the situation as soon as the first symptoms of over-capitalization are observed by the firm. An over-capitalized company has been rightly compared with a very fat person who is likely to suffer from various diseases unless he takes steps to immediately reduce his weight. Likewise, an over-capitalized company must cut its dead weight before it becomes deep rooted and almost impossible to get rid of. In this regard, various remedial measures such as increasing the efficiency of management, reduction of high interest bearing funded debt, redemption of preference shares, reduction in face value and number of shares, etc., have been suggested.

1. To have Efficient Management: Management should try to become more efficient and try to curb excess expenditure. Earning capacity should be improved and care must be taken to spend every single rupee in the most profitable and economic manner.

2. Redemption of Preference Shares: Preference shares carrying high rate of dividend should be redeemed out of retained earnings in order to raise the share of equity shareholders.

3. Reduction of Funded Debts: Debentures, public deposits and loans taken at higher rates of interest should be prepaid out of accumulated profits or out of fresh borrowings at lower rates of interest, if there are no accumulated profits.

4. Reorganization of Equity Share Capital: The face value or the number of equity shares may be reduced in order to rectify over-capitalization. Sometimes, shareholders may oppose to this proposal but actually their proportionate interest in the equity is not reduced. The amount available due to reorganization of share capital is utilized for writing off the fictitious assets and other over-valued assets.

1.2.11 Under capitalization:

Under capitalization is the opposite concept of over capitalization and it will occur when the company's actual capitalization is lower than the capitalization as warranted by its earning capacity. Under capitalization is not the so called inadequate capital. It is a state, when its actual capitalization is lower than its proper capitalization as warranted by its earning capacity. This situation normally happens with companies which have insufficient capital but large secret reserves in the form of considerable appreciation in the values of the fixed assets not brought into the books.

Concept of undercapitalization

According to Gersrtenberg, **"A company may be under-capitalized when the rate of profits it is making on the total capital is exceptionally high in relation to the return enjoyed by similarly situated companies in the same industry, or when it has too little capital with which to conduct its business".**

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

In simple words, we can say that under-capitalization is the reverse phenomenon of over-capitalization, and occurs when a company's actual capitalization is lower than its proper capitalization as warranted by its earning capacity. The term under-capitalization should never be considered synonymous with inadequate capital. The real value of an under-capitalized company is more than its book value. The profits are higher than warranted by the book value of its assets. Such a company can pay a higher rate of dividend and the market value of its shares is much higher than its face value.

Symptoms of undercapitalization

The assets acquired with the existing capitalization facilitate the generation of higher profits. It so happens when**:** (i) The assets have been acquired at lower rates, or (ii). The company has generated secret reserves by paying lower dividends to the shareholders over a number of years. The symptoms of under-capitalization are as follows:

1. There is an unforeseen increase in earnings of the company.
2. Future earnings of the company were under-estimated at the time of promotion.
3. Assets might have been acquired at very low prices.

Causes of undercapitalization

Following are the important causes of under-capitalization in a company:

1. Under-Estimation of Capital Requirements: If the future capital requirements are underestimated by the promoters, the inadequacy of capital is experienced at a later stage. The company may arrange cheaper debt at lower rate of interest at that stage resulting in increased earnings per share. This leads the company to a situation of under-capitalization.

2. Under-Estimation of Future Earnings: While preparing the financial plan, if the future earnings of the company are under estimated and the actual earnings turn out to be higher than the estimated figure, the company may find itself in a condition of under-capitalization.

3. Promotion during Depression: Companies promoted during a period of depression often experience under-capitalization when inflation sets in because of a sudden rise in their earnings.

4. Conservative Dividend Policy: If the management of a particular company adopts an orthodox dividend policy, i.e. where it follows a cautious policy regarding the distribution of dividend and keeps a major part of its earnings for re-investment purpose, it results into higher earnings and conditions of under-capitalization.

5. Very Efficient Management: In companies, where the management is very efficient, the rate of return may be quite high as compared to other companies in the same industry, and such a high rate of return may eventually lead towards under-capitalization.

6. Desire of Control and Trading on Equity: In many companies, the promoter desires to retain control over the company and raises lesser amount of share capital. However, later on when the funds are required they resort to trading on equity. This raising of funds at a lower rate of interest than the earnings of the company eventually leads to under-capitalization.

Effects of undercapitalization: under capitalization have the following effects:

1. Limited marketability of shares: share of undercapitalized company enjoy market value but it limits marketability. It may cause large fluctuations in the market. Due to limited marketability, such company's shares may not command a price which commensurate with the increase in its earnings.

2. Industrial unrest: employees know the company has tremendous profits and it is not allotted with them, it may encourage industrial unrest. But company cannot satisfy the financial demands of the employees. These demands continue to grow day by day.

3. Consumer dissatisfaction: consumer always aware of the significant profits of a company. They also feel that company is exploiting them by earning higher profits. Hence, they expect from a company to lower the price or improve the quality of product. When a company cannot satisfy consumer's expectations, it leads to consumer dissatisfaction.

4. Government interference: the government always keeps watch on profit making companies. It often suspects that company may be concealing their profits with a view to evading tax. High earning per share may attract government interference to bring down the prices of the product so as to protect the interest of consumer and other stakeholders.

5. Inadequacy of capital: undercapitalized company suffers from inadequacy of capital and a company depends on borrowing on debts at higher rate of interest. It leads to increase in creditors control over company.

6. Cut-throat competition: Undercapitalization Company has high rate of earnings. High rate of earning may attract competitors to entre into market. It causes cut throat competition.

Remedies for Under-Capitalization:

Under-capitalization can be corrected by taking any of the following remedial measures:

1. Fresh Issue of Shares: If under-capitalization is due to inadequacy of capital, then it can be corrected by the issue of fresh shares, the company may also redeem its long-term debt by the issue of fresh share capital.

2. Issue of Bonus Shares: The Company may issue bonus shares by capitalizing its accumulated earnings. This is the most commonly used and effective method of correcting under-capitalization. It reduces earnings per share after the bonus issue.

3. Increasing the Par Value of Shares: The Company may revalue its assets and increase their values. In lieu, thereof, the par value of shares may also be increased. This will result into reduction of earnings per rupee of share value but the amount of dividend per share will remain same.

4. Splitting Stock: Another effective method of correcting under-capitalization is to split up the existing stock into larger number of shares reducing the value of each share. It neither affects the total earnings of the company nor the total amount of capital of the company but still dividend per share shall reduce.

1.3 Summary

The term 'business finance' is very comprehensive. It implies finances of business activities. Business can be categorized into three groups: commerce, industry and service. It is a process of rising, providing and managing of all the money to be used in connection with business activities. It encompasses finance of sole proprietary organizations, partnership firms and corporate organizations. Profit Maximization as its name signifies refers that the profit of the firm should be increased while Wealth Maximization aims at accelerating the worth of the entity. There is a close relationship between the finance and other areas of management such as production, Human resource, marketing etc. Almost all business activities in an organization directly or indirectly involve the acquisition and use of funds. Capitalization is one of the most important parts of financial decision, which is related to the total amount of capital employed in the business concern. Understanding the concept of capitalization leads to solve many problems in the field of financial management.

1.4 Term to remember

- **Finance:** It is defined as the position of money at the time it is needed.

- **Business Finance:** According to Guthmann & Dougall, business finance can be broadly defined as the activity concerned with planning, raising, controlling and administering of funds used in the business
- **Finance Function:** The finance function is the process of acquiring and utilizing funds of a business.
- **Financial decisions:** It refers to decisions concerning financial matters of a business firm.

1.5 Check your progress

I) Choose the correct alternative:

1. ------------------ can be calculated by deducting total cost from total revenue.

   a. wealth b. profit c. capital d. Loss

2. ------------------- maximization is the ability of a company to increase the market value of its common stock over time.

   a. profit b. wealth c. capital d. Revenue

3. ------------------ decisions relate to the selection of assets in which funds will be invested by a firm.

   a- investment b- dividend c- Routine d- finance

4. ----------------- decisions relate to acquiring the optimum finance to meet financial objectives and seeing that fixed and working capital are effectively managed.

   a- investment b- dividend c- Routine d- finance

5. ----------------- decisions relate to the determination as to how much and how frequently cash can be paid out of the profits of an organization as income for its owners/shareholders.

   a- investment b- dividend c- Routine d- finance

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

   a- capitalization b- under capitalization c- over capitalization d- optimum capitalization

7. ------------------------------- refers to the company which possesses an excess of capital in relation to its activity level and requirements.

   a- capitalization b- under capitalization

   c- over capitalization d- optimum capitalization

8. ---------------------------- is occur when the company's actual capitalization is lower than the capitalization as warranted by its earning capacity.

   a- capitalization b- under capitalization

   c- over capitalization d- optimum capitalization

II) Fill in the blanks

a. **----------** is the remuneration paid to the entrepreneur after deduction of all expenses.

b. The **---------------** function is the process of acquiring and utilizing funds of a business.

c. **--** aims at accelerating the worth of the entity.

d. **---------------------------** encompasses a wide range of activities and disciplines regarding the management of money and other valuable assets.

e. **-------------------------** refers to the kind and proportion of different securities for raising funds.

III) State 'True' or False'

1. Profit Maximization is the capability of the firm in producing maximum output with the limited input, or it uses minimum input for producing stated output.
2. The financial decision making that relates to current assets or short-term assets is known as Fixed capital management
3. Profit Maximization is based on the increase of sales and profits of the organization.
4. Wealth Maximization ignores the risk and uncertainty.
5. Dividend decision refers to decisions concerning financial matters of a business firm.

1.6 Answers to check your progress

I) 1- b 2- b 3- a 4- d 5- b 6- a

7- c 8- b

II) a- Profit b- finance c- wealth maximization d- business finance

e- capital structure

III) 1- True 2- False 3. True 4. False 5.False

1.7 Exercises

A) Write short answers to the following questions

1. Explain the scope of Business Finance.
2. Explain the significance of Business Finance.
3. Describe the relationship of finance with other areas of management.
4. What are the symptoms of over capitalization?
5. Explain the causes of over capitalization.
6. State the remedies for over capitalization.
7. Explain the effects of under capitalization.
8. Describe the causes of under capitalization

B) Write long answers to the following questions

1. Explain the scope and significance of business finance.
2. Explain the Profit maximization Vs Wealth maximization
3. What is investment decision? Explain the factors affecting on investment decision.
4. What is dividend decision? Explain the factors affecting on dividend decision.
5. Describe the theories of capitalization.
6. Explain the effects and remedies of over capitalization
7. Explain the causes and remedies of under capitalization.

C) Write short notes

1. Profit maximization Vs Wealth maximization
2. Finance decision
3. Liquidity decision
4. Routine Functions
5. Capitalization
6. Over capitalization
7. Under capitalization
8. The Cost theory of Capitalization
9. The earning theory of Capitalization

Practical:

Practical 3.1: Visit to any organization and do interaction with finance Controller & understand the various financial functions.

My self Ameya meet to Dr. Amit CA Professional. He has working as finance controller at Synergy Pvt., Ltd. The aim of the meeting to understand the functions of finance controller. Meeting with Dr. Amit I discussed regarding various functions of finance controller in his Organization.

Dr. Amit said that the Financial Controller job involves managing leadership over finances, accounting, and financial strategies. They must possess the ability to see the larger picture while focusing on detail. He also opinioned that the efficiency and accuracy are the good quality which are essential in the organization as a financial controller. While the controller's work is centered around financial data, which helps to formulate sound policies and strategies regarding financial management.

Dr. Amit commented as Finance Controllers may be accountants, but they don't do accounting work. Accounting refers to the act of recording company transaction data, where controllers are focused on making sure the data is recorded accurately, in time to time, as well as it is maintained in accordance with company rules and regulations. He also followed the guidelines of Accounting standard issued by Indian Institute of Chartered Accountant. If anyerrors and frauds emerge, the controller often find such malpractices and determine what was being happened, and investigate such practices.

When I was asking about role of finance controller in particular industry. Dr. Amit expressed that as a controller he has play a specific role in Synergy Pvt. Ltd. Being a finance controller, he leads the department to ensure all activities are completed and in compliance with government, industry, and company standards. They are responsible for the general ledgers and financial statements like balance sheets and income statements, ensuring he presents the true nature of cash flow in the organization. He serves as the link between the senior management team and the finance department. His responsibilities include:

1. To ensure the payments from debtors and customers
2. To observe general accounting operations
3. To set-up bank accounts.
4. To work with Chartered Accountant outside of the company.
5. To create effective internal policies and apply to control financial system.
6. To prepare financial reports to deliver to the Chief Financial Officer (CFO) or higher authorities.
7. To complete all the essential compliances regarding central and state tax.
8. To review payroll for accuracy and ensure whether it is maintained properly.

Finally, Dr. Amit opinioned that the financial controller is often responsible for use of ICT in organization for recording and preparing financial reports. He also reviewed state and central tax reports to ensure accuracy, insurance policies and conducted audits. He also told me that the overall documentation and transactions of organization is controlled by financial Controller.

Considering the career opportunities as finance controller I inquired about the qualification of particular post. Dr. Amit responded that to work as a financial controller, a Bachelor's degree in finance is essential. Along with it the candidate should complete master degree or professional qualification in field of financial sector. Most of the financial controllers are also Chartered Accountant accountants or certified management accountants (CMAs). Controllers may also have additional qualifications such as, Certified Financial Analyst, Certified Fraud Examiner, Certified Financial Controller. Moreover, it is noted that to successin the field, financial controllers also need a comprehensive set of soft skills, including, Communication skills, Leadership skills, Emotional intelligence, Flexibility and adaptability, Problem solving skills.

In this way we (Students) should visit any organization and interact with finance controller and they may understand the various financial functions of finance controller in specific industry. Through this visit we may understand the nature of organization, types, operation of business which affect on the financial functions.

(Author visited to Synergy Pvt. Ltd and interacted with Dr. Amit *for Complied function of Finance Controller)*

1.8 References

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Unit 2

Capital Structure

Unit Structure

2.0 Objectives

After Studying this unit you will be able to:

- Understand the term Capital Structure
- Understand principles of capital structure
- Understand factors influencing the capital structure
- Understand the concept of Trading on Equity
- Understand the concept of Weighted Average cost of Capital (WACC)

2.1 Introduction:

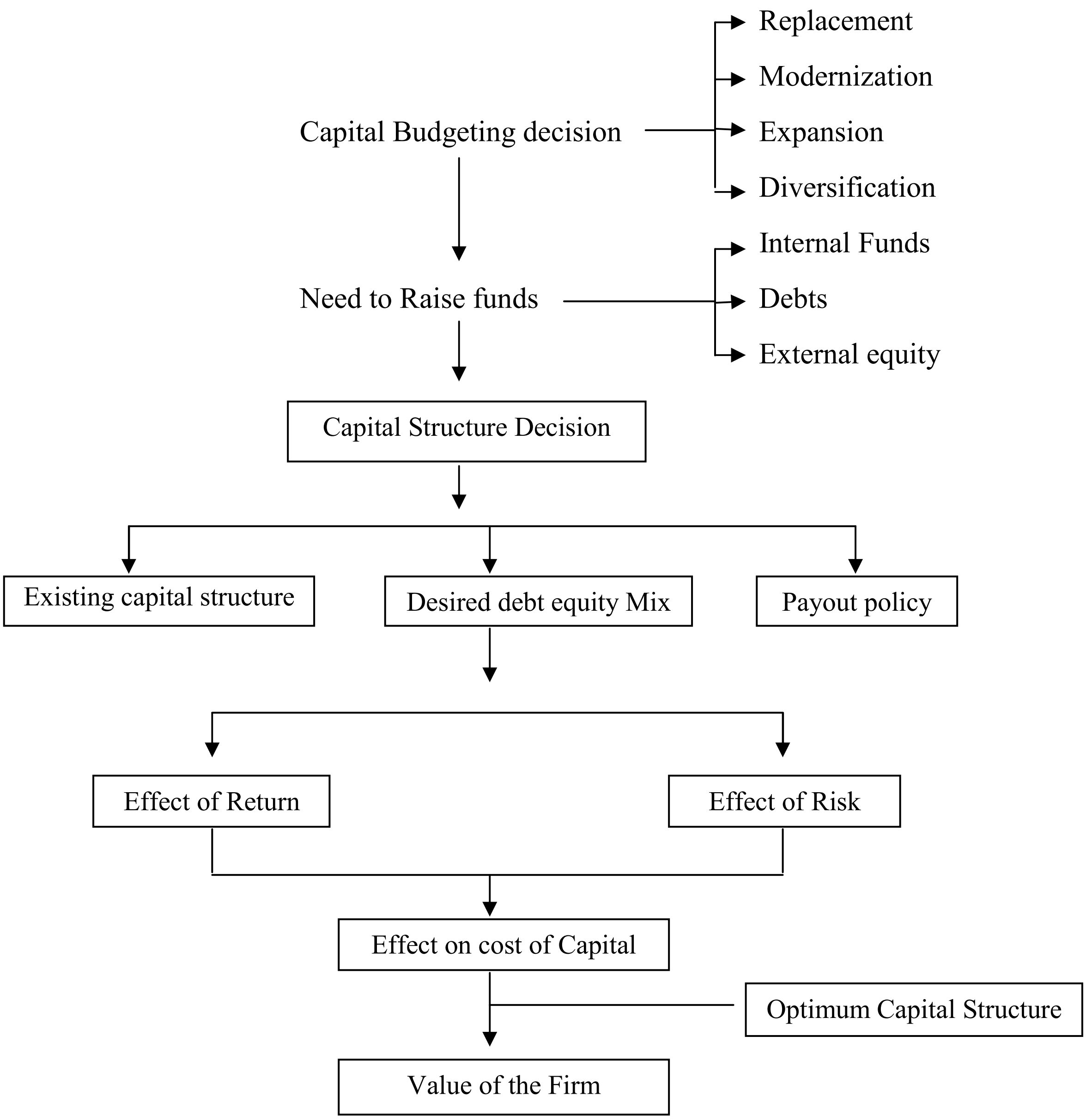
The term ‘structure’ means the arrangement of the various parts. Capital structure means the arrangement of capital from different sources so that the long-term funds needed for the business are raised. Capital structure refers to the proportions or combinations of equity share capital, preference share capital, debentures, long-term loans, retained earnings and other long-term sources of funds in the total amount of capital which a firm should raise to run its business. Decisions relating to financing the assets of a firm are very crucial in every business. The finance manager is regularly fixed in the difficulty of what the optimum proportion of debt and equity. As a general rule, there should be a proper mix of debt and equity capital in financing the firm’s assets. Capital structure is usually considered to serve the interest of the equity shareholders.

The relative proportion of various sources of funds used in a business is termed as financial structure. Capital structure is a part of the financial structure and refers to the proportion of the various long-term sources of financing. It is concerned with making the selection of the sources of the funds in a proper manner, which is in relative degree and proportion. The capital structure of a company is made up of debt and equity securities that include a firm’s financing of its assets. It is the permanent financing of a firm represented by long-term debt, preferred stock and net worth. It relates to the arrangement of capital and excludes short-term borrowings. It denotes some degree of permanency as it excludes short-term sources of financing. Again, each component of capital structure has a different cost to the firm. In case of companies, it is financed from various sources. In proprietary concerns, usually, the capital employed, is entirely contributed by its owners. In this context, capital refers to the total of funds supplied by both owners and long-term creditors. What should be the appropriate proportion between owned and debt capital? It depends on the financial policy of individual firms. In one company debt capital may be zero while in another such capital may even be greater than the owned capital. The proportion between the two, usually expressed in terms of a ratio, denotes the capital structure of a company.

In short, Capital structure refers to the percentage of capital (money) at work in a business by type. There are two forms of capital: equity capital and debt capital.

Each type of capital has its own benefits and drawbacks and a substantial part of wise corporate stewardship and management is attempting to find the perfect capital structure in terms of risk/reward payoff for shareholders. Many middle-class investors believe that the goal in life is to be debt-free.

The **process of capital structure decision** is depicted in the figure below:



2.2 Presentation of Subject Matter

2.2.1 Meaning of Capital Structure:

1. Gerestenberg, 'Capital structure of a company refers to the composition or make up of its capitalization and it includes all long term capital resources viz., loans, reserves, shares and bonds'.

2. **Keown et al.** defined capital structure as, 'balancing the array of funds sources in a proper manner, i.e. in relative magnitude or in proportions'.

3. P. Chandra, 'capital structure is essentially concerned with how the firm decides to divide its cash flows into two broad components, a fixed component that is earmarked to meet the obligations toward debt capital and a residual component that belongs to equity shareholders'.

4. John J. Hampton Capital structure is the combination of debt and equity securities that comprise a firm's financing of its assets."

5. I. M. Pandey "Capital structure refers to the mix of long-term sources of funds, such as, debentures, long-term debts, preference share capital and equity share capital including reserves and surplus."

Capital structure is the mix of the long-term sources of funds used by a firm. It is made up of debt and equity securities and refers to permanent financing of a firm. It is composed of long-term debt, preference share capital and shareholders' funds. Hence, capital structure implies the composition of funds raised from various sources broadly classified as debt and equity. It may be defined as the proportion of debt and equity in the total capital that will remain invested in a business over a long period of time. Capital structure is concerned with the quantitative aspect. A decision about the proportion among these types of securities refers to the capital structure decision of an enterprise.

The term capital structure should not be confused with financial structure and Assets structure. While financial structure consists of short-term debt, long-term debt and share holders' fund i.e., the entire left hand side of the company's Balance Sheet. But capital structure consists of long-term debt and shareholders' fund. The capital structure of a firm is a part of its financial structure. Some experts of financial management include short-term debt in the composition of capital structure. In that case, there is no difference between the two terms—capital structure and financial structure. So, capital structure is different from financial structure. It is a part of financial structure. Capital structure refers to the proportion of long-term debt and equity in the total capital of a company. On the other hand, financial structure refers to the net worth or owners' equity and all liabilities (long-term as well as short-term). Capital structure does not include short-term liabilities but financial structure includes short-term liabilities or current liabilities.

Capital Structure is referred to as the ratio of different kinds of securities raised by a firm as long-term finance. The capital structure involves two decisions-

a. Type of securities to be issued is equity shares, preference shares and long term borrowings (Debentures).

b. Relative ratio of securities can be determined by process of capital gearing. On this basis, the companies are divided into two-

   i) Highly geared companies - Those companies whose proportion of equity capitalization is small.

   ii) Low geared companies - Those companies whose equity capital dominates total capitalization.

For instance - There are two companies A and B. Total capitalization amounts to be Rs. 200,000 in each case. The ratio of equity capital to total capitalization in company A is Rs. 50,000, while in company B, ratio of equity capital is Rs. 150,000 to total capitalization, i.e., in Company A, proportion is 25% and in company B, proportion is 75%. In such cases, company A is considered to be a highly geared company and company B is low geared company.

Components of Capital Structure

Shareholders Funds

1. **Equity Capital**
2. **Preference Capital**
3. **Retained Earnings**

Borrowed Funds

1. **Debentures**
2. **Term Loans**
3. **Public Deposits**

2.2.2 Cardinal Principles of Capital Structure

A) Cost Principle: cost is an important principle of capital structure. It is clear that a business should be at least able of earning enough revenue to meet its cost of capital and finance its growth. Hence, along with a risk as principle the finance manager has to consider the cost aspect carefully while determining the capital structure. According to this principle, an ideal pattern of capital structure is one that minimizes cost of capital structure and maximizes earnings per share. For example, Debt capital is cheaper than equity capital from the point of its cost and interest being deductible for income tax purpose, whereas no such deduction is allowed for dividends.

B) Risk Principle: The finance manager attempts to plan the capital structure in such a manner, that risk and cost are the least and the control of the existing management is diluted to the least extent. However, there are also additional factors also like marketability of the issue and flexibility of the capital structure, timing of raising the funds. According to this principle, reliance is to be found more on common equity for financing capital requirements than excessive use of debt. Use of more and more debt means higher commitment in form of interest payout. This would lead to erosion of shareholders value in unfavourable business situation. There are two risks associated with this principle:

(i) **Business Risk:** it is an unavoidable risk because of the environment in which the firm has to operate and it is represented by the variability of earning before interest and tax. The variability in turn is influenced by revenues and expenses. Revenues and expenses are affected by demand of firm products, variations in prices and proportion of fixed cost I in total cost.

(ii) **Financial risk:** it is a risk associated with the availability of earnings per share caused by use of financial leverage. It is the additional risk borne by the shareholders when a firm uses debt in addition to equity financing. Financial risk also two types:

a. **Risk of cash insolvency**- as a firm raises more debt, its commitment towards debt service increases. This is due to two reasons. Firstly, higher the debt, the greater the amount of interest payable, even in years o insufficient profit. Secondly, the principal has to be repaid in committed installments, even if sufficient cash is not available. Thus the risk of cash insolvency increases.

b. **Risk of variation in the EPS**- Equity shareholders are entitled to residual earnings only, i.e. earning after meeting interest, tax and preference dividend. Hence, as interest increases, these will be lower probability that equity shareholders will enjoy a stable dividend. As a result of financial leverage, if debt content is high in the capital structure, the risk of variations in expected earnings available to equity shareholders will be higher.

Generally, a firm should neither be exposed to high degree of business risk and low degree of financial risk or vice-versa, so that shareholders do not bear a higher risk.

C) Control Principle:

Along with cost and risk principles, the control principle is also important consideration in planning the capital structure. When a company issues further equity shares, automatically dilutes the controlling interest of the present owners. Similarly, preference shareholders can have voting rights and thereby affect the composition of the Board of Directors, in case dividends on such shares are not paid for two consecutive years. Financial institutions normally require that they shall have one or more directors on the Boards. Hence, when the management agrees to raise loans from financial institutions by implication it agrees to sacrifice a part of its control over the company. It is noticeable, therefore, that decision concerning capital structure are taken after keeping the control factor in mind.

While designing a capital structure, the finance manager may also keep in mind the present management control and ownership remains uninterrupted. Issue of new equity will reduce existing control pattern and also it involves higher cost. Issue of more debt causes no reduction in control, but causes a higher degree of financial risk. The consideration of retaining control of the business is an important factor in capital structure decisions. If the existing equity shareholders do not like to reduce the control, they may prefer debt capital to equity capital, as previous has no voting rights.

There are three major considerations in capital structure are Risk, Cost and Control. These are differing for various components of capital i.e. own funds and loan funds a comparative analysis is given as under:

Comparative Analysis

Types of fund	Risk	Cost	Control
Equity Capital	Low risk- no question of repayment of capital expect when the company is under liquidation- hence best from viewpoint of risk	Most expensive- dividend expectations of shareholders are higher than interest rats also dividends are not tax deductible	Dilution of control- since the capital base might be expanded and new shareholders/public are involved
Preference capital	Slightly higher risk when compared to Equity capital principal is redeemable after a certain period even if dividend payment is based on profits	Slightly cheaper cost than Equity but higher than interest rate on loan funds. Further, preference dividends are not tax-deductible	No dilution of control since voting rights are restricted
Loan funds	High risk-capital should be repaid as per agreement interest should be paid irrespective of performance or profits	Comparatively Cheaper- prevailing interest rates are considered only to the extent of after tax impact	No dilution of control-but some financial institutions may insist on nomination of their representatives in the board of directors

D) Flexibility Principle:

Flexibility it means that the management chooses such a combination of sources of financing which it finds easier to adjust according to changes in need of funds in future. While debt could be interchanged (if the company is loaded with a debt of 18% and funds are available at 15% it can return old debt with new debt, at a lesser interest rate) but the same option may not be available in case of equity investment. The capital structures of a company should be such that it can raise funds as and when required. Flexibility provides opportunity for expansion, both in terms of lower impact on cost and with no significant rise in risk profile.

In an enterprise, the capital structure should be such that there are both contractions as well as relaxation in plans. Debentures and loans can be refunded back as the time requires. While equity capital cannot be refunded at any point it provides inflexibility to plans. Therefore, in order to make the capital structure possible, the company should go for issue of debentures and other loans.

E) Timing Principle:

Proper timing of a security issue often brings sustainable savings because of the dynamic nature of the capital market. Hence, the issue should be made at the right time so as to minimize effective cost of capital. The management should constantly study the trend in the capital market and time its issue carefully.

Besides, above principles, other factors such as nature of industry and competition in the industry should also be considered. Industries facing severe competition also resort to more equity than debt.

Thus, a finance manager in designing a suitable pattern of capital structure must put forward about satisfactory compromise between the above principles. The compromise can be reached by assigning weights to these principles in terms of various characteristics of the company.

2.2.3 Factors influencing the capital structure

There are various factors influencing on capital structure. These factors are mostly depending on types of business and situation of economy of the country. The following factors influence the capital structure decisions:

1. Risk of cash insolvency: Risk of cash insolvency arises due to failure to pay fixed interest liabilities. Generally, the higher proportion of debt in capital structure compels the company to pay higher rate of interest on debt irrespective of the fact that the fund is available or not. The non-payment of interest charges and principal amount in time will call for liquidation of the company. The sudden withdrawal of debt funds from the company can cause cash insolvency. This risk factor has an important bearing in determining the capital structure of a company and it can be avoided if the project is financed by issues equity share capital.

2. Risk in variation of earnings: The higher the debt content in the capital structure of a company, the higher will be the risk of variation in the expected earnings available to equity shareholders. If return on investment on total capital employed (i.e., shareholders' fund plus long-term debt) exceeds the interest rate, the shareholders get a higher return.

On the other hand, if interest rate exceeds return on investment, the shareholders may not get any return at all.

3. Cost of capital: Cost of capital means cost of raising the capital from different sources of funds. It is the price paid for using the capital. A business enterprise should generate enough revenue to meet its cost of capital and finance its future growth. The finance manager should consider the cost of each source of fund while designing the capital structure of a company. Many of the most successful companies in the world decide their capital structure on one simple consideration — the cost of capital. If you can borrow money at 7 percent for 30 years in a world of 3 percent inflation and reinvest it in core operations at 15 percent, you would be wise to consider at least 40 percent to 50 percent in debt capital in your overall capital structure particularly if your sales and cost structure are relatively stable.

4. Trading on equity: The word "equity" denotes the ownership of the company. Trading on equity means the taking advantage of equity share capital to borrowed funds on reasonable basis. It refers to additional profits that equity shareholders earn because of issuance of debentures and preference shares. It is based on the thought that if the rate of dividend on preference capital and the rate of interest on borrowed capital is lower than the general rate of company's earnings, equity shareholders are at advantage which means a company should go for a judicious blend of preference shares, equity shares as well as debentures. Trading on equity becomes more important when expectations of shareholders are high.

The use of fixed interest bearing securities along with owner's equity as sources of finance is known as trading on equity. It is an arrangement by which the company aims at increasing the return on equity shares by the use of fixed interest bearing securities (i.e., debenture, preference shares etc.).

If the existing capital structure of the company consists mainly of the equity shares, the return on equity shares can be increased by using borrowed capital. This is so because the interest paid on debentures is a deductible expenditure for income tax assessment and the after-tax cost of debenture becomes very low.

Any excess earnings over cost of debt will be added up to the equity shareholders. If the rate of return on total capital employed exceeds the rate of interest on debt capital or rate of dividend on preference share capital, the company is said to be trading on equity.

6. Government policies: Capital structure is influenced by Government policies, rules and regulations of SEBI and lending policies of financial institutions which change the financial pattern of the company totally. Monetary and fiscal policies of the Government will also affect the capital structure decisions. Raising finance by way of borrowing or issue of equity is subject to policies of the Government and its r regulatory bodies like RBI etc. The various policies and rules, regulations stipulated from time to time by these bodies have to be complied with for acquiring funds through the particular mode.

7. Size of the company: Availability of funds is greatly influenced by the size of company. A small company finds it difficult to raise debt capital. The terms of debentures and long-term loans are less favourable to such enterprises. Small companies have to depend more on the equity shares and retained earnings. On the other hand, large companies issue various types of securities despite the fact that they pay less interest because investors consider large companies less risky. Small size business firm's capital structure generally consists of loans from banks and retained profits. While on the other hand, big companies having goodwill, stability and an established profit can easily go for issuance of shares and debentures as well as loans and borrowings from financial institutions. The bigger the size, the wider is total capitalization.

8. Needs of the investors: While deciding capital structure the financial conditions and psychology of different types of investors will have to be kept in mind. For example, a poor or middle class investor may only be able to invest in equity or preference shares which are usually of small denominations, only a financially sound investor can afford to invest in debentures of higher denominations. A cautious investor who wants his capital to grow will prefer equity shares. Different types of securities are issued to different classes of investors according to their requirements, sometimes; the investor may be motivated by the options and advantages available with a security e.g. double options, convertibility, security of principal and interest etc.

9. Period of finance: The period for which finance is needed also influences the capital structure. When long-term funds (say 10 years) are needed, it should be raised by issuing debentures or preference shares. But if the funds are for permanent requirement, it will be appropriate to raise them by the issue of equity shares. for Medium term it should be raise by debt.

10. Nature of business: It has great influence in the capital structure of the business, companies having stable and certain earnings prefer debentures or preference shares and companies having no assured income depends on internal resources. Enterprises which enjoy stable earnings and dividend with a proven track record may go for borrowings or preference shares, since they are having adequate profits to pay interest/ fixed charges. But companies, which do not have assured income, should preferably rely on internal resources to a large extent since; it may be difficult to attract investors towards the issue.

11. Purpose of financing: Capital structure of a company is also affected by the purpose of financing. Funds are required for long term productive purposes like manufacturing; setting up new plant etc. may be procure through issue of long- term sources. But, the funds are required for non-Productive purposes like welfare facilities to employees, such as school, hospital etc. internal sources of financing may have to be procured.

12. Corporate taxation: Interest on borrowed capital is a tax- deductible expense. But, dividend is not. Also the cost of raising finance through borrowing is deductible in the year in which it is incurred. If it is incurred during the pre-commencement period, it is to be capitalized. Due to the tax saving advantage, debt has a cheaper effective cost than preference shares or equity shares. The impact of taxation should be carefully analyzed. When corporate income is subject to taxes, debt financing is favourable. This is so because the dividend payable on equity share capital and preference share capital are not deductible for tax purposes, whereas interest paid on debt is deductible from income and reduces a firm's tax liabilities. The tax saving on interest charges reduces the cost of debt funds. Moreover, a company has to pay tax on the amount distributed as dividend to the equity shareholders. Due to this, total earnings available for both debt holders and stockholders are more when debt capital is used in capital structure. Therefore, if the corporate tax rate is high enough, it is prudent to raise capital by issuing debentures or taking long-term loans from financial institutions.

13. Cash inflows: The selection of capital structure is also affected by the capacity of the business to generate cash inflows. It analyses solvency position and the ability of the company to meet its charges.

14. Provision for future: The provision for future requirement of capital is also to be considered while planning the capital structure of a company. Future growth considerations and further requirements of capital should also be considered

15. EBIT-EPS analysis: In accounting and finance, earnings before interest and taxes (EBIT), is a measure of a firm's profit that includes all expenses except interest and income tax expenses. It is the difference between operating revenues and operating expenses. If the level of EBIT is low from HPS point of view, equity is preferable to debt. If the EBIT is high from EPS point of view, debt financing is preferable to equity. If ROI is less than the interest on debt, debt financing decreases ROE. When the ROI is more than the interest on debt, debt financing increases ROE.

2.2.4 Trading on Equity

Trading on equity means to raise fixed cost capital (borrowed capital and preference share capital) on the basis of equity share capital so as to increasing the income of equity shareholders. Trading on equity occurs when a corporation uses bonds, other debt, and preferred stock to increase its earnings on common stock. The term trading on equity means debts are contracted and loans are raised mainly on the basis of equity capital. Those who provide debt have a limited share in the firm's earning and hence want to be protected in terms of earning and values represented by equity capital. Since fixed charges do not vary with firms earnings before interest and tax a magnified effect is produced on earning per share. Whether the leverage is favourable, in the sense, increase in earnings per share more proportionately to the increased earnings before interest and tax, depends on the profitability of investment proposal. If the rate of returns on investment exceeds their explicit cost, financial leverage is said to be positive. In a company, it is the directors who are so called elected representatives of equity shareholders. These members have got maximum voting rights in a concern as compared to the preference shareholders and debenture holders. Preference shareholders have reasonably less voting rights while debenture holders have no voting rights. If the company's management policies are such that they want to retain their voting rights in their hands, the capital structure consists of debenture holders and loans rather than equity shares.

Trading on Equity, also known as financial leverage is the balance between the cost financing operations with equity or debt and the income earned from the operations. In other words, it's a gamble. The company is betting that the return from the investment will generate more income than it costs to finance the investment. Trading on the equity occurs using both equity and debt.

Example

First let's look at an equity example. The board of directors can issue more preferred shares to pay for its expansions or operations. In this case, management is betting that the new expansions will generate more income for the common shareholders than the newly issued preferred shares will require in annual dividend payments.

Companies also finance much of their operations and expansions using debt in the form of bonds or loans. In this case, management is usually convinced that it will be able to generate more profits from the new expanded assets than the interest and principle payments required by the new liabilities.

Depending on the company issuing preferred shares is more profitable than taking on more debt. This is because many investors who think common stock is too risky are interested in the benefits of preferred shares. With equity investors, there are no interest obligations and depending on the class of shares being issued dividends doesn't have to be paid annually. This allows the company to gain the capital it needs to expand without immediate cash outlays for interest. It also gives the company time to make a profit with the new assets.

As you can see, Trading on Equity is a type of trade off. The firm uses its financing of debt or equity to purchase new assets. In turn, it uses its new assets to pay for or finance its debt and equity obligations.

Effects of Trading on Equity:

Trading on equity acts like as a lever to enlarge the influence of fluctuations in earnings. Any fluctuation in earnings before interest and taxes (EBIT) is magnified on the earnings per share (EPS) by operation of trading on equity larger the magnitude of debt in capital structure, the higher is the variation in EPS given any variation in EBIT.

Solution:

Impact on trading on equity, will be reflected in earnings per share available to common stock holders. To calculate the EPS in each of the four alternatives EBIT has to be first of all calculated.

Particulars	Proposal 'A'	Proposal 'B'	Proposal 'C'	Proposal 'D'
Proposal Amount Rs	1,20,000	1,20,000	1,20,000	1,20,000
Less EBIT	-	25,000	60,000	-
Earnings Before tax	1,20,000	95,000	60,000	1,20,000
Less tax @ 50%	60,000	47,500	30,000	60,000
Earnings after Tax	60,000	47,500	30,000	60,000
Less preferred Stock dividend	25,000	-	-	-
Earnings available for common stock holder	20,000	15,000	10,000	15,000
No. of Common shares	20,000	15,000	10,000	15,000
Earnings Per Share- EPS	3.00	3.67	3.00	2.33

Effects of trading on equity can be explained with the help of the following example.

Practical :

Ramchandra Company is capitalized with Rs. 10,00,000 dividends in 10,000 common shares of Rs. 100 each. The management wishes to raise another Rs. 10,00,000 to finance a major programme of expansion through one of four possible financing plans.

Then management

A) May finance the company with all common stock,

B) Rs. 5 lakhs in common stock and Rs. 5 lakhs in debt at 5% interest,

C) All debt at 6% interest or

D) Rs. 5 lakhs in common stock and Rs. 5 lakhs in preferred stock with 5-4 dividend.

The company's existing earnings before interest and taxes (EBIT) amounted to Rs. 12,00,000, corporation tax is assumed to be 50%

Thus, when EBIT is Rs. 1,20,000 proposals B involving a total capitalization of 75% common stock and 25% debt, would be the most favourable with respect to earnings per share. It may further be noted that proportion of common stock in total capitalization is the same in both the proposals B and D but EPS is altogether different because of induction of preferred stock.

While preferred stock dividend is subject to taxes whereas interest on debt is tax deductible expenditure resulting in variation in EPS in proposals B and D, with a 50% tax rate the explicit cost of preferred stock is twice the cost of debt.

2.2.5 Weighted Average cost of Capital (WACC)

Before going to study the weighted average cost of capital, we must understand capital structure at first. Capital structure refers to the amount of debt and/or equity employed by a firm to fund its operations and finance its assets. A firm's capital structure is typically expressed as a debt-to-equity or debt-to-capital ratio. Capital structure is the mix of debt and equity capital.

ASSETS	**DEBT**
	EQUITY

There are various sources of finance for raising the funds required for every organization to acquire the assets. These are:

- Equity share capital
- Preference share capital
- Debentures
- Bonds

- Long term loan and
- Retained earnings etc.

These sources of finance are useful under different circumstances. The cost of capital is largely an academic term which is useful for measuring the efficiency of management in decision making of rising of funds through the above mentioned sources of finance. It is an important concept in formulating a firm's capital structure. Each source has the cost i.e. dividend and interest and that particular cost is known as cost of capital.

Meaning of WACC-

A firm's Weighted Average Cost of Capital (WACC) represents its blended cost of capital across all sources, including common shares, preferred shares, and debt. The cost of each type of capital is weighted by its percentage of total capital and they are added together. A firm's total cost of capital is a weighted average of the cost of equity and the cost of debt, known as the Weighted Average Cost of Capital. The Weighted Average Cost of Capital shows us the relationship between the components of capital, commonly Equity and Debt. Debt and equity capital are used to fund a business's operations, capital expenditure, acquisitions, and other investments. There are tradeoffs firms have to make when they decide whether to use debt or equity to finance operations, and managers will balance the two to find the optimal capital structure. In short Capital Structure is the Mix of Debt Capital (Long Term Liability) and Equity Capital Equity Capital, Reserve and Surplus, Profit and Loss Account less fictitious Assets.

Importance of Weighted Average Cost of Capital (WACC)

WACC has the purpose of determining the cost of each component of the structure of capital. Each element has its associated cost:

Ordinary shares pay out dividends;

The firm pays interest on its debt;

Preferred stock has a fixed rate payment.

The WACC is an essential part of the Discounted Cash Flow (DCF) model, which makes it a vital concept, especially for finance professionals in business development and investment banking.

WACC is dictated by the external market and not by the management of the company. It represents the minimum return a company must earn on its asset base to satisfy its owners, creditors, and other capital providers, or they will invest elsewhere.

A company can have multiple sources of capital, like common stock, preferred stock, regular debt, convertible debt, options, pension liabilities, government subsidies, and others. Different securities represent different sources of financing and are expected to generate separate returns. Therefore the Weighted Average Cost of Capital considers the weights of all sources of financing. However, the more complex the capital structure of a company is, the harder it gets to calculate its WACC.

Optimal capital structure

The optimal capital structure of a firm is often defined as the proportion of debt and equity that results in the lowest weighted average cost of capital (WACC) for the firm. This technical definition is not always used in practice, and firms often have a strategic or philosophical view of what the ideal structure should be.

Low leverage

ASSETS	**DEBT 2,000**
Rs. 10,000	**EQUITY- 8,000**

High Leverage

ASSETS	**DEBT 8,000**
Rs. 10,000	**EQUITY- 2,000**

Debt investors take less risk because they have the first claim on the assets of the business in the event of insolvency. For this reason, they accept a lower rate of return and, thus, the firm has a lower cost of capital when it issues debt compared to equity.

Equity investors take more risk, as they only receive the residual value after debt investors have been repaid. In exchange for this risk, investors expect a higher rate of return and, therefore, the implied cost of equity is greater than that of debt.

Conclusion

Companies need to know their WACC as a way to gauge expenses and analyze new projects. It is also a way to explain the capital structure of the company and determine the best proportions between various financing sources. The lower the WACC, the cheaper it is for the company to fund further investment initiatives. It is also important to remember that the more complex the capital structure of the company is, the harder it gets to calculate the Weighted Average Cost of Capital.

Cost of capital formula:

The formula is equal to:

WACC = (E/V x Re) + ((D/V x Rd) x (1 – T))

Where:

E = market value of the firm's equity (market cap)
D = market value of the firm's debt
V = total value of capital (equity plus debt)
E/V = percentage of capital that is equity
D/V = percentage of capital that is debt
Re = cost of equity (required rate of return)
Rd = cost of debt (yield to maturity on existing debt)
T = tax rate

Illustration no. 1

Calculate the cost of capital in the following cases:

I) ABC ltd. Issues 12% Debentures of face value Rs. 100 each and realizes Rs. 95 Debenture. The Debentures are redeemable after 10 years at a premium of 10%.

II) XYZ Ltd. Issues 14% preference shares of face value 100 each Rs. 92 per share. The shares are repayable after 12 years at par.

Both companies are paying income tax at 50%.

Solution:

Cost of Debt

$$\mathbf{Kd = \frac{[Int + (RV - SV)/N]\ (1 - t)}{(RV + SV)/2}}$$

Int = Annual interest to be paid i.e. 12%

t = Company's effective tax rate i.e. 50% or 0.50

RV= Redemption value of per debenture i.e. 110

N = Number of years to maturity i.e. 10 years

SV= Issue price per debenture i.e. Rs. 95

$$\mathbf{Kd = \frac{[12 + (110 - 95)/10]\ (1 - 0.5)}{(110 + 95)/2}}$$

$$= \mathbf{\frac{[12 + 2.5](0.5)}{97.50}}$$

$$= \mathbf{\frac{7.25}{97.50}}$$

= 7.43

$$\mathbf{Kp = 7.43}$$

Cost of preference capital

$$\mathbf{Kp = \frac{D + (RV - SV)/N}{(RV + SV)/2}}$$

Where,

D = Dividend on preference shares i.e. Rs. 14

SV= Issue price per share minus flotation cost Rs. 92

N = Number of years for redemption i.e. 12 years

RV= Net price payable on redemption Rs. 100

$$\mathbf{Kp = \frac{14 + (100 - 92)/12}{(100 + 92)/2}}$$

$$\mathbf{Kp} = \frac{\mathbf{14 + 0.67}}{\mathbf{95}}$$

$$\mathbf{Kp = 15.28}$$

Illustration no. 2

A firm has the following capital structure and after-tax costs for the different sources of funds used:

Source of funds	Amount Rs.	Proportion %	After tax cost%
Debt	15,00,000	25	5
Preference Shares	12,00,000	20	10
Equity Shares	18,00,000	30	12
Retained Earnings	15,00,000	25	11
Total	60,00,000	100	

You are required to compute the weighted average cost of capital.

Solution 2

Source of funds	Proportion X	Cost W	(XW)%
Debt	25	5	1.25
Preference Shares	20	10	2.00
Equity Shares	30	12	3.60
Retained Earnings	25	11	2.75
Weighted Average Cost Of Capital			**9.60%**

Illustration no. 3

The following information has been extracted from the balance sheet of fashions ltd. as on 31/12/2018

Equity share capital	4,00,000
12% Debentures	4,00,000
18% Term loan	12,00,000
18% Term loan	20,00,000

a) Determine the weighted average cost of capital of the company. It had been paying dividends at a consistent rate of 20% p.a.

b) What difference will it make if the market price of equity shares Rs. 160? (face value Rs. 100)

c) Determine the effect of income tax on the cost of capital under both premises.

Solution 3:

a) Weighted average cost of capital of the company is as follows:

Source of capital	Cost of capital	Proportion of total	Weighted average cost of capital
Equity share capital	20%	4/20	4.00%
12% Debentures	12%	4/20	2.40%
Term loan	18%	12/20	10.80%
WACC			17.20%

Therefore, weighted average cost of capital of the company is 17.20 p.a. without considering market price and income tax.

b) What difference will it make if the market price of equity shares Rs. 160? (face value Rs. 100)

$$\mathbf{Ke = D1/p}$$

$$\mathbf{Ke = 20/160}$$

$$\mathbf{= 12.5}$$

Weighted average cost of capital will therefore be:

Source of capital	Cost of capital	Proportion of total	Weighted average cost of capital
Equity share capital	12.5%	4/20	2.5%
12% Debentures	12%	4/20	2.40%
Term loan	18%	12/20	10.80%
WACC			15.7%

c) As interest on Debentures and Term loan is allowable deductable expenditure for arriving taxable income, the real cost of the company will be interest charges less tax benefit. (assuming that company earns taxable income)

So interest cost will be rate of interest (1-t)

12% Debentures: $12 \times 0.60 = 7.2\%$

18% Term Loan: $18 \times 0.60 = 10.8\%$

a) WACC after tax benefit (as per premises a);

Source of capital	Cost of capital	Proportion of total	Weighted average cost of capital
Equity share capital	20%	4/20	4.00%
12% Debentures	7.2%	4/20	1.44%
Term loan	10.8%	12/20	6.48%
WACC			11.92%

b) WACC after tax benefit (as per premises a);

Source of capital	Cost of capital	Proportion of total	Weighted average cost of capital
Equity share capital	12.5%	4/20	2.50%
12% Debentures	7.2%	4/20	1.44%

Term loan	10.8%	12/20	6.48%
WACC			10.42%

Illustration no. 4

The following information is available from the balance of Fortune Ltd. Company

Equity share capital	2,00,000
Reserve and Surplus	1,30,000
8% Debentures	1,70,000

The tax rate of the company is 50%. Current level of equity dividend is 12%. Calculate weighted average cost of capital of Fortune Ltd. Company.

Solution 4:

Capital Structure	Amount Rs.	Proportion (weight)	After tax cost	Weighted cost
Equity share capital	200000	40%	12%	40%×12%=4.80%
Reserve and Surplus	130000	26%	12%	26%×12%=3.12%
8% Debentures	170000	34%	4%	34%×4%=1.36%
Total	500000	100%		**WACC=9.28%**

2.3 Summary

Capital structure refers to the mix of a firm's capitalization. Mix of long term sources of funds such as debentures, preference share capital, equity share capital and retained earnings for meeting total capital requirement. Capital structure decision refers to deciding the forms of financing which sources to be tapped, their actual requirements amount to be funded and their relative proportions in total capitalization. Normally a finance manager tries to choose a pattern of capital structure which minimizes cost of capital and maximizes the owners return. While, choosing a suitable financing pattern, certain factors like cost, risk, control, flexibility and timing and other considerations like nature of industry, competition of industry etc. should be considered. For e.g. industries facing severe competition also resort to more equity than debt.

While capital structure is designing some principles can be considered such as risk, cost, control, flexible and timing. Other factors such as nature of industry and competition in the industry should also be considered. Industries facing severe competition also resort to more equity than debt. Thus, a finance manager in designing a suitable pattern of capital structure must put forward about satisfactory compromise between the principles. The compromise can be reached by assigning weights to these principles in terms of various characteristics of the company.

There are various factors influencing on capital structure. These factors are mostly depending on types of business and situation of economy of the country. These factors are Risk of cash insolvency, risk of variation of earnings, cost of capital, trading on equity, nature of business, period of finance, size of the company, Government policies, legal requirements, need of investors, EBIT-EPS, purpose of financing, corporate taxation, Cash inflows, provision for future etc.

Trading on equity means to raise fixed cost capital (borrowed capital and preference share capital) on the basis of equity share capital so as to increasing the income of equity shareholders. Trading on equity occurs when a corporation uses bonds, other debt, and preferred stock to increase its earnings on common stock.

2.4 Terms to Remember:

- **Trading on equity**- Trading on equity means to raise fixed cost capital (borrowed capital and preference share capital) on the basis of equity share capital so as to increasing the income of equity shareholders. Trading on equity occurs when a corporation uses bonds, other debt, and preferred stock to increase its earnings on common stock.
- **EBIT** - Earnings Before Interest and Taxes- In accounting and finance, earnings before interest and taxes (EBIT), is a measure of a firm's profit that includes all expenses except interest and income tax expenses. It is the difference between operating revenues and operating expenses.
- **EPS**- Earnings Per Share- is the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability.

- **ROI**- Return on Investment- A performance measure used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. ROI measures the amount of return on an investment relative to the investment's cost.

2.5 Check Your Progress:

A. Choose the correct alternative:

1. The term "capital structure" refers to:
   i. Long-term debt, preferred stock, and common stock equity
   ii. Current assets and current liabilities
   iii. Total assets minus liabilities.
   iv. Shareholders equity
2. EBIT is usually the same thing as:
   i. funds provided by operations.
   ii. Earning before taxes
   iii. Net income
   iv. Operating profit
3. Financial risk is the risk associated with a firm's:
   i. cost of equity capital.
   ii. capital structure.
   iii. daily operations.
   iv. business classification.

B. Fill in the blanks:

1. There are two forms of capital ----------- capital and ----------- capital.
2. Capital structure is the mix of the ---------- sources of funds used by a firm.
3. ------------------------ means the taking advantage of equity share capital to borrowed funds on reasonable basis.
4. ---------------------------------- is a measure of a firm's profit that includes all expenses except interest and income tax expenses.

5. There are two forms of capital: equity capital and ---------------- capital.

C. State the following statement 'True' or 'False'

1. Recapitalization occurs when the firm alters its capital structure.
2. Increasing the value of the firm through different types of financing is the basis behind looking at the optimal capital structure.
3. The key issue in the whole capital structure discussion is whether a firm can not affect its total valuation and its cost of capital by changing its financing mix.
4. According to the traditional approach, an optimal capital structure would probably not be a financing mix consisting entirely of debt.
5. Capital structure is the mix of the short term sources of funds used by a firm.
6. Capital structure refers to the mix of a firm's capitalization.

2.6 Answers to check your progress:

A. Choose the correct alternative:

1. Long-term debt, preferred stock, and common stock equity
2. Operating profit
3. Capital structure

B. Fill in the blanks:

1. Equity and debt
2. Long term
3. Trading on equity
4. Earnings before interest and taxes (EBIT)
5. Debt

C. State' True' or 'False'

1. True 2. True 3. False 4. True 5. False 6. True

2.7 Exercise:

A) Short Notes

1. Trading on equity

2. Cost principle of capital structure
3. Risk principle of capital structure
4. Control principle of capital structure
5. Flexible and Timing principle of capital structure

B) Long Answer Type Questions

1. What is Capital structure? Explain cardinal principles of capital structure.
2. Explain the factors influencing the capital structure.
3. Explain the concept of Trading on equity
4. Explain the concept of Weighted Average Cost of Capital

2.8 Reference to Further Study:

1. Financial Management – S C Saxena
2. Essentials of Business Finance-Dr R.M.Shrivastav
3. Financial Management – P V Kulkarni
4. Financial Management- Prasanna Chandra
5. Financial Management- Dr Anil Kumar Dhagat

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Unit-3

Sources of Finance

Unit Structure

3.0 Objectives

3.1 Introduction

3.2 Presentation of Subject Matter

- 3.2.1 Equity Shares
- 3.2.2 Preference Shares
- 3.2.3 Debentures
- 3.2.4 Term Loans
- 3.2.5 Venture Finance
- 3.2.6 Lease Capital
- 3.2.7 Project Finance

3.3 Summary

3.4 Terms to Remember

3.5 Check your progress

3.6 Answers to Check your Progress

3.7 Exercise

3.8 Reference for Further Study

3.0 Objectives:

After studying this unit you will be able to:

- To know the various sources of finance
- To understand the concept differential rights of equity shares
- To know the concept and characteristics of Preference shares
- To understand the concept and legal provisions of Debentures
- To know concept and process of venture capital
- To understand the concept and mechanism of lease finance
- To understand concept and features of project finance

3.1 Introduction:

Sources of finance mean the ways for mobilizing various terms of finance to the industrial concern. Sources of finance state that, how the companies are mobilizing finance for their requirements. The companies belong to the existing or the new which need sum amount of finance to meet the long-term and short-term requirements such as purchasing of fixed assets, construction of office building, purchase of raw materials and day-to-day expenses. A finance manager has to assemble funds form numerous sources to satisfy varied financial needs of the firm.

Sources of finance may be classified under various categories according to the following important heads:

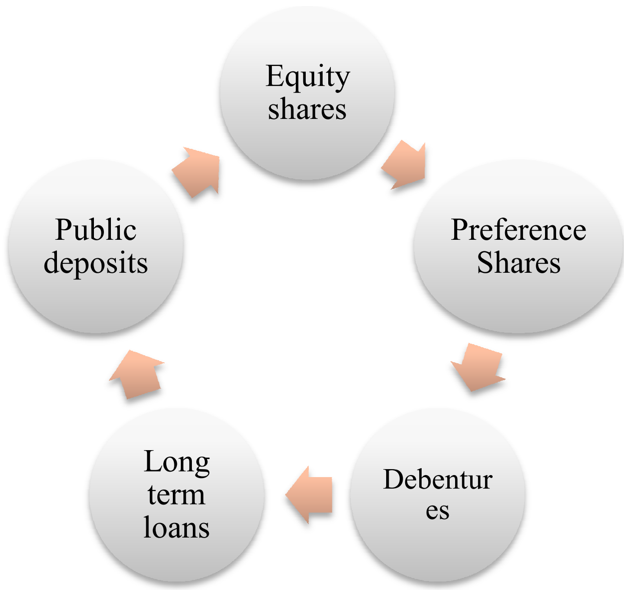
1. Based on the Period

Sources of Finance may be classified under various categories based on the period.

Long-term sources:

Finance may be mobilized by long-term or short-term. When the finance mobilized with large amount and the repayable over the period will be more than five years, it may be considered as long-term sources. Share capital, issue of debenture, long-term loans from financial institutions and commercial banks come under this kind of source of finance. Long-term source of finance needs to meet the capital expenditure of the firms such as purchase of fixed assets, land and buildings, etc.

Long-term sources of finance



Short-term sources:

Apart from the long-term source of finance, firms can generate finance with the help of short-term sources like loans and advances from commercial banks, moneylenders, etc. Short-term source of finance needs to meet the operational expenditure of the business concern.

Short-term source of finance

2. Based on Ownership

Sources of Finance may be classified under various categories based on the period:

An ownership source of finance include

- Shares capital, earnings
- Retained earnings
- Surplus and Profits

Borrowed capital include

- Debenture
- Bonds
- Public deposits
- Loans from Bank and Financial Institutions.

3. Based on Sources of Generation

Sources of Finance may be classified into various categories based on the period.

Internal source of finance includes

- Retained earnings
- Depreciation funds
- Surplus

External sources of finance may be include

- Share capital
- Debenture
- Public deposits
- Loans from Banks and Financial institutions

4. Based in Mode of Finance

Security finance may be include

- Shares capital
- Debenture

Retained earnings may include

- Retained earnings
- Depreciation funds

3.2 Presentation of Subject Matter

3.2.1 EQUITY SHARES

Equity Shares also known as ordinary shares, which means, other than preference shares. Equity shareholders are the real owners of the company. They have a control over the management of the company. Equity shareholders are eligible to get dividend if the company earns profit. Equity share capital cannot be redeemed during the lifetime of the company.

The liability of the equity shareholders is the value of unpaid value of shares.

Characteristics of Equity Shares

Equity shares consist of the following important features:

1. Maturity of the shares: Equity shares have permanent nature of capital, which has no maturity period. It cannot be redeemed during the lifetime of the company.

2. Residual claim on income: Equity shareholders have the right to get income left after paying fixed rate of dividend to preference shareholder. The earnings or the income available to the shareholders is equal to the profit after tax minus preference dividend.

3. Residual claims on assets: If the company wound up, the ordinary or equity shareholders have the right to get the claims on assets. These rights are only available to the equity shareholders.

4. Right to control: Equity shareholders are the real owners of the company. Hence, they have power to control the management of the company and they have power to take any decision regarding the business operation.

5. Voting rights: Equity shareholders have voting rights in the meeting of the company with the help of voting right power; they can change or remove any decision of the business concern. Equity shareholders only have voting rights in the company meeting and also they can nominate proxy to participate and vote in the meeting instead of the shareholder.

6. Pre-emptive right: Equity shareholder pre-emptive rights. The pre-emptive right is the legal right of the existing shareholders. It is attested by the company in the first opportunity to purchase additional equity shares in proportion to their current holding capacity.

7. Limited liability: Equity shareholders are having only limited liability to the value of shares they have purchased. If the shareholders are having fully paid up shares, they have no liability. For example: If the shareholder purchased 100 shares with the face value of Rs. 10 each. He paid only Rs. 900. His liability is only Rs. 100.

Total number of shares 100

Face value of shares Rs. 10

Total value of shares 100 × 10 = 1,000

Paid up value of shares 900

Unpaid value/liability 100

Liability of the shareholders is only unpaid value of the share (that is Rs. 100).

Merits of Equity Shares

Equity shares are the most common and universally used shares to mobilize finance for the company. It consists of the following merits.

1. **Permanent sources of finance:** Equity share capital is belonging to long-term permanent nature of sources of finance; hence, it can be used for long-term or fixed capital requirement of the business concern.

2. **Voting rights:** Equity shareholders are the real owners of the company who have voting rights. This type of advantage is available only to the equity shareholders.

3. **No fixed dividend:** Equity shares do not creating any obligation to pay a fixed rate of dividend. If the company earns profit, equity shareholders are eligible for profit, they are eligible to get dividend otherwise, and they cannot claim any dividend from the company.

4**. Less cost of capital:** Cost of capital is the major factor, which affects the value of the company. If the company wants to increase the value of the company, they have to use more share capital because, it consists of less cost of capital while compared to other sources of finance.

5. Retained earnings: When the company have more share capital, it will be suitable for retained earnings which are the less cost sources of finance while compared to other sources of finance.

Demerits of Equity Shares

1. Irredeemable: Equity shares cannot be redeemed during the lifetime of the business concern. It is the most dangerous thing of over capitalization.

2. Obstacles in management: Equity shareholder can put obstacles in management by manipulation and organizing themselves. Because, they have power to contrast any decision is against the wealth of the shareholders.

3. Leads to speculation: Equity shares dealings in share market lead to secularism during prosperous periods.

4. Limited income to investor: The Investors who desire to invest in safe securities with a fixed income have no attraction for equity shares. 5. No trading on equity: When the company raises capital only with the help of equity, the company cannot take the advantage of trading on equity.

5. Ownership Dilution: new equity shares may dilute the ownership and control of the existing shareholders. The shareholders have a pro-emptive right to retain their proportionate ownership; they may not have funds to invest in additional shares. Dilution of ownership assumes great significance in the case of closely held companies.

Legal Provisions:

A guidance of SEBI covers the public issue of equity shares. The public issue may be through the prospectus, private placement or offer for sale. Following are the guidelines issued by SEBI for issue of shares:

a. The draft prospectus is to be approved by the SEBI

b. The equity preference ratio should be 3:1

c. The debt equity norm has to be 1:2

d. In case of new company issue should be made at par

e. The stock exchange listing of shares should be satisfied

f. If the minimum subscription list is not met from public and underwriters within 120 days from the date of opening of the issue, the subscription amount has to be refunded.

a. SWEAT EQUITY SHARES:

Sweat equity shares are such **equity shares,** which are issued by a Company to its directors or employees at a discount or for consideration, other than cash, for providing their know-how or making available rights in the nature of intellectual property rights or value additions, by whatever name called.

Issue of Sweat Equity Shares for a private limited company used to be regulated by Section 79A and Unlisted Companies (Issue of Sweat Equity Shares) Rules, 2003 under Companies Act, 1956 which under the Companies Act, 2013 is governed by Section 54 read with Companies (Share Capital and Debentures) Rules, 2014 under Chapter IV to the Act whereas the listed companies shall adhere to the SEBI (Issue of Sweat Equity) Regulations, 2002 laid down by the Securities Exchange Board of India (SEBI). This section is a sole exception to Section 53 of the Companies Act, 2013 which imposes the restrictions on issue of shares at a discount. as explained in the current rules in this regard, expression 'Employees' mean a permanent employee of the Company who has been working in India or outside India, for at least one year; or a director of the Company, whether a whole time director or not; or an employee or a Director as mentioned above of a subsidiary, in India or outside India, or of a holding company of the Company.

The rules also provides for the explanation to the expression 'Value additions', which means actual or anticipated economic benefits derived or to be derived by the Company from an expert or a professional for providing know-how or making available rights in the nature of intellectual property rights, by such person to whom sweat equity is being issued for which the consideration is not paid or included in the normal remuneration payable under the contract of employment, in the case of an employee. Not less than one year has, at the date of issue of sweat equity, elapsed since the date on which the company had commenced business i. e the company to be eligible to issue sweat equity shall be a company which has been in existence for not less than at least 1 year.

Essentials of Sweat Equity:

- **Eligibility for Sweat-**

a) Permanent employee of the Company who has been working in India or outside India, or at least last 1 year

b) Director of Company-Whole time director or not

c) An employee or a director as defined in sub-clauses (a) or (b) above of a subsidiary (in India or outside India) or of a holding Company.

- **Value Addition**–It means actual or anticipated economic benefits derived or to be derived by Company from an expert or a professional for providing know-how or making available rights in the nature of intellectual property rights.
- **Authorization by shareholders**–prior shareholders approval through special resolution is required.
- **Time limit for issuing Sweat:** Allotment of sweat equity shares shall be made within 12 months from the date of passing special resolution.
- **Time Gap**– There should be at least 1 year between the commenced of business and issue of such shares.
- **Valuation**– Valuation of sweat shares and intellectual property rights(IPR)/know how/ value additions shall be done by Registered Value.
- **Notice of General Meeting**– Critical elements of Valuation Report shall be sent along with the Notice. Particulars like class of shares, price, consideration,

principal terms of conditions, employees to who sweat is proposed is required to be mentioned in explanatory statement.

- **Limit on sweat equity**: In a year, sweat shares shall not exceed 15% of existing paid up equity share capital or shares having issue value of Rs. 5,00,00,000, whichever is higher. However, it should not exceed 25% of paid up equity capital of Company at any time.

- **Mandatory lock-in period- 3 years** from the date of allotment. The fact that the share certificates are under lock-in and the period of expiry of lock in shall be mentioned in prominent manner on share certificate.

- **Manner of treatment of sweat issued** for other than cash in Books of accounts-
  a) If non-cash consideration takes the form of a depreciable or amortizable asset- Should be carried to the balance sheet according to accounting standards; or
  b) In other cases- Shall be expensed as provided in the accounting standards.

- **Accounting value of sweat equity –**

a) If sweat equity shares are not issued for acquisition of an asset- Value shall be treated as a form of compensation to the employee or the director in the financial statements of the Company.

b) If sweat equity shares are issued for acquisition of an asset- the value of the asset, as determined by the valuation report, shall be carried in the balance sheet as per the Accounting Standards and such amount of the accounting value of the sweat equity shares that is in excess of the value of the asset acquired, as per the valuation report, shall be treated as a form of compensation to the employee or the director in the financial statements of the company

- **Rights/limitations/restrictions applicable** on sweat equity shares- Shall rank paripassu with other equity shareholders.

- **Disclosure in Directors Report-** Particulars like class of director or employee, class of shares, number of sweat equity shares, percentage of sweat equity shares in total post issued and paid up share capital, diluted Earnings Per Share, consideration received.

- **Register of Sweat Equity Shares**– Details of sweat shares shall be mentioned in this Register. It shall be maintained at Registered Office or such other place as the Board may decide. Entries shall be authenticated by CS of the Company or by any other person authorized by Board.

Conditions for the Issue:

Conditions for the issue of Sweat Equity under Rule 8 of Companies (Shares and Debentures) Rules, 2014:

1. The special resolution authorizing the issue of sweat equity shares shall be valid for making the allotment within a period of not more than twelve months from the date of passing of the special resolution.
2. The company shall not issue sweat equity shares for more than Fifteen percent of the existing paid up equity share capital in a year or shares of the issue value of Rupees Five Crores, whichever is higher. However the issuance of sweat equity shares in the Company shall not exceed 25% of the paid up capital of the company at any time.
3. The sweat equity shares issued to directors or employees shall be locked in/non transferable for a period of three years from the date of allotment and the fact that the share certificates are under lock-in and the period of expiry of lock in shall be stamped in bold or mentioned in any other prominent manner on the share certificate.
4. The sweat equity shares to be issued shall be valued at a price determined by a registered valuer as the fair price giving justification for such valuation.
5. The valuation of intellectual property rights or of know how or value additions for which sweat equity shares are to be issued, shall be carried out by a registered valuer, who shall provide a proper report addressed to the Board of directors with justification for such valuation.
6. Where sweat equity shares are issued for a non-cash consideration on the basis of a valuation report in respect thereof obtained from the registered valuer, such non-cash consideration shall be treated in the following manner in the books of account of the company –

7. where the non-cash consideration takes the form of a depreciable or amortizable asset, it shall be carried to the balance sheet of the company in accordance with the accounting standards; or

8. Where (a) above is not applicable, it shall be expensed as provided in the accounting standards.

9. The amount of sweat equity shares issued shall be treated as part of managerial remuneration for the purposes of sections 197 and 198 of the Act, if the following conditions are fulfilled, namely –

10. the sweat equity shares are issued to any director or manager; and

11. They are issued for consideration other than cash, which does not take the form of an asset which can be carried to the balance sheet of the company in accordance with the applicable accounting standards.

12. In respect of sweat equity shares issued during an accounting period, the accounting value of sweat equity shares shall be treated as a form of compensation to the employee or the director in the financial statements of the company, if the sweat equity shares are not issued pursuant to acquisition of an asset.

13. If the shares are issued pursuant to acquisition of an asset, the value of the asset, as determined by the valuation report, shall be carried in the balance sheet as per the Accounting Standards and such amount of the accounting value of the sweat equity shares that is in excess of the value of the asset acquired, as per the valuation report, shall be treated as a form of compensation to the employee or the director in the financial statements of the company.

14. The company on issue and allotment of sweat equity shall *inter allia* disclose in its Boards Report every year the following details:

15. the class of director or employee to whom sweat equity shares were issued;

16. the class of shares issued as Sweat Equity Shares;

17. the number of sweat equity shares issued to the directors, key managerial personnel or other employees showing separately the number of such shares issued to them , if any, for consideration other than cash and the individual names of allottees holding one percent or more of the issued share capital;

18. the principal terms and conditions for issue of sweat equity shares, including pricing formula;
19. the total number of shares arising as a result of issue of sweat equity shares;
20. the percentage of the sweat equity shares of the total post issued and paid up share capital;
21. the consideration (including consideration other than cash) received or benefit accrued to the company from the issue of sweat equity shares;
22. The diluted Earnings Per Share (EPS) pursuant to issuance of sweat equity shares.

b) EMPLOYEE'S STOCK OPTION PLAN (ESOP)

Employee stock options are call options on a company's common stock granted to a select group of its employees. Certain restrictions on the option provide a financial incentive for employees to align their goals with those of the company's shareholders. ESOP's are Employee Stock Option Plans under which employees receive the right to purchase a certain number of shares in the company at a predetermined price, as a reward for their performance and also as motivation for employees to keep increasing their performance. Employees typically have to wait for a certain duration known as vesting period before they can to purchase the shares. The main aim of giving such a plan exercise the right to its employees is to give shares of the company to its employees at a discounted price to the market price at the time of exercise. Many companies (especially in the startup phase) have now started giving Employee Stock Options as this is beneficial to both the employer as well as the employee.

Benefits of ESOP's

The major benefits of awarding Employee Stock Options are mentioned below:

Lock-in Period:

ESOP's come with a lock-in period known as vesting period and employees can exercise the options only after this period. If the employee leaves the organisation before completing the specified period – these ESOP's get lapsed and the employee will not get any benefit.

A '**Sense of Ownership' for the employees:**

When the employees are given shares of the same company in which they are working, it gives them a sense of feeling that now they are not employees of this organisation but are the owners. As they are now they owners, they also have a share in the profits of the company. In fact, since employees directly benefit from the increase in the share price, they focus on overall value creation for the company.

Kind instead of Cash

ESOP's are a way of awarding the employees in kind instead of cash. In the initial days of ESOP's in India, small organisations who were cash strapped used to give ESOP's to their employees to increase the overall pay package. In this manner, they were able to compensate the employees in kind without affecting their cash reserves (if a organisation issues ESOP's- its cash reserves are not affected).

c. Equity shares with differential rights:

Rule 4 of the Companies (Share Capital and Debentures) Rules 2014 deals with equity shares with differential rights. The differential rights regime has undergone a significant change with the coming into effect of the provisions of the 2013 Act. Under the 1956 Act, the provisions governing issue of shares with differential rights did not apply to purely private companies. There was therefore sufficient freedom to structure the contractual terms agreed between parties to a joint venture should they choose a purely private company as the JV vehicle. Without going into the issue as to whether the exemption available for purely private companies should have continued, what requires to be clarified immediately is that the actions taken by purely private companies under the provisions of the 1956 Act will continue to remain valid. This would help avoid confusion as to whether beginning 1 April 2014, the provisions of the 2013 Act will be applicable notwithstanding actions duly taken under the 1956 Act, although the legal basis for such an interpretation is not very sound. Under the 2013 Act and rules governing issue of shares with differential rights, it is specified that shares with differential rights shall not exceed 26% of the total post issue paid up equity share capital. This 26% includes equity shares issued with differential rights issued at any point in time. There are various purely private companies whose capital comprises of shares with differential rights in excess of 26%. An explanation in the rules clarifies that differential rights attached to the shares issued by any company under the provisions of the 1956 Act shall continue.

However, the grandfathering effect seems to have a condition attached to it. The condition states that such rights shall continue till they are converted with differential rights in accordance with the 2013 Act. It therefore appears that while the existing differential shares can continue, the differential terms cannot be converted/ modified. One other condition imposed is that a company shall not convert its existing equity share capital with voting rights into equity capital carrying differential voting rights and vice versa. This is possibly to address a situation where parties would have attempted to convert existing shares into differential shares by adopting a strict interpretation that such conversion does not amount to 'issue' and therefore will not be subject to the limit prescribed.

Which Company may issue:

A company limited by shares *shall* issue equity shares with differential rights as to dividend, voting or otherwise, when it complies with the following conditions, namely:-

(a) The articles of association of the company authorize the issue of shares with differential rights.

(b) The issue of shares is authorized by an *ordinary resolution* passed at a general meeting of the shareholders. Where the equity shares of a company are listed on a recognized stock exchange, the issue of such shares shall be approved by the shareholders through *postal ballot*.

(c) The shares with differential rights shall *not exceed twenty-six percent of the total post-issue paid up equity share capital* including equity shares with differential rights issued at any point of time.

(d) The company having consistent *track record of distributable profits* for the last three years;

(e) The company has not *defaulted in filing* financial statements and annual returns for three financial years immediately proceeding the financial year in which it is decided to issue such shares.

(f) The company has *no subsisting default in the payment* of a declared dividend to its shareholders or repayment of its matured deposits or redemption of its preference shares or debentures that have become due for redemption or payment of interest on such deposits or debentures or payment of dividend.

(g) The company has *not defaulted in payment* of the dividend on preference shares or repayment of any term loan from a public financial institution or State level financial institution or scheduled Bank that has become repayable or interest payable thereon or dues with respect to statutory payments relating to its employees to any authority or default in crediting the amount in Investor Education and Protection Fund to the Central Government.

(h) the company has *not been penalized by Court or Tribunal* during the last three years of any offence under the Reserve Bank of India Act, 1934, the Securities and Exchange Board of India Act, 1992, the Securities Contracts Regulation Act, 1956, the Foreign Exchange Management Act, 1999 or any other special Act, under which such companies being regulated by sectoral regulators.

3.2.2 PREFERENCE SHARES

The parts of corporate securities are called as preference shares. It is the shares, which have preferential right to get dividend and get back the initial investment at the time of winding up of the company. Preference shareholders are eligible to get fixed rate of dividend and they do not have voting rights.

Preference shares may be classified into the following major types:

1. Cumulative preference shares: Cumulative preference shares have right to claim dividends for those years which have no profits. If the company is unable to earn profit in any one or more years, C.P. Shares are unable to get any dividend but they have right to get the comparative dividend for the previous years if the company earned profit.

2. Non-cumulative preference shares: Non-cumulative preference shares have no right to enjoy the above benefits. They are eligible to get only dividend if the company earns profit during the years. Otherwise, they cannot claim any dividend.

3. Redeemable preference shares: When, the preference shares have a fixed maturity period it becomes redeemable preference shares. It can be redeemable during the lifetime of the company. The Company Act has provided certain restrictions on the return of the redeemable preference shares.

4. Irredeemable Preference Shares: Irredeemable preference shares can be redeemed only when the company goes for liquidator. There is no fixed maturity period for such kind of preference shares.

5. Participating Preference Shares: Participating preference shareholders have right to participate extra profits after distributing the equity shareholders.

6. Non-Participating Preference Shares: Non-participating preference shareholders are not having any right to participate extra profits after distributing to the equity shareholders. Fixed rate of dividend is payable to the type of shareholders.

7. Convertible Preference Shares: Convertible preference shareholders have right to convert their holding into equity shares after a specific period. The articles of association must authorize the right of conversion.

8. Non-convertible Preference Shares; There shares, cannot be converted into equity shares from preference shares.

Characteristics of Preference Shares

The following are the important characteristics of the preference shares:

1. Maturity period: Normally preference shares have no fixed maturity period except in the case of redeemable preference shares. Preference shares can be redeemable only at the time of the company liquidation.

2. Residual claims on income: Preferential shareholders have a residual claim on income. Fixed rate of dividend is payable to the preference shareholders.

3. Residual claims on assets: The first preference is given to the preference shareholders at the time of liquidation. If any extra Assets are available that should be distributed to equity shareholder.

4. Control of Management: Preference shareholder does not have any voting rights. Hence, they cannot have control over the management of the company.

Merits of Preference Shares

Preference shares have the following important advantages.

1. Fixed dividend: The dividend rate is fixed in the case of preference shares. It is called as fixed income security because it provides a constant rate of income to the investors.

2. Cumulative dividends: Preference shares have another advantage which is called cumulative dividends. If the company does not earn any profit in any previous years, it can be cumulative with future period dividend.

3. Redemption: Preference Shares can be redeemable after a specific period except in the case of irredeemable preference shares. There is a fixed maturity period for repayment of the initial investment.

4. Participation: Participative preference shareholders can participate in the surplus profit after distribution to the equity shareholders.

5. Convertibility: Convertibility preference shares can be converted into equity shares when the articles of association provide such conversion.

Demerits of Preference Shares

1. Expensive sources of finance: Preference shares have high expensive source of finance while compared to equity shares.

2. No voting right: Generally preference shareholders do not have any voting rights. Hence they cannot have the control over the management of the company.

3. Fixed dividend only: Preference shares can get only fixed rate of dividend. They may not enjoy more profits of the company.

4. Permanent burden: Cumulative preference shares become a permanent burden so far as the payment of dividend is concerned. The company must pay the dividend for the unprofitable periods also.

5. Taxation: In the taxation point of view, preference shares dividend is not a deductible expense while calculating tax. But, interest is a deductible expense. Hence, it has disadvantage on the tax deduction point of view.

Legal provision of preference shares

a. The company should have to obtain in principle the approval for listing of preference shares on the recognized stock exchange

b. Credit rating of not less than AA from the recognized agency should be is obtained by the company while issuing preference shares

c. At the time of issue the company should create capital redemption reserve.

3.2.3 Debentures

A Debenture is a document issued by the company. It is a certificate issued by the company under its seal acknowledging a debt. A debenture is a long term promissory note for raising loan capital. The firm promises to pay interest and principal as stipulated period. The purchaser of debenture is called debenture holder. According to the Companies Act 1956, “debenture includes debenture stock, bonds and any other securities of a company whether constituting a charge of the assets of the company or not.” It is certificate issued by a company under its seal acknowledging a debt due by it to its holders.

Types of Debentures

Debentures may be divided into the following major types:

1. Unsecured debentures: Unsecured debentures are not given any security on assets of the company. It is also called simple or naked debentures. This type of debentures is treaded as unsecured creditors at the time of winding up of the company.

2. Secured debentures: Secured debentures are given security on assets of the company. It is also called as mortgaged debentures because these debentures are given against any mortgage of the assets of the company.

3. Redeemable debentures: These debentures are to be redeemed on the expiry of a certain period. The interest is paid periodically and the initial investment is returned after the fixed maturity period.

4. Irredeemable debentures: These kinds of debentures cannot be redeemable during the life time of the business concern.

5. Convertible debentures: Convertible debentures are the debentures whose holders have the option to get them converted wholly or partly into shares. These debentures are usually converted into equity shares. Conversion of the debentures may be:

Non-convertible debentures

Fully convertible debentures

Partly convertible debentures

6. Other types: Debentures can also be classified into the following types. Some of the common types of the debentures are as follows:

1. Collateral Debenture

2. Guaranteed Debenture
3. First Debenture
4. Zero Coupon Bond
5. Zero Interest Bond/Debenture

Characteristics of Debentures

1. Maturity period: Debentures consist of long-term fixed maturity period. Normally, debentures consist of 10–20 years maturity period and are repayable with the principle investment at the end of the maturity period.

2. Residual claims in income: Debenture holders are eligible to get fixed rate of interest at every end of the accounting period. Debenture holders have priority of claim in income of the company over equity and preference shareholders.

3. Residual claims on asset: Debenture holders have priority of claims on Assets of the company over equity and preference shareholders. The Debenture holders may have either specific change on the Assets or floating change of the assets of the company. Specific change of Debenture holders are treated as secured creditors and floating change of Debenture holders are treated as unsecured creditors.

4. No voting rights: Debenture holders are considered as creditors of the company.

Hence they have no voting rights. Debenture holders cannot have the control over the performance of the business concern.

5. Fixed rate of interest: Debentures yield fixed rate of interest till the maturity period. Hence the business will not affect the yield of the debenture.

Merits of Debenture

Debenture is one of the major parts of the long-term sources of finance which of consist the following important merits:

1. Long-term sources: Debenture is one of the long-term sources of finance to the company. Normally the maturity period is longer than the other sources of finance.

2. Fixed rate of interest: Fixed rate of interest is payable to debenture holders, hence it is most suitable of the companies earn higher profit. Generally, the rate of interest is lower than the other sources of long-term finance.

3. Trade on equity: A company can trade on equity by mixing debentures in its capital structure and thereby increase its earning per share. When the company apply the trade on equity concept, cost of capital will reduce and value of the company will increase.

4. Income tax deduction: Interest payable to debentures can be deducted from the total profit of the company. So it helps to reduce the tax burden of the company.

5. Protection: Various provisions of the debenture trust deed and the guidelines issued by the SEB1 protect the interest of debenture holders.

Demerits of Debentures

Debenture finance consists of the following major demerits:

1. Fixed rate of interest: Debenture consists of fixed rate of interest payable to securities. Even though the company is unable to earn profit, they have to pay the fixed rate of interest to debenture holders; hence, it is not suitable to those company earnings which fluctuate considerably.

2. No voting rights: Debenture holders do not have any voting rights. Hence, they cannot have the control over the management of the company.

3. Creditors of the company: Debenture holders are merely creditors and not the owners of the company. They do not have any claim in the surplus profits of the company.

4. High risk: Every additional issue of debentures becomes more risky and costly on account of higher expectation of debenture holders. This enhanced financial risk increases the cost of equity capital and the cost of raising finance through debentures which is also high because of high stamp duty.

5. Restrictions of further issues: The Company cannot raise further finance through debentures as the debentures are under the part of security of the assets already mortgaged to debenture holders.

Legal provision of Debentures:

a. If the maturity period is less than or equal to 18 months, appointment of debenture trustees and creation of debenture redemption reserve is not required

b. Credit rating is made compulsory for all the companies

c. A debenture trust deed has to be executed within 6 months from the closure of the issue

d. If the maturity period is more than 36 months, the conversion is optional with 'put and call' option

e. Premium amount to be stated in the prospectus when company issues debenture at premium also the redemption amount, period of maturity, yield on redemption shall be predetermined and stated in the prospectus.

3.2.4 TERM LOANS:

A term loan is a loan from a bank for a specific amount that has a specified repayment schedule and a fixed or floating interest rate. For example, many banks have term-loan programs that can offer small businesses the cash they need to operate from month to month. Often, a small business uses the cash from a term loan to purchase fixed assets such as equipment for its production process.

A term loan is for equipment, real estate or working capital paid off between one and 25 years. The loan carries a fixed or variable interest rate, monthly or quarterly repayment schedule, and set maturity date. The loan requires collateral and a rigorous approval process to reduce the risk of repayment. A term loan is appropriate for an established small business with sound financial statements and a substantial down payment to minimize payment amounts and total loan cost.

Meaning: Term loan is a medium-term source financed primarily by banks and financial institutions. Such a type of loan is generally used for financing of expansion, diversification and modernization of projects so this type of financing is also known as project financing. Term loans are repayable in periodic installments.

Features of Term Loans:

Term loan is a part of debt financing obtained from banks and financial institutions.

The basic features of term loan have been discussed below:

1. Security: Term loans are secured loans. Assets which are financed through term loans serve as primary security and the other assets of the company serve as collateral security.

2. Obligation: Interest payment and repayment of principal on term loans is obligatory on the part of the borrower. Whether the firm is earning a profit or not, term loans are generally repayable over a period of 5 to 10 years in installments.

3. Interest: Term loans carry a fixed rate of interest but this rate is negotiated between the borrowers and lenders at the time of dispersing of loan.

4. Maturity: As it is a source of medium-term financing, its maturity period lies between 5 to 10 years and repayment is made in installments.

5. Restrictive Covenants: Besides asset security, the lender of the term loans imposes other restrictive covenants to themselves. Lenders ask the borrowers to maintain a minimum asset base, not to raise additional loans or to repay existing loans, etc.

6. Convertibility: Term loans may be converted into equity at the option and according to the terms and conditions laid down by the financial institutions.

Merits of Term Loans:

Term loans are one of the important sources of project financing. The merits of term loans are as follows;

i. From Point of View of the Borrower:

Cheap: It is a cheaper source of medium-term financing.

Tax Benefit: Interest payable on term loan is a tax deductible expenditure and thus taxation benefit is available on interest.

Flexible: Term loans are negotiable loans between the borrowers and lenders. So terms and conditions of such type of loans are not rigid and this provides some sort of flexibility.

Control: Since term loans represent debt financing, the interest of the equity shareholders are not diluted.

ii. From Point of View of the Lender:

Secured: Term loans are provided by banks and other financial institutions against security—so term loans are secured.

Regular Income: It is obligatory on the part of the borrower to pay the interest and repayment of principal irrespective of its financial position—hence the lender has a regular and steady income.

Conversion: Financial institutions may insist the borrower to convert the term loans into equity. Therefore, they can get the right to control the affairs of the company.

Demerits of Term Loans:

Term loans have several disadvantages which are discussed below.

i. From Point of View of the Borrower:

Obligation: Yearly interest payment and repayment of principal is obligatory on the part of borrower. Failure to meet these payments raises a question on the liquidity position of the borrower and its existence will be at stake.

Risk: Like any other form of debt financing term loans also increases the financial risk of the company. Debt financing is beneficial only if the internal rate of return of the concern is greater than its cost of capital; otherwise it adversely affects the benefit of shareholders.

Interference: In addition to collateral security, restrictive covenants are also imposed by the lenders which lead to unnecessary interference in the functioning of the concern.

ii. From Point of View of the Lender:

Negotiability: Terms and conditions of term loans are negotiable between borrower and lenders and thus it sometimes can affect the interest of lenders.

Control: Like other sources of debt financing, the lenders of term loans do not have any right to control the affairs of the company.

3.2.5 VENTURE CAPITAL

Concept of Venture Capital: Venture Capital finance is a new type of financial intermediary which has emerged in India during 1980s. It is a long-term financial assistance provided to projects, which are established to introduce new products, inventions, idea and technology. Venture capital finance is more suitable to risky oriented business which consists of huge investment and provides results after 5 to 7 year.

The term Venture Capital fund is usually used to denote Mutual funds or Institutional investors. They provide equity finance or risk capital to little known, unregistered, highly risky, young and small private business, especially in technology oriented and knowledge intensive business. Venture Capital termed as long-term funds in equity or semi-equity form to finance hi-tech projects involving high risk and yet having strong potential of high profitability.

Definition of Venture Capital

According to Jame Koloski Morries, venture capital is defined as providing seed, start up and first stage financing and also funding expansion of companies that have already Special Financing demonstrated their business potential but do not yet have access to the public securities market or to credit oriented institutional funding sources. Venture Capital also provides management in leveraged buy out financing. 1995 finance bill define Venture Capital as long-term equity investment in novel technology based projects with display potential for significant growth and financial return.

Process of Venture capital

1. Deal Origination: Venture capital financing begins with origination of a deal. For venture capital business, stream of deals is necessary. There may be various sources of origination of deals. One such source is referral system in which deals are referred to venture capitalists by their parent organizations, trade partners, industry association, friends, etc. Another source of deal flow is the active search through, networks, trade fairs, conferences, seminars, foreign resist etc. Certain intermediaries, who act as link between venture capitalists and the potential entrepreneurs, also become source of deal origination.

2. Screening: Venture capitalist in his endeavor to choose the best ventures first of all undertakes preliminary scrutiny of all projects on the basis of certain broad criteria, such as technology or product, market scope, size of investment, geographical location and stage of financing. Venture capitalists in India ask the applicant to provide a brief profile of the proposed venture to establish prime facie eligibility. Entrepreneurs are also invited for face-to-face discussion for seeking certain clarifications.

3. Evaluation: After a proposal has passed the preliminary screening, a detailed evaluation of the proposal takes place. A detailed study of project profile, track record of the entrepreneur, market potential, technological feasibility future turnover, profitability, etc. is undertaken. Venture capitalists in Indian factor in the entrepreneur's background, especially in terms of integrity, long-term vision, urge to grow managerial skills and business orientation. They also consider the entrepreneur's entrepreneurial skills, technical competence, manufacturing and marketing abilities and experience. Further, the project's viability in terms of product, market and technology is examined. Besides, venture capitalists in India undertake thorough risk analysis of the proposal to ascertain product risk, market risk, technological and entrepreneurial risk. After considering in detail various aspects of the proposal, venture capitalist takes a final decision in terms of risk return spectrum, as brought in figure below

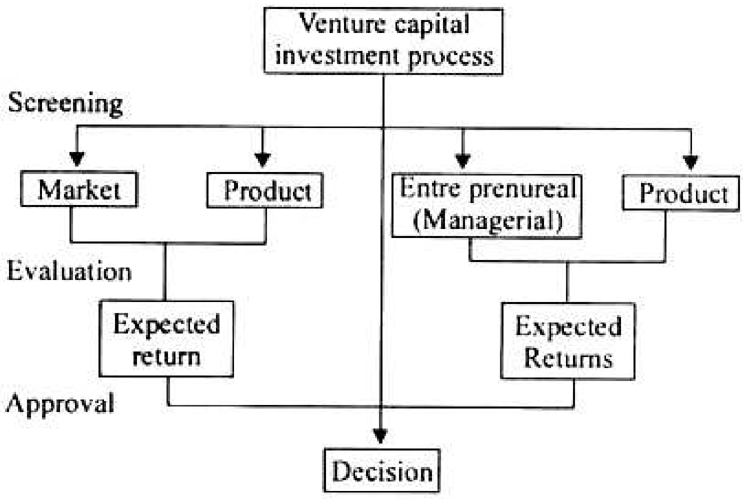


Figure. 31.1. Venture capital Investment Process
source : Typsee and Burno (1984).

4. Deal Negotiation: Once the venture is found viable, the venture capitalist negotiates the terms of the deal with the entrepreneur. This it does so as to protect its interest. Terms of the deal include amount, form and price of the investment.

It also contains protective covenants such as venture capitalists right to control the venture company and to change its management, if necessary, buy back arrangements, acquisition, making IPOs. Terms of the deal should be mutually beneficial to both venture capitalist and the entrepreneur. It should be flexible and its structure should safeguard interests of both the parties.

5. Post Investment Activity: Once the deal is financed and the venture begins working, the venture capitalist associates himself with the enterprise as a partner and collaborator in order to ensure that the enterprise is operating as per the plan.

The venture capitalists participation in the enterprise is generally through a representation in the Board of Directors or informal influence in improving the quality of marketing, finance and other managerial functions. Generally, the venture capitalist does not meddle in the day-to-day working of the enterprise; it intervenes when a financial or managerial crisis takes place.

6. Exit Plan: The last stage of venture capital financing is the exit to realise the investment so as to make a profit/minimize losses. The venture capitalist should make exit plan, determining precise timing of exit that would depend on an a myriad of factors, such as nature of the venture, the extent and type of financial stake, the state of actual and potential competition, market conditions, etc. At exit stage of venture capital financing, venture capitalist decides about disinvestments/realization alternatives which are related to the type of investment, equity/quasi-equity and debt instruments. Thus, venture capitalize may exit through IPOs, acquisition by another company, purchase of the venture capitalist's share by the promoter and purchase of the venture capitalist's share by an outsider.

Merits of Venture Capital

This is a very important source of financing for a new business. Here money is provided by investors to start a business that has strong potentiality of high growth and profitability. The provider of venture capital also provides managerial and technical support. Venture capital is also known as risk capital.

The merits of venture capital are as follows:

1. Business expertise. Aside from the financial backing, obtaining venture capital financing can provide a start-up or young business with a valuable source of guidance and consultation. This can help with a variety of business decisions, including financial management and human resource management. Making better decisions in these key areas can be vitally important as your business grows.

2. Additional resources. In a number of critical areas, including legal, tax and personnel matters, a VC firm can provide active support, all the more important at a key stage in the growth of a young company. Faster growth and greater success are two potential key benefits.

3. Connections. Venture capitalists are typically well connected in the business community. Tapping into these connections could have tremendous benefits.

4. New innovative projects are financed through venture capital which generally offers high profitability in long run.

5. In addition to capital, venture capital provides valuable information, resources, technical assistance, etc., to make a business successful.

Demerits of Venture Capital

1. Loss of control. The drawbacks associated with equity financing in general can be compounded with venture capital financing. You could think of it as equity financing on steroids. With a large injection of cash and professional—and possibly aggressive—investors, it is likely that your VC partners will want to be involved. The size of their stake could determine how much say they have in shaping your company's direction.

2. Minority ownership status. Depending on the size of the VC firm's stake in your company, which could be more than 50%, you could lose management control. Essentially, you could be giving up ownership of your own business.

3. It is an uncertain form of financing.

4. Benefit from such financing can be realized in long run only.

3.2.6 LEASE FINANCE

Lease financing is one of the popular and common methods of assets based finance, which is the alternative to the loan finance. Lease is a contract. A contract under which one party, the leaser (owner) of an asset agrees to grant the use of that asset to another leaser, in exchange for periodic rental payments. Lease is contractual agreement between the owner of the assets and user of the assets for a specific period by a periodical rent.

Definition of Leasing

Lease may be defined as a contractual arrangement in which a party owning an asset provides the asset for use to another, the right to use the assets to the user over a certain period of time, for consideration in form of periodic payment, with or without a further payment.

According to the equipment leasing association of UK definition, leasing is a contract between the lesser and the leaser for hire of a specific asset selected from a manufacturers or vender of such assets by the lessee. The leaser retains the ownership of the asset. The lessee passes possession and uses the asset on payment for the specified period.

Parties or Elements of Leasing

Leasing is one of the important and popular parts of asset based finance. It consists of the following essential elements. One should understand these elements before they are going to study on leasing.

1. Parties: These are essentially two parties to a contract of lease financing, namely the owner and user of the assets.

2. Leaser: Leaser is the owner of the assets that are being leased. Leasers may be individual partnership, joint stock companies, corporation or financial institutions.

3. Lease: Lease is the receiver of the service of the assets under a lease contract.

Lease assets may be firms or companies.

4. Lease broker: Lease broker is an agent in between the leaser (owner) and lessee.

He acts as an intermediary in arranging the lease deals. Merchant banking divisions of foreign banks, subsidiaries Indian banking and private foreign banks are acting as lease brokers.

5. Lease assets: The lease assets may be plant, machinery, equipments, land, automobile, factory, building etc.

Term of Lease

The term of lease is the period for which the agreement of lease remains for operations.

The lease term may be fixed in the agreement or up to the expiry of the assets.

Lease Rental

The consideration that the lease pays to the leaser for lease transaction is the rental.

Mechanism of lease finance

Leases are legally binding contracts that financially obligate the University. The negotiation, approval and processing of all leases will be the responsibility of Treasury Operations and will require final approval from the Vice President for Finance and Treasurer. Leasing equipment is subject to the same policies and procedures (including the CEA process and the creation of a requisition through the Purchasing Department) that would apply to the acquisition of any piece of capital equipment, such as computers, scientific equipment, business related equipment, etc. Leasing is a financing technique, not a funding source. The acquiring department must identify the funding source prior to entering into a lease. In order to be considered for leasing, the item must have a value of at least $50,000 and must have CEA approval.

Types of Leasing

Leasing, as a financing concept, is an arrangement between two parties for a specified period. Leasing may be classified into different types according to the nature of the agreement.

The following are the major types of leasing as follows:

(A) Lease based on the term of lease

1. Finance Lease
2. Operating Lease

(B) Lease based on the method of lease

1. Sale and lease back
2. Direct lease

(C) Lease based in the parties involved

1. Single investor lease
2. Leveraged lease

(D) Lease based in the area

1. Domestic lease
2. International lease

1. Financing lease: Financing lease is also called as full payout lease. It is one of the long-term leases and cannot be cancelable before the expiry of the agreement. It means a lease for terms that approach the economic life of the asset, the total payments over the term of the lease are greater than the leasers initial cost of the leased asset. For example: Hiring a factory, or building for a long period. It includes all expenditures related to maintenance.

2. Operating lease: Operating lease is also called as service lease. Operating lease is one of the short-term and cancelable leases. It means a lease for a time shorter than the economic life of the assets; generally the payments over the term of the lease are less than the leaser's initial cost of the leased asset. For example: Hiring a car for a particular travel. It includes all expenses such as driver salary, maintenance, fuels, repairs etc.

3. Sale and lease back: Sale and lease back is a lease under which the lease sells an asset for cash to a prospective leaser and then leases back the same asset, making fixed periodic payments for its use. It may be in the firm of operating leasing or financial leasing. It is one of the convenient methods of leasing which facilitates the financial liquidity of the company.

4. Direct lease: When the lease belongs to the owner of the assets and users of the assets with direct relationship it is called as direct lease. Direct lease may be Dipartite lease (two parties in the lease) or tripartite lease. (Three parties in the lease)

5. Single investor lease: When the lease belongs to only two parties namely leaser and it is called as single investor lease. It consists of only one investor (owner). Normally all types of leasing such as operating, financially, sale and lease back and direct lease are coming under these categories.

6. Leveraged lease: This type of lease is used to acquire the high level capital cost of assets and equipments. Under this lease, there are three parties involved; the leaser, the lender and the lessee. Under the leverage lease, the leaser acts as equity participant supplying a fraction of the total cost of the assets while the lender supplies the major part.

7. Domestic lease: In the lease transaction, if both the parties belong to the domicile of the same country it is called as domestic leasing. 8. International lease If the lease transaction and the leasing parties belong to the domicile of different countries, it is called as international leasing.

3.2.7 Project Finance

Project finance is a funding technique that looks to the cash flows generated by a project to provide investor returns and lenders' debt service. The World Bank defines project finance as the "use of nonrecourse or limited-recourse financing." Further defining these two terms, "the financing of a project is said to be nonrecourse when lenders are repaid only from the cash flow generated by the project or, in the event of complete failure, from the value of the project's assets. Lenders may also have limited recourse to the assets of a parent company sponsoring a project Capital-intensive. Project financings tend to be large-scale projects that require a great deal of debt and equity capital, from hundreds of millions to billions of dollars. Infrastructure projects tend to fill this category.

Concept of project Finance

Project Finance is a method of funding in which the lender looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the exposure. Project Finance transactions play an important role in financing development throughout the world. This type of financing is usually for large, complex and expensive installations that might include, for example, power plants, chemical processing plants, mines, transportation infrastructure, environment, and telecommunications infrastructure.

Features of Project Finance

1. Capital-intensive: project financings tend to be large-scale projects that require a great deal of debt and equity capital, from hundreds of millions to billions of rupees infrastructure projects tends to fill this category. A World Bank study in late 1993 found that the average size of project financed infrastructure projects in developing countries was $440 million. However, projects that was in the planning stages at that time had an average size $710 million.

2. Highly leveraged: These transactions tend to be highly leveraged with debt accounting for usually 65% to 80% of capital in relatively normal cases.

3. Long term: The tenor for project financings can easily reach 15 to 20 years. It is provided to small and medium size of organisations. The project finance is long term finance.

4. Project report: a borrowing company must prepare the project report. Project report includes feasibility of project, viability of project, repayment schedule etc. this report submitted to lending institute for sanction the loan.

5. Feasibility testing: the lending institutions may verify and evaluate the project report through their experts. Before sanctioning the finance experts examine the feasibility and viability of project.

6. Loan agreement: agreement of loan made after the sanctioning the project proposal. Loan agreement is prepared by the lending company. It is signed by both the parties. All the terms and conditions of the project finance are included in such agreement.

7. Installments of loan: sanctioned amount of loan is paid in installment. Loan is realized as per requirement of borrowing company. It is also linked with the stages of completion of project.

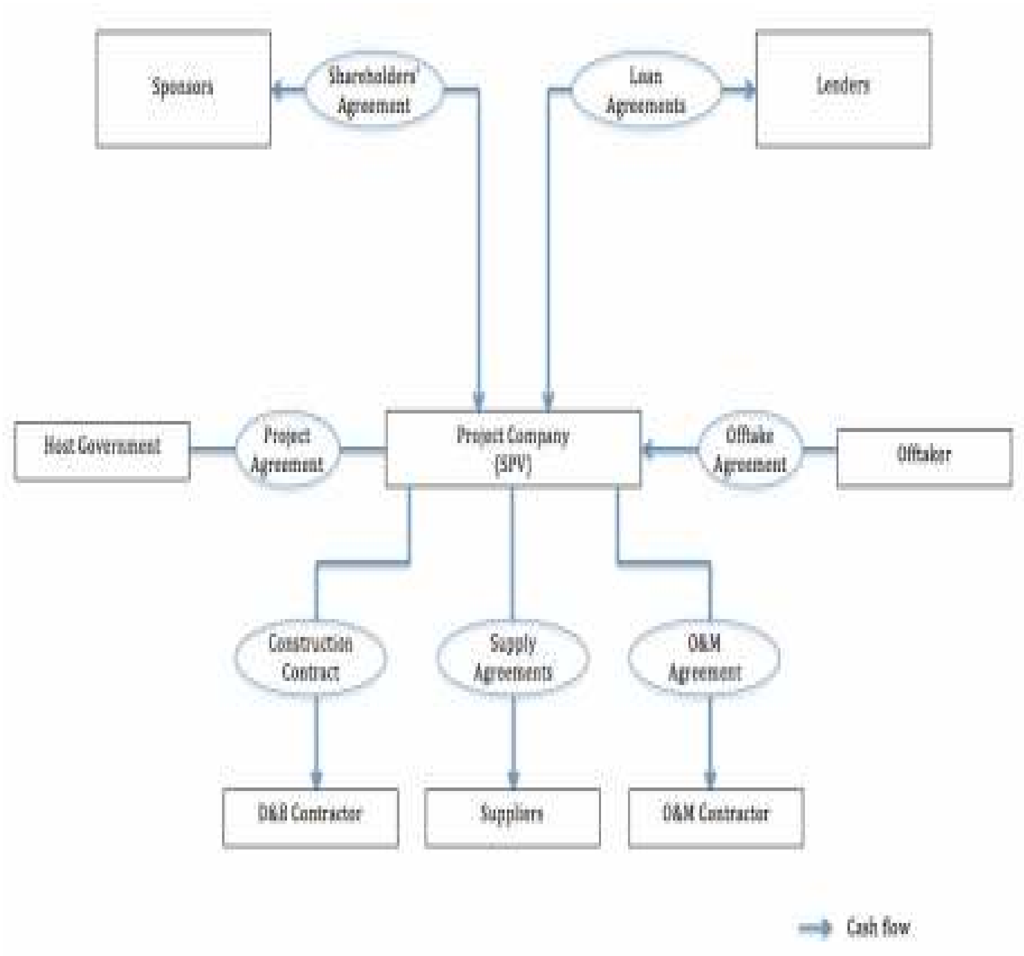
8. Evaluation of project: the lending company arranges continuous evaluation system. It is also check the performance of the project. Installment paid by the financer is properly used or not.

9. Recovery of loan: in the loan agreement repayment procedure and time schedule is mentioned. According to this, Project Company recovers their repayment with interest. Generally, repayment may be start after the completion of the project.

10. Security: security is the most essential factor in this process. It is predetermined in the agreement. Some assets are given for the security.

Main Parties of project finance

Project finance transactions are complex transactions that often require numerous players in interdependent relationships. Because of this complexity, not all projects follow the same structure and not all of the participants described below partake in all projects. A typical project finance structure looks like as follows:



Typical project finance structure: principal parties and various contracts

The description of each of the **parties** involved is as follows:

1. Government: Though local governments generally participate only indirectly in projects, their role is often most influential. The local government's influence might include: approval of the project, control of the state company that sponsors the project, responsibility for operating and environmental licenses, tax holidays, supply guarantees, and industry regulations or policies, providing operating concessions

2. Project Company. The project company is the legal entity that will own, develop, construct, operate and maintain the project. The project company is generally an SPV (Special Purpose Vehicle) created in the project host country and therefore subject to the laws of that country (unless appropriate 'commissions' can be paid so that key government officials can grant 'exceptions' to the project). A project company can be created in one of two ways:

- when the host government solicits bids and selects the best candidate among the bidders;
- or a company or group of companies may initiate a project on their own, with or without soliciting host government involvement.

However, most projects have government involvement and backing. The SPV will be controlled by its equity owners.

3. Sponsors: The equity investor(s) and owner(s) of the Project Company can be a single party, or more frequently, a consortium:

- Industrial sponsors, who see the initiative as linked to their core business
- Public sponsors (central or local government, municipalities, or municipalized companies), whose aims center on social welfare
- Contractor/sponsors, who develop, build, or run plants and are interested in participating in the initiative by providing equity and/or subordinated debt
- Purely financial investors

4. Lenders. The project finance is provided by single bank, financial institution or group of bankers and group of financial institutions. It is depends upon the risk and size of project. The group of lenders is called as syndicate. The feasibility of the project is examined through expert team which is formed by lenders. They make agreement with Sponsor Company which includes rate of interest, due dates of repayment, amount of loan and installments etc.

5. off taker. It is found in utility, industrial, oil & gas and petrochemical projects. One or more parties will be contractually obligated to 'off take' (purchase) some or all of the product or service produced by the project.

6. Suppliers. One or more parties provide raw materials or other inputs to the project in return for payment.

7. Contractors. The substantive performance obligations of the Project Company to design and build (D&B), and operate the project will usually be done through engineering procurement and construction (EPC) and operations and maintenance (O&M) contracts respectively.

8. Shareholders' agreement. A shareholders' agreement sets out the respective rights and obligations of the sponsors with respect to each other and the project company, with a strictly controlled dividend policy. In project financing, special attention is paid to the handling of potential conflicts of interests. This is especially the case where both private sector sponsors and the host government are equity holders.

9. **Loan agreements.** A credit agreement is the principal legal document between the banks and the project company that details the express terms on which the banks will advance funds to the project company together with any associated security documents. Some of the issues parties will need to consider are:

- The currency of the loans (should they be denominated in the principal currency of expenditure or the currency of the projected revenues?);
- the manageability of the drawdown and reporting requirements from the project company's point of view;
- Whether any control amount requirements reflect local legal requirements.

10. Offtake agreement. Revenue risk can be managed through an offtake agreement between the host government authority/power distribution company and the project company by providing the project company with a sufficient pre-determined revenue stream to ensure payment of its project obligations, operating costs and a return for its sponsors. An off take agreement will typically take the form of a "take-or-pay" agreement, which provides that the offtaker has the option of either taking the project's product or paying for the product (even if it is not taken) at the agreed tariff. Long-term agreements such as these would normally be entered into for gas or electricity generation projects, since sales would not be made on a spot or retail market.

11. Construction agreement. A construction contract between the project company and the construction company will typically be in the form of a comprehensive turnkey contract, which should ensure that the contractor will deliver a completed and operational facility. The turnkey model provides for the project, capable of meeting its projected operating standards and contractual obligations, to be handed over and be ready for immediate operation. For that reason, it is not unusual for sponsors to try and shift all completion- related risks onto the contractor.

12. Supply agreements. A supply agreement between the project company and the supplier varies in sensitivity depending on the raw material or fuel used by a project and the source and ownership of supplied material. Security of supply and price certainty is of key importance for the project. It is also important that pricing and adjustments of terms are capable of being passed through under the offtake agreement in order to protect the project's revenue projections and debt servicing capacity.

13. Operating and maintenance (O&M) agreement. An operating and maintenance agreement between the project company and the operator allocates facility operational risks and aims to ensure that the operator meets performance guarantees tied to maximizing revenues.

14. Project agreement. A project agreement between the host government and the project company depends on the degree of the government's involvement. Two major cases usually occur:

The host government agrees to be the offtaker, purchasing all or part of the output of the project, sometimes at a set price. These projects are often in the energy, oil and mining industries, where a product or service is the output. For the provision of public facilities where usage risk inherently cannot be transferred to the private sector, such as schools and hospitals, the private-sector investor is paid by the host government for constructing the facility to the required specification and making it available for the period of the contract, as well as for provision of services such as maintenance, cleaning and catering. The host government can enter in a Concession Agreement with the project company, which allows the collection of tolls from users; it does not usually involve any payment by or to the host government.

3.3 Summary

Equity Shares also known as ordinary shares, which means, other than preference shares. Equity shareholders are the real owners of the company. They have a control over the management of the company. Equity shareholders are eligible to get dividend if the company earns profit. Equity share capital cannot be redeemed during the lifetime of the company. **Sweat equity shares** are such **equity shares,** which are issued by a Company to its directors or employees at a discount or for consideration, other than cash, for providing their know-how or making available rights in the nature of intellectual property rights or value additions. A debenture is a long term promissory note for raising loan capital. The firm promises to pay interest and principal as stipulated period. The purchaser of debenture is called debenture holder. According to the Companies Act 1956, "debenture includes debenture stock, bonds and any other securities of a company whether constituting a charge of the assets of the company or not." It is certificate issued by a company under its seal acknowledging a debt due by it to its holders. Term loan is a medium-term source financed primarily by banks and financial institutions. Such a type of loan is generally used for financing of expansion, diversification and modernization of projects so this type of financing is also known as project financing. Term loans are repayable in periodic installments. venture capital is defined as providing seed, start up and first stage financing and also funding expansion of companies that have already Special Financing demonstrated their business potential but do not yet have access to the public securities market or to credit oriented institutional funding sources. Lease may be defined as a contractual arrangement in which a party owning an asset provides the asset for use to another, the right to use the assets to the user over a certain period of time, for consideration in form of periodic payment, with or without a further payment. Project finance is a funding technique that looks to the cash flows generated by a project to provide investor returns and lenders' debt service. The World Bank defines project finance as the "use of nonrecourse or limited-recourse financing." Further defining these two terms, "the financing of a project is said to be nonrecourse when lenders are repaid only from the cash flow generated by the project or, in the event of complete failure, from the value of the project's assets.

3.4 Terms to Remember

- **Employee stock options: Employee** stock options are call options on a company's common stock granted to a select group of its employees.
- **Debenture:** It is certificate issued by a company under its seal acknowledging a debt due by it to its holders.
- **Lease:** the assets provided on rental basis
- **Term Loan:** A term loan is a loan from a bank for a specific amount that has a specified repayment schedule and a fixed or floating interest rate.
- **Venture Capital:** venture capital is a providing seed, start up and first stage financing and also funding expansion of companies that have already Special Financing demonstrated their business potential but do not yet have access to the public securities market or to credit oriented institutional funding sources.

3.5 Check your progress

A) Choose the correct alternative

1. Equity shareholders are the ----------- of the company.

   a. Owners b. borrower c. employee d. manager

2. ------------------ preference shares have right to claim dividends for those years which have no profits.

   a. Cumulative b. Non- cumulative

   c. Redeemable d. Non-redeemable

3. ------------------ finance is also known as equipment leasing.

   a. Venture b. Project c. Lease d. Term

4. Lease finance is new mode of -----------------------

   a. amalgamation b. Financing c. Absorption d. Joint venture

5. ------------------ is a providing seed, start up and first stage financing

a. Venture capital   b. Lease   c. debenture   d. term loan

B) Fill in the Blanks

1. -----------------------------------are call options on a company's common stock granted to a select group of its employees.

2. --------------------------is a funding technique that looks to the cash flows generated by a project to provide investor returns and lenders' debt service.

3. -------------------- debentures are not given any security on assets of the company.

4. Allotment of --------------------------- shall be made within 12 months from the date of passing special resolution.

5. Equity Shares also known as ------------- shares.

C) Write 'True or False'

1. The articles of association of the company authorize the issue of shares with differential rights.
2. Allotment of sweat equity shares shall be made within 6 months from the date of passing special resolution.
3. Preference shareholders are eligible to get fixed rate of dividend and they do not have voting rights.
4. The dividend rate is fixed in the case of sweat shares
5. A debenture is a long term promissory note for raising loan capital.
6. Term loans are repayable in periodic installments.
7. Lease finance is mode of financing in cash

3.6 Answers to Check your Progress

A) 1- b 2 - a   3 - c   4 - b   5- a

B) 1- **Employee** stock options   2- Project finance   3- Unsecured

4- sweat equity shares   5- ordinary

C) 1- True   2- False   3. True   4- False   5. True   6. True   7- False

3.7 Exercise

A) Short Notes

1. Sweat Shares
2. Employee's Stock Option
3. Equity shares with differential rights
4. Characteristics of Preference Shares
5. Merits of Debentures
6. Legal Provisions of Term loans
7. Demerits of equity shares
8. Process of Venture capital
9. Mechanism of Lease Capital
10. Features of Project finance

B) Long answer type questions

1. Explain the meaning, merits and demerits of equity shares
2. Describe the characteristics, types and legal provisions of preference share.
3. State the meaning, merits and demerits of Debentures.
4. Explain the concept, process, merits and demerits of Venture capital
5. Describe the concept, parties and types of Lease Finance.
6. Explain the concept, feature and main parties of Project finance.

Practical

Prepare & present comparative analysis chart of all sources of Finance learnt by students:

It seems that the sources of finance for business are equity, debt, debentures, retained earnings, term loans, working capital loans, letter of credit, euro issue, venture funding etc. These sources of funds are used in different situations. They are classified based on time period, ownership and control, and their source of generation. It is ideal to evaluate each source of capital before opting for it. Sources of capital are the most explorable area especially for the entrepreneurs who are about to start a new business. It is perhaps the toughest part of all the efforts. There are various capital sources, we can classify on the basis of different parameters.

It is understood that there are many alternatives to sources of finance or capital. It is stated that the select the right source and the right mix of finance is a key challenge for every finance manager as well as entrepreneurs. The process of selecting the right source of finance involves in-depth analysis of each and every source of fund. Hence, it is stated that for the analysing and comparing the sources, it needs the understanding of all the characteristics of the financing sources. There are many characteristics on the basis of which sources of finance are classified. It is understood that on the basis of a time period, sources are classified as long-term, medium term, and short term. It seems that the ownership and control classify sources of finance into owned and borrowed capital. Internal sources and external sources are the two sources of generation of capital. It is stated that the all the sources have different characteristics to suit different types of requirements. Hence, herewith tried to understand comparative analysis chart of all sources of finance, which learnt by students.

Sr.	View	Personal Financing	Family and Friend	Shares	Bond/ Debenture	Bank Loan	Lease Financing	Factoring	Micro Loan	Crowd funding	Venture Capital
1	Base	MOM	OPM	OPM	OPM	OPM	OPM	OPM	OPM	OPM	OPM
2	Generation	Internal	Internal	Internal	External	External	External	External	External	External	External
3	Nature	Informal	Informal	Formal	Formal	Formal	Formal	Formal	Formal	Formal	Formal
4	Ownership	Own Fund	Own Fund	Own Fund	One Fund	One Fund	One Fund	One Fund	One Fund	One Fund	One Fund
5	Mortage	No	No	No	Yes	Yes	No	-	Yes	No	No
6	Period	-	-	Long	Long	Long/ Medium / Short	Medium	Short	Short	Short	Short
7	Repayment	Profit	-	Dividend	Interest	Interest	Interest	Interest	Interest	Return	Return
8	ROI	Low	Low	Low	High	High	High	High	Medium	High	High
9	Cost	Low	Low	Low	High	High	High	High	Low	High	High
10	Benefit	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive
11	Risk	Low	Low	Low	High	High	High	High	Low	High	High
12	Devision Making	Easy	Easy	Easy	Difficult	Difficult	Difficult	Difficult	Difficult	Difficult	Difficult

(Compiled by Discussion with Financial Expert Note: MoM = My Own Money, OPM = Other People Money)

It is understanding that there are a number of factors which influence the owner's decision which determines the source of fund to be select financing mix. Thus, it is stated that such factors include a time period for which funds are required, the purpose of raising finance, and the total funds required by the particular business entity or firm.

3.8 Reference for Further Study

1. Advanced Financial Management – Dr. N. M. Vechalekar
2. Financial Management- Hogland
3. Financial Management- S. C. Saxena
4. Financial Management- P. V. Kulkarni
5. Financial Management- Ravi M. Kishore

Unit-4

Working Capital Management

Structure:

4.0 Objectives:

After studying this unit, the students will be able to:

- Understand the concept of Working Capital
- Know the types and significance of Working Capital
- Understand the determinants and sources of Working Capital
- Study the Working Capital Management
- Learn the Cash Management, Liquidity Management, Credit Management and Inventory Management

4.1 Introduction:

The definition of working capital itself explains the significance of it in the business that it is the amount which is used to carry on day to day working of the business. That means without working capital the working of the business cannot be possible. Working capital is called as the life blood or heart of the business. Importance of working capital in the business explains the need of working capital management.

4.2 Presentation of Subject Matter:

4.2 A Working Capital

4.2 A.1: Concept of Working Capital:

In general sense, the working capital means, the capital which is needed to carry on the day to day working of the business.

Shubin defined the working capital as, "the funds necessary to cover the cost of operating the business enterprise." The cost of operating the enterprise includes purchases of raw materials or finished goods, wages and salaries of staff, payment of other expenses like rent, insurance, printing, lighting, advertisement etc. The funds need to cover this cost is called as working capital. Such capital is in the form of different current assets and they change their form in the ordinary course of business e.g. from cash to inventories, inventories to receivable and receivables into cash.

Hoagland defines it as, "the difference between the book value of the current assets and the current liabilities.

In his view, Gestenberg called it as a circulating capital.

The most widely used concept of working capital is defined as, "the difference between current assets and current liabilities." This concept is useful to know the liquidity of the firm.

4.2. A.2 Types of Working Capital:

There are different concepts/types of working capital having different meanings which are explained as follows –

1. **Gross working capital** – It is a broad concept of working capital. According to this concept working capital means the total of all current assets of the firm. This concept is important from view point of management because the management can plan for the working capital well in advance and use effectively all the current assets. As per this concept working capital and current assets are the two inter-changeable terms.

2. **Net working capital** – According to this concept the working capital means the net current assets that mean current assets minus current liabilities. This concept is widely current assets used. It is used to find out the soundness of short term financial position of the firm by the concerned parties.

3. **Negative working capital** – It means the excess of current liabilities over the current assets. It is opposite to net working capital. Negative working capital is also called as working capital deficit. It shows that the working capital position of the firm is not good.

4. **Permanent working capital** – It is the minimum amount of investment in current assets required at all time to carry out minimum level of business activities. In other words it is the amount of working capital which remains in the business permanently in one form or another. Every business firm is required to maintain a minimum balance of cash, inventory and receivables irrespective of the short term ups and downs in the level of activity. It is referred to as the care current assets by the Deheja committee and Tondon committee. It is also called as fixed working capital or minimum working capital. It represents the long term capital.

5. **Variable working capital** – It means the working capital invested in the business over and above the fixed/permanent working capital. The amount of variable working capital keeps on fluctuating from time to time depending upon the scale of operations and stage of business cycle. It increases during the peak period and decreases during the period of recession. It represents the short term capital.

6. **Cash working capital** – The cash working capital refers to the working capital which is available in cash. It is determined with the help of cash-flow statement.

4.2. A.3 Significance / Importance of Working Capital:

The definition of working capital itself explains the significance of it in the business that it is the amount which is used to carry on day to day working of the business. That means without working capital the working of the business cannot be possible. Working capital is called as the life blood or heart of the business. The significance or importance of working capital can be explained as under —

i) It is important to maintain the smooth flow of the working of the business.

ii) With the help of working capital, the required raw materials and other materials can be purchased in time which leads to full utilization of the capacity of the business.

iii) It is possible to avail the benefits of large scale purchases.

iv) If the working capital is sufficient, the firm can pay its short term claims in time which will useful to maintain good relations with claimants.

v) Working capital is the indicator of liquidity position and if it is good short term loans can easily be made available from banks and financial institutions.

vi) It is possible to take the advantage of favourable and profitable market conditions.

vii) A firm can pay the government dues and other claims in time and avoid penalties.

viii) If a firm ensures a good flow of working capital, there is no need to borrow funds at high rate of interest.

ix) The sufficient working capital ensures the payment of wages and salaries to the staff in time which develops good working environment.

x) A firm having sufficient working capital can increase the sales by allowing credit facility to customers.

4.2. A.4 Factors Determining Working Capital Requirement:

Each business firm needs the working capital but the requirement of the working capital of each firm is different because it depends upon various factors. These factors are as follows:

i) **Size of the firm:** The amount of working capital required depends upon the size of the firm. Big firm require more working capital as compare to the small firms.

ii) **Nature of business:** The requirement of working capital also depends on the nature of the business carried out by the firm. If the firm is a trading firm it requires more working capital and if the firm is an industrial or public utilities concern it requires less working capital.

iii) **Volume of business:** If the volume of business is large it requires more working capital and if the volume of business is small there is a less need of working capital.

iv) **Length of processing or selling period:** If the processing or selling period is large it requires more working capital and vice versa.

v) **Policy of purchase and sale:** The requirement of working capital depends upon the firm's policy of purchase and sale. If a firm has a policy of cash purchases and credit sales it requires more working capital and if a firm has a policy of credit purchases and cash sales it requires less working capital.

vi) **Large stock of raw materials:** Some firms require large stock of raw materials for some reasons such as seasonal nature, long distance etc. Such firms need more working capital than others.

vii) **Expansion:** If a firm wants to make rapid expansion or expansion on large scale it require more working capital.

viii) **Cash requirements:** If a firm requires more cash for payment of different expenses, taxes, charges etc. the requirement of working capital is more and if cash requirement is less, the need of working capital is also less.

ix) **Use of Labour:** The firm, who use labour on large scale for business activities, needs more working capital and if the firm is highly mechanized it needs less working capital.

x) **Management attitude and efficiency :** The attitude or policy of management in respect of payments of dividend, discount, price, expenses etc. is of cash saving and efficiency of management is more that time requirement of working capital is less and vice-versa.

4.2. B Sources of Working Capital:

Working capital finance generally refers to debt raised for a period of less than a year from Term Lending Institutions, Commercial Banks and Non-Banking Finance Companies (NBFC) catering to the short-term credit needs of the business entities. There are different sources of working capital. These sources are as follows:

4.2. B. 1: Accruals:

It is an internal source of working capital finance. In addition to the sources of raising finance for working capital needs, one more source in the form of accrued expenses or outstanding expenses is available. Like trade credit, this source also does not actually generate funds but it only postpones the payment of certain expenses. The greater is the postponement, the greater is the amount available for financing. But legal aspects should be taken into consideration before using this source.

Internal funds are very important source of financing short-term obligations. It is a spontaneous source of meeting the working capital needs. Such accounts are self-generating and available immediately. The most common accruals are wages and salaries, taxes, short-terms obligations, retained earnings and depreciation fund amounts. Amount kept aside for payment of salaries and wages can be a good source, since the payment has to be made on a fixed date. Similarly, a provision for tax is created out of the profits but the taxes are paid only after assessment is finalized. Thus the time-interval between the receipt of income and actual payment helps the business in meeting some of its short-term requirements. In addition the profits earned by the company remain with the company till the dividend and interest payments are made. Some amount is available from the depreciation fund also. All such accrual accounts become an important source for working capital needs. When the size of the business grows, amount of accrual also increases. This enables the firm to finance its short-term obligations. Accruals vary with the level of activity of the firm. When the activity level expands, accruals increase and when the activity level shortened accruals decrease. It is costless and interest free and internal source of financing. There are no formalities involved. Accruals do not create any change on the assets of the company. But there are some shortcomings of this source such as temporary source of finance, a company cannot use such amount indefinitely, trade unions will oppose, if the employees are not paid on time, it might reduce the morale of the employees, it may lead to lower efficiency and high labour turnover. Hence, internal accruals as a source of working capital should be used only in the last. Yet some companies who are having shortage of funds can resort to this source.

4.2. B. 2: Trade Credit

Trade credit represents the credit extended by the suppliers of goods and services. It is a form of short-term financing of working capital needs. It is available and common to all types of business firms. In actual practice, it is the largest source of short-term funds. It is an important source of finance representing 25% to 50% of short term financing. Almost in all modern economies, buyers are not required to pay for goods on delivery. They are allowed a short-term credit period before payment becomes due. The confidence of suppliers is the key to securing trade credit. This credit may take the form of either Open account credit arrangement or Acceptance credit arrangement.

In an open account credit arrangement, the buyer is not required to sign a formal debt instrument. The seller does not ask the buyer to sign any instrument as evidence for the amount due. The seller trusts the buyer and expects him to pay the price after the credit period expires. In case of acceptance credit arrangement the buyer accepts a bill of exchange or gives a promissory note for the amount due by him. Thus, it is an arrangement by which the creditworthiness of the buyer is recognized formally. The buyer has to pay the amount of the bill or note after a stipulated time or on a specified date.

Trade credit arrangement is generally made available to the buyer on informal basis. It does not create any charge on the assets. Such arrangement usually allows a cash discount to the buyer for prompt payment. The volume of trade credit and its use can be a good source of short-term financing. The amount available depends on the following factors (i) The terms of trade credit, (ii) reputation of the purchasing firm, (iii) financial position of the seller and (iv) volume of purchases by the buyer. This source is beneficial because it does not create any charge on the asset of the buyer, readily available, flexible and continuous source of financing. But the cost of trade credit may be very high. The firm or company should balance the advantages against disadvantages of trade credit. It should be resorted to considering the price loss of discount and possibility of deterioration in reputation. Hence a company should have a selective approach in using trade credit. It should not be stretched too much and beyond limits.

4. 2. B. 3: Commercial Banks

The commonly used source for financing working capital needs is the finance by commercial banks. Normally, a bank assesses the requirements of customers for working capital needs. This assessment is done on the basis of the sales level as well as production plans of the firm. How much amount of current assets should be maintained is also assessed by the bank. After deducting the margin money from the total requirements, the balance amount is financed by the bank. There may be separate financing limits for peak periods and non-peak periods.

a) Fund-based:

1) Overdrafts: An overdraft is a temporary accommodation by the bank by which a borrower is allowed to overdraw his current account up to a fixed limit, usually against collateral securities such as hypothecation of marketable shares, stocks or bonds. This system operates exactly on similar lines to that of cash credits, the only difference being that an overdraft is intended to be used only temporarily, whereas a cash credit is used regularly and for longer periods.

This is most common method of bank financing. A customer is allowed to withdraw more amount than the balance to his credit in the account. For example, if bank balance to the credit of a customer is Rs. 20.000 he may be allowed to withdraw Rs. 30.000 thus indicating that there is a bank overdraft of Rs. 10.000. How much amount is allowed to be withdrawn as overdraft depends upon the limit sanctioned by the bank. The limits are decided after a careful scrutiny of the bank account transactions of the customer. Interest is charged only on the amount which is withdrawn as overdraft. Like trade credit, bank overdraft arrangements can also offer wide flexibility once relations between the bank and the customer are developed.

2) Cash Credit: Cash credit refers to a system of financing where a borrower is provided a credit limit, which could be utilized by him for the purpose of running day-to-day business. The limits are decided based on his overall cash requirement of the business. The calculation is based on the total operating cycle and gap between payment to be received and to be made.

Like overdraft, in this method also, a bank sanctions a particular limit up to which a borrower can borrow. It is not necessary for a borrower to withdraw the entire amount of borrowing immediately. He can withdraw the amount as per his requirements. Interest is charged only on the amount withdrawn and not on the entire amount sanctioned. A bank may demand security in the form of a current asset. Similar to overdraft, cash credit also offers wide flexibility and therefore is very popular method of financing

3) Working Capital Loan: In addition to the above mentioned methods, sometimes temporary working capital loans may also be sanctioned by the bank. This refers to the working capital limit of a borrower extended to him in the form of a loan. The loan component covers the permanent part of the working capital need while cash credit component caters to the fluctuating part of the limit. The interest is charged on the loan component irrespective of utilization when such a term loan is availed. Since small firms do not generally possess expertise in managing loan funds in case of low utilization of limits and also have lower control on their working capital management, carving out a loan component is not mandatory in their case.

4) Bills Financing: Bills are negotiable instruments that the buyer agrees to pay the drawer/payee the value of the goods after a specified period of time. On effecting sale of his products on credit, an entrepreneur could draw a bill on the purchaser and on his acceptance avail credit against the bill from his banker. Bank financing against bills is in the form of either discounting or purchase. In case of discounting, the banker credits the client's account for the bill amount (less discount for meeting interest charges for a remaining number of days to maturity) and collects the bill as an agent of the client. In case of purchase, the banker assumes ownership of the bill and claims it in his own right.

5) Bills discounting: A bill of exchange which is drawn by a creditor on his debtor is a negotiable instrument. It contains an unconditional order to pay a certain sum of money after a certain period of time to the creditor. But the creditor has to wait till the maturity date before he receives the payment. His money remains blocked till the period is over. In order to remove this difficulty, the creditor can discount the bill with his bank. The bank deducts certain amount as commission from the amount of the bill and the remaining amount is paid to the creditor. However, before giving this facility to the drawer or the creditor, the credit rating of the drawer is checked by the bank.

6) Export financing: This financial instrument is offered in case of goods exported from the country in order to arbitrage on lower interest rates abroad. In order to offset the disadvantage of higher interest rates in India faced by units competing in export markets, banks extend concessional financing for exports. The export financing can be broadly classified into:

a. **Pre-shipment credit** - Such financing is provided for meeting costs related to purchase of goods, processing, packing and shipping. Pre-shipment credit is available both in rupees as well as in foreign currency depending upon the requirement.

b. **Post-shipment credit** - Post-shipment credit is provided for financing the exporter subsequent to dispatch of goods until realization of sales proceeds from the foreign buyer as per the terms of the transaction or the letter of credit received from the foreign buyer's banker.

Other forms of Export financing include Foreign usance bills (FBE), and Foreign Demand Bills (FDB), Foreign L/Cs (FLCs) and Export Performance Guarantees.

For all the financing modes, discussed above, a bank will usually demand some kind of security. The security may be in the form of hypothecation, pledge, mortgage or lien.

b) Non-fund based/Documentary Credit instruments:

These are commercial documents guaranteeing payment by the bank to the beneficiary, who is usually the seller of merchandise, against the underlying transaction.

1) Letter of credit: Through a letter of credit issued by a bank, it commits to honour the payment terms of the underlying transaction if the seller delivers the goods as stipulated in the contract. It could be issued either for domestic transaction or for international trade, most typically for the latter because of the long gestation periods involved.

2) Letter of guarantee: A letter of guarantee is issued by a banker to a third party indicating that the bank would meet the financial consequences (to a specified amount) in the event of failure of its client in adhering to the terms of the contract with the third party.

3) Deferred payment guarantee: Typically in case of equipment financing, the manufacturer (by itself/through a financing tie-up) offers credit to the buyers of its equipment at attractive terms to generate additional demand for its products. The Deferred Payment Guarantee (DPG) is a bank facility where the bank extends a guarantee to the equipment manufacturer on behalf of its client that the financing extended by the manufacturer (by himself or through its preferred financier) would be repaid as per the terms agreed upon.

4. 2. B. 4: Public Deposits

Public deposits constitute an important source of business finance in Indian industries. Many firms, large and small, have solicited unsecured deposits from the public in recent years, mainly to finance their working capital requirements. Especially, such deposits are found in sugar, cotton textiles, engineering, chemicals and trading concerns. They are mainly a source of short-term finance, but they have also been utilized to provide long and medium term finance also. Initially, these deposits were received from the public, the shareholders and the employees of the mills. The Indian Central Banking Inquiry Committee (1931) recognized the importance of public deposits in financing cotton textile industry. Then the growth of such deposits has been considerable after the third five year plan. Taking into account the shortage of funds from the capital market, many companies attempted to raise funds needed by them directly from the public offering more interest rates than banks. In order to avoid competition between the companies and the banks in obtaining such deposits, The Reserve Bank of India has laid down restrictions on these deposits.

Advantages :

1. The cost of deposits is lower than the rate of interest charged by the banks.
2. They do not create any charge on the assets of the company.
3. They introduce an element of flexibility in the financial structure of the company.
4. The company can adopt a liberal dividend policy as the rate of interest on deposits is fixed. It helps in enhancing the prestige of the company.
5. There are no restrictions on the companies about the use of funds collected through public deposits.
6. There are very few legal complications and formalities.
7. The short-term and medium term financial needs can be satisfied by raising such deposits.
8. There is no dilution of control of the company when the funds are raised through deposits.

Disadvantages:

1. The public deposits are very uncertain and inelastic.
2. These deposits disturb the interest rates in the capital market. There is an unhealthy competition between the companies and the banks in attracting deposits from the people.
3. They are unsecured deposits. There is no security given to depositors for getting their money back from the company.
4. It is sometimes said that it is a costly method of raising loans as compared to other sources of finance.

5. Many times, the depositors cannot judge the soundness of the company and thus risk their money by investing in weak companies

6. The Reserve Bank rules are not effective. There is hardly any protection to the depositors.

7. Public deposits may lead to over-capitalization if the company mobilizes more funds through public deposits.

8. Such deposits affect the business of the banks adversely. Banks may not be in a position to attract deposits, if the companies are allowed to accept the deposits.

Legal Provisions for Public Deposits

Initially in 1974, the Reserve Bank of India appointed a Study Group under the chairmanship of James Raj, chairman of the Unit Trust of India. The group was asked to suggest measures to enlighten non-banking companies regarding public deposits. The group recommended that the companies be allowed to accept deposits from the public, but the quantity of deposits should be restricted.

The Companies (Acceptance of Deposits) Amendment Rules – 1978 governs fixed deposits. The important features of these regulations are as follows:

1. Public deposits cannot exceed 25% of paid-up share capital and free reserves.

2. The minimum period for which companies will be able to accept deposits will be 6 months and maximum 36 months.

3. The company had to deposit or invest in scheduled bank at least 10% of deposits maturing during the year. The amount set aside can be used only for repaying such deposits.

4. A company inviting deposits from the public is required to disclose certain facts about its financial performance and position.

Section 58 of the Indian Companies Act is deals with the public deposits. There are rules for non-banking companies, who wish to raise deposits from the public.

No deposits can be invited from the public unless the companies follow the rules and guidelines made by the Department of Company Affairs of the Central Government in consultation with the Reserve Bank of India. The rate of interest, maturity period of deposits and the amount permitted to be raised by the companies are given in the guidelines. The companies have to follow these guidelines while accepting deposits from the public.

4.2. B. 5: Inter-Corporate Deposits

These are unsecured short term funding raised from other corporates that have surplus funds. An inter-corporate deposit is, the deposit made by one corporate body (company) with another company. Such deposits are usually made for a maximum period of six months. It can be a good source of working capital.

Types of Deposits : Such deposits may generally be of three types.

(a) **Call Deposits :** Such deposits are payable on call. They are repayable on call or as soon as demand is made. It can be just one or two-three days' notice to get the amount back.

(b) **Three Months Deposits :** These inter-corporate deposits are made for a period of three months. Such deposits have been found to be most popular among the companies. Some companies have surplus funds while some are in need of such short-term funds.

(c) **Six Months Deposits :** These deposits are made for six months by the companies. Generally, they are made for a maximum of 6 months and that too with A category companies only.

Legal provisions : The Companies Act (Section 372 A) makes provisions for inter-corporate deposits.

1. They are in the nature of unsecured deposits.
2. Such deposits are made on the basis of credits worthiness and willingness of the company concerned.
3. A Company cannot make deposits, loans and guarantees all the three together. The amount cannot be more than 60% of its net worth plus free reserves or cent percent of its free reserves, whichever is more.
4. In case the above limit is to be crossed, it can be done only with the prior permission of central government.
5. A special resolution has also to be passed by the company, granting permission to exceed the ceiling.

4. 2. B. 6: Short-term Loans from Financial Institutions

Financial institutions at the national and state level provide short-term funds to the business units. The financial institutions can be broadly classified into national financial institutions and state level financial institutions. The Life Insurance Corporation of India and the General Insurance Corporation of India provide short term loans to manufacturing companies.

A company is to be eligible to receive short term loans should satisfy the following conditions:

1. It should have declared an annual dividend of not less than 6% for the past five years with certain relaxation.
2. The debt-equity ratio of the company should not exceed 2:1.
3. The current ratio of the company should be at least 1:1.
4. The average of the interest cover ratios for the past three years should be at least 2:1.

Features:

The short term loans provided by financial institutions have the following features;

1. They are unsecured and are given on the strength of a demand promissory note.
2. The loan is given for a period of one year and can be renewed for two consecutive years, provided the original eligibility criteria are satisfied.
3. After a loan is repaid, the company will have to wait for at least 6 months before availing of a fresh loan.

The form of assistance can be broadly classified into direct and indirect assistance. The basic feature of direct assistance is that financial institutions provide funds directly to the project. In indirect assistance, the institutions provide guarantee on behalf of promoters of the project. In addition to long-term funding, they give margin money for working capital. The assistance carries interest starting from one percent and repayable on easy terms. ICICI enables domestic manufacturers and dealers to increase their sales by offering deferred credit to their buyers. IDBI has a similar scheme of Bill Rediscounting.

The financial institutions generally provide medium and long-term loans. Term loans are generally provided as working capital for acquiring income producing assets. Such assets generate the cash flows for repayment of the loan. The repayment of the loans and facilities is normally fixed on case to case basis depending on projected cash-flow of the borrower. Such loans are given on an individual basis as small business loans. The ability to repay is taken into consideration. Short Term loans given for working capital are a good source of quickly increasing capital to raise business supply capabilities.

Finance assistance is given on merits of each case Interest rate may be fixed or floating. Repayment schedule and time of maturity are as per the guidelines of said institution. Firms can have term loans but they are usually for small business loans. It can be an attractive loan for new or expanding enterprises. Such loans can increase the profitability over time. The individual firm has to submit loan application with project report. The report should cover cost of the project, means of financing, marketing arrangement, profitability and cash inflow. If the terms are acceptable to the borrower, the financial institution sends loan agreement to him for approval and signature.

Short-term loans are typically working capital loans. Their maturity is within one year or less. It is an option for an established business. Such loans do not require any collateral. They require less paper work and are available to meet unexpected needs. But they are little more expensive.

4. 2. B. 7: Commercial Papers (CP)

These are short term unsecured promissory notes issued by firms with a high credit rating at a discount on the face value. The maturity varies from 15 days to a year. It was introduced in India in 1990. The purpose was to enable companies to diversify their sources of short-term borrowings. Beside CP aimed at providing an additional instrument to investors. Subsequently, primary dealers and all India financial institutions were also permitted to issue CP to enable to meet their short term working capital requirements.

Companies, primary dealers and all India financial institutions are eligible to issue CP. No corporate would be eligible to issue CP unless:

(a) The tangible net worth of the company as per the latest audited balance sheet is not less than Rs. 4 crores.

(b) Company has been sanctioned working capital limit by banks or all-India financial institutions.

(c) The borrowed or loan account of the company is classified as a Standard Asset by the financing banks and institutions.

(d) Company has obtained minimum credit rating A-2 for issue of commercial paper.

There are certain legal provisions or rules for the issue of commercial paper prescribed by' Reserve Bank of India. Such rules are as follows:

1. The minimum credit rating of A-2 is obtained at the time of issue of CP.
2. The time-period of maturity prescribed for CP is minimum 15 days and maximum upto one year.
3. The maturity date of CP should not go beyond the date of validity of credit rating of the issuer.
4. The aggregate amount of CP from an issuing company (issuer) shall be within the limit as approved by the Board or quantum indicated by credit rating agency, whichever is lower.
5. Financial institutions can issue CP within the overall limit prescribed by their Board and updated from time to time.
6. CP can be issued in denominations of Rs. 5 lakhs or multiple thereof.
7. The total amount of CP proposed to be issued should be raised within a period of 2 weeks from the date on which the issuer opens the issue for subscription.
8. CP may be issued on a single date or in parts on different dates. If it is issued on different dates, each CP will have the same maturity date.
9. Only a scheduled bank can act as an Issuing and Paying Agent (IPA) for issuance of CP.
10. CP can be issued in the form of promissory note or in dematerialised form.
11. Each issuer must appoint an IPA for issuance of CP.

Commercial papers are negotiable by endorsement and delivery. Hence they are liquid instruments. They can be sold either directly by the issuing company to the investor. Alternatively issuer can sell it to the dealer who in turn will sell it into the market. CP helps the highly rated company since it gets cheaper funds rather than borrowing from the bank.

Advantages :

1. It is a quick and cost effective way of raising working capital.
2. It proves the best way to the company to take advantage of short-term interest fluctuations in the market.
3. It provides the exit option to the investors to quit the investment.
4. CPs are cheaper than a bank loan.
5. As CPs require to be rated, good rating reduces the cost of capital.
6. It is unsecured and thus does not create any liens on the assets of the company.
7. It has wide range of maturity.
8. It is exempt from securities registration requirements.

Disadvantages :

1. CP is available only to a few selected profitable companies.
2. By issue of CP, the credit available from the banks may get reduced
3. Issue of CP is closely regulated by RBI and SEBI guidelines

4. 2. B. 8: Factoring

It is a structured working capital finance solution that includes finance against the client's domestic or export receivables, collection of receivables on due date, credit protection and credit advisory services. It allows the client to convert the accounts receivables to cash thereby releasing the cash generation potential of the business.

4. 2. C. Working Capital Management

Working capital management is a managerial accounting strategy focusing on maintaining efficient levels of both components of working capital, current assets and current liabilities in respect to each other. Working capital management ensures a company has sufficient cash flow in order to meet its short-term debt obligations and operating expenses.

According to Investopedia, implementing an effective working capital management system is an excellent way for many companies to improve their earnings. The two main aspect of working capital management are ratio analysis and management of individual components of working capital.

A few key performance ratios of a working capital management system are the working capital ratio, inventory turnover and the collection ratio. Ratio analysis will lead management to identify areas of focus such as inventory management, cash management, accounts receivable and payable management.

The importance of working capital management is reflected in the fact that financial managers spend a great deal of time in managing current assets and current liabilities. Arranging short-term financing, negotiating favourable credit terms, controlling cash movement, managing accounts receivables and monitoring investments in inventories consume a great deal of time of financial managers.

Working capital, in general practice, refers to the excess of current assets over current liabilities. Management of working capital therefore, is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the inter-relationship that exists between them. In other words it refers to all aspects of administration of both current assets and current liabilities.

The basic goal of working capital management is to manage the current assets and current liabilities of a firm in such a way that a satisfactory level of working capital is maintained, i.e., it is neither inadequate nor excessive. This is so because both inadequate as well as excessive working capital positions are bad for any business. Inadequacy of working capital may lead the firm to insolvency and excessive working capital implies idle funds which earn no profits for the business. Working capital management policies of a firm have a great effect on its profitability, liquidity and structural health of the organization.

Need For Working Capital Management:

1. There is a positive correlation between the sale of the product of the firm and the current assets. An increase in the sale of the product requires a corresponding

increase in current assets. It is therefore indispensable to manage the current assets properly and efficiently.

2. More than half of the total capital of the firm is generally invested in current assets. It means less than half of the capital is blocked in fixed assets. We pay due attention to the management of fixed assets through the capital budgeting process. Management of working capital too, therefore, attracts the attention of the management.

3. In emergency (non-availability of funds etc.) fixed assets can be acquired on lease but there is no alternative for current assets. Investment in current assets, i.e., inventory or receivables can in no way be avoided without sustaining loss.

4. Working capital needs are more often financed through outside sources so it is necessary to utilize them in the best way possible.

5. The management of working capital is more important for small units because they scarcely rely on long term capital market and have an easy access to short term financial sources i.e. trade credit, short term bank loan etc.

6. In the modem system approach to management, the operations of the firm are viewed as a total that is an integrated system. In this sense it is not possible to study one segment of the firm individually or leave it out completely. Hence, an overall look on the management of working capital is necessary.

Process of Working capital management

Working Capital means current assets such as cash, accounts receivable and inventory etc. minus the current liabilities. The management of current assets is as important as or rather more important than the management of fixed assets because, the fate of most of the business very largely depends upon the manner in which their working capital is managed. The study of working capital management is incomplete unless we have an overall look on the management of current liabilities. Determining the appropriate level of current assets, current liabilities and of working capital involves fundamental decisions regarding firm's liquidity and the composition of firm's debts.

There are two fold objectives of the Management of Working Capital

(i) Maintenance of working capital at appropriate level and

(ii) Availability of ample funds as and when they are needed.

In the accomplishment of these two objectives the management has to consider the composition of current assets pool. The working capital position sets the various policies in the business with respect to general operation, purchasing, financing expansion and dividend etc.

In general, working capital management involves decisions regarding the composition and financing the current assets. Now, these decisions were presumed to involve trade-offs between risk and responsibility.

In this context, working capital management is three dimensional in nature:

i) Dimension I, is concerned with the formulation of policies with regard to profitability, risk and liquidity.

ii) Dimension II, is concerned with the decisions about the composition and level of Current assets.

iii) Dimension III is concerned with the decisions about the composition and level of current liabilities.

Now, in short, we could describe the basic steps involved in management of working capital as follows:

(a) Long-run View of Working Capital: The working capital is classified into gross working capital and net working capital. But from the management point of view, gross working capital is of less importance as compared to net working capital. For having a long-run view of working capital, we have to concentrate on the net value of the current assets, i.e. the operation of current assets which is constant in short-run analysis but variable and manageable in the long-run operations.

(b) Measurement of Working Capital: It is important to measure the working capital balances from the financial data of corporate balance sheet.

(c) Ratio Analysis: The ratio analysis of working capital is then utilised by management as a means of checking the efficiency with which the working capital is being used in the enterprise. From the management point of view the most important ratios are turnover working capital ratio, current debt to tangible net worth (current liabilities) etc.

(d) Funds Flow Analysis of Working Capital: Fund flow analysis of working capital is an effective management tool to study how the funds have been procured for the business and how they have been utilized for the business or for the venture undertaken.

(e) Preparation of Working Capital Budget: The preparation of working capital budget from the point of view of efficient management involves careful measurement of future requirements and the formulation of plans for meeting them. Thus, to conclude it can be stated that the preparation of working capital budget constitutes an important part of an overall financial budgeting.

4. 2. C.1: Cash Management

Cash is one of the current assets of a business. It is needed at all times to keep the business going. A business concern should always keep sufficient cash for meeting its obligations. Taking into consideration the importance of cash in business the management of cash become very important. Cash management refers to management of cash balance and the bank balance including the short terms deposits. The following discussion explains the meaning of cash as well as cash management.

Meaning of Cash:

Cash is one of the current assets of a business. It is needed at all times to keep the business going. A business concern should always keep sufficient cash for meeting its obligations. Any shortage of cash will hamper the operation of a concern and any excess of it will be unproductive. Cash is the most unproductive of all the assets. While fixed assets like machinery, plant, etc. and current assets such as inventory will help the business in increasing its earning capacity, cash in hand will not add anything to the concern.

There are two ways of viewing the term 'cash'. In a narrow sense it includes actual cash in the form of notes and coins and bank drafts held by a firm and the deposits withdraw able on demand. And in a broader sense, it includes even marketable securities which can be immediately sold or converted into cash.

Thus, cash is the balancing figures between debtors, stock and creditors. Without adequate cash to meet working capital demands, it is impossible to extend credit, order stock or pay creditors. To understand the meaning of the term cash it is necessary to know the nature of cash, motives for holding cash and also the factors affecting the cash balance. Cash is an asset but it is an idle asset because cash doesn't produce anything by itself. Cash is an unproductive or least productive asset which does not earn any profit for the firm. Shortage of cash harms the operations of a firm and there is a cost of cash shortage also. Minimum level of cash is necessary to carry on business activities. This level is also known as critical level of cash. There are different motives for holding cash. The firm's needs for cash may be attributed to the various motives/needs such as Transactions motive, Precautionary motive, Speculative motive and Compensation motive. Some people are of the view that a business requires cash only for the first two motives while others feel that speculative motive also remains. A firm needs cash for making transactions in the day to day operations. A firm is required to keep cash for meeting various contingencies. The speculative motive relates to holding of cash for investing in profitable opportunities as and when they arise. A minimum cash balance should be maintained by a firm for different security deposits and this is known as the compensation motive for holding cash. The various factors affecting the cash balance are like Credit Position of the Firm, Status of Firm's Receivable, Status of Firm's Inventory Account, Nature of Business Enterprise, Managements Attitude towards Risk, Amount of Sales in Relation to Assets,Cash Inflows and Cash Outflows, Cost of Cash Balance etc.

Meaning of Cash Management:

Cash management refers to management of cash balance and the bank balance including the short terms deposits. For cash management purposes, the term cash is used in this broader sense, i.e., it covers cash, cash equivalents and those assets which are immediately convertible into cash. A financial manager is required to manage the cash flows (both inflows and outflows) arising out of the operations of the firm. Cash management, deals with optimization of cash as an asset and for this purpose the financial manager has to take various decisions from time to time. He has to deal as the cash flows director of the firm. Even if a firm is highly profitable, its cash inflows may not exactly match the cash outflows. He has to manipulate and synchronize the two for the advantage of the firm by investing excess cash if any as well as arranging funds to cover the deficiency.

Objectives of Cash Management:

The basic objectives of cash management are two-fold:

1) Meeting the Payment Schedule: In the normal course of business firms have to make payments of cash on a continuous and regular basis to suppliers of goods, employees and so on. At the same time, there is a constant inflow of cash through collections from debtors. A basic objective of cash management is to meet the payment schedule, i.e., to have sufficient cash to meet the cash disbursement needs of a firm. The importance of sufficient cash to meet the payment schedule can hardly be over-emphasized. The advantages of adequate cash are:

i) It prevents insolvency or bankruptcy arising out of the inability of a firm to meet its obligations

ii) The relationship with the bank is not strained;

iii) It helps in fostering good relations with trade creditors and suppliers of raw materials, as prompt payment may help their own cash management;

iv) A trade discount can be availed of if payment is made within the due date;

v) It leads to a strong credit rating which enables the firm to purchase goods on favorable terms and to maintain its line of credit with banks and other resources of credit;

vi) To take advantage of favorable business opportunities that may be available periodically;

vii) Finally, the firm can meet unanticipated cash expenditure with a minimum of strain during emergencies, such as strikes, fires or a new marketing campaign by competitors. Keeping large cash balances, however, implies a high cost; the advantages of prompt payment of cash can well be realized by sufficient and not excessive cash.

2) Minimizing Funds Committed to Cash Balances: The second objective of cash management is to minimize cash balances. In minimizing the cash balances two conflicting aspects have to be reconciled. A high level of cash balances will, as shown above, ensure prompt payment together with all the advantages. But it also implies that large funds will remain idle, as cash is a non-earning asset and the firm will have to forego profits. A low level of cash balances, on the other hand, may mean failure to meet the payment schedule. The aim of cash management should be to have an optimal amount of cash balances.

Basic Strategies for Cash Management:

The broad cash management strategies are essentially related to the cash turnover process, that is, the cash cycle together with the cash turnover. The cash cycle refers to the process by which cash is used to purchase materials from which goods are produced, which are then sold to customers, who later pay the bills. The firm receives cash from customers and the cycle repeats itself. The cash turnover means the number of times cash is used during each year. The cash cycle involves several steps along the way as funds flow from the firm's accounts, as shown in table below:

Details of Cash Cycle

A = Materials ordered	D = Cheque clearance	G = Payment received
B = Materials received	E = Goods sold	H = Cheques deposited
C = Payments	F = Customer mails payments	I = Funds collected

In addressing the issue of cash management strategies, we are concerned with the time periods involved in stages B, C, D, and F, G, H, I. A firm has no control over the time involved between stages A and B. The lag between D and E is determined by the production process and inventory policy. The time period between stages E and F is determined by credit terms and the payments policy of customers.

The higher the cash turnover, the less is the cash a firm requires. A firm should, therefore, try to maximize the cash turnover. But it must maintain a minimum amount of operating cash balance so that it does not run out of cash. The minimum level of operating cash is determined by dividing the total operating annual outlays by the cash turnover rate.

Cash Management Strategies are intended to minimize the operating cash balance requirement. The basic strategies that can be employed to do the needful are as follows:

1) Stretching Accounts Payable:

One basic strategy of efficient cash management is to stretch the accounts payable. In other words, a firm should pay its accounts payable as late as possible without damaging its credit standing. It should, however, take advantage of the cash discount available on prompt payment

2) Efficient Inventory-Production Management:

Another strategy is to increase the inventory turnover, avoiding stock-outs, that is, and shortage of stock. This can be done in the following ways:

i) Increasing the raw materials turnover by using more efficient inventory control techniques.

ii) Decreasing the production cycle through better production planning, scheduling and control techniques; it will lead to an increase in the work-in-progress inventory turnover.

iii) Increasing the finished goods turnover through better forecasting of demand and a better planning of production.

Thus, efficient inventory and production management causes a decline in the operating cash requirement and, hence, a saving in cash operating cost.

3) Speeding Collection of Accounts Receivable:

Yet another strategy for efficient cash management is to collect accounts receivable as quickly as possible without losing future sales because of high-pressure collection techniques. The average collection period of receivables can be reduced by changes in: i) Credit terms, ii) Credit standards, and iii) Collection policies. In brief, credit standards represent the criteria for determining to whom credit should be extended. The collection policies determine the effort put forth to collect accounts receivable promptly.

4) Combined Cash Management Strategies:

We have shown the effect of individual strategies on the efficiency of cash management. Each one of them has a favorable effect on the operating cash requirement. We now illustrate their combined effect, as firms will be well advised to use a combination of these strategies.

Cash Management Techniques/Processes:

There are some specific techniques and processes for speedy collection of receivables from customers and slowing disbursements.

1) Cash Management Planning:

Cash planning is a technique to plan and control the use of cash. It protects the financial condition of the firm by developing a projected cash statement from a forecast of expected cash inflows and outflows for a given period. The forecast may be based on the present operations or the anticipated future operations. Cash plans are very crucial in developing the overall operating plans of the firm.

Cash planning may be done on daily, weekly or monthly basis. The period and frequency of cash planning generally depends upon the size of the firms and philosophy of the management. Large firms prepare daily and weekly forecasts. Medium-size firms usually prepare weekly and monthly forecasts. Small firms may not prepare formal cash forecasts because of the non-availability of information and small-scale operations. But, if the small firms prepare cash projections, it is done on monthly basis. As a firm grows and business operations become complex, cash planning becomes inevitable for its continuing success. In order to take care of all these considerations, the firm should prepare a cash budget.

2) Cash Management Control:

The efficiency of the firm's cash management program can be enhanced by the knowledge and use of various procedures aimed at: Accelerating cash inflows, and controlling cash outflows.

i) Accelerating Cash Inflows:

Efficient cash management is possible only when the collections of cash are accelerated. The delay between the time customers pay their dues and the time the cash is collected in the sense of becoming useable by the firm should be attempted to be reduced to the extent possible. Collection process may be speeded up in any of the following manners:

a) The mailing time of payment from customers to the firm may be reduced.

b) The time during which payments received by the firm remain uncollected may be minimized. It includes the time a company takes in processing the cheques internally and the time consumed in the clearance of the cheques through the banking system.

There are different methods/techniques considered to be useful to accelerate the collections such as Prompt Payment by Customers, Early Conversion of Payments into Cash, Concentration Banking, and Lock Box System etc.

ii) Controlling Cash Outflows:

Just as the golden rule for controlling cash inflows is accelerate the collections'; similarly, the golden rule for controlling cash outflows is 'slow down the disbursements'. Decentralized collection system is the best way to acceierate collections and centralized payment system is the best way to slow down the disbursements. Delaying the accounts payable the extent possible can help the firm only if the firm's credit standing does not suffer. If an effective control over disbursements is exercised, without losing goodwill, cash availability is certainly enhanced.

The methods/techniques which can be fruitfully employed to slow down the disbursements as far as possible are Payments through Drafts, Adjusting Payroll Funds, Inter-bank Transfer, Paying the Float, Avoidance of Early Payments, Centralized Disbursements etc.

3) Determining the Optimum Cash Balance:

One of the primary responsibilities of the financial manager is to maintain a sound liquidity position of the firm so that the dues are settled in time. The firm needs cash to purchase raw materials and pay wages and other expenses as well as for paying dividend, interest and taxes. The test of liquidity is the availability of cash to meet the firm's obligations when they become due.

Liquid balance (balance of cash and marketable securities) must be maintained at the optimum level. It is the level which gives the minimum cost of holding the liquid balance. Determination of such a level is very important for an efficient cash management. If the liquid balance exceeds the required balance, it remains idle and, therefore, it involves opportunity costs in the sense that the amount could have been put to more effective use. None the less, liquidity position of the enterprise becomes more sounds. On the other hand, if liquid balance is short of the requirements, the firm may have to incur shortage costs. The firm may be required to sell its fixed investments or it may have to resort to fresh borrowings. It may have to forego cash discounts and pay higher rates of interest on borrowings. There is a danger of losing goodwill and there is a risk of insolvency even. Thus, with increasing liquid balances, 'opportunity' or 'holding' costs increase, but the 'shortage' costs go down, and vice versa. The combination of opportunity costs and shortage costs gives the total cost of maintaining liquid balances at various levels. The point which gives the minimum total cost is the point of optimum liquidity balance—representing a trade-off of shortage costs against opportunity costs.

4) Investing Surplus Cash:

Cash not required for temporary periods of short durations can be invested in near-cash assets, i.e., marketable securities which are readily convertible into cash. Even though the cash is temporarily ideal, it should not be kept so because if the firm has an opportunity to earn interest through investing it in marketable securities, why should it not avail of the same. The selection of the securities should, however, be made very cautiously. The criterion for selecting securities may be as Marketability, Maturity, Risk of Default, Liquidity, and Yield etc.

How much amount should be invested in marketable securities and when should a security transaction take place is a crucial problem before the financial manager. If the amount and the timing of transactions can be determined, the firm can minimize the costs of maintaining liquid balance.

Cash Management Models:

Two important cash management models which lead to determination of optimum balance of cash are -

1) Optimum Cash Balance under Certainty: Baumol's Model

2) Optimum Cash Balance under Uncertainty: The Miller-Orr Model

These models are explained in short as follows:

1) Optimum Cash Balance under Certainty: Baumol's Model:

The Baumol cash management model provides a formal approach for determining a firm's optimum cash balance under certainty. It considers cash management similar to an inventory management problem. As such, the firm attempts to minimize the sum of the cost of holding cash (inventory of cash) and the cost of converting marketable securities to cash.

The Baumol's model makes the following assumptions:

a) The firm is able to forecast its cash needs with certainty.

b) The firm's cash payments occur uniformly over a period of time.

c) The opportunity cost of holding cash is known and it does not change over time.

d) The firm will incur the same transaction cost whenever it converts securities to cash.

Let us assume that the firm sells securities and starts with a cash balance of C rupees. As the firm spends cash, its cash balance decreases steadily and reaches to zero. The firm replenishes its cash balance to C rupees by selling marketable securities. This pattern continues over time. Since the cash balance decreases steadily, the average cash balance will be: C/2.

The firm incurs a holding cost for keeping the cash balance. It is an opportunity cost; that is, the return foregone on the marketable securities. If the opportunity cost is k, then the firm's holding cost for maintaining an average cash balance is as follow:

Holding cost = k (C/2)

The firm incurs a transaction cost whenever it converts its marketable securities to cash. Total number of transactions during the year will be total funds requirement, T, divided by the cash balance, C, i.e. T/C. The cost per transaction is assumed to be constant. If per transaction cost is c, then the total transaction cost will be:

Transaction cost = c (T/C)

The total annual cost of the demand for cash will be:

Total cost = k(C/2) + c(T/C)

The holding cost increases as demand for cash, C, increases. However, the transaction cost reduces because with increasing C the number of transaction will decline. Thus, there is a trade-off between the holding cost and the transaction cost.

The optimum cash balance, C*, is obtained when the total cost is minimum. The formula for the optimum cash balance is as follow:

$$C^* = \sqrt{\frac{2cT}{k}}$$

Where C* is the optimum cash balance, c is the cost per transaction, T is the total cash needed during the year and k is the opportunity cost of holding cash balance. The optimum cash balance will increase with increase in per transaction cost and total funds required and decrease with the opportunity cost.

Limitations of the Baumol Model

1) Assumes a constant disbursement rate.

2) Ignores cash receipts during the period.

3) Does not allow for safety cash reserves.

Inspite of the limitations, the model has a theoretical value. It gives an idea as to how the holding cost and transaction cost should be optimized by the firm. The cash balance being maintained by the firm should be a level close to optimum level as given by the model so that the total cost is minimized.

2) Optimum Cash Balance under Uncertainty: The Miller-Orr Model

The Miller-Orr (MO) model is also known as stochastic model. This model overcomes the shortcoming of Baumol's model and allows for daily cash flow variation. It assumes that net cash flows are normally distributed with a zero value of mean and a standard deviation. The MO model provided for two control limits-the upper control limit and the lower control limit as well as a return point. If the firm's cash flows fluctuate randomly and hit the upper limit, then it buys sufficient marketable securities to come back to a normal level of cash balance i. e. the return point. Similarly, when the firm's cash flows wander and hit the lower limit, it sells sufficient marketable securities to bring the cash balance back to the normal level i. e. the return point.

The firm sets the lower control limit as per its requirement or maintaining minimum cash balance. It is necessary to decide the distance between the upper control limit and lower control limit. The difference between the upper limit and the lower limit depends on the following factors:

i) The transaction cost (c)

ii) The interest rate (i)

iii) The standard deviation (σ) of net cash flows.

The formula for determining the distance between upper and lower control limits (called Z) is as follows:

(Upper Limit — Lower Limit) = (3/4x Transaction Cost x Cash Flow Variance/Interest Rate) 1/3

$Z = (3/4 \text{ x } c\sigma^2 / \text{i})^{1/3}$

4. 2. C.2: Liquidity Management

Liquidity refers to the ability of a concern to meet its current obligations as and when these become due. The short-term obligations are met by realizing amounts from current, floating or circulating assets. The current assets should either be liquid or near liquidity. These should be convertible into cash for paying obligations of short-term nature. The sufficiency or insufficiency of current assets should be assessed by comparing them with short-term/current liabilities. If current assets can pay off current liabilities, then liquidity position will be satisfactory. On the other hand, if current liabilities may not be easily met out of current assets then liquidity position will be bad. The bankers, suppliers of goods and other short-term creditors are interested in the liquidity of the concern. They will extend credit only if they are sure that current assets are enough to pay out the obligations.

Liquidity Management is the management who looks after to maintain the sound liquidity position of the firm. To maintain the proper liquidity in the firm, management has to measure it. To measure the liquidity of a firm Current Ratio, Liquid Ratio and Absolute Liquid Ratio are used. One of the primary responsibilities of the financial manager is to maintain a sound liquidity position of the firm so that the dues are settled in time. The firm needs cash to purchase raw materials and pay wages and other expenses as well as for paying dividend, interest and taxes. The test of liquidity is the availability of cash to meet the firm's obligations when they become due.

Liquid balance (balance of cash and marketable securities) must be maintained at the optimum level. It is the level which gives the minimum cost of holding the liquid balance. Determination of such a level is very important for an efficient cash management. If the liquid balance exceeds the required balance, it remains idle and, therefore, it involves opportunity costs in the sense that the amount could have been put to more effective use. None the less, liquidity position of the enterprise becomes more sounds. On the other hand, if liquid balance is short of the requirements, the firm may have to incur shortage costs. The firm may be required to sell its fixed investments or it may have to resort to fresh borrowings. It may have to forego cash discounts and pay higher rates of interest on borrowings. There is a danger of losing goodwill and there is a risk of insolvency even. Thus, with increasing liquid balances, 'opportunity' or 'holding' costs increase, but the 'shortage' costs go down, and vice versa. The combination of opportunity costs and shortage costs gives the total cost of maintaining liquid balances at various levels. The point which gives the minimum total cost is the point of optimum liquidity balance—representing a trade-off of shortage costs against opportunity costs.

Liquidity is a vital factor in business operations. Liquidity should be optimum, that neither excess nor less. Excess liquidity means idle funds while inadequate liquidity results in interruptions in business. A proper balance has to be maintained through efficient liquidity management.

Need and Importance of Liquidity Management:

The need and importance of liquidity management can be explained as follows:

1. Liquidity gives indication that firm has capacity to meet short-term obligations.
2. It throws light on the efficiency of the collection department.
3. Inter-firm comparison can be made on the basis of liquidity.
4. Timely and early payments to suppliers become possible.
5. A firm can enjoy the benefit of cash discount due to liquidity.
6. Dividend payment to the shareholders can be regular.
7. Such company is treated more creditworthy and can get loans easily.
8. A company with liquidity can take advantage of favourable market conditions.
9. A company can meet contingencies or unexpected expenses.

Techniques of Liquidity Management:

The techniques of liquidity management involve the techniques used for proper cash control, which includes techniques regarding accelerating the cash inflow and slowing down the cash outflow. These techniques/methods are explained as follows:

i) Methods/Techniques for Accelerating Cash Inflows:

Efficient cash management is possible only when the collections of cash are accelerated. The delay between the time customers pay their dues and the time the cash is collected in the sense of becoming useable by the firm should be attempted to be reduced to the extent possible. Collection process may be speeded up in any of the following manners:

a) The mailing time of payment from customers to the firm may be reduced.

b) The time during which payments received by the firm remain uncollected may be minimized. It includes the time a company takes in processing the cheques internally and the time consumed in the clearance of the cheques through the banking system.

Following methods/techniques are considered to be useful to accelerate the collections:

a) Prompt Payment by Customers: One way to ensure prompt payment by customers is prompt billing. What the customer has to pay and the period of payment should be notified accurately and in advance. The use of mechanical devices for billing along with the enclosure of a self-addressed return envelope will speed up payment by customers. Another, and more important, technique to encourage prompt payment by customers is the practice of offering cash discounts. The availability of discount implies considerable saving to the customers. To avail of the facility, the customers would be eager to make payment early.

b) Early Conversion of Payments into Cash: Once the customer makes the payment by writing a cheque in favor of the firm, the collection can be expedited by prompt encashment of the cheque. There is a lag between the time a cheque is prepared and mailed by the customer and the time the funds are included in the cash reservoir of the firm.

Within this time interval three steps are involved:

- Transit or mailing time, that is, the time taken by the post offices to transfer the cheque from the customers to the firm. This delay or lag is referred to as postal float;

- Time taken in processing the cheques within the firm before they are deposited in the banks, termed as lethargy; and
- Collection time within the bank, that is, the time taken by the bank in collecting the payment from the customer's bank. This is called bank float.

The early conversion of payment into cash, as a technique to speed up collection of accounts receivable, is done to reduce the time lag between posting of the cheque by the customer and the realization of money by the firm.

c) Concentration Banking: To speed up collections, these should be decentralized as far as possible. If, instead of one collection center, there are a number of collection centers for the purpose, collections would certainly be speeded up. This procedure is named as concentration banking. Through this procedure, the mailing time of the customers is reduced. Customers of a particular region may be directed to deposit/remit their payments to a collection center established at the central place of that region. The collection center will deposit the payments received in the local bank account. Surplus (over the minimum balance to be kept) is transferred to a concentration bank regularly (may be daily), which is generally at the firm's head office. This concentration bank or central bank can get the payments by telegraphic transfer or telex, as per the instructions given by the firm. The collection centres may themselves collect the cheques or the cash payment from the customers, instead of customers remitting the payments to the collection center. It further accelerates the process of collection because of the reduction in the mailing time. The advantage of system of decentralized collection is two-fold:

- The mailing time is reduced, because the bills are prepared by the local collection centres and sent by them to the customers. Further, if the collection centres collect the payments by themselves, the time requires for mailing is reduced on this account also.
- Collection time is reduced, since the payments collected are deposited in the local bank accounts. The funds become useable by the firm immediately on hearing from the collection center about the amount being deposited in the local bank account.

d) Lock Box System: The system is a further improvement over the concentration banking system in the matter of accelerating the cash inflows. Under this system, the time required in collecting the payments, processing them and finally depositing them in the local bank accounts is further reduced. Before determining the collection centers, a feasibility study is made of the possibility of cheques that would be deposited under alternative plans. In this regard operations research techniques nave proved useful in the location of lock box sites. A post office box is hired by the firm at each collection center and the customers are instructed to mail through remittances to the box. The remittances are picked up by the local bank directly from the post office box (i.e., lock box) as per the instructions given by the firm. The bank can pick up the mail several times a day and deposit the cheques in the account of the firm. A record is kept by the bank regarding the cheques deposited and is sent to the firm as and when required.

The advantages of such a system are as under:

- The cheques are deposited sooner than if they were processed by the firm prior to deposit-thus the time lag between the receipt of cheques by the firm and the actual deposit thereof at the bank is eliminated.
- The firm is freed from the responsibility of handling and depositing the cheques. The main disadvantages of such a system is the cost involved of making such arrangements—hiring post office box and loading the bank with additional burden of work entail costs and sometimes it may be uneconomical for the firm to adopt such a system.

ii) Controlling Cash Outflows:

Just as the golden rule for controlling cash inflows is accelerate the collections'; similarly, the golden rule for controlling cash outflows is 'slow down the disbursements'. Decentralized collection system is the best way to acceierate collections and centralized payment system is the best way to slow down the disbursements. Delaying the accounts payable the extent possible can help the firm only if the firm's credit standing does not suffer. If an effective control over disbursements is exercised, without losing goodwill, cash availability is certainly enhanced.

Methods/Techniques of Slowing Disbursement:

The following methods/techniques can be fruitfully employed to slow down the disbursements as far as possible.

a) Payments through Drafts:

A company can delay payments by issuing drafts to the suppliers instead of giving cheques. When a cheque is issued then the company will have to keep a balance in its account so that the cheque is paid whenever it comes. On the other hand a draft is payable only on presentation to the issuer. The receiver will give the draft to its bank for presenting it to the buyer's bank. It takes a number of days before it is actually paid.

b) Adjusting Payroll Funds:

Some economy can be exercised on payroll funds also. it can be done by reducing the frequency of payments. It the payments are made weekly then this period can be extended to a month. Secondly, finance manager can plan the issuing of salary cheque and their disbursements.

c) Inter-bank Transfer:

An efficient use of cash is also possible by inter-bank transfers. If the company has accounts with more than one bank then amounts can be transferred to the bank where disbursements are to be made. It will help in avoiding excess amount in one bank.

d) Paying the Float:

'Float' is the lag between the time the cheque is written and the time the firm's bank receives it. A firm may have less balance in its bank account but the firm may issue a cheque to its supplier because the supplier would present the cheque to his bank for payment only when he receives it after a few days. Moreover, after presentation to the bank, the bank would send the cheque for collection, which would also consume some time. The time by which firm's bank receives the cheque for payment can be used by the firm for utilizing funds for business purposes and exactly on the time when the payment has to be made by the bank, the amount may be deposited in the bank by the firm. In case the period of time gap can be accurately estimated by the financial manager, the firm can certainly earn during the float period. However, the game is a risky one and should be played with caution.

e) Avoidance of Early Payments:

One way to delay payments is to avoid early payments. According to the terms of credit, a firm is required to make a payment within a stipulated period. It entitles a firm to cash discounts. If, however, payments are delayed beyond the due date, the credit standing may be adversely affected so that the firms would find it difficult to secure trade credit later. But if the firm pays its accounts payable before the due date it has no special advantage. Thus, a firm would be well advised not to make payments early that is, before the due date.

f) Centralized Disbursements:

Another method to slow down disbursements is to have centralized disbursements. All the payments should be made by the head office from a centralized disbursement account. Such an arrangement would enable a firm to delay payments and conserve cash for several reasons. Firstly, it involves increase in the transit time. The remittance from the head office to the customers in distant places would involve more mailing time than a decentralized payment by the local branch. The second reason for reduction in operating cash requirement is that since the firm has a centralized bank account, a relatively smaller total cash balance will be needed. In the case of a decentralized arrangement, a minimum cash balance will have to be maintained at each branch which will add to a large operating cash balance. Finally, schedules can be tightly controlled and disbursements made exactly on the right day.

4. 2. C.3: Receivables Management

Meaning and Definition of Credit/Receivables:

Credit/Receivables represent amounts owed to the firm as a result of sale of goods or services in the ordinary course of business. These are claims of the firm against its customers and form part of its current assets. Receivables are also known as accounts receivables, trade receivables, customer receivables or book debts. The receivables are carried for the customers. The period of credit and extent of receivables depends upon the credit policy followed by the firm. The purpose of maintaining or investing in receivables is to meet competition, and to increase the sales and profits.

According to Hampton, "Receivables are asset accounts representing amount owned to firm as a result of sale of goods or services in ordinary course of business".

Receivables are the extension of credit facilities to customers. Their basic aim is to provide facility to customers to allow them a reasonable time in which they can pay for goods purchased by them.

The investments in receivables involve both benefits and costs. The total cost of receivables consists of cost of financing, which is a factor of time, plus cost of administration plus cost of delinquency plus cost of default. However, the receivables does not result in increasing the cost only, rather they bring some benefits also to the firm. The benefits of credit/receivables are increase in sales, increase in profit and even to make extra profit. The extension of trade credit has a major impact on sales, costs and profitability. Other things being equal, a relatively liberal policy and, therefore, higher investments in receivables, will produce larger sales. However, costs will be higher with liberal policies than with more stringent measures. Therefore, accounts receivable management should aim at a trade-off between profit (benefit) and risk (cost). That is to say, the decision to commit funds to receivables (or the decision to grant credit) will be based on a comparison of the benefits and costs involved, while determining the optimum level of receivables. The costs and benefits to be compared are marginal costs and benefits. The firm should only consider the incremental (additional) benefits and costs that result from a change in the receivables or trade credit policy.

Factors Influencing the Size of Receivables:

Besides sales, a number of other factors also influence the size of receivables. The following factors directly and indirectly affect the size of receivables:

1) **Size of Credit Sales:** The volume of credit sales is the first factor which increases or decreases the size of receivables. If a concern sells only on cash basis, as in the case of Bata Shoe Company, then there will be no receivables. The higher the part of credit sales out of total sales, figures of receivables will also be more or vice versa.

2) **Credit Policies:** A firm with conservative credit policy will have a low size of receivables while a firm with liberal credit policy will be increasing this figure. The vigor with which the concern collects the receivables also affects its receivables. If collections are prompt then even if credit is liberally extended the size of receivables will remain under control. In case receivables remain outstanding for a longer period, there is always a possibility of bad debts.

3) **Terms of Trade:** The size of receivables also depends upon the terms of trade. The period of credit allowed and rates of discount given are linked with receivables. If credit period allowed is more than receivables will also be more. Sometimes trade policies of competitors have to be followed otherwise it becomes difficult to expand the sales. The trade terms once followed cannot be changed without adversely affecting sales opportunities.

4) **Expansion Plans:** When a concern wants to expand its activities, it will have to enter new markets. To attract customers, it will give incentives in the form of credit facilities. The periods of credit can be reduced when the firm is able to get permanent customers. In the early stages of expansion more credit becomes essential and size of receivables will be more.

5) **Relation with Profits:** The credit policy is followed with a view to increase sales. When sales increase beyond a certain level the additional costs incurred are less than the increase in revenues. It will be beneficial to increase sales beyond a point because it will bring more profits. The increase in profits will be followed by an increase in the size of receivables or vice-versa.

6) **Credit Collection Efforts:** The collection of credit should be streamlined. The customers should be sent periodical reminders if they fail to pay in time. On the other hand, if adequate attention is not paid towards credit collection then the concern can land itself in a serious financial problem. Efficient credit collection machinery will reduce the size of receivables. If these efforts are slower then outstanding amounts will be more.

7) **Habits of Customers:** The paying habits of customers also have a bearing on the size of receivables. The customers may be in the habit of delaying payments even though they are financially sound. The concern should remain in touch with such customers and should make them realize the urgency of their needs.

8) **Stability of Sales:** In the business of seasonal character, total sales and the credit sales will go up in the season and therefore volume of receivables will also be large. On the other hand, if a firm supplies goods on installment basis, its balance in receivables will be high.

9) **Size and Policy of Cash Discount:** It is also an important variable in deciding the level of investment in receivables. Cash discount affects the cost of

capital and the investment in receivables. If cost of capital of the firm is lower in comparison to the cash discount to be allowed, investment in receivables will be less. If both are equal, it will not affect the investment at all. If cost of capital is higher than cash discount, the investment in receivables will be larger.

10) **Bill Discounting and Endorsement:** If firm has any arrangement with the banks to get the bills discounted or if they re-endorsed to third parties, the level of investment in assets will be automatically low. If bills are honored on due dates, the investment will be larger.

A concern should be clear about its credit policies. How much will be the size of receivables on the basis of present policies? This is an important estimation which will help the concern in planning its working capital. Though it is not possible to forecast exact receivables in the future but some estimation is possible on the basis of past experience, present credit policies and policies pursued by other concerns. The factors help in forecasting receivables are Credit Period Allowed, Effect of Cost of Goods Sold, Forecasting Expenses, Forecasting Average Collection Period and Discounts, and Average Size of Receivables etc.

Meaning of Credit/Receivables Management:

Credit/Receivables management is the process of making decisions relating to investment in trade debtors. Certain investment in receivables is necessary to increase the sales and the profits of a firm. But at the same time investment in this asset involves cost considerations also. Further, there is always a risk of bad debts too. The term Receivables management may be defined as collection of steps and procedure required to properly weigh the costs and benefits attached with the credit policies. The Receivables management consists of matching the cost of increasing sales (particularly credit sales) with the benefits arising out of increased sales with the objective of maximizing the return on investment of the firm.

Objectives of Credit/Receivables Management:

The objectives of credit/receivables management are to improve sales, eliminate bad debts, and reduce transaction costs incidental to maintenance of accounts and collection of sale proceeds and, finally, enhance profits of the firm. Credit sales help the organization to make extra profit. It is a known fact; firms charge a higher price, when sold on credit, compared to normal price.

1) **Book Debts are used as a Marketing Tool for Improvement of Business:** If the firm wants to expand business, it has to, necessarily, sell on credit. After a certain level, additional sales do not create additional production costs, due to the presence of fixed costs. So, the additional contribution, totally, goes towards profit, improving the profitability of the firm.

2) **Optimum Level of Investment in Receivables:** To support sales, it is necessary for the firm to make investment in receivables. Investment in receivables involves costs as funds are tied up in debtors. Further, there is also risk in respect of bad debts too. On the other hand, receivables bring returns. If so, till what level investment is to be made in receivables? Investment in receivables is to be made till the incremental costs are less than the incremental return.

Thus, the objective of receivables management is to make a sound Investment in debtors. In the words of Bolton, S.E., The objective of receivables management is 'to promote sales and profits until that point is reached where the return on investment in further funding receivables is less than the cost of funds raised to finance that additional credit (i.e. cost of capital)'.

Dimensions of Credit/Receivables Management:

Credit/Receivables management involves the careful consideration of the following aspects:

1) Credit Policy.

2) Credit Evaluation

3) Monitoring Receivables

These points are explained below:

1. Credit Policy:

The credit policy of a company can be regarded as a kind of trade-off between increased credit sales leading to increase in profit and the cost of having larger amount of cash locked up in the form of receivables and the loss due to the incidence of bad debts. In competitive market, the credit policy adopted by a company is considerably influenced by the practices followed by the industry. A change in the credit policy of a company, say, by extending credit policy of a company, to 30 days, when the other companies are following a credit period of 15 days can result in such a high demand for the company's product that it cannot cope with. Further, other companies also may have to fall in line in the long run. It is assumed generally that such factors have already been taken into consideration before making changes in the credit policy of a company.

The credit policy of a firm provides the framework to determine:

i) Whether or not to extend credit to a customer and

ii) How much credit to extend.

The credit policy decision of firm has following dimensions:

A) Credit Standards

B) Credit Term

C) Collection Efforts.

A. Credit Standards:

The term credit standards represent the basic criteria for the extension of credit to customers. The quantitative basis of establishing credit standards are factors such as credit ratings, credit references, average payments period and certain financial ratios. The overall standards are divided into two categories as - 1) Tight or restrictive, and 2) Liberal or non-restrictive.

The optimum level of investment in receivables should be where there is a trade-off between the costs and profitability. The increased investment in receivables also adversely affects the liquidity of a firm. On the other hand, a tight credit policy increases the liquidity of a firm. Thus, optimum level or investment in receivables is achieved at a point where there is a trade-off between cost, profitability and liquidity. The trade-off with reference to credit standards covers Collection Costs, Investments in Receivables or the Average Collection Period,Bad Debt Expenses,and Sales Volume etc.

The basic changes and effects on profits arising from a relaxation of credit standards are summarized in the following table. If the credit standards are tightened, the opposite effects, as shown in the brackets, would follow:

Effect of Relaxation of Standards

Item	Direction of Change (I =Increase, D = Decrease)	Effect on Profits (Positive +, Negative -)
Sales Volume	I (D)	+ (-)
Average Collection Period	I (D)	- (+)
Bad Debts	I (D)	- (+)

B. Credit Terms

The second decision area in credit policies of firm is the credit terms. After the credit standards have been established and the credit-worthiness of the customers has been assessed, the management of a firm must determine the terms and conditions on which trade credit will be made available. The stipulations under which goods are sold on credit are referred to as credit terms. These relate to the repayment of the amount under the credit sale. Thus, credit terms specify the repayment terms of receivables.

Credit term has three Components:

1) **Cash Discount Period:** The collection of receivables is influenced by the period allowed for availing the discount. The additional period allowed for this facility may prompt some more customers to avail discount and make payments. This will mean additional funds released from receivables which may be alternatively used. At the same time the extending of discount period will result in late collection of funds because those who were getting discount and making payments as per earlier schedule will also delay their payments.

2) **Cash Discount:** Cash discount is allowed to expedite the collection of receivables. The funds tied up in receivables are released. The concern will be able to use the additional funds received from expedited collections due to cash discount. The discount allowed involves cost. The financial manager should compare the earnings resulting from released funds and tht cost of discount. The discount should be allowed only if its cost is less than the earnings from additional funds. If the funds

cannot be profitably employed then discount should not be allowed. The implications of increasing or initiating cash discount are as follows:

i) The sales volume will increase. The grant of discount implies reduced prices. If the demand for the products is elastic, reduction in prices will result in higher sales volume.

ii) Since the customers, to take advantage of the discount, would like to pay within the discount period, the average collection period would be reduced. The reduction in the collection period would lead to a reduction in the investment in receivables as also the cost. The decrease in the average collection period would also cause a fall in bad debt expenses. As a result, profits would increase.

iii) The discount would have a negative effect on the profits. This is because the decrease in prices would affect the profit margin per unit of sale.

The effects of increase in the cash discount are summarized in Table below. The effect of decrease in cash discount will be exactly opposite.

Effect of Increase in Cash Discount

Item	Direction of Change (I =Increase, D = Decrease)	Effect on Profits (Positive +, Negative -)
Sales Volume	I	+
Average Collection Period	D	+
Bad Debts	D	+
Profit Per Unit	D	-

3) Credit Period: The credit period is an important aspect of the credit policy. It refers to the length of time over which the customers are allowed to delay the payment. There is no hard and fast rule regarding the credit period and it may differ from one market to another. The credit period generally varies from 3 days to 60 days. In some cases, the credit period may be zero and only cash sale are made. Customary practices are important factor in deciding the credit period. The firm however, must be aware of the cost of granting credit to the customers for different periods.

Lengthening the credit period increases the sales by attracting more and more customers, whereas the squeezing the credit period has the distracting effect. The effect of changing the credit period is similar to that of changing the credit standard and hence requires careful analysis. The firm must consider the cost involved in increasing the credit period which will result in increase in the investment in receivables.

The expected effect of an increase in the credit period is summarized as follows:

Effect of Increase in Credit Period

Item	Direction of Change (I =Increase, D = Decrease)	Effect on Profits (Positive +, Negative -)
Sales Volume	I	+
Average Collection Period	I	-
Bad Debts	I	-

A decrease in credit period will have an opposite effect.

C. Collection Effort

The third area involved in the credit policy is collection policies. They refer to the procedures followed to collect accounts receivable when, after the expiry of the credit period, they become due. These policies cover two aspects:

1. Degree of Effort to Collect the Overdue:

To show the effects of the collection effort, the credit policies of a firm may be categorized into strict and lenient.

A strict policy of collection will involve more efforts on collection. Such a policy has both plus and negative effects. This policy will enable early collection of dues and will reduce bad debt losses. The money collected will be used for other purposes and the profits of the concern will go up. On the other hand a rigorous collection policy will involve increased collection costs. It may also reduce the volume of sales.

A lenient policy may increase the debt collection period and more bad debt losses. A customer not clearing the dues for long may not repeat his order because he will have to pay earlier dues first, thus causing loss of customers. The collection policy should weigh various aspects associated with it, the gains and losses of such policy and its effect on the finances of the concern.

Basic Trade-off from Tight Collection Effort

Item	Direction of Change (I =Increase, D = Decrease)	Effect on Profits (Positive +, Negative -)
Sales Volume	D	-
Average Collection Period	D	+
Bad Debts	D	+
Collection Expenditure	I	-

The effect of the lenient policy will be just the opposite.

2. Types of Collection Effort:

The second aspect of collection policies relates to the steps that should be taken to collect overdue from the customers. A well-established collection policy should have clear-cut guidelines as to the sequence of collection efforts. After the credit period is over and payment remains due, the firm should initiate measures to collect them. The effort should in the beginning be polite, but, with the passage of time, it should gradually become strict. The steps usually taken are: 1) Letters, including reminders, to expedite payment; 2) Telephone calls for personal contact; 3) Personal visits; 4) Help of collection agencies; and finally, 5) Legal action.

The firm should take recourse to very stringent measures, like legal action, only after all other avenues have been fully exhausted. They not only involve a cost but also affect the relationship with the customers. The aim should be to collect as early as possible; genuine difficulties of the customers should be given due consideration.

2. Credit Evaluation

Besides establishing credit standards, a firm should develop procedure for evaluating credit applicants. The second aspect of receivables management of a firm is credit analysis and investigation. Two basic steps are involved in the credit investigation process:

1) **Obtaining Credit Information:** The first step in credit analysis is obtaining credit information on which to base the evaluation of a customer. The sources of information, broadly speaking, are:

i) **Internal:** Usually, firms require their customers to fill various forms and documents giving details about financial operations. They are also required to furnish trade references with whom the firms can novo contacts to judge the suitability of the customer for credit. This type of information is obtained from internal sources of credit information. Another internal source of credit information is derived from the records of the firms contemplating an extension of credit. It is likely that a particular customer/applicant may have enjoyed credit facility in the past. In that case, the firm would have information on the behavior of the applicant(s) in terms of the historical payment pattern. This type of information may not be adequate and may, therefore, have to be supplemented by information from other sources.

ii) **External:** The availability of information from external sources to assess the credit-worthiness of customers depends upon the development of institutional facilities and industry practices. In India, the external sources of credit information are not as developed as in the industrially advanced countries of the world depending upon the availability; the following external sources may be employed to collect information.

a) **Financial Statements:** One external source of credit information is the published financial statements, that is, the balance sheet and the profit and loss account. The financial statements contain very useful information. They throw light on an applicant's financial viability, liquidity, profitability and debt capacity. Although the financial statements do not directly reveal the past payment record of the applicant, they are very helpful in assessing the overall financial position of a firm, which significantly determines its credit standing.

b) **Bank References:** Another useful source of credit information is the bank of the firm which is contemplating the extension of credit. The modus operandi here is that the firm's banker collects the necessary information from the applicant's banks. Alternatively, the applicant may be required to ask his banker to provide the necessary information either directly to the firm or to its bank.

c) **Trade References:** These refer to the collection of information from firms with whom the applicant has dealings and who on the basis of their experience would vouch for the applicant.

d) **Credit Bureau Reports:** Finally, specialist credit bureau reports from organizations specializing in supplying credit information can also be utilized.

2) Analysis of Credit Information: Once the credit information has been collected from different sources, it should be analyzed to determine the credit-worthiness of the applicant. The well-known 5 C's of Credit.

i) **Character:** The word character as a credit standard refers to borrowers' honesty, responsibility, integrity and consistency. These are evidenced in variety of ways. For example, police action, legal actions and complaints about a person's character.

ii) **Capacity:** It refers to the ability of the borrowers to pay their financial obligations. This is determined by current expected income, existing debts and ongoing operating expenses. This type of information is available in current and proforma financial statements.

iii) **Capital:** It is the amount of assets that can be liquidated for the payment of debt if all other means of collecting it fail. This cushion of assets is represented by a firm's equity.

iv) **Collateral:** Collateral refers to assets that are pledged for security in a credit transaction.

v) **Conditions:** Conditions refer to economic factors, which are beyond the control of funds and which affect company's ability to pay debts.

Although there are no established procedures to analyze the information, the firm should devise one to suit its needs.

The analysis should cover two aspects:

i) **Quantitative:** The assessment of the quantitative aspects is based on the factual information available from the financial statements, the past records of the firm, and so on. The first step involved in this type of assessment is to prepare an aging schedule of the accounts payable of the applicant as well as calculate the average age of the accounts payable. This exercise will give an insight into the past payment pattern of the customer. Another step it analyzing the credit information is through a ratio analysis of the liquidity, profitability and debt capacity of the applicant. These ratios should be compared with the industry average. Moreover, trend analysis over a period of time would reveal the financial strength of the customer.

ii) **Qualitative:** The quantitative assessment should be supplemented by a qualitative/subjective interpretation of the applicant's credit-worthiness. The subjective judgment would cover aspects relating to the quality of management. Here, the references from other suppliers, bank references and specialist bureau reports would form the basis for the conclusions to be drawn. In the ultimate analysis, therefore, the decision whether to extend credit to the applicant and what amount to extend will depend upon the subjective interpretation of his credit standing.

3. Monitoring of Receivables

The next important step in management of receivables is control of these receivables. Setting of standard and framing the credit policy is not sufficient and their effective implementation is also equally important.

In order to controls the level of receivable, the firm should apply regular checks and there must be continuous monitoring system. The financial manager should keep a watch on the creditworthiness of all the customers as well as on the total credit policy of the firm. The following methods can be adopted for this purpose:

1) **Average Collection Period:** The average collection period may be found by dividing the average receivables by the amount of credit sales per day.

$$\text{Average Collection Period} = \frac{\text{Average Receivables}}{\text{Credit Sales per day}}$$

Number of day's sales outstanding may be calculated on a weekly basis. The managerial efficiency can be ascertained by comparing it with the past year's period of the firm.

2) **Aging Schedule of Receivables:** The quality of receivables of the firm can be measured by looking at the age of receivables. The older the receivable, lower is the quality and greater chances of default. In aging schedule, total outstanding

receivables on a particular day are classified into different age groups together with percentage of total receivables that fall in each age group.

3) **Line of Credit:** This is an another control measure for receivables management which refers to the maximum amount a particular customer may have as due to the firm at any time. Different lines of credit are allowed to different customers. As long as the customer's unpaid balance remains within this maximum limit, account may be routinely handled. The line of credit must be reviewed periodically for all the customers. This does not mean that credit line must be changed, rather it may be unchanged or increased or reduced.

4) **Accounting Ratios:** They are of good help in order to control the receivables. Though several ratios may be calculated in this regard, two accounting ratios, in particular, may be used. They are: i) Receivables Turnover Ratio, and ii) Average Collection Period. Both the ratios should be calculated on a continuous basis to monitor the receivables.

4. 2. C.4: Inventory Management

Meaning and Definition of Inventory:

The dictionary meaning of inventory is 'stock of goods'. The word 'Inventory' is understood differently by various authors. In accounting language it may mean stock of finished goods only. In a manufacturing concern, it may include raw materials, work in process and stores, etc.

International Accounting Standard Committee (I.A.S.C) defines inventories as "Tangible property - 1) Held for sale in the ordinary course of business, 2) In the process of production for such sale or, 3) To be consumed in the process of production of goods or services for sale".

The American Institute of Certified Public Account (AICPA) defines "inventory in the sense of tangible goods, which are held for sale, in process of production and available for ready consumption."

According to Bolten S.E., "Inventory refers to stock-pile of product, a firm is offering for sale and components that make up the product".

Inventory includes the following things:

1) Raw Material: It includes direct material used in the manufacture of a product. The purpose of holding raw material is to ensure uninterrupted producton in the event of delaying delivery. The amount of raw materials to be kept by a firm depends on various factors such as speed with which raw materials are to be ordered and procured and uncertainty in the supply of these raw materials.

2) Work-in-Progress: It includes partly finished goods and materials held between manufacturing stages. It can also be stated that those raw materials which are used in production process but are not finally converted into final product are work-in-progress.

3) Consumable: Consumables are products that consumers buy recurrently, i.e., items which "get used-up" or discarded. For example, consumable office supplies are such products as paper, pens, file folders, post-it notes, computer disks, and toner or ink cartridges. Not included capital goods such as computers, fax machines, and other business machines or office furniture.

4) Finished Goods: The goods ready for sale or distribution comes under this class. It helps to reduce the risk associated with stoppage in output on account of strikes, breakdowns, shortage of material, etc.

5) Stores and Spares: This category includes those products, which are accessories to the main products produced for the purpose of sale. For example, stores and spares items are bolts, nuts, clamps, screws, etc. These spare parts are usually bought from outside or sometimes they are manufactured in the company also.

Each firm hold inventory for one or another purpose. There are three main purposes or motives of holding inventories. These are Transaction Motive, Precautionary Motive, and Speculative Motive. Every firm has to maintain some level of inventory to meet the day to day requirements of sales, production process, customer demand etc. It is called as transaction motive. A firm should keep some inventory for unforeseen circumstances also. It is a precautionary motive. The firm may be tempted to keep some inventory in order to capitalize an opportunity to make profit e.g., sufficient level of inventory may help the firm to earn extra profit in case of expected shortage in the market, it is a speculative motive.

Meaning of Inventory Management:

The investment in inventory is very high in most of the undertakings engaged in manufacturing, whole-sale and retail trade. The amount of investment is sometimes more in inventory than in other assets. About 90 per cent part of working capital invested in inventories. It is necessary for every management to give proper attention to inventory management. A proper planning of purchasing, handling, storing and accounting should form a part of inventory management. An efficient system of inventory management will determine (a) what to purchase (b) how much to purchase (c) from where to purchase (d) where to store, etc.

The purpose of inventory management is to keep the stocks in neither a way that there is over-stocking nor under-stocking. The over-stocking will mean reduction of liquidity and starving of other production processes; under-stocking, on the other hand, will result in stoppage of work. The investments in inventory should keep in reasonable limits.

Objective of Inventory Management:

The objectives of inventory management may be discussed under two heads:

1) Operating Objectives:

Operational objectives refer to material and other parts which are available in sufficient quantity. It includes -

i) Availability of Materials: The first and the foremost objective of the inventory management is to make all types of materials available at all times whenever they are needed by the production departments so that the production may not be held up for want of materials. It is therefore advisable to maintain a minimum quantity of all types of materials to move on the production on schedule.

ii) Minimizing the Wastage: Inventory control is essential to minimize the wastage at all levels i.e. during its storage in the godown or at work in the factory. Normal wastage, in other words uncontrollable wastage, should only be permitted. Any abnormal but controllable wastage should strictly be controlled. Wastage of materials by leakage, theft, embezzlement and spoilage due to rust, dust or dirt should be avoided.

iii) Promotion of Manufacturing Efficiency: The manufacturing efficiency of the enterprise increases if right types of raw material are made available to the production department at the right time. It reduces wastage and cost of production and improves the morale of workers.

iv) Better Service to Customers: In order to meet the demand of the customers, it is the responsibility of the concern to produce sufficient stock of finished goods to execute the orders received. It means, a flow of production should be maintained.

v) Control of Production Level: The concern may decide to increase or decrease the production level in favorable time and the inventory may be controlled accordingly. But in odd times, when raw materials are in short supply. Proper control of inventory helps in creating and maintaining buffer stock to meet any eventuality. Production variations can also be avoided through proper control to inventories.

vi) Optimal Level of Inventories: Proper control of inventories helps management to procure materials in time in order to run the plan efficiently. It thus, helps in the maintaining the optimum level of inventories keeping in view the operational requirements. It also avoids the out of stock danger.

2) Financial Objectives:

The financial objectives means that investment in inventories must not remain idle and minimum capital must be locked in it. It includes -

i) Economy in Purchasing: Proper inventory control brings certain advantages and economies in purchasing the raw materials. Management makes every attempt to purchase the raw materials in bulk quantity and to take advantage of favorable market conditions.

ii) Optimum Investment and Efficient Use of Capital: The prime objective of inventory control from financial point of view is to have an optimum level of investment in inventories. There should neither be any deficiency of stock of raw materials so as to hold up the production process nor there any excessive investment in inventories so as to block the capital that could be used in an efficient manner otherwise. It is, therefore, the responsibility of financial management to set up the maximum and minimum levels of stocks to avoid deficiency or surplus stock positions.

iii) Reasonable Price: Management should ensure the supply of raw materials at a responsibility low price but without sacrificing the quality of it. It helps in controlling the cost of production and the quality of finished goods in order to maximize the profits of the concern.

iv) Minimizing Costs: Minimizing inventory costs such as handling, ordering and carrying costs, etc., is one of the main objectives of inventory management. Financial management should help controlling the inventory costs in a way that reduces the cost per unit of inventory. Inventory costs are the part of total cost of production hence cost of production can also a minimized by controlling the inventory costs.

Tools and Techniques of Inventory Management:

Effective inventory management requires an effective control system for inventories. A proper inventory control not only helps in solving the acute problem of liquidity but also increases profits and causes substantial reduction in the working capital of the concern.

The following are the important tools and techniques of inventory management and control:

1) Determination of Stock Levels
2) Determination of safety stocks
3) Ordering System of Inventory
4) Determination of Economic Order Quantity
5) JIT Analysis
6) A-B-C Analysis
7) VED Analysis
8) Inventory Turnover Ratio
9) Aging Schedule of Inventories
10) Perpetual inventory system

Some of the above techniques of inventory management are explained below in short.

1) Determination of Stock Levels:

Carrying of too much and too little of inventories is detrimental to the firm. If the inventory level is too little, the firm will face frequent stock-outs involving heavy ordering cost and if the inventory level is too high it will be unnecessary tie-up of capital. Therefore, an efficient inventory management requires that a firm should maintain an optimum level of inventory where inventory costs are the minimum and at the same time there is no stock-out which may result in loss of sale of stoppage of production. The various stock levels are as Minimum Stock Level, Maximum Stock Level, Re-ordering Level, Danger Level and Average Stock Level etc.

2) Determination of Safety Stocks:

Safety stock is a buffer to meet some unanticipated increase in usage. The usage of inventory cannot be perfectly forecasted. It fluctuates over a period of time. The demand for materials may fluctuate and delivery of inventory may also be delayed and in such a situation the firm can face a problem of stock-out. The stock out can prove costly by affecting the smooth working of the concern. In order to protect against the stock out arising out of usage fluctuations, firms usually maintain some margin of safety stocks. The basic problem is to determine the level of quantity of safety stocks. Two costs are involved in the determination of this stock i.e. opportunity cost of stock-outs and the carrying costs. The stock-outs of raw materials cause production disruption resulting into higher cost of production. Similarly, the stock-outs of finished goods result into the failure of the firm in competition as the firm cannot provide proper customer service. If a firm maintains low level of safety frequent stock-outs will occur resulting into the larger opportunity costs. On the other hand, the larger quantities of safety stocks involve higher carrying costs.

3) Ordering Systems of Inventory:

The basic problem of inventory is to decide the re-order point. This point indicates when an order should be placed. There-order point is determined with the help of (a) average consumption rate, (b) duration of lead time, (c) economic order quantity, when the inventory is depleted to lead time consumption, the order should be placed. There are three prevalent systems of ordering and a concern can choose any one these:

i) Fixed Order Quantity System (or Q System): Under this system, materials are reordered at irregular intervals whenever the stock reaches the reorder level. The reorder quantity is normally the economic ordering quantity so that the aggregate ordering costs and stock holding costs are the lowest. In this system the order quantity is fixed but the order period varies.

ii) Periodic Review System (or P System): Under this P system, the economic ordering quantity is converted into a time scale, and this period is known as periodic review time or cycle time. The period between the placements of orders is fixed, while the quantity ordered varies. The average inventory held in the P system is greater than that held in the Q system. But the great advantage in P system lies in reduction or monitoring labor and launching of orders. In P system, the buffer stock indicates the average consumption during lead time and review time. The safety stock is the same as in the Q system to denote increased consumption as a result of possible extension of lead time. The reserved stock is calculated on the basis of excess consumption during lead time and review time.

iii) Modified Replenishment System: Under this system reorder quantity is variable like the P system but lower limit is placed on its size, i.e., reordering quantity should not be below the fixed lower limit when the order is placed at a fixed period to time. This system combines the main features of the other two systems namely, maximum level, a variable order quantity subject to a certain lower limit, a reordering level and review of the level at a fixed interval.

4) Economic Order Quantity (EOQ):

EOQ is an important factor in controlling the inventory. It is a quantity of inventory which can reasonably be ordered economically at a time. It is also known as 'Standard Order Quantity', 'Economic Lot Size,' or 'Economical Ordering Quantity'. In determining this point ordering costs and carrying costs are taken into consideration. Ordering costs are basically the cost of getting an item of inventory and it includes cost of placing an order. Carrying cost includes costs of storage facilities, property insurance, and loss of value through physical deterioration, cost of obsolescence. Either of these two costs affects the profits of the firm adversely and management tries to balance these two costs. The balancing or reconciliation point is known as economic order quantity.

The quantity may be calculated with the help of the following formula:

$$\text{EOQ} = \sqrt{\frac{2AS}{I}}$$

Where, A = Annual quantity used (in units)

S = Cost of placing an order (fixed cost)

I = Cost of holding one unit.

5) Just-In-Time (JIT):

Just-In-Time (JIT) is defined in the APICS dictionary as "a philosophy of manufacturing based on planned elimination of all waste and on continuous improvement of productivity". It also has been described as an approach with the objective of producing the right part in the right place at the right time (in other words, "just-in-time"). Waste results from any activity that adds cost without adding value, such as the unnecessary moving of materials, the accumulation of excess inventory, or the use of faulty production methods that create products requiring subsequent rework. JIT (also known as lean production or stockless production) should improve profits and return on investment by reducing inventory levels (increasing the inventory turnover rate), reducing variability, improving product quality, reducing production and delivery lead times, and reducing other costs (such as those associated with machine setup and equipment breakdown). In a JIT system, underutilized (excess) capacity is used instead of buffer inventories to hedge against problems that may arise. JIT applies primarily to repetitive manufacturing processes in which the same products and components are produced over and over again. The general idea is to establish flow processes (even when the facility uses a jobbing or batch process layout) by linking work centers so that there is an even, balanced flow of materials throughout the entire production process, similar to that found in an assembly line. To accomplish this, an attempt is made to reach the goals of driving all inventory buffers toward zero and achieving the ideal lot size of one unit. The main advantages of JIT system are as - i) Increased awareness of different problems and their costs, ii) Reducing lot size and less work in progress, iii) Less raw material inventory, less indirect material and less finished goods, iv) Higher productivity, v) Faster feedback of defects, vi) Reduced material inventory as well as material waste, vii) High quality of finished goods and smoother output, viii) Better control over defects and improved overall working etc.

6) A-B-C Analysis:

The materials are divided into a number of categories for adopting a selective approach for material control. It is generally seen that in manufacturing concern, a small percentage of items contribute a large percentage of value of consumption and a large percentage of items of materials contribute a small percentage of value. In between these two limits there are some items which have almost equal percentage of value of materials. Under A-B-C analysis, the materials are divided into three categories viz., A, B and C. Past experience has shown that almost 10 percent of the items contributes to 70 per cent of value consumption and this category is called 'A' category. About 20 per cent of the items contribute about 20 per cent of value of consumption and this is known as category 'B' materials. Category 'C' covers about 70 per cent of items of materials which contribute only 10 per cent of value of consumption. There may be some variation in different organization and an adjustment can be made in these percentages.

A-B-C analysis helps to concentrate more efforts on category A since greatest monetary advantage will come by controlling these items. An attention should be paid in estimating requirements, purchasing, maintaining safety stocks and properly storing of 'A' category materials. These items are kept under a constant review so that a substantial material cost may be controlled. The control of 'C' items may be relaxed and these stocks may be purchased for the year. A little more attention should be given towards `B' category items and their purchase should be undertaken at quarterly or half-yearly intervals.

The following points should be kept in mind for ABC analysis:

i) Where items can be substituted for each other, they should be preferably treated as one item.

ii) More emphasis should be given to the value of consumption and not to price per unit of the item.

iii) All the items consumed by an organization should be considered together for classifying as A, B or C instead of taking them as spares, raw materials, semi-finished and finished items and then classifying as A, B and C.

iv) There can be more than three classes and the period of consumption need not necessarily be one year.

4.3 Summary:

The definition of working capital itself explains the significance of it in the business that it is the amount which is used to carry on day to day working of the business. That means without working capital the working of the business cannot be possible. Working capital is called as the life blood or heart of the business. Importance of working capital in the business explains the need of working capital management. The most widely used concept of working capital is defined as, "the difference between current assets and current liabilities." This concept is useful to know the liquidity of the firm. There are different concepts/types of working capital having different meanings such as Gross Working Capital, Net Working Capital, Negative Working Capital, Permanent Working Capital, Variable Working Capital, and Cash Working Capital. Working capital finance generally refers to debt raised for a period of less than a year from Term Lending Institutions, Commercial Banks and Non-Banking Finance Companies (NBFC) catering to the short-term credit needs of the business entities. Working capital finance may be fund-based or through non-fund based or documentary credit instruments.

Working capital, in general practice, refers to the excess of current assets over current liabilities. Management of working capital therefore, is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the inter-relationship that exists between them. In other words it refers to all aspects of administration of both current assets and current liabilities. Cash management refers to management of cash balance and the bank balance including the short terms deposits. For cash management purposes, the term cash is used in this broader sense, i.e., it covers cash, cash equivalents and those assets which are immediately convertible into cash. A financial manager is required to manage the cash flows (both inflows and outflows) arising out of the operations of the firm. Liquidity Management is the management who looks after to maintain the sound liquidity position of the firm. Credit/Receivables management is the process of making decisions relating to investment in trade debtors. Certain investment in receivables is necessary to increase the sales and the profits of a firm. But at the same time investment in this asset involves cost considerations also. Further, there is always a risk of bad debts too. The Receivables management consists of matching the cost of increasing sales (particularly credit sales) with the benefits arising out of increased sales with the objective of maximizing the return on investment of the firm. Inventory management includes proper planning of purchasing, handling, storing and accounting of inventory. An efficient system of inventory management will determine (a) what to purchase (b) how much to purchase (c) from where to purchase (d) where to store, etc. There are different important tools and techniques of inventory management and control such as Determination of Stock Levels, Determination of safety stocks, Ordering System of Inventory, Determination of Economic Order Quantity, JIT Analysis, A-B-C Analysis, VED Analysis, Inventory Turnover Ratio, Aging Schedule of Inventories, Perpetual inventory system etc.

4.4 Terms to Remember :

- **Working Capital:** Working capital is defined as, "the difference between current assets and current liabilities."
- **Working Capital Management:** Management of working capital therefore, is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the inter-relationship that exists between them. In other words it refers to all aspects of administration of both current assets and current liabilities.
- **Cash Management:** Cash management refers to management of cash balance and the bank balance including the short terms deposits.
- **Liquidity Management:** Liquidity Management is the management who looks after to maintain the sound liquidity position of the firm.
- **Credit/Receivables Management:** Liquidity Management is the management who looks after to maintain the sound liquidity position of the firm.
- **Inventory Management:** Inventory management includes proper planning of purchasing, handling, storing and accounting of inventory.

4.5 Check Your Progress:

A. Choose the correct alternative:

1. The current assets minus the current liabilities is termed as ---------

   a. Working Capital b. Circulating Capital

   c. Net Current Assets d. All of above

2. Permanent working capital is also known as -----------

a. Minimum working capital b. Fixed working capital

c. Care current assets d. All of above

3. CP can be issued in denominations of ------ or multiple thereof.

a. Rs. One Lakh b. Rs. Five Lakhs

c. Rs Five Thousand d. Rs. One Thousand

4. The most common accruals are -----------

a. Wages and salaries b. Taxes

c. Short-terms obligations d. All of above

5. Credit/Receivables management involves the careful consideration of ------ aspects.

a. Credit Policy b. Credit Evaluation

c. Monitoring Receivables d. All of above

6. Public deposits cannot exceed -------- of paid-up share capital and free reserves.

a. 10% b. 50%

c. 25% d. 5%

7. Cash Management Strategies are intended to ------- the operating cash balance requirement.

a. Maximize b. Minimize

c. Expand d. All of above

8. The credit policy decision of firm has ---------- dimensions.

a. Credit Standards b. Credit Term

c. Collection Efforts d. All of above

9. Inter-corporate deposits are may be of --------

a. Call Deposits b. Three Months Deposits

c. Six Months Deposits d. All of above

10. An efficient system of inventory management will determine

    a. what to purchase   b. how much to purchase

    c. from where to purchase and where to store   d. All of above

B. Fill in the Blanks:

i) Difference between current assets and current liabilities is known as.......

ii) -------- working capital remains in the business in one form or another.

iii) Negative working capital means the excess of current --------- over the current ------.

iv) Working capital finance generally refers to debt raised for a period of ------ than a year.

v) ------------- are short term unsecured promissory notes issued by firms with a high credit rating at a discount on the face value.

vi) The Miller-Orr (MO) model is also known as --------- model.

vii) Credit/Receivables management is the process of making decisions relating to investment in -------------.

C. State 'True' or 'False'.

i. Trade credit it is the largest source of short-term funds.

ii. The higher the cash turnover, the more is the cash a firm requires.

iii. Variable working capital is financed out of short term funds.

iv. Permanent working capital is different from fixed capital.

v. The Baumol cash management model provides a formal approach for determining a firm's optimum cash balance under uncertainty.

vi. A proper balance in liquidity is maintained through efficient liquidity management.

vii. Proper inventory control brings economies in purchasing the raw materials.

4.6 Answers to Check Your Progress:

A. Choose the correct alternative:

1 – d, 2 – d, 3 – b, 4 – d, 5 – d, 6 – c, 7 – b, 8 – d, 9 – d, 10 - d

B. Fill in the Blanks:

i- working capital, ii – Permanent, iii – liabilities, assets, iv – less,

v - Commercial Papers, vi – stochastic, vii – trade debtors

C. State 'True' or 'False'.

i- True, ii – False, iii – True, iv – True, v – False, vi – True, vii - True

4.7 Exercise:

1. What is working capital? State its significance.
2. Explain the types of working capital.
3. Describe the various factors determining the working capital.
4. What are the various sources of financing working capital requirement?
5. What is working capital management?
6. What is cash management? Explain the techniques of cash management.
7. What is liquidity management? State the techniques of liquidity management.
8. What is credit/receivables management? Explain the dimensions of credit management.
9. What is inventory management? What are the objectives of inventory management?
10. Explain the various techniques of inventory management.

Practical: Obtain financial report of any company and calculate working capital and identify source of finance.

Calculation of working capital:

1. Working Capital is calculated on the basis of difference between Current Assets and Current Liabilities. The formula is:

   Working Capital = Current Assets - Current Liabilities

2. Current Assets include Inventory/Closing Stock, Sundry Debtors, Cash and Bank Balance and Prepaid Expenses/ Advance Payments. In the given illustration the current assets are Inventory/Closing Stock, Sundry Debtors, Cash and Bank Balance.

3. Current Liabilities include Sundry Creditors and Outstanding Expenses/Delay in Payments. In the given illustration the current liabilities include Sundry Creditors.

4. Inventory/Closing Stock is of three types namely Raw Materials, Work in Process and Finished Goods. It is estimated on the basis the period of inventory/stock with company.

5. Sundry Debtors are calculated on the basis of period of credit allowed to customers and only on credit sales. These are calculated generally on the basis of cost of sales.

6. Sundry Creditors are calculated on the basis of period of credit allowed by suppliers.

7. If period is given in weeks 52 weeks in a year, in months 12 months in a year and in days 360 days in a year are considered.

   On the basis of above calculation is made as follows:

Illustration:

The financial information of Coal India Ltd. for the year ending 31st March 2020 was as follows:

1. Total sales during the year were Rs. 845.16 crores.

2. Fixed expenses per month were Rs. 92.68 crores.

3. Operating profit was 19.22% of sales

4. Inventory Turnover Ratio 7.55

5. Debtors Turnover Ratio 11.48

6. Trade payables per month were Rs. 14.19 crores.

Calculate working capital.

Solution:

Statement of Working Capital

(Rs in Crore)

Particulars	**Rs.**	**Rs.**
A) Current Assets :		
1. Stock/Inventory (Note 1)		90.43
2. Sundry Debtors (Note 2)		26.95
3. Cash		092.68
Total Current Assets (A)		210.06
Less :		
B) Current Liabilities :		
1. Trade payables (B)		014.19
Net Working Capital (A-B)		**195.87**

Working Notes:

1. Stock/Inventory:

Stock Turnover Ratio = $\frac{\textit{Cost of Goods Sold}}{\textit{Average Stock}}$

$$7.55 = \frac{682.72}{\textit{Average Stock}}$$

= 90.43 Crores

Average Stock = 90.43 Crores

Cost of Goods Sold:

= Sales – Operating Profit

= 845.16 – 162.44 (19.22% of 845.16)

= 682.72 Crores

2. **Debtors Turnover Ratio**

Debtors Turnover Ratio = $\frac{Debtors}{Credit\ sales} \times 360$ days

11.48 $= \frac{Debtors}{845.16} \times 360$ days

= 26.95 Crores

Sundry Debtors = 26.95 Crores

Sources of Working Capital Finance:

Working capital finance generally refers to debt raised for a period of less than a year from Term Lending Institutions, Commercial Banks and Non-Banking Finance Companies (NBFC) catering to the short-term credit needs of the business entities.

In the above illustration the sources of Working Capital Finance may be Accruals, Trade Credit, Loan from Commercial Banks, Working Capital Loan like Bills Financing, Bills discounting etc.

4.8 Further Readings:

1. Advanced Financial Management - Dr. N. M. Vechalekar.
2. Introduction to Financial Management - I M Pandey
3. Financial Management - Prasanna Chandra
4. Financial Management - Khan and Jain
5. Financial management - Ravi M Kirhare
6. Cost Accounting and Financial management – Tulsian
7. Financial Management - P V Kulkarni
8. Financial Management - S C Saxena
9. Financial Management - Hogland.

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Unit-1

Capital Market

Unit Structure

1.0 Objectives:

After studying this unit, the students will be able to:

- Study the concept and functions primary capital market and its methods of selling corporate securities.
- Understand Meaning and role of Stock Exchange with its evolution and trading mechanism
- Know the role of SEBI in Indian capital market and concept of Credit Rating with need and credit rating agencies in India.
- Study the concept and benefits of Depository and its position in India.
- Learn the concept of NSDL and CDSL.

1.1 Introduction:

Any individual saves out of their current income to meet future requirements of fund for different purposes. When the amount saved is small, the individual may keep it in the form of cash with himself. But as the savings increases, he/she may invest in banks to earn more rate of interest, or contribute to a provident fund account. Further if the savings are substantial he/she may think of investing in physical assets or financial assets. Investing in physical assets refer to investing the surplus funds in land, building, gold, silver, precious stones etc. Investment in financial assets means investing the surplus funds in financial securities such as shares, bonds and debentures, saving certificates, fixed deposits etc. While investing the surplus or savings an individual investor always considers five important factors. They are safety, liquidity, yield, tax benefit and the convenience. Safety refers to minimum risk of losing the money invested, liquidity refers to ease in converting physical or financial assets into ready cash, yield refers to the rate of return on investment made. Tax benefit refers to the getting some tax relief benefit which accrues to the investors when investment is made in certain securities and convenience refers to ease with which surplus can be invested, marketed and accounted. Though investment in physical assets offer highest safety to the investment, financial assets offer better liquidity and also yield. The investor who wants to invest in financial assets can purchase the asset from the capital market.

Capital market is one of the significant aspects of every financial market. Broadly speaking the capital market is a market for financial assets which have a long or indefinite maturity. Unlike money market instruments, the capital market instruments become mature for the period above one year. It is an institutional arrangement to borrow and lend money for a longer period of time. Business units and corporate are the borrowers in the capital market. It involves various instruments which can be used for financial transactions. It provides long term debt and equity finance for the government and the corporate sector.

1.2 Presentation of Subject Matter:

1.2.1 Concept of Capital Market

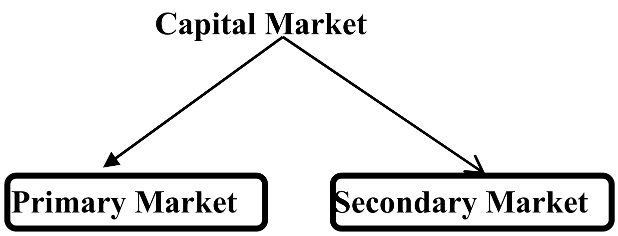
The capital market is a security market which mobilizes the long term savings of individuals for investment in shares, debentures, units of mutual funds and other financial assets or instruments. It is a financial market in which long-term debt or equity backed securities are bought and sold. This market is the source from where finance is raised by companies for meeting their requirement of funds for new projects, modernization and expansion activities, long term working capital requirements, repayment of loans and various other purposes. In short, capital markets are defined as markets in which money is provided for longer periods. It is a channel the wealth of savers to those who can put it to long-term productive use, such as companies or governments making long-term investments. To understand the concept of Capital Market we can study following definitions.

According to ***Herbert E. Dougall***, *"Capital Markets are complex of institutions and mechanisms whereby intermediate term funds (Loans upto 10 years maturity) and long term funds (longer maturity loans and corporate stocks) are pooled and made available to business, government and individuals and where instruments that are already outstanding are transferred."*

The term capital market can defined as *"A series of channels through which savings of the community are made available to industrial and commercial enterprises and public authorities"*

Capital markets fulfill the need of medium and long term loans of industry, trade, agriculture and transport. These markets play a vital role in channelizing the savings of individuals for investment in the economic development of the country. In modern capital markets are almost invariably hosted on computer-based electronic trading systems. There are more than thousands of such systems, most serving only small parts of the overall capital markets. Entities hosting the systems include stock exchanges, investment banks, and government departments.

Capital market can be classified into primary and secondary markets. The primary market is a market for new shares, where as in the secondary market the existing securities are traded. It shows as under:



1.2.1.1 Primary Capital Market

The primary market is the part of the capital market that deals with issuing of new securities. This market creates long term instruments through which corporate entities raise funds from the capital market. The investor purchases the new securities via an investment bank or lead bank or merchant bankers. Primary market also includes the offer of securities to the shareholders by an existing company. In primary market, new issues may be made in three ways namely public issue, right issue and private placement. Public issue refers to sale of securities to the members of the public. Right issue means sale of securities to existing shareholders or debentures holders. Private placement involves selling securities privately to some selected group of investors. In a primary market, companies, governments or public sector institutions can raise funds through bond issues and corporations can raise capital through the sale of new stock through an initial public offering (IPO). This is often done through an investment bank or finance syndicate of securities dealers. The process of selling new shares to investors is called underwriting. Dealers earn a commission that is built into the price of the security offering, though it can be found in the prospectus.

1.2.1.2 Meaning:

The primary market is the market where the securities are sold for the first time. This market consists of the companies making the fresh issue of securities and the members of the public subscribing to them. It is also called the new issue market (NIM). The primary market consists of new issues of capital (equity, debenture, bonds etc) by new or existing companies.

Features of primary markets:

1. Primary market is the market for new long term equity capital.
2. The primary market performs the crucial function of facilitating capital formation in the economy.

3. The securities are issued by the company directly to investors.

4. The company receives the money and issues new security certificates to the investors.

5. Primary issues are used by companies for the purpose of beginning new business or for expanding or modernizing the existing business.

6. The new issue market does not include certain other sources of new long term external finance, such as loans from financial institutions.

1.2.1.3 Role of Primary Capital Market:

The major role of the primary capital market is to facilitate capital growth by enabling individuals to convert savings into investments. It plays a significant role in the national economy and helps to facilitates companies to issue new stocks to raise money directly from households for business expansion or to meet financial obligations. The role of primary capital market is as under:

1. ***Saving Mobilization**:* Primary capital market plays an important role to mobilize the savings. It is main source for mobilizing idle savings from people for further investments in the productive sectors of an economy. In that sense it convert the idle monetary resources into proper investments

2. ***Rise in Capital Formation**:* Through mobilization of ideal monetary resources it generates savings and diverts the said mobilized savings to various sectors such as agriculture, trade, industry, etc. This helps in increasing capital formation.

3. ***Regulation of Funds**:* The role primary capital market not only helps in fund mobilization, but it also helps in proper allocation of these resources. It can have regulation over the resources so that it can direct funds in a qualitative manner.

4. ***Provision of Investment Avenue**:* These markets provide various investment avenues for people who wish to invest fund for a longer period. It gives information of suitable rate of returns to investors and Instruments such as equities, bonds, mutual fund units, insurance policies, etc. to provides diverse investment avenue for the people.

5. ***Speedy Economic Growth**:* Primary capital market enhances production and productivity in the economy in India. The role of this market to make funds available for long term financial requirements of business houses. It helps in increasing economy growth by generation of employment and development of infrastructure

6. ***Availability of Fund Continuously:*** It is place where the investment avenue is continuously available for longer investment. This liquid market make its fund available on continues basis to buyers and seller for easily buy and sell securities. Hence, marketability in the capital market becomes easy

7. ***Provision of Service**:* This market perform good role for providing various types of services. It includes long term and medium term loans to industry, consultancy services, underwriting services, export finance, etc. These services help the manufacturing sector in a large spectrum.

8. ***Modernization and Expansion of business:*** With change in technology business houses are also required to use modern techniques. Hence they need to replace old technology with the new. Financial supply is essential through capital market.

1.2.1.4 Functions of Primary Capital Market:

The main functions of primary capital market are given below:

1. Organization of New Issues:

After investigation of viability of new projects the organization of new issues possible. It is an important element to know the structure of financial arrangements while organization of new shares. The structure of financial arrangements includes requirements and availability of promoter's equity, debt-equity ratio, equity from public, short term funds, liquidity ratio etc.

2. Underwriting of New Issues:

Underwriting is the next step involved in floating of new issue. Underwriting is a guaranteeing purchase of a specified amount of new issue at a fixed price. The purchase may be for sale to the public, for only one's portfolio or for both purposes. Commission paid to underwriter for underwriting the new issue. Mostly underwriting of a new issue is undertaken by a group of financial institutions.

3. Distribution of New Issue:

The sale of stock to the public is nothing but distribution of new issues. There are three ways of selling the new issue.

(i) Issue of a Prospectus to the Public- Prospectus is an invitation to the public to purchase the issue. The issue of a public prospectus is done through advertisement. It gives information about the company, issue and the underwriters.

   (a) It Provides Liquidity: Liquidity means an assets easily convertibility into cash shortly with minimum loss of capital value. It helps to develop continuous market for securities, to buy and sell at any time during business hours at small transaction cost.

   (b) Providing liquidity to old stocks: For attracting new finance and for encouraging prospective investors to invest in securities.

(ii) Encourage New Investment- This market acts as an important indicator of the investment climate in the economy. When prices of existing securities are rising and the volume of trading activity in the secondary market goes up, new issues also tend to increase as the primary market is better preferred. Hence, it is a good time for companies to come forward with new issues

1.2.1.5 Methods of selling Corporate Securities in Primary Capital Market:

Following are the major methods of selling/issuing corporate securities, such as:

1. Initial Public Offer:

It is a common method of direct selling new issues of securities. This method enables a company to raise funds from a large number of investors scattered throughout the country. Under this method, the company issues a prospectus to the public inviting offers for subscription. The interested investors willingly apply for the securities to buy. This method ensures a wider distribution of securities thereby leading to diffusion of ownership and avoids concentration of economic power in a few hands. In short, it is suitable method for reputed companies which want to raise large capital and can bear the large costs of a public issue.

2. Private Placement:

Private placement is very suitable, convenient method for small issues particularly during depression. Under this method, the issuing company sells its securities privately to one or more institutional brokers who in turn sell them to their clients and associates. Moreover, the company gets the money quickly and there is no risk of non-receipt of minimum subscription. However it has some drawbacks that, institutional brokers insist a huge discount or other conditions for private purchase of securities. Secondly, it may not sell the securities in the market but keep them with it.

3. Offer for Sale:

Under this method, the issuing company allots the security to an issue house at an agreed price. It saves the company from the cost and trouble of selling securities directly to the investing public. The issue house or financial institution publishes a document called an ‘offer for sale’. It offers to the public shares or debentures for sale at higher price. After receiving applications, the issue house renounces the allotment in favour of the applicants who become direct allottees of the shares or debentures.

4. Sale through Intermediaries:

In this process, company appoints intermediaries like stock brokers, commercial banks and financial institutions to assist in marketing for the new securities on commission basis. The company provides blank application forms to every mediator who affixes his seal on them and distributes among proposed investors. Each mediator gets commission on the amount of security applications bearing his seal. However, mediators do not guarantee the sale of securities. But this method saves the administrative problems and expenses involved in direct selling of securities to the public.

5. Sale through Managing Brokers:

Sale of securities through managing brokers is more popular method among new companies. Managing brokers advise companies about the terms and conditions as well as proper timing to the issue of securities. They assist companies in pre-issue publicity and issue of prospectus and getting stock exchange listing. They also enlist the support and cooperation of share brokers.

6. **Privileged Subscriptions:**

Under this method, when an existing company wants to issue further securities, it is required to offer them to existing shareholders on prorate basis. It is known as 'Rights Issue'. Sale of shares by rights issues is cheaper as compared to sale through prospectus. But the existing shareholders will subscribe to the new issues only when the past performance and future prospects of the company are good.

7. **Sale to Inside Coterie:**

A company may resort to subscription by promoters and directors. This method helps to save the expenses of public issue. Generally, a percentage of new issue of securities is reserved for subscription by the internal group of people who can in this way share the future prosperity of the company.

Practical work:

1. *List the physical and financial assets for investing the surplus fund as per the safety, liquidity, yield, tax benefit and convenience.*
2. *Visit to any one of the investment bank / lead bank /merchant bankers / stock brokers and fill the following chart, after knowing the monthly or quarterly primary market position, with fresh or new issue by the way of public issue, right issue and private placement.*

Name of Company	**Monthly/Qrtly fresh Issue**								
	Public Issue			***Right Issue***			***Private Placement***		
	Equity	*Debenture*	*Bonds*	*Equity*	*Debenture*	*Bonds*	*Equity*	*Debenture*	*Bonds*

1.2.1.6 Underwriting of Securities:

It is the process by which investment banks raise investment capital from investors on behalf of corporations and governments that are issuing securities (both equity and debt capital). The services of an underwriter are typically used during a public offering in a primary market. Underwriting is the process that a lender or other financial service uses to assess the credit worthiness or risk of a potential customer. These services are provided by some financial institutions, such as banks, insurance or investment houses, whereby they guarantee payment in case of damage or financial loss and accept the financial risk for liability arising from such guarantee. An underwriting arrangement may be created in a number of situations including insurance, issue of securities in primary markets, and in bank lending, among others.

The underwriting standards in place help to set benchmarks for how much debt may be issued to a person, the terms of the loans, how much debt a specific company is willing to issue, and what interest rates will be charged. A securities underwriter or investment bank is the entity that helps corporation raise money from investors. Most of the companies are not set up to manage the sale and then disbursal of many of their investment securities. Selling stocks, bonds or other securities is also an expensive proposition and companies frequently look for ways to reduce costs as well as their risks when doing so. A securities underwriter relieves a client corporation of much of the risk attached to selling its securities. This is a way of distributing a newly issued security, such as stocks or bonds to investors. A lead banks manager underwrites the transaction, which means they have taken on the risk of distributing the securities. Should they not be able to find enough investors, they will have to hold some securities themselves. Underwriters make their income from the price difference (the underwriting spread) between the price they pay the issuer and what they collect from investors or from broker-dealers who buy portions of the offering.

1.2.2 Secondary Capital Market (Stock Exchange)

The secondary market is a pre-requisite market for developing a capital market. This market facilitates marketability and liquidity of the corporate securities. Without this market, the corporate sector cannot grow. It is the economic barometer of the country. It indicates the economic growth of the nation. It facilitates the flow of capital into profitable enterprises. It has a significant impact on the business activities of the country. The trading activity takes place between investor through the intermediaries called stock brokers. Stock brokers assist the investors in buying and selling of securities in the secondary market. They buy or sell securities for their clients. Usually the secondary market transactions are completed through the stock exchanges. The secondary market for a variety of assets can vary from loans to stocks, from fragmented to centralized and from illiquid to very liquid.

1.2.2.1 Meaning:

The secondary market is a market for existing financial securities. After the securities are originally sold through the primary market, they are traded through the secondary market. Thus the secondary market involves the purchases and sale of securities already issued. It is also called stock market or the aftermarket, is the financial market in which previously issued financial instruments such as stock, bonds, options and futures are bought and sold.

A stock exchange is a market where shares and debentures of joint stock companies and securities of central, state and semi-Government bodies are bought and sold under a code of rules and regulation.

The Securities Contracts (Regulations) Act 1956 defines Stock Exchange *"as an association, organization or body of individuals whether incorporated or not, established for the purpose of assisting, regulating and controlling business in buying and selling and dealing in securities"*.

The said definition clearly indicates that a stock exchange is a capital market where long term finance for the development of companies can be obtained by selling the securities through authorized persons. The securities of government, quasi-government and private enterprises are bought and sold in this market. It is the nerve centre of national finance. Stock Exchange is, in fact the focal points of the capital market system that fuel the growth and expansion of national business, to the ultimate benefit and well-being of the national economy and its people.

Characteristics:

1. It is an organized market for the securities.
2. It may be an incorporated company or an association of person.
3. It regulates and controls business in buying, selling and dealing in securities.
4. The working of stock exchange is regulated by the Government.

5. Stock exchange does not itself engage in the purchase and sale of securities. It provides only a place where members can carry on their business on their own account under a code of rules and regulations.

The significance of stock exchange is found in its operation of smooth marketability and liquidity of corporate securities. It provides ready market for buying and selling of corporate securities. This market creates a favourable demand for stock and shares and with this demand company can improve their performance. It also creates an image for a company. It facilitates the self assessment of financial status of the corporate enterprise. It provides capital formation and promotes industrial growth of the country by attracting investment from the general public. This is an organized market for buying and selling of securities. The securities are evaluated through the floated price on every day operation. The listed securities gain quick response from the public in the market. Due to variation in price every day, the corporate enterprises can improve their bargaining position.

1.2.2.2 Evolution of Stock Exchange

It is said that the concept of 'Stock Exchange' was first evolved when people during the 18th century were talking about participation in the companies which emerged due to Industrial Revolution. Persons interested in the activities of newly emerging industrial establishments were sitting in Lloyd's Coffee House, London, and were discussing about the financial operation of the companies. Thus, it is said that Lloyd's Coffee House was the original place where the concept of Stock Exchange was evolved. Gradually, this assumed legal status and the first stock exchange were established in London.

Stock exchange represents an organized market in trading of securities. The organized stock exchanges in India are of recent origin when compared with other financial markets. They did not exist in the ancient times. The growth of stock exchange has been linked with the growth of joint stock companies. The joint stock companies were, in fact, born after the industrial revolution. The stock exchanges were born with the birth of joint stock companies. So the stock exchanges were the products of joint stock companies.

The first organized stock exchange in India was started in Mumbai (Bombay Stock Exchange) in 1875 with the formation of the 'Native Share and Stock

Brokers Association. In 1894 'Ahmedabad Share and Stock Brokers Association was set up mainly to handle large blocks of textile shares. They were voluntary bodies and were non-profit organizations. In 1908 the Calcutta Stock Exchange was formed primarily to deal in shares of plantations and jute mills. There are twenty two stock exchanges in the country. The organization of stock exchanges varies. Some are public limited companies (13), while others are limited by guarantee (6) or as voluntary not profit-making organizations (3). The stock exchanges need to be recognized under the Securities Contracts (Regulation) Act 1956. At the end of March 2009, there were 20 stock exchanges registered with SEBI (Securities Exchange Board of India) having total of 8,652 registered brokers and 62,471 registered sub-brokers trading on them. As of now SEBI has approved and notified the Corporatization and Demutualization scheme of 22 stock exchanges.

Organization and Management:

There is no uniformity in the form or ownership of stock exchanges that are functioning in the country today. Some Stock exchanges are organized as voluntary associations and some are limited companies and some are guaranteed companies

Wherever the form of ownership, the stock exchanges are managed by an executive Committee/Governing body which consists of president, a Vice-President, Executive Director, elected director, public representatives and nominees of the Government. The Governing body is responsible for policy formulation and smooth running of the exchange. The executive functions are discharged by the Executive Director.

1.2.2.3 Role and Functions of Stock Exchange:

The major role and important functions of stock exchange are as under:

1. ***Ready and continuous Market:*** Stock exchange provides a market place for exchange of securities freely by the brokers for their clients. It provides a ready and continuous market for buying and selling of securities i.e., shares, debentures and securities of Government and semi-Government bodies. Mobility of capital takes place smoothly.

2. ***Provides liquidity to investors:*** A continuous market facilitates liquidity through sale and purchase of securities. Any time, securities can be converted into cash and vice-versa. This liquidity increases the value and utility of securities.
3. ***Wide distribution of securities:*** Stock exchange helps existing and new companies in wider distribution of their securities. Listed shares in the stock exchange are more acceptable and fetch higher market value. When securities are listed in all the stock exchange they attract investors from different parts of the country.
4. ***Mobilization of savings:*** The stock markets are perfect market which helps to mobilize the savings of the people to productive channels. They encourage individuals and institutions to invest their funds in business enterprises. It has facilitated the conversion of small savings of the public into productive activities. Thus there will be orderly flow of savings into investment and assist economic prosperity.
5. ***Ensure safety of funds:*** Stock exchanges ensure safety of investable funds because they have to operate under a code of rules and regulations. The brokers cannot overcharge the investors. This strengthens investors' confidence and stimulates large investments.
6. ***Proper direction to the flow of capital:*** Stock exchanges bring about flow of capital in appropriate directions; they direct the flow of capital in the most profitable channels. The prices quoted for different securities on the stock exchange indicate their relative profitability. If the securities are quoted in the stock exchanges above par for a long time, it indicates the good prospects of the concern. It is treated as a barometer of business activity.
7. ***Assessment of securities:*** The stock exchange ensures correct appraisal of security. The real worth of securities is evaluated by free play at market force. The prices quoted in the stock exchanges for all securities are recorded and made available to the public. This helps the investor to know the prices and value of securities at any time. The free play of demand for the supply of securities determines price continuously.
8. ***Mirror of business cycle /Economic Barometer:*** Stock exchanges are the mirror of business cycle. Price trends on a stock exchange reflect the economic

progress and socio-political conditions of a country. It indicates the boom or depression prevailing in the country**.** Like barometer which indicates the variation in temperature of the environment at any point of time, the stock exchange indicates the health of the economy.

9. ***Capital Formation:*** Stock exchange play a vital role to form the capital required by corporate enterprises. Besides motivating public to invest in securities, the stock market promotes capital formation and provides necessary funds to the needy industries. Capital formation and disbursement is an auto mechanism found in stock exchange.

10. ***Help to banks:*** The Stock exchanges help banks to maintain liquidity by increasing the volume of marketable securities. They have mutual cooperation between banks and stock exchange. This facilitates speedy economic development and fair dealing in buying and selling securities

11. ***Future Forecast:*** Stock exchanges render forecasting function. The price movements for securities reflect and forecast the future happenings in business operations. The impending business boom or depression is indicated in advance by stock exchanges. Prompt signal is given by the stock exchange in this direction.

12. ***Speculation:*** The operators on the stock exchange are the authorized agents with different names. These operators hold corporate securities for a temporary period. The speculators, who wish to make profit out of variation in price of securities, operate skillfully and provide good liquidity position to the securities. Speculation affects the share prices badly at certain time; it plays a vital role in moving the capital market.

1.2.2.4 Trading Mechanism in Stock Exchange:

We have so far analyzed the various functions of stock exchange. It is essential here to understand the trading mechanism in (operation) stock exchange.

a) Operations- The Securities Contracts Act, 1956 has specified the trading mechanism of the stock exchange. All stock exchanges are operating in India. But Bombay stock exchange is the leader and entire stock exchange operations of the country are informally guided by this exchange. Stock exchanges are managed by an Executive Committee or Governing Board. This Board will be controlling the operations of the exchange. There will not be more than three Government nominees on the Board of each exchange. There are sub-committees like (i) Listing Committee (ii) Defaulters' Committee (iii) Arbitration Committee to look after the various aspects of the exchange.

The buying and selling of securities takes place by members (broker) or authorized agents. Certain legal formalities have to be followed to become the member of the exchange. There is uniformity of dealings on all stock exchanges. Three types of trading takes place in the exchanges. Such as (i) Spot delivery contract (ii) Ready delivery contract and (iii) Forward delivery contract.

The person who wants to buy or sell the securities cannot directly deal on the exchange. He has to select a broker (member) for opening an account and enter into contract for settling the deal. The intending buyer or seller should place an order with the broker. There are a number of methods. Normally, the broker informs his client through letter. After placing the order with the broker, the broker will go to the trading ring to clear the transaction. There will be open bidding and by outcry and showing the fingers, deal will be settled. A slip giving brief details of the bargain in prepared and put in a box for making announcement in the official price list for information. Then the settlement will be made as per the type of the contract.

b) Operating persons- There are several persons operating on the stock exchange. All of them are the official agents of the exchange having different names according to the function they discharge. They are (a) Brokers (b) Jobbers (c) Authorized clerks (d) Remesiers

i) Brokers: Brokers are commission agents who act as intermediaries between buyers and sellers of securities. They do not own the securities but buy transact business on behalf of investor. They are entitled to a prescribed scale of brokerage for the service rendered by them.

***ii) Jobber*:** Jobber is the members who transact business independently for themselves. They buy and sell securities to earn profit on their own account. He is a specialist dealer who buy sells securities to the brokers. A jobber always quotes two prices for a security. The lower price is for purchasing and higher price is for selling.

iii) ***Authorized Clerks:*** Every exchange allows its members to appoint agents to carry out the business on the trading floor. The agent authorized by the member to carry on the business is called "Authorized Clerk". Authorized Clerk cannot directly deal with the brokers or Jobber. He will be dealing on behalf of a broker.

iv) **Remisiers:** Remisiers are the sub-brokers appointed by brokers and they are not allowed to trade on the trading floor. These sub-brokers are given nearly 50% commissions on each dealing

Thus, several types of brokers and their authorized agents operate on the exchange to carry out the transactions smoothly. Only a member can transact business at a stock exchange, either on his own behalf or on behalf of his clients. Thus, a non member can purchase or sell shares or securities only through the members. The relationship between the client and the member is that of a trustee nature. Therefore, when the member receives share/ securities from his client for sale, he is obliged to sell the shares/securities as per instructions and to remit the sale proceeds thereof after deducting brokerage and other related expenses to his client.

Similarly, when the members are buy share / securities to his client. He has to ensure that shares/securities are delivered to the client after he has received from the client payment for the same which includes the brokerage and other incidental expenses in connection therewith. Thus, the member acts as the custodian and handles the shares/securities on their behalf. The member, being a custodian of the shares/securities of his clients, must ensure that he has received payment from other stock brokers for the shares/securities sold on behalf of his clients and that he has made payment to the other stock broker on behalf of his client for the securities purchased on their behalf. The procedures followed by various stock exchanges in the purchase and sale of securities vary. The procedure described below is followed in some of the stock exchanges in India. An investor may place an order by telephone to avoid delay. Some methods of placing on order are described below.

1. ***Fixed price* -** When the client instructs the broker to buy or sell certain shares at a fixed price mentioned in the order. It is called a fixed price. The broker cannot buy or sell, beyond this limit is said to be that limit order.

2. ***At best at the Market Order*-** It is an order which does not specify any price and therefore should be executed immediately at the best prices obtainable at the time

3. **'*Immediate /Cancel' order*-** It is that order which does not specify any price and therefore should be executed immediately at the prevailing price. Otherwise the order stands cancelled price obtainable at the time

4. ***'Discretionary' order*-** Instructions may be issued by the client to buy or sell shares at whatever price is considered reasonable by the member. This is termed is 'Discretionary order'

5. ***Open order*-** When the client places on a limit on the time during which his order must be executed, it is known as 'Open Order'

On receiving the order, the member takes it down in a rough memo book from which it may be transferred to the 'order book'

1.2.3 SEBI and Credit Rating

1.2.3.1 Securities and Exchange Board of India (SEBI):

With the growth in the dealings of stock markets, lot of malpractices also started in stock markets such as price rigging, unauthorized premium on new issue and delay in delivery of shares, violation of rules and regulations of stock exchange and listing requirements. Due to these malpractices the customers started losing confidence and faith in the stock exchange. So government of India decided to set up regulatory body known as Securities Exchange Board of India (SEBI). SEBI promotes orderly and healthy development in the stock market but initially SEBI was not able to exercise complete control over the stock market transactions. It was left as a watch dog to observe the activities but was found ineffective in regulating and controlling them. As a result in May 1992, SEBI was granted legal status. SEBI is a body corporate having a separate legal existence and perpetual succession.

It is the regulator for the securities market in India. Initially SEBI was a non statutory body without any statutory power. In April 1988 the SEBI was constituted as the regulator of capital markets in India under a resolution of the

Government of India. It became an autonomous body by the Government of India on 12 April 1992 and given additional statutory powers in the Securities and Exchange Board of India Act, 1992 being passed by the Indian Parliament. SEBI has its headquarters at the business district of Bandra Kurla Complex in Mumbai and has Northern, Eastern, Southern and Western Regional Offices in New Delhi, Kolkata, Chennai and Ahmedabad respectively. Controller of Capital Issues was the regulatory authority before SEBI came into existence; it derived authority from the Capital Issues (Control) Act, 1947.

The Preamble of the SEBI describes the basic functions of the Securities and Exchange Board of India as "*...to protect the interests of investors in securities and to promote the development of, and to regulate the securities market and for matters connected there with or incidental there to".* The main purpose of SEBI is to check on malpractices and protect the interest of investors. Hence, SEBI has to be responsive to meet the needs of three groups, such as:

a. *Issuers:* For issuer it provides a market place in which they can raise finance easily

b. *Investors:* For investor it provides protection and supply of correct information.

c. *Intermediaries:* For intermediaries it provides a competitive professional market.

SEBI has performed three functions rolled into one body: quasi-legislative, quasi-judicial and quasi-executive. It drafts regulations in its legislative capacity, it conducts investigation and enforcement action in its executive function and it passes rulings and orders in its judicial capacity. SEBI has taken a very proactive role in streamlining disclosure requirements to international standards. The main objectives of SEBI are:

a. To protect investors to have continuous flow of saving in stock market.

b. To try to make companies to use proper customes and to help them in selling securities at minimum expenses.

c. To help in obtaining efficient services to investors from market agent, bankers and other middlemen.

Powers of SEBI- For the discharge of its functions efficiently, SEBI has used the following powers:

1. Registration of brokers.
2. To approve by−laws of Securities exchanges.
3. To require the securities exchange to amend their by−laws.
4. Inspect the books of accounts and call for periodical returns from recognized Securities exchanges.
5. Inspect the books of accounts of financial intermediaries.
6. Compel certain companies to list their shares in one or more Securities exchanges.

Organizational Structure of SEBI:

1. It is working as a statutory body in corporate sector.
2. Its activities are divided into five departments. Each department is headed by an executive director.
3. The head office of SEBI is in Mumbai and it has branch office in Kolkata, Chennai and Delhi.
4. There are two advisory committees formed by SEBI to deal with primary and secondary markets.
5. These committees consist of market players, investors associations and eminent persons.

1.2.3.2 Functional Role of SEBI:

The overall objectives of SEBI are to protect the interest of investors and to promote the development of stock exchange and to regulate the activities of stock market. In this context the SEBI performs the important three functional role to meet its objectives, which is given below:

1. Role of Protective Functions:

These functions are performed by SEBI to protect the trust and interest of investor and provide safety of investment. It includes the following sub-functions**:**

(a) ***It Checks Price Rigging:*** Price rigging refers to manipulating the prices of securities with the main objective of inflating or depressing the market price of securities. SEBI prohibits such practice regularly because this can defraud and cheat the investors.

(b) ***It Prohibits Insider trading:*** SEBI keeps a strict verify when insiders are buying securities of the company and takes strict action on insider trading. Insider is any person connected with the company such as directors, promoters etc. These insiders have sensitive information which affects the prices of the securities.

(c) ***Prohibits fake and Unfair Trade Practices:*** SEBI does not allow to any companies to make misleading statements which are likely to induce the sale or purchase of securities by any other person.

(d) ***Orientation to Investors:*** SEBI undertakes steps to educate investors so that they are able to evaluate the various securities of different companies and select the most profitable securities.

(e) ***Apply Code of Conduct in Market:*** SEBI used to apply code of conduct in security market for promotion of fair practices with various steps such as: (i) It has issued informative guidance to protect the debenture-holders interest. (ii) It is empowered to investigate cases of insider trading and has provisions for stiff fine and imprisonment. (iii) It has stopped the practice of making preferential allotment of shares unrelated to market prices.

2. Role of Developmental Functions:

SEBI performed these functions to promote and develop activities in stock exchange and boost the business in stock exchange. Under developmental categories following functions are performed by SEBI:

(a) It promotes education and training to intermediaries of the securities market.

(b) It tries to support various activities of stock exchange for creating flexible and adoptable approach in following way: (i) It has permitted internet trading through registered stock brokers. (ii) It has made underwriting optional to reduce the cost of issue and (iii) Even initial public offer of primary market is permitted through stock exchange.

3. Role of Regulatory Functions:

These regulatory functions are performed by SEBI to regulate the business activities in stock exchange. To regulate the stock exchange following functions are performed:

(a) SEBI has framed various rules and regulations and a code of conduct to regulate the intermediaries such as brokers, underwriters, merchant bankers, etc.

(b) These intermediaries have been brought under the regulatory purview and private placement has been made more restrictive.

(c) It has registers and regulates the working of stock brokers, sub-brokers, share transfer agents, trustees, merchant bankers and all those who are associated with stock exchange in any manner.

(d) SEBI regulates takeover of the companies and conducts inquiries and audit of stock exchanges.

(e) SEBI registers and regulates the working of mutual funds etc.

Thus with the help of different committees, SEBI has enjoyed success as a regulator by pushing systematic reforms aggressively and successively. SEBI is credited for quick movement towards making the markets electronic and paperless. SEBI has been active in setting up the regulations as required under law. SEBI has also been instrumental in taking quick and effective steps in light of the global meltdown.

1.2.3.3 Credit Rating:

Credit rating serves as a valuable input in the decision making process of different participants in the capital market including the regulators. Although credit rating is relatively new in India, the levels of awareness as well as its actual use are increasing slowly and gradually. With the liberalization and consequent restructuring of the financial services sector, credit rating is becoming even more important. Credit rating system have occupy an essential role as information providers particularly for credit related opinions in respect of debt instruments, a role that has been strengthened by the perception that their opinions are independent, objective, well researched and credible. Owing to this, it is an important that the major player in the market, particularly the investors, understand the significance and different agencies of credit rating.

1.2.3.4 Meaning: Credit Rating

Ratings, usually expressed in alphabetical or alphanumeric symbols, are a simple and easy understand tool enable the investor to differentiate between debt instruments on the basis of their underlying credit quality.

The credit rating is a symbolic indicator of the current opinion of the relative capability of the issuer to service its debt obligation in a timely fashion, with specific reference to the instrument being rated. It is focused on communicating to the investors, the relative ranking of the default loss probability for a given fixed income investment in comparison with other rated instruments.

According to the–Standard & Poor's *"In determining a rating both quantitative and qualitative analysis are employed. The judgement is qualitative in nature and the role of the quantitative analysis is to help make the best possible overall qualitative judgement because, ultimately, a rating is an opinion"*

A rating is specific to a debt instrument and is intended as a grade, an analysis of the credit risk associated with the particular instrument. It is based upon the relative capability and willingness of the issuer of the instrument to service the debt obligations (both principal and interest) as per the terms of the contract. Thus, a rating is neither a general purpose evaluation on the issuer, nor an overall assessment of the credit risk likely to be involved in all the debts contracted or to be contracted by such entity. The primary objective of rating is to provide guidance to investor/ creditors in determining a credit risk associated with a debt instrument/ credit obligation. It does not amount to a recommendation to buy, hold or sell an instrument as it does not take into consideration factors such as market prices, personal risk preferences and other consideration which may influence an investment decision. The rating process is itself based on certain 'givens' the agency for instance does not perform an audit. Instead, it is required to rely on information provided by the issuer and collected by analysts from different source, including interactions in person with various entities. Consequently, the agency does not guarantee the completeness or accuracy of the information on which the rating is based.

1.2.3.5 Need of Credit Rating:

Credit rating plays vital role in financial market by helping to reduce the information asymmetric between lenders and investors. It provides ancillary business services and other services like risk management and consulting services to help financial institutions to manage credit and operational risks. The need and benefits of credit rating towards investors, borrowers, companies and government which reveals the following points

1. It enables the investor to identify the risks associated with various debt obligations.
2. It enables the investors to get superior information at low cast and help to take calculated risk in their investment decisions
3. It facilitates companies with good rating to enter the capital market confidently and raise funds at comparatively cheaper rates
4. It can be used as a marketing tool and encourage discipline among the corporate borrowers
5. It encourages people to invest their savings in corporate securities & get high return
6. It facilitates the formulation of public policy guidelines on institutional investments
7. Fair and good ratings motivate the public to invest their savings in good shares deposits and debentures.
8. Decreasing the potential conflict between the underwriters and the investors.
9. Providing greater liquidity in secondary market
10. Continuing growth of information technology, leads to encouraging increased disclosure on the part of companies.
11. Better accounting standards and improved financial information for the promotion of individual and institutional investor protection.
12. Increased securitization of borrowing and lending consequent to disintermediation
13. Increasing role of capital and money markets consequent to disintermediation

14. Globalization of the credit market and facilitates foreign collaborations
15. The growth of confidence in the efficiency of the market mechanism
16. Withdrawal of Government safety nets and the trend towards privatization.
17. Assess the creditworthiness of issuers of securities, usually companies, non-profit organizations / government.
18. Ample opportunities to strengthen the capital market and building investors' confidence in the Indian financial system.

Thus, it is clear that, in India, there are many systemic constraints on the credit rating services, for e.g- low disclosure levels; poor audit quality and long time lags in the availability of data. There is also a need to educate the investor to have the right expectations. All this has led to ratings being reduced from being an evaluation tool to a mere certification tool, thereby at times defeating the very purpose of existence of rating agencies.

1.2.3.6 Credit Rating Agencies in India:

In the economic globalization, liberalization, industrialization, industrial development and Research promoted by disintermediation, there is a genuine need for authentic investment information designed to facilitate the decision making process of investors and other participants of the financial services sector. There are various credit rating agencies in India. Such as:

(a) Credit Rating Information Services of India Limited (CRISIL)-

CRISIL, the first rating agency in India, which was mainly promoted by the Industrial Credit and Investment Corporation of India (ICICI) and Unit Trust of India (UTI) in 1987. They have other shareholders, it includes Life Insurance Corporation of India (LIC), State Bank of India (SBI), Asian Development Bank (ADB), Housing Development Finance Corporation (HDFC), General Insurance Corporation of India (GIC) and its subsidiaries, Standard Chartered Bank, Bank of Tokyo, Banque IndoSuez, Sakura Bank, Hong Kong and Shanghai Banking Corporation, Citibank, Grindlays Bank, Duetsche Bank, Societe Generale, Banque Nationale de Paris, UCO Bank, Bank of India, Canara Bank, Allahabad Bank, Central Bank of India, Vysya Bank Ltd, Bank of Madura Ltd, and Indian Overseas Bank.

The principal objective of CRISIL is to rate debt obligations of Indian companies. It provides rating guide to the investors as to the degree of certainty with timely payment of interest and principal on a particular debt instruments. CRISIL, rates debentures, fixed deposit programs, short term instruments like commercial paper, structured obligations and preference shares. CRISIL has rated in all 926 debt instruments issued by 668 companies from its commencement in 31st March1994. They have introduced CRISIL Card, CRISIL View, CRISIL Ban card and CRISIL Rating Digest Service.

(b) Investment Information and Credit Rating Agency of India Limited (ICRA)

The IFCI and a number of other financial institutions established ICRA in 1991 at Delhi. It undertakes rating of debt instruments. ICRA credit rating provides an investor with a simple indicator expressing the underlying credit quality in a debt issue programme. ICRA credit ratings also establish a connection between risk and return.

They provide a yardstick against which to measure the risk inborn in an instrument. An investor uses the rating to assess the risk level and compares the offered rate of return with his expected rate of return (for the given level of risk) to optimize his risk-return trade off. The relatively unknown issuer is also benefited by having access to a much wider investor base as credit rating minimizes the role of ‘name recognition’ in an investment decision. In addition, ICRA provides ‘general assessment’ report on different aspects of the company’s operations and management.

(c) Credit Analysis and Research Limited (CARE)

The Industrial Development Bank of India (IDBI) jointly with Canara Bank, UTI, private sector banks and financial services companies promoted the Credit Analysis and Research Institution to offer credit rating information and equity research service to the Indian industry and business institutions. CARE, incorporated on April 21, 1993, commenced its operations in October 1993.

CARE undertakes rating of all types of debt instruments like commercial paper, fixed deposits, bonds, debentures and structural obligations, involving an independent and professional assessment of debt servicing capabilities of companies. Business organization gets necessary information and guidance on equity research services and credit rating system.

(d) Duff and Phelps Credit Rating India Private Ltd. (DCR)

This is the leading international credit rating agency. Duff and Phelps with the J.M. Financial and Alliance Group set up DCR in India. It has started rating the company's debt instruments since 1996. It has provided effective competition to the existing agencies. The main objective of DCR is to give credit rating to debt instruments. Various agencies are expected to publicize the ratings and also update the rating on a quarterly basis.

The guidelines given by SEBI for rating function and brought them under its regulatory framework. CRAs are required to attain a minimum net worth of Rs.5 crores. They are prohibited from rating the instruments floated by their promoters and also borrowers of promoters' institutions. There are popular symbol employed by this agency such as: D1, D_2, D_3 etc., It is depending upon the credit status.

(e) Onida Individual Credit Rating Agency Ltd. (ONICRA)

This credit rating agency has been setup and sponsored by the Onida Finance Ltd. It is known as 'ONICRA'. It has taken up the task of credit rating individual borrowers and not an institutional borrower. Hence, ONICRA helps the users of this rating to know risk level associated with entering into the credit transactions. It is gradually gaining acceptance among financial institutions and others. Brickwork / stonework ratings are the newest rating agencies in the country.

(f) Fitch Ratings (India) Ltd.

Fitch Ratings Limited is also one of the good rating agency in India, which is a 100% owned subsidiary of a foreign company. It is recognized by the Securities Exchange Board of India (SEBI), for its operations in India. This rating agency provides necessary guidance to investor for the determining a credit risk associated with a debt instrument.

1.2.3.7 Credit Rating Methodology:

An evaluation and monitoring ratings, both qualitative and quantitative criteria are employed. The methodology involves an analysis on various sections of the past performance of the company and an assessment of its future prospects, which involves judgment of the company's competitive advantage position and assessment of its management and strategies. In order to reduce subjectivity, a meaningful decision-making process is applied in assigning a rating which ensures that no single individual decides on a rating.

The operation of rating exercise commences at the request of a company. A rating applies to a particular debt obligation of the company and is not a general purpose evaluation of the company. The focus of the assessment is on the ability and the willingness of the company to meet the financial obligations on the debt instrument in a timely manner. The following key factors should consider in the credit rating methodology:

Business Analysis- It includes risk of industry, market position of the company within the industry, operating efficiency of the company and administrative cum legal position.

Financial Analysis- It covers quality of accounting with its procedure, earning protection, trend of cash flow and adequacy of financial flexibility etc.

Management Evaluation- It focuses the track record of the management, mission and goal of company, depth of managerial talent, succession plans, capacity appraisal to overcome adverse situations, philosophy and its managerial strategies.

Regulatory and Competitive Environment- This part deals with structure and regulatory framework of the financial system, trends in regulation or deregulation and their impact on the company.

Fundamental Evaluation- It includes capital adequacy, assets quality, liquidity management, profitability ratio and financial position, Interest and tax sensitivity etc.

Thus, the credit ratings are the symbolic presentation of opinions' of concern agency. The various symbols are used by above different agency. The classification of ratings is on the basis of merits. It has mainly four categories, such as:

- High investment grade
- Investment grade
- Speculative grade
- Poor grade

1.2.4 Depository

A depository institution provides financial services to personal and business customers. Deposits in the institution include securities such as stocks or bonds. The institution holds the securities in electronic form also known as book-entry form, or in dematerialized or paper format such as a physical certificate. The rapid growth in numbers, volumes and value of securities exposed the limitation of handling and dealing in securities in physical mode. The trading in physical segment is full of inefficiencies due to handling of large volumes of certificates and also involves various other problems like bad deliveries, delays in transfer, irregular settlement, loss in transit, forgery certificates, stolen certificates, mutilation of certificates, postal losses, court cases, litigation etc. To overcome these deficiencies, a new system of trading, viz. Depository system was introduced, which facilitates investor to hold securities in electronic form and to trade in these securities. The depository bought in solutions for all these problems.

Technology is revolutionizing every field of human effort and activity, especially in the capital markets. A major development has been the setting up of depository services. The objective of a depository is to provide for the maintenance or transfer of ownership records of securities in an electronic form and scripless trading in the stock exchanges, thereby reducing settlement risks. The Securities and Exchange Board of India (SEBI) has granted registration to two depositories - the National Securities Depository Limited (NSDL) and the Central Depository Services (India) Limited (CDSL) under the Depository Act, 1996. This provided the capital markets with superior technology, complex securities processing and rock solid accounting and portfolio management system.

1.2.4.1 Meaning: Depository

A depository in a simple term means a place where something is deposit for storage and security, however in capital market, this term has a lot of relevance, we define ***"Depository as an institution that works like bank"*** Likewise our bank holds investor fund, similarly depository maintains an account for investors securities (share, debentures, mutual fund etc) hold by them in a dematerialized or an electronic form.

Depository is an organization which holds your securities in electronic (known as 'book entry') form, in the same manner as a bank holds your money. Further, a depository also transfers your securities without actually handling securities, in the same day as a bank transfers funds without actually handling cash. In simple terms Depository is an institution or organization which holds securities with it, in which trading is done among shares, debentures, mutual funds, derivatives and commodities. The intermediaries perform their actions in variety of securities at Depository on behalf of their clients. These intermediaries are known as Depositories Participants.

A depository can be compared to a bank. A depository is an organization where the securities of an investor are hold in electronic form and carries out the securities transaction by book entry. It means, just as a bank holds cash in your account and provides all services related to transaction of cash, a depository holds securities in electronic form and provides all services related to transaction of shares/debt instruments. A depository interfaces with its investors through its agents called Depository Participants (DPs). If an investor wants to utilize the services offered by a depository, the investor has to open an account with a DP. This is similar to opening an account with any branch of a bank in order to utilize the bank's services. Thus, an investor who wishes to avail of all depository services has to open a demat account with a depository participant. The depository participant is an agent of the depository and is authorized to offer depository services to investors. According to SEBI guidelines, financial institutions, banks, custodians, stock brokers can become depository participants. Once you have opened an account with a depository participant, you can buy or sell shares in the electronic form, provided the seller/buyer also holds shares in the electronic form.

Features of Depository System:

Some feature of depository system are derived from the above concept, such as :

(a) Day-to-day basis of reconciliation is made by National Securities Depository Ltd. (NSDL)

(b) Securities are divisible and, as such, can be transacted by any quantity;

(c) Allotted securities as International Security Identification Number (ISIN) by SEBI

(d) The benefit of depository system is enjoyed by the investor of securities

(e) Central Depository Services Ltd (CDSL) and National Securities Depository Ltd (NSDL) are the Depository Participants to act as agent.

Transferring the ownership of shares from one investor's account to another investor's account when a trade is executed is one of the primary functions of a depository. This helps reduce the paperwork for executing a trade and speeds up the transfer process. Moreover a depository is it eliminates the risk of holding the securities in physical form such as theft, loss, fraud, damage or delay in deliveries. Depository services include checking and savings accounts and the transfer of funds and electronic payments through online banking or debit cards. The Depository has various depository participants registered with it which offer depository services or Demat account services to their clients.

Who are the depositories?

Depositories are those who are licensed by the Securities and Exchange Board of India (SEBI) to undertake depository functions i.e. holding and handling of securities in electronic form. The National Securities Depository Ltd. (NSDL) promoted by UTI, IDBI and NSE is the first depository of India. The Stock Exchange, Mumbai has promoted Central Depository Services (India) Ltd. (CDSL) which has drawn plans to set up the second depository in the country

1.2.4.2 Process of Depository:

There are three steps in which an investor can covert his physical certificate into electronic form.

I. Open an account with one of the Depository Participants of NSDL

II. Sign an Agreement with the Depository Participants

III. Submit dematerialization request form along with share certificate to the issuer.

Dematerialization (Demat) Account and its Process:

It is an account that holds the investors securities such as shares, debentures, mutual fund etc in a dematerialized or an electronic form. A buy transaction will result in a credit entry while a sell transaction leads to debit entry in a demat account. A demat account is opened on the same lines as that of a Bank Account. Prescribed Account opening forms are available with the Depository Participants, needs to be filled in. Standard Agreements are to be signed by the Client and the Depository Participants, which details the rights and obligations of both parties.

Along with the form the client requires to attach photographs of account holder, attested copies of proof of residence and proof of identity needs to be submitted along with the account opening form. If the corporate clients, need of additional attachments are - true copy of the resolution for Demat account opening with signatories to operate the account and true copy of the Memorandum and Articles of Association is to be attached.

After the opening as account, all existing shares can be dematerialized and converted into Electronic Form. Dematerialization is a process by which investor can deposit (demat) shares of any company listed on NSDL which are registered in investor name and convert the physical holdings into electronic form as under:

a. Fill a Dematerialization request form available with participant.

b. Submit share certificates along with request form.

c. Investor account will be credited within 15 days.

d. If investor wishes to convert their electronic shares back to physical shares at a later stage, they do so by applying for re-materialization, submit it for dematerialization

1.2.4.3 Role of Depository system:

The role of depository system is not only maintaining the accounts of the shareholder but to undertake and collect dividends, bonus shares, etc., on behalf of the shareholder. Periodically, the shareholders have informed of their holdings by a Depository agent through a statement of accounts. Any sale or purchase of shares have take place through the Depository. In this context the depository play mainly following role:

a. *Central Depository*- It is an organization with which all the shares, belonging to the shareholders are kept and the electronic system takes care of them.

b. *Share Registrar*- It is an authority who controls the issue of securities along with for the transfer of securities while buying or selling of securities.

c. *Clearing and Settlement Corporation*- It is an authority to settles the transfer of funds between the seller and buyer.

d. *Depository Participant*- He is like a share broker and he trades as per the instructions of the shareholder in and outside the stock exchange.

In addition to that, the use of electronic system in the transfer of shares is an important role by Depository system. Let us know the general role of depository system as under:

1. Takes hold of all securities in the country listed in that particular stock exchange.
2. Introduction of electronic system enables speedy transactions and accuracy.
3. Assist to the security holders to buy and sell securities with proper liquidity to the securities.
4. Avoided blank transfers of securities and prevented holding of shares in illegal names.
5. Make registration and collected stamp charges for the sale of securities easily.
6. Promotes more activity in the capital market as trading in genuine shares.
7. Avoids use of stationery and prevents delay in registration of transfers.
8. Properly distributed dividend and interest on securities or shares.
9. Acts as collateral security for the raising of 1oans from any financial institution.

1.2.4.4 Benefits of Depository System:

A depository eliminates the risk associated with holding physical securities. They reduce the paper work involved in trading and faster the transfer of shares. In 1996, demat or electronic trading was made compulsory for institutional investors, which led to a spike in the overall trading volumes in the Indian market. Foreign investors felt more confident about trading in the Indian market due to the depository system as there were far fewer incidents of forgery, delay and unscrupulous transfer of shares. The benefits of depository system may be studied under four heads namely:

I. Benefits to investors

a. It eliminates bad deliveries
b. It computes the settlement cycle very fast

c. It makes quick transfer and registration of securities and help investor to get dividend and bonus without delay.

d. It eliminates all risks associated with physical certificate

e. It makes to provides nomination facility to the investors

f. It helps to reduces trading cost and exempt from stamp duty on transaction.

g. Being it is paperless trading; no share certificate and deed etc. are required.

h. It charge interest rate on loan against pledge of dematerialized shares is comparatively lower.

i. Use the account holder can totally freeze his account for any desired period.

j. It enables the investors to deliver shares in any part of the country without exposing themselves to the risk and cost of transportation.

k. It enables to revise the investors' portfolio more frequently due to low transaction costs and quick transfer of securities.

II. Benefits to Capital Market

1. Dues are settled in a very short time
2. It also eliminates bad delivering
3. It quick solved the problems arising from odd lots of securities
4. It eliminates the physical handling of documents and encourage paperless work
5. It is more transparent, efficient and reduces errors
6. Questions of loss, damage of securities does not arise.
7. Huge number of transactions can be settled at a very short time.
8. Build high degree confidence of investors in the capital market.
9. Use of depository system attracts foreign investors.
10. Volume of trade in capital market substantially increases.
11. Increased in participation of middle income group directly or through mutual funds.

III. Benefits to Company

a. It reduces the risk of loss of securities and eradicate the fake activities;

b. It avoids the checking of shares, deeds and various papers

c. No share certificate is issued as the securities are divisible

d. It reduces the various costs which require secretarial help

e. Scriptless trading helps allocate corporate benefits faster.

f. It supplies better communication facilities

g. It helps the shareholder to take decisions through quick availability of information

h. It enables the company to maintain and update stock information.

i. Issue cost gets drastically reduced due to dematerialization of securities.

j. Paperless trading is a boon for the company management.

k. It helps the company build a good corporate image.

IV. Benefits to Intermediaries:

1. It helps to enhanced liquidity, safety and turnover on stock market.
2. It improved cash flow elimination of forgery and counterfeit
3. Elimination of risk from settlement due to bad deliveries.
4. No postal / courier charges
5. Periodic status reports to investors on their transactions, leads to better controls

1.2.4.5 Present Position of Depository in India:

In India long back when at the Bombay Stock Exchange, stocks were traded in rings and when deals were fixed money was exchanged for receipts. Later physical shares certificates were provided. This invited a lot manual paper work and physical process also led to scams. Investor used to hold the securities in the form of physical certificate which has their own disadvantages and to take a control over the irregularities of the capital market for the protection of an investor`s interest. It means the rapid growth in numbers; volumes and value of securities exposed the limitation of handling and dealing in securities in physical mode. The trading in physical segment is full of inefficiencies due to handling of large volumes of certificates and also involves various problems. Depository system has been introduced in India where the securities could be handled in an electronic form by the process of dematerialization. After introduced the Dematerialization in 1996, that entire process was digitized and shares were transferred electronically in "Demat Account". This depository bought in solutions for all these problems. A major development has been the setting up of depository services. The objective of a depository is to provide for the maintenance or transfer of ownership records of securities in an electronic form and scripless trading in the stock exchanges, thereby reducing settlement risks. The Securities and Exchange Board of India (SEBI) has granted registration for two depositories in India which are well known as NSDL (National securities depository limited) and CDSL (Central Depository Services (India) Limited) under the Depository Act, 1996. They interface with the investors through their agents called Depository participants (DPs). DPs could be the banks (private, public and foreign), financial institutions and SEBI registered trading members. There are mainly three parties involved in Depository System:

- *Depository:* facilitates the smooth flow of trading and ensure the investor`s about their investment in securities
- *Depository Participant (DP):* provides the service of opening a demat account to the investor.
- *Investor:* individual or group invested in securities

Depository participant provides the service of opening a demat account to the investor; they are coming with different schemes like three-in-one demat account, free demat account etc to attract the investors to open an account with them. However, they are making an investment in to securities more accessible by providing services like SMS, e-mail for every transaction, E-trading platform, investment advice etc.

In India, Depository Participant is described as an agent of the depository. They are the mediators between the depository and the investors. The relationship between the Depository Participants and the depository is governed by an agreement made between the two under the Depositories Act. In legal sense, a Depository Participant is an entity who is registered under the section 12 (1A) of the SEBI Act. As per the Act, a Depository Participant can offer depository-related services only after obtaining a certificate of registration from SEBI. As of 2012, there were 288 of NSDL and 563 of CDSL registered Depository Participants with SEBI. As per the SEBI Regulations 1996, prescribe a minimum net worth of Rs. 50 lakh for stockbrokers, agents and non-banking finance companies (NBFC), for granting them a certificate of registration to act as Depository Participants. If a stockbroker seeks to act as a Depository Participants in more than one depository, he should comply with the specified net worth criterion separately for each such depository.

Thus, in the depository system, share certificates belonging to the investors are dematerialized and their names are entered in the records of depositary as beneficial owners. Investors' names in the companies register are replaced by the name of depository as the registered owner of the securities. The beneficial owner continues to enjoy all the rights and benefits and be subject to all the liabilities in respect of the securities held by the depository. The ownership changes in, the depositary are done automatically on the basis of delivery vs. payment. The investors opting to join depository mode are required to enter into agreement with depository through a participant who acts as an agent of depository. The agencies such as custodians, bank, financial institutions, large corporate brokerage firms, non-banking financial companies etc. act as participants of depositaries. The companies issuing securities are also required to enter into an agreement with the depositary.

1.2.4.6 Form of Depository in India:

A depository is an organization that holds securities of investors in an electronic format at the request of an investor through a registered Depository Participant. It assists in the allotment and transfer of securities and securities lending. In a depository, securities such as money, shares and properties, etc. are kept for safekeeping under their or depositary terms. The securities are held in the form of electronic accounts. They carry out their various operations through functionaries called as business partners or a Depository Participant. This system is governed under the Depositories Act by the government. The enactment of this act paved the way for the establishment of NSDL and CDSL. NSDL stands for 'National Securities Depository Limited', whereas CDSL stands for 'Central

Depository Services Limited'. They both are depositories that hold various securities like shares in electronic form. There is no major difference between the two; however there is small difference in their charges and their source of work. NSDL works for National Stock Exchange, whereas CDSL works for Bombay (Mumbai) Stock Exchange. Let us make an in-depth study of NSDL depository system as under:

1.2.4.7 National Securities Depository Limited (NSDL)

The first and largest depository set up in India is National Securities Depository Limited (NSDL). It is promoted by Industrial Development Bank of India (IDBI) - the largest development bank of India, Unit Trust of India (UTI) - the largest mutual fund in India and National Stock Exchange (NSE) - the largest stock exchange in India. Some of the prominent banks in the country have taken a stake in NSDL i.e. State Bank of India, HDFC Bank Limited, Deutsche Bank A.G, Axis Bank Limited, Citibank, Oriental Bank of Commerce, Union Bank of India, Dena Bank, Canara Bank etc. It has established in August 1996 and actual operation was commenced in October 1996. The Depositories Act has provided dematerialization route to book entry based transfer of securities and settlement of securities trade. In exercise of the rights conferred by the Depositories Act, NSDL framed its Bye laws and business rules with the approved by SEBI. While the Bye Laws define the scope of the functioning of NSDL and its business partners; the Business Rules outline the operational procedures to be followed by NSDL and its Business Partners.

NSDL depository has promoted by institutions of national importance responsible for economic development of the country. Since beginning a national infrastructure of international standards that handles most of the securities held and settled in dematerialized form in the Indian capital market. Although India had a vibrant capital market which is more than a century old, the paper-based settlement of trades caused substantial problems like bad delivery, delays in transfer, irregular settlement till recently. NSDL aims to ensure the safety and soundness of Indian capital market places by developing settlement solutions that increase efficiency, minimize risk and reduce costs. Using modern and flexible technology systems, NSDL works to support the investors and brokers in the capital market of the country. In the depository system, securities are held in depository accounts, which is more or less similar to holding funds in bank accounts. Transfer of ownership of securities is done through simple account transfers. This method does away with all the risks and hassles normally associated with paperwork. Consequently, the cost of transacting in a depository environment is considerably lower as compared to transacting in certificates. Hence at NSDL, play a central role in developing products and services that will continue to nurture the growing needs of the financial services industry. In view of the amendment SEBI (Depositories and Participants) Regulations, 2012, NSDL has adopted code of conduct and ethics for its directors and top managerial personnel. These ethical code of NSDL, aimed at improving the professional and ethical standards in the functioning of the company thereby creating better investor confidence in the integrity of the market. The entire integrated system (including the electronic links and the software at NSDL and each business partner's end) is called the ***"NEST"*** (National Electronic Settlement and Transfer) system.

NSDL has introduced a Certification Programme in Depository Operations, and it has been made compulsory for all Depository Participants to appoint a person qualified in this certification in each of its branches. All grievances of the investors are to be resolved by the concerned business partner. If they fail to do so, the investor has the right to approach NSDL. They has taken a comprehensive insurance policy to help Depository Participants to indemnifying investors for the loss accrued to them due to errors, omissions, commission or negligence of Depository Participants. NSDL and its business partners use computer technology systems, which conform to industry standards. Further, the systems are accepted by NSDL only after a rigorous testing procedure. The NSDL computer systems are continuously reviewed in order to make them more secure and adequate for the size of business. These reviews are a part of an ongoing exercise wherein security considerations are given as much importance as operational efficiency.

Facilities and Services offered by NSDL:

The following facilities and services are offered by NSDL to their investors, through its agents (Depository Participants).

1. Holding the investors' securities in electronic form.
2. Dematerialization and re-materialization of securities (converting physical certificates to electronic form and vice versa)
3. Transfer of securities

4. Settlement of trades in e-form in the depository segment of stock exchanges
5. Pledging or hypothecation of dematerialized securities;
6. Electronic credit of public offerings and non-cash corporate actions such as rights, bonus etc.

NSDL Measures to Ensure Safety in Investor Holdings

NSDL provides various measures to ensure safety of the investor holdings such as:

1. As per the criteria prescribed by SEBI for becoming a Depository Participant in the regulations A Depository Participant can be operational only after registration by SEBI, which is based on the recommendation from NSDL.
2. Depository Participants are allowed to make any debit and credit entry to an account only on the basis of valid instruction from the client or investors.
3. There is mandatory reconciliation system between Depository Participants and NSDL every day.
4. Records of all transactions are maintained by NSDL with the databases of business partners.
5. Periodical inspections / verification has made of various activities of both Depository Participant and agent by NSDL.
6. Every investor has a right to receive statement of accounts periodically from the Depository Participant.
7. NSDL forwards statement of account to investors randomly for counter check in every month
8. Though the depository holds the investor accounts on trust, however investor have right to transfer their holdings to an account held with another Depository Participant
9. The protection measures adopted by NSDL are more than in the regulations prescribed by SEBI.
10. The data interchange between NSDL and its business partners is protected by protection measures of international standards such as encryption hardware lock.

1.2.4.8 Central Depository Services Limited (CDSL)

Central Depository Services Limited (CDSL) was received SEBI approval in February,1999 and commenced operation in July 15, 1999. It is second Depository (NSDL being first) in India to hold shares and securities in dematerialized form and classified as capital market infrastructure company. CSDL is promoted by the Bombay Stock Exchange (Mumbai), in association with the State Bank of India (SBI), Bank of India, Bank of Baroda and HDFC Bank. The objective of CDSL was to providing ***convenient, dependable and secure*** depository services at affordable cost to all market participants. To promote use of electronic form of securities and to encourage investor for dematerialization of existing physical paper based shareholding, Depository Act, 1996 exempted all depository based electronic transfer of shares and securities from Stamp Duty, which was 0.25 percent of the value of the securities. It has an attempt to ensure the safety and soundness of Indian market places by developing settlement solutions that increase efficiency, minimize risk and reduce costs. The investor who is known as beneficial owner has to open a demat account through any Depository Participant for dematerialization of his holdings and transferring securities. The balances in the investors account recorded and maintained with CDSL can be obtained through the Depository Participant. The Depository Participant is required to provide the investor, at regular intervals, a statement of account which gives the details of the securities holdings and transactions. The depository system has effectively eliminated paper-based certificates which were level to be fake, forged, counterfeit resulting in bad deliveries. CDSL offers an efficient and instant transfer of securities.

Convenience: CDSL has a wide network of Depository Participants, operating from over 17,000 sites, across the country, offering convenience for an investor to select a Depository Participant based on his location. The Depository Participants are directly connected to CDSL thereby providing on-line and efficient depository service to investors. Wide Spectrum of Securities Available for Demat. The equity shares of almost all group companies are available for dematerialization on CDSL, consisting of Public (listed & unlisted) Limited and Private Limited companies. These securities include equities, bonds, units of mutual funds, Govt. securities, Commercial papers, Certificate of deposits; etc. Thus, an investor can hold almost all his securities in one account with CDSL. It has kept its tariffs very competitive to provide affordable depository services to investors.

Dependability: This system is built on centralized database architecture and thus enables Depository Participants to provide on-line depository services with the latest status of the investor's account. Convenient to Depository Participants the entire database of investors is stored centrally at CDSL. It has made provisions for contingency terminals, which enables a Depository Participants to update transactions, in case of any system related problems at the Depository Participants office. Continuous updation of procedures and processes in tune with evolving market practices is another hallmark of CDSL's services. CDSL conducts regular audit of its Depository Participants to ensure compliance of operational and regulatory requirements. CDSL has in place a mechanism for monitoring dormant accounts through helpdesk. Depository Participants and investors can obtain clarifications and guidance from CDSL's prompt and courteous helpline facility.

Security: All data held at CDSL is automatically mirrored at the Disaster Recovery site and is also backed up and stored in fireproof cabinets at the main and disaster recovery site. Every beneficial owner in CDSL is allotted a unique account number, which prevents any wrong entry or transfer of securities. If the transferor's account number is wrongly entered, the transaction will not go through the CDSL system, unless corrected. All data and communications between CDSL and its users is encrypted to ensure its security and integrity. In case any Depository Participants of CDSL goes into liquidation, the creditors of the Depository Participants will have no access to the holdings of the beneficial owner. CDSL has an insurance cover in the unlikely event of loss to a beneficial owner due to the negligence of CDSL or its Depository Participants.

1.2.4.9 Merits of NSDL and CDSL:

In the depository system, the ownership and transfer of securities takes place by means of electronic book entries. This system rids the capital market of the dangers related to handling of paper. NSDL and CDSL provide numerous direct and indirect benefits, such as:

1. ***Eradication of bad deliveries* -** In the depository system holder of an investor are dematerialized, the question of bad delivery does not arise. In a depository environment good money certainly induce good quality of assets

2. ***Risk elimination in physical certificates-*** Dealing in physical securities have risks of theft, loss of certificates etc. This problem does not arise in the depository environment.

3. ***No stamp duty:*** For transfer of any kind of electronic securities in the depository. This waiver extends to equity shares, debt instruments and units of mutual funds.

4. ***Quick registration and transfer of securities-*** The ownership and transfer of securities takes place by means of electronic mode in the depository system. There is no further need to send it to the company's registrar for registration.

5. ***Faster settlement cycle-*** With the use of electronic record system, the settlement cycle of trading transaction is very fast without delay. It leads to faster turnover of stock and more liquidity with the investor.

6. ***Faster disbursement of non cash corporate benefits- like rights, bonus, etc. -*** NSDL provides for direct credit of non cash corporate benefits like rights, bonus etc., to an investors account, thereby ensuring faster disbursement and avoiding risk of loss of certificates in transit.

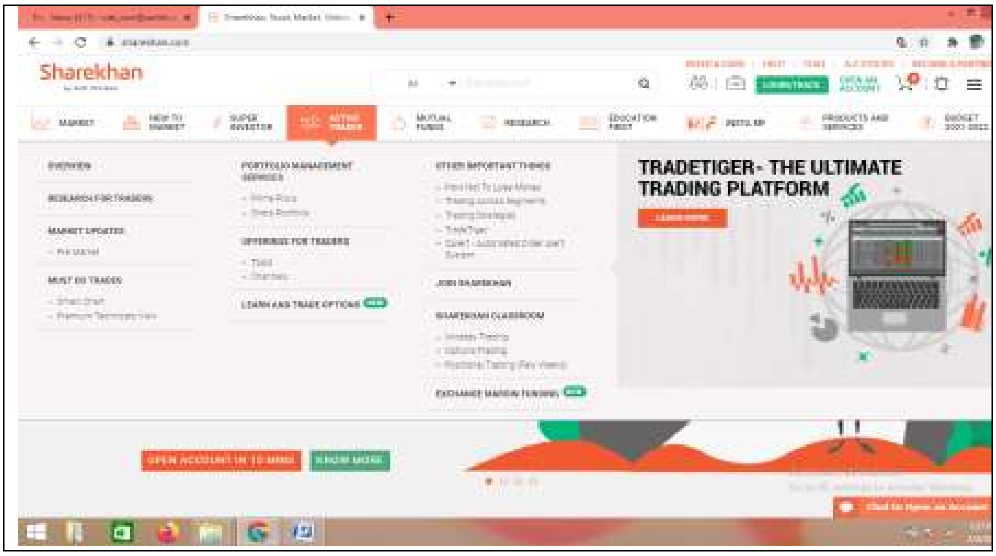
7. ***Periodic reports-*** Investors get periodical status report on their holdings and transactions. It leads to better controls.

8. ***Eradication of problems to transmission of demat shares-*** The process of transmission is more convenient in case of dematerialized holdings, as the transmission formalities for all securities held in a demat account.

9. ***Elimination of problems on selling securities of a minor -*** A natural guardian is not required to take court approval for selling demat securities on behalf of a minor.

- **Practical: Visit any Share broker office and observed share trading Activities:**

Practical No. 1: *Visit to Sharekhan trade broker office*



(https://www.sharekhan.com/, visited on dated 23December2020)

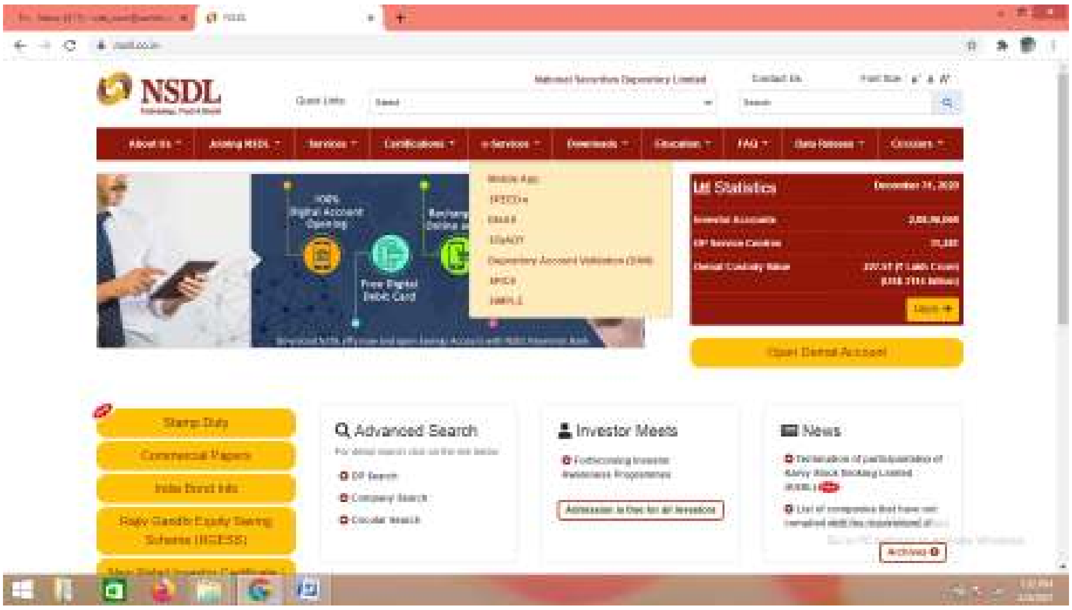
After the visit to sharekhan trade broker and mentioned following observations:

1. *It is seems that the Sharkan is one of the leading broker in share market.*
2. *It is noted that the Sharkhan provide portfolio management facilities to their clients.*
3. *It is observed that the Sharekhan serve facilities as equity share analysis and similar trading activities service, which helps to investor for investment decision making.*

In this way students should visit to any trading broking office e.g. ICICI, Mahindra Kotak, HDFC etc., nearby your location and mentioned your own observation.

Similarly, students should understand the how to open "Demat Account" by supporting necessary document and which helps to understand the procedure of Demat Account with the help of any stock broker / investment bank / merchant banker (e.g- Sherkhan)

Practical No. 2: *Visit to website of depositories i.e., NSDL (National Securities Depository Limited) and CDSL (Central Depository Service Limited) and understand the process and role of depository system.*



((Sources: https://www.nsdl.co.in/)

After visit to NSDL official website :

1. *It is observed that, the National Securities Depository Limited (NSDL) is a financial organization created to hold securities such as bonds, shares etc.*
2. *It is also seems that, basic facilities like account maintenance, dematerialisation, rematerialisation, settlement of trades through market transfers, off market transfers & inter-depository transfers, distribution of non-cash corporate actions and nomination/ transmission.*

In this way students should visit to Depositories website and point out other observation. Beside this students should Collect information on present position of Indian depository system both NSDL & CDSL and write highlights on same

1.3 Summary:

In this unit we studied primary and secondary capital market, its concepts, mechanism, and functions socio-economic development of the country. Capital market fulfills the requirement of medium and long term loans to trading and business organization. It is perform the functions such as collecting savings and consolidating them, raising capital for industries, providing opportunities for investment, expanding and using modern techniques for trade which helps the development of various sectors as well as economic development of country. The institutions which demand long term loans and supply long term loans come together in the capital market. The primary market is the part of the capital market that deals with issuing of new securities, creates long term instruments through which corporate entities raise funds from the capital market. The investor purchases the new securities via an investment bank or lead bank or merchant bankers. The major role of the primary capital market is to facilitate capital growth by enabling individuals to convert savings into investments. Moreover, the significance of stock exchange is found in its operation of smooth marketability and liquidity of corporate securities. It provides ready market for buying and selling of corporate securities. This market creates an image for a company. It facilitates the self assessment of financial status of the corporate enterprise and provides capital formation and promotes industrial growth of the country by attracting investment from the general public.

Now a day's many schemes have been planned for the development of capital market such as, formation of SEBI, improvement in share market, establishment of credit rating agencies etc. The overall objectives of SEBI are to protect the interest of investors and to promote the development of stock exchange and to regulate the activities of stock market. Apart from that, credit rating and depository are the important aspects of capital market, Credit rating plays vital role in financial market by helping to reduce the information asymmetric between lenders and investors. It provides ancillary business services and other services like risk management and consulting services to help financial institutions to manage credit and operational risks. The role of depository system is not only maintaining the accounts of the shareholder but to undertake and collect dividends, bonus shares, etc., on behalf of the shareholder. Periodically, the shareholders have informed of their holdings by a Depository agent through a statement of accounts. Any sale or purchase of shares have take place through the Depository. Thus, the capital market of India was not developed before independence. But considering the importance of capital market in economic development, major steps were taken for the development of capital market. There is an increase in participating institutions of capital market. But lack of sufficient investment, less involvement in agriculture sector are some the limitation of capital market.

1.4 Terms to Remember

1. **Capital Formation-** When savings are invested there is capital formation e.g. If a person from his saving purchases truck for transportation of goods of others then it is termed as capital formation.
2. **Primary Market-** The primary market is the part of the capital market that deals with issuing of new securities.
3. **Underwriting of Securities-** It is the process by which investment banks raise investment capital from investors on behalf of corporations and governments that are issuing securities.
4. **Securities Market-** It is known as stock exchange in Britain. In such market, long term securities like shares and debentures are transacted. It is a secondary market.
5. **Financial instruments-** Instruments against which loans are extended are called financial instruments. E.g. deposit certificate, securities etc.
6. **Underwriting-** It is the process that a lender or other financial service uses to assess the credit worthiness or risk of a potential customer.
7. **Stock Market-** It is a capital market where long term finance for the development of companies can be obtained by selling the securities through authorized persons.
8. **Stock Broker-** A person who assist the investors in buying and selling of securities in the secondary market. The trading activity takes place between investor through the intermediaries called stock brokers.
9. **Investor-** The person or institution purchasing financial instruments like shares and debentures. Such investment is made in money terms.
10. **Credit Rating-** Means an evaluation of debtors' credit ability, in relation to particular liability in present circumstances.
11. **Depository-** It is an organization which holds securities (like shares, debentures, bonds, government securities, mutual fund units etc.) of investors

in electronic form at the request of the investors through a registered Depository Participant. It can be compared to a bank. It provides services related to transactions in securities.

12. **Underwriter-** Underwriter gives guarantee of the collecting certain amount by selling equality shares of the company before a particular day. If the shares are not sold before the particular day, the underwriter purposes these shares.

1.5 Check Your Progress

A. Choose the correct alternative:

1. Indian Capital Market is divided in organized and --------------

   a. Unorganized　　b. Developed

   c. Mixed　　d. All of above

2. The first organized stock exchange in India was started in -------------

   a. Calcutta　　b. Mumbai (Bombay)

   c. Chennai (Madras)　　d. Ahmedabad

3. What is full form of SEBI?

   a. Sale and Exchange Body and Industry

   b. Staff of Executive body of India

   c. Securities and Exchange Board of India

   d. Selection of Enterprise Board of India.

4. Mechanism through which there is exchange of medium and long term loans is called--------

   a. Money Market　　b. Capital Market

   c. Loans Market　　d. Currency Market

5. In capital market the demand for capital comes from ---------

   a. Public undertaking　　b. Social System

   c. Both　　d. None of the above

6. To avoid the frauds that takes place in Capital Market-------was established.

   a. NABARD b. UTI c. SEBI d. SBI

7. Securities Contracts Act, -------has specified the trading mechanism of the Stock Exchange.

   a. 1946 b. 1976 c. 1956 d. 1986

8. Investment Information and Credit Rating Agency of India Limited (ICRA) was established in the year -------

   a. 1981 b. 2001 c. 1971 d. 1991

9. Fitch Ratings Limited is one of the good rating agency in India, which is ------- owned subsidiary of a foreign company.

   a. 50% b. 49% c. 100% d. 51%

10. The Securities and Exchange Board of India has granted registration for ------- depositories in India

    a. two b. three c. five d. ten

B. Fill in the Blanks:

i) Capital Market fulfils ---------------

ii) The primary capital market is deals with issuing of ---------- securities.

iii) Private Foreign banks are ------- registered with SEBI.

iv) The services of an underwriter are typically used during a ---------in a primary market.

v) -----------assist the investors in buying and selling of securities in the secondary market.

vi) The CRISIL is established in the year ---------.

vii) National Securities Depository Limited (NSDL) is the --------- depository set up in India.

C. State 'True' or 'False'.

i. In India, there is much need of control of the securities market.

ii. Investors get safety in depository system.

iii. There is no existence of unorganized sector in the Indian Capital Market.

iv. Depository Participant is not provides the service of opening a demat account to the investor.

v. All investors can keep their investment in intangibles. .

vi. SEBI has control over Merchant Bank.

vii. NSDL depository has promoted by institutions of national importance responsible for economic development of the country.

1.6 Answers to Check Your Progress

A. Choose the correct alternative:

1 – a, 2 – b, 3 – c, 4 – b, 5 – b, 6 – c, 7 – c, 8 – d, 9 – c, 10 - a

B. Fill in the Blanks:

i- Fixed capital requirement, ii- new, iii-not, iv- public offering,

v- Stock brokers, vi- 1987, vii- first and largest.

C. State 'True' or 'False'.

i- True, ii- True, iii-False, iv- False v- False, vi- True, vii True

1.7 Exercise

1. What is primary capital market? State its functions.
2. Describe the methods of selling corporate securities in primary capital market.
3. Define the stock market. State its role and functions.
4. Describe the functional role of SEBI in regulating capital markets in India.
5. What is credit rating? Describe the credit rating agencies in India.
6. State the meaning of Depository. Explain its benefits.
7. Explain the Concept of National Securities Depository Limited (NSDL) and Central Depository Service Limited (CDSL).
8. State the role of Depository in India.

9. Search and visit the website of listed companies or any broking agencies or its consultant to understanding the procedure / methods to buy the securities of IPO (Initial Public Offer) for investment.
10. Discuss with the underwriting service agencies to assess the credit worthiness or risk of a potential customer and understand the role of underwriting securities for raising investment capital from investors on behalf of corporations or Government by issuing securities (both equity and debt capital)
11. Secondary Capital Market (Stock Exchange) is an "Economic Barometer" of nation. Explain its performance with practical aspects.
12. Record the 'Intraday Transaction' after visiting and observing online position in the working hours on the website of NSE and BSE.
13. Prepare organization chart / organization structure of National Stock Exchange (NSE) and Bombay Stock Exchange (BSE)
14. Visit the website of any stock market and analyzed its functions.
15. Briefly, draft the trading mechanism of stock exchange.
16. Prepare organization structure of Securities and Exchanges Board of India (SEBI)
17. Search and write the 'pros and cons' of SEBI
18. How the Credit rating service as a 'valuable inputs' in decision making process of different participants in the capital market? Justify.
19. Understand and fill the following table of four Indian Credit Rating Agencies.
20. Discuss and write the credit rating methodology *by considering the key factors.*

Agencies' Name	Established year	Established place	Objectives	Functions	Present performance
CRISIL					
ICRA					
DCR					
ONICRA					

1.8 Further Readings

1. Fundamentals of the Indian Financial System – Vasant Desai.
2. Financial Management - Prasanna Chandra
3. Banks and Institutional Management: A New Orientation- Vasant Desai.
4. Financial Management - Khan and Jain
5. Indian Economy – Recent Edition- Rudra Dutta and K.P.M Sundaram
6. Investment and Securities Markets in India- V. A. Avadhani
7. India's Banking and Financial Sector in the New Millennium, Ghaziabad, Academic Foundation, 2001

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Unit-2

Mutual Funds, Portfolio Management and Micro Finance

Unit Structure

2.0 Objectives:

After studying this unit, the students will be able to:

- Understand the concept of mutual fund, its types and present position of mutual funds in India.
- Know the meaning and objectives of portfolio management and issues in portfolio construction.
- Understand the concept, need and policy about financial inclusion.
- Know the concept need and present position of microfinance in India

2.1 Introduction:

Financial sector is going through a phase where lot of new products, services are coming into the market. People, in general, feel that investment in stock market has a huge risk. In order to cope up with the requirement of diversification, liquidity and low risk; mutual fund evolved as an investment avenue. This facilitates lot of advantages to a small investor. Further, those who wish to invest their money and are able to share the profit can avail benefit of port-folio management where huge funds are given to fund managers who professionally manage the funds. On the other hand, there are people who do not have even access to basic banking services. It is important to bring them into mainstream for which financial inclusion drive is necessary. Micro finance is one of the way through which the needy people are provided financial services at affordable cost. This chapter throws light on the important issues emerging in financial sector today.

2.2 Presentation of Subject Matter:

2.2.1 Part A: Mutual Fund: Concept, Importance, Types and Present Position

2.2.1.1 Introduction:

A mutual fund is a financial intermediary that pools the savings of investors for collective investment in a diversified portfolio of securities. A fund is “mutual” as all of its returns, minus its expenses, are shared by the fund’s investors. The Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 defines a mutual fund as a ‘a fund established in the form of a trust to raise money through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments’. According to the above definition, a mutual fund in India can raise resources through sale of units to the public. It can be set up in the form of a Trust under the Indian Trust Act. The definition has been further extended by allowing mutual funds to diversify their activities in the following areas: Portfolio management services, Management of offshore funds, Providing advice to offshore funds, Management of pension or provident funds, Management of venture capital funds, Management of money market funds, Management of real estate funds.

A mutual fund serves as a link between the investor and the securities market by mobilising savings from the investors and investing them in the securities market to generate returns. Thus, a mutual fund is akin to portfolio management services (PMS). Although, both are conceptually same, they are different from each other. Portfolio management services are offered to high net worth individuals; taking into account their risk profile, their investments are managed separately. In the case of mutual funds, savings of small investors are pooled under a scheme and the returns are distributed in the same proportion in which the investments are made by the investors/unit-holders. Mutual fund is a collective savings scheme. Mutual funds play an important role in mobilising the savings of small investors and channelising the same for productive ventures in the Indian economy. **Benefits of Mutual Funds** An investor can invest directly in individual securities or indirectly through a financial intermediary. Globally, mutual funds have established themselves as the means of investment for the retail investor.

1. Professional management: An average investor lacks the knowledge of capital market operations and does not have large resources to reap the benefits of investment. Hence, he requires the help of an expert. It, is not only expensive to 'hire the services' of an expert but it is more difficult to identify a real expert. Mutual funds are managed by professional managers who have the requisite skills and experience to analyse the performance and prospects of companies. They make possible an organised investment strategy, which is hardly possible for an individual investor.

2. Portfolio diversification: An investor undertakes risk if he invests all his funds in a single scrip. Mutual funds invest in a number of companies across various industries and sectors. This diversification reduces the riskiness of the investments.

3. Reduction in transaction costs: Compared to direct investing in the capital market, investing through the funds is relatively less expensive as the benefit of economies of scale is passed on to the investors.

4. Liquidity: Often, investors cannot sell the securities held easily, while in case of mutual funds, they can easily encash their investment by selling their units to the fund if it is an open-ended scheme or selling them on a stock exchange if it is a close-ended scheme.

5. Convenience: Investing in mutual fund reduces paperwork, saves time and makes investment easy.

6. Flexibility: Mutual funds offer a family of schemes, and investors have the option of transferring their holdings from one scheme to the other.

7. Tax benefits Mutual fund investors now enjoy income-tax benefits. Dividends received from mutual funds' debt schemes are tax exempt to the overall limit of Rs 9,000 allowed under section 80L of the Income Tax Act.

8. Transparency Mutual funds transparently declare their portfolio every month. Thus an investor knows where his/her money is being deployed and in case they are not happy with the portfolio they can withdraw at a short notice.

9. Stability to the stock market Mutual funds have a large amount of funds which provide them economies of scale by which they can absorb any losses in the stock market and continue investing in the stock market. In addition, mutual funds increase liquidity in the money and capital market.

10. Equity research Mutual funds can afford information and data required for investments as they have large amount of funds and equity research teams available with them. History of Mutual Funds The history of mutual funds, dates back to 19th century Europe, in particular, Great Britain. Robert Fleming set up in 1868 the first investment trust called Foreign and Colonial Investment Trust which promised to manage the finances of the moneyed classes of Scotland by spreading the investment over a number of different stocks. This investment trust and other investment trusts which were subsequently set up in Britain and the US, resembled today's close-ended mutual funds. The first mutual fund in the US, Massachusetts Investors' Trust, was setup in March 1924. This was the first open-ended mutual fund. The stock market crash in 1929, the Great Depression, and the outbreak of the Second World War slackened the pace of growth of the mutual fund industry. Innovations in products and services increased the popularity of mutual funds in the 1950s and 1960s. The first international stock mutual fund was introduced in the US in 1940. In 1976, the first tax-exempt municipal bond funds emerged and in 1979, the first money market mutual funds were created. The latest additions are the international bond fund in 1986 and arm funds in 1990. This industry witnessed substantial growth in the eighties and nineties when there was a significant increase in the number of mutual funds, schemes, assets, and shareholders. In the US, the mutual fund industry

registered a ten fold growth in the eighties (1980-89) only, with 25% of the household sector's investment in financial assets made through them. Fund assets increased from less than $150 billion in 1980 to over $4 trillion by the end of 1997. Since 1996, mutual fund assets have exceeded bank deposits. The mutual fund industry and the banking industry virtually rival each other in size.

Growth of Mutual Funds in India :The Indian mutual fund industry has evolved over distinct stages. The growth of the mutual fund industry in India can be divided into four phases:

Phase I (1964-87), Phase II (1987-92), Phase III (1992-97), and Phase IV (beyond 1997).

Phase I: The mutual fund concept was introduced in India with the setting up of UTI in 1963. The Unit Trust of India (UTI) was the first mutual fund set up under the UTI Act, 1963, a special act of the Parliament. It became operational in 1964 with a major objective of mobilising savings through the sale of units and investing them in corporate securities for maximising yield and capital appreciation. This phase commenced with the launch of Unit Scheme 1964 (US-64) the first open-ended and the most popular scheme. UTI's investible funds, at market value (and including the book value of fixed assets) grew from Rs 49 crore in1965 to Rs 219 crore in 1970-71 to Rs 1,126 crore in 1980-81 and further to Rs 5,068 crore by June 1987. Its investor base had also grown to about 2 million investors. It launched innovative schemes during this phase. Its fund family included five income-oriented, open-ended schemes, which were sold largely through its agent network built up over the years. Master share, the equity growth fund launched in 1986, proved to be a grand marketing success. Master share was the first real close-ended scheme floated by UTI. It launched India Fund in 1986-the first Indian offshore fund for overseas investors, which was listed on the London Stock Exchange (LSE). UTI maintained its monopoly and experienced a consistent growth till 1987.

Phase II: The second phase witnessed the entry of mutual fund companies sponsored by nationalised banks and insurance companies. In 1987, SBI Mutual Fund and Canbank Mutual Fund were set up as trusts under the Indian Trust Act, 1882. In 1988, UTI floated another offshore fund, namely, The India Growth Fund which was listed on the New York Stock Exchange (NYSE). By 1990, the two nationalised insurance giants, LIC and GIC, and nationalised banks, namely, Indian

Bank, Bank of India, and Punjab National Bank had started operations of wholly-owned mutual fund subsidiaries. The assured return type of schemes floated by the mutual funds during this phase were perceived to be another banking product offered by the arms of sponsor banks. In October 1989, the first regulatory guidelines were issued by the Reserve Bank of India, but they were applicable only to the mutual funds sponsored by FIIs. Subsequently, the Government of India issued comprehensive guidelines in June 1990 covering all 'mutual funds. These guidelines emphasised compulsory registration with SEBI and an arms length relationship be maintained between the sponsor and asset management company (AMC). With the entry of public sector funds, there was a tremendous growth in the size of the mutual fund industry with investible funds, at market value, increasing to Rs 53,462 crore and the number of investors increasing to over 23 million. The buoyant equity markets in 1991-92 and tax benefits under equity-linked savings schemes enhanced the attractiveness of equity funds.

Phase III: The year 1993 marked a turning point in the history of mutual funds in India. Tile Securities and Exchange Board of India (SEBI) issued the Mutual Fund Regulations in January 1993. SEBI notified regulations bringing all mutual funds except UTI under a common regulatory framework. Private domestic and foreign players were allowed entry in the mutual fund industry. Kothari group of companies, in joint venture with Pioneer, a US fund company, set up the first private mutual fund the Kothari Pioneer Mutual Fund, in 1993. Kothari Pioneer introduced the first open-ended fund Prima in 1993. Several other private sector mutual funds were set up during this phase. UTI launched a new scheme, Master-gain, in May 1992, which was a phenomenal success with a subscription of Rs 4,700 crore from 631akh applicants. The industry's investible funds at market value increased to Rs 78,655 crore and the number of investor accounts increased to 50 million. However, the year 1995 was the beginning of the sluggish phase of the mutual fund industry. During 1995 and 1996, unit holders saw an erosion in the value of their investments due to a decline in the NA V s of the equity funds. Moreover, the service quality of mutual funds declined due to a rapid growth in the number of investor accounts, and the inadequacy of service infrastructure. A lack of performance of the public sector funds and miserable failure of foreign funds like Morgan Stanley eroded the confidence of investors in fund managers. Investors perception about mutual funds, gradually turned negative. Mutual funds found it increasingly difficult to raise money. The average annual sales declined from about Rs13,000 . crore in 1991-94 to about Rs 9,000 crore in 1995 and 1996.

Phase IV: During this phase, the flow of funds into the kitty of mutual funds sharply increased. This significant growth was aided by a more positive sentiment in the capital market, significant tax benefits, and improvement in the quality of investor service. Investible funds, at market value, of the industry rose by June 2000 to over Rs 1,10,000 crore with UTI having 68% of the market share. During 1999-2000 sales mobilisation reached a record level of Rs 73,000 crore as against Rs 31,420 crore in the preceding year. This trend was, however, sharply reversed in 2000-01. The UTI dropped a bombshell on the investing public by disclosing the NAV of US-64-its flagship scheme as on December 28,2000, just at Rs 5.81 as against the face value of Rs 10 and the last sale price of Rs 14.50. The disclosure of NAV of the country's largest mutual fund scheme was the biggest shock of the year to investors. Crumbling global equity markets, a sluggish economy coupled with bad investment decisions made life tough for big funds across the world in 2001-02. The effect of these problems was felt strongly in India also. Pioneer m, JP Morgan and Newton Investment Management pulled out from the Indian market. Bank of India MF liquidated all its schemes in 2002. The Indian mutual fund industry has stagnated at around Rs 1,00,000 crore assets since 2000-01. This stagnation is partly a result of stagnated equity markets and the indifferent performance by players. As against this, the aggregate deposits of Scheduled Commercial Banks (SCBs) as on May 3, 2002, stood at Rs 11,86,468 crore. Mutual funds assets under management (AUM) form just around 10% of deposits of SCBs. The Unit Trust of India is losing out to other private sector players. While there has been an increase in AUM by around 11% during the year 2002, UTI on the contrary has lost more than 11% in AUM. The private sector mutual funds have benefited the most from the debacle ofUS-64 of UTI. The AUM of this sector grew by around- 60% for the year ending March 2002. Types of Mutual Fund Schemes The objectives of mutual funds are to provide continuous liquidity and higher yields with high degree of safety to investors. Based on these objectives, different types of mutual fund schemes have evolved.

2.2.1.2 Types of Mutual Fund Schemes :

Functional Classification of Mutual Funds:

1. Open-ended schemes: In case of open-ended schemes, the mutual fund continuously offers to sell and repurchase its units at net asset value (NAV) or NAV-related prices. Unlike close-ended schemes, open-ended ones do not have to be listed on the stock exchange and can also offer repurchase soon after allotment. Investors can enter and exit the scheme any time during the life of the fund. Open-ended schemes do not have a fixed corpus. The corpus of fund increases or decreases, depending on the purchase or redemption of units by investors. There is no fixed redemption period in open-ended schemes, which can be terminated whenever the need arises. The fund offers a redemption price at which the holder can sell units to the fund and exit. Besides, an investor can enter the fund again by buying units from the fund at its offer price. Such funds announce sale and repurchase prices from time-to-time. UTI's US-64 scheme is an example of such a fund. The key feature of open-ended funds is liquidity. They increase liquidity of the investors as the units can be continuously bought and sold. The investors can develop their income or saving plan due to free entry and exit frame of funds. Open-ended schemes usually come as a family of schemes which enable the investors to switch over from one scheme to another of same family.

2. Close-ended schemes: Close-ended schemes have a fixed corpus and a stipulated maturity period ranging between 2 to 5 years. Investors can invest in the scheme when it is launched. The scheme remains open for a period not exceeding 45 days. Investors in close-ended schemes can buy units only from the market, once initial subscriptions are over and thereafter the units are listed on the stock exchanges where they dm be bought and sold. The fund has no interaction with investors till redemption except for paying dividend/bonus. In order to provide an alternate exit route to the investors, some close-ended funds give an option of selling back the units to the mutual fund through periodic repurchase at NAV related prices. If an investor sells units directly to the fund, he cannot enter the fund again, as units bought back by the fund cannot be reissued. The close-ended scheme can be converted into an open-ended one. The units can be rolled over by the passing of a resolution by a majority of the unit--holders.

3. Interval scheme: Interval scheme combines the features of open-ended and close-ended schemes. They are open for sale or redemption during predetermined intervals at NAVrelated prices. Portfolio Classification Here, classification is on the basis of nature and types of securities and objective of investment. 1. Income funds:

The aim of income funds is to provide safety of investments and regular income to investors. Such schemes invest predominantly in income-bearing instruments like bonds, debentures, government securities, and commercial paper. The return as well as the risk are lower in income funds as compared to growth funds.

Growth funds: The main objective of growth funds is capital appreciation over the medium-to-long- term. They invest most of the corpus in equity shares with significant growth potential and they offer higher return to investors in the long-term. They assume the risks associated with equity investments. There is no guarantee or assurance of returns. These schemes are usually close-ended and listed on stock exchanges.

3. Balanced funds: The aim of balanced scheme is to provide both capital appreciation and regular income. They divide their investment between equity shares and fixed nicebearing instruments in such a proportion that, the portfolio is balanced. The portfolio of such funds usually comprises of companies with good profit and dividend track records. Their exposure to risk is moderate and they offer a reasonable rate of return.

4. Money market mutual funds: They specialise in investing in short-term money market instruments like treasury bills, and certificate of deposits. The objective of such funds is high liquidity with low rate of return.

Geographical Classification

1. Domestic funds: Funds which mobilise resources from a particular geographical locality like a country or region are domestic funds. The market is limited and confined to the boundaries of a nation in which the fund operates. They can invest only in the securities which are issued and traded in the domestic financial markets.

2. Offshore funds: Offshore funds attract foreign capital for investment in ‘the country of the issuing company. They facilitate cross-border fund flow which leads to an increase in foreign currency and foreign exchange reserves. Such mutual funds can invest in securities of foreign companies. They open domestic capital market to international investors. Many mutual funds in India have launched a number of offshore funds, either independently or jointly with foreign investment management companies. The first offshore fund, the India Fund, was launched by Unit Trust of India in July 1986 in collaboration with the US fund manager, Merril Lynch. Others

1. Sectoral: These funds invest in specific core sectors like energy, telecommunications, IT, construction, transportation, and financial services. Some of these newly opened-up sectors offer good investment potential.

2. Tax saving schemes: Tax-saving schemes are designed on the basis of tax policy with special tax incentives to investors. Mutual funds have introduced a number of tax saving schemes. These are close--ended schemes and investments are made for ten years, although investors can avail of encashment facilities after 3 years. These schemes contain various options like income, growth or capital application. The latest scheme offered is the Systematic Withdrawal Plan (SWP) which enables investors to reduce their tax incidence on dividends from as high as 30% to as low as 3 to 4%.

3. Equity-linked savings scheme (ELSS): In order to encourage investors to invest in equity market, the government has given tax-concessions through special schemes. Investment in these schemes entitles the investor to claim an income tax rebate, but these schemes carry a lock-in period before the end of which funds cannot be withdrawn.

4. Special schemes: Mutual funds have launched special schemes to cater to the special needs of investors. UTI has launched special schemes such as Children's Gift Growth Fund, 1986, Housing Unit Scheme, 1992, and Venture Capital Funds.

5. Gilt funds: Mutual funds which deal exclusively in gilts are called gilt funds. With a view to creating a wider investor base for government securities, the Reserve Bank of India encouraged setting up of gilt funds. These funds are provided liquidity support by the Reserve Bank.

6. Load funds: Mutual funds incur certain expenses such as brokerage, marketing expenses, and communication expenses. These expenses are known as 'load' and are recovered by the fund when it sells the units to investors or repurchases the units from withholders. In other words, load is a sales charge, or commission, assessed by certain mutual funds to cover their selling costs. Loads can be of two types-Front-end-load and back-endload. Front-end-load, or sale load, is a charge collected at the time when an investor enters into the scheme. Back-end, or repurchase, load is a charge collected when the investor gets out of the scheme. Schemes that do not charge a load are called 'No load' schemes. In other words, if the asset management company (AMC) bears the load during the initial launch of the scheme, then these schemes are known as no-load schemes. However, these no-load schemes can have an exit load when the unit holder gets out of the scheme before a stipulated period mentioned in the initial offer. This is done to prevent short-term investments and redemptions. Some funds may also charge different amount of loads to investors depending upon the time period the investor has stayed with the funds. The longer the investor stays with the fund, less is the amount of exit load charged. This is known as contingent deferred sales' charge (CDSL). It is a back-end (exit load) fee imposed by certain funds on shares redeemed with a specific period following their purchase and is usually assessed on a sliding scale.

7. Index funds: An index fund is a mutual fund which invests in securities in the index on which it is based BSE Sensex or S&P CNX Nifty. It invests only in those shares which comprise the market index and in exactly the same proportion as the companies/weightage in the index so that the value of such index funds varies with the market index. An index fund follows a passive investment strategy as no effort is made by the fund manager to identify stocks for investment/dis-investment. The fund manager has to merely track the index on which it is based. His portfolio will need an adjustment in case there is a revision in the underlying index. In other words, the fund manager has to buy stocks which are added to the index and sell stocks which are deleted from the index. Internationally, index funds are very popular. Around onethird of professionally run portfolios in the US are index funds. Empirical evidence points out that active fund managers have not been able to perform well. Only 20-25% of actively managed equity mutual funds out-perform benchmark indices in the long-term. These active fund managers park 80% of their money in an index and do active management on the remaining 20%. Moreover, risk averse investors like provident funds and pension funds prefer investment in passively managed funds like index funds.

8. PE ratio fund: PE ratio fund is another mutual fund variant that is offered by Pioneer IT! Mutual Fund. The PE (Price-Earnings) ratio is the ratio of the price of the stock of a company to its earnings per share (EPS). The PE ratio of the index is the weighted average price-earnings ratio of all its constituent stocks. The PE ratio fund invests in equities and debt instruments wherein the proportion of the investment is determined by the ongoing price-earnings multiple of the market. Broadly, around 90% of the investible funds will be invested in equity if the Nifty Index PE ratio is 12 or below. If this ratio exceeds 28, the investment will be in debt/money markets. Between the two ends of 12 and 28 PIE ratio of the Nifty, the fund will allocate varying proportions of its investible funds to equity and debt. The objective of this scheme is to provide superior risk-adjusted returns through a balanced portfolio of equity and debt instruments.

9. Exchange traded funds: Exchange Traded Funds (ETFs) are a hybrid of open-ended mutual funds and listed individual stocks. They are listed on stock exchanges and trade like individual stocks on the stock exchange. However, trading at the stock exchanges does not affect their portfolio. ETFs do not sell their shares directly to investors for cash. The shares are offered to investors over the stock exchange. ETFs are basically passively managed funds that track a particular index such as S&P CNX Nifty. Since they are listed on stock exchanges, it is possible to buy and sell them throughout the day and their price is determined by the demand-supply forces in the market. In practice, they trade in a small range around the value of the assets (NAV) held by them. ETFs offer several distinct advantages. ·ETFs bring the trading and real time pricing advantages of individual stocks to mutual funds. The ability to trade intraday at prices that are usually close to the actual intra-day NAV of the scheme makes it almost real-time trading. ·ETFs are simpler to understand and hence they can attract small investors who are deterred to trade in index futures due to requirement of minimum contract size. Small investors can buy minimum one unit of ETF, can place limit orders and trade intra-day. This, in turn, would increase liquidity of the cash market. ·ETFs can be used to arbitrate effectively between index futures and spot index. ·ETFs provide the benefits of diversified index funds. The investor can benefit from the flexibility of stocks as well as the diversification. ·ETFs being passively managed, have somewhat higher NAV against an index fund of the same portfolio. The operating expenses of ETFs are lower than even those of similar index funds as they do not have to service investors who deal in shares through stock exchanges. ·ETFs can be beneficial for financial institutions also. Financial institutions can use ETFs for utilizing idle cash, managing redemptions, modifying sector allocations, and hedging market exposure. The first exchange traded fund-Standard and Poor's Depository Receipt (SPDR-also called Spider)-was launched in the US in 1993. ETFs have grown rapidly with around US$100 billion in assets as on December 2001. Today, about 60% of trading value on the American Stock Exchange (AMEX) is from ETFs. ETFs were launched in Europe and Asia in 2001. Currently, more than 120 ETFs are available in US, Europe, Singapore, Hongkong, Japan, and other countries. Among the popular ones are SPDRs (Spiders) based on the S&P 500 Index, QQQs (cubes) based on the Nasdaq-100 Index, i SHARES based on MSCI Indices and TRAHK (Tracks) based on the Hang Seng Index. The ETF structure has seen over $120 bn pouring into it in more than 220 funds. It has become the fastest growing fund structure. In year 2001 alone, the number of funds doubled from 100 to 200. The first ETF to be introduced in India is Nifty Bench mark Exchange-Traded Scheme (Nifty BeES). It is an open-ended ETF, launched towards the end of 2001 by Benchmark Mutual Funds. The fund is listed in the capital market segment of the NSE and trades the S&P CNX Nifty Index. The Benchmark Asset Management Company has become the first company in Asia (excluding Japan) to introduce ETF.

Net Asset Value (NAV):The net asset value of a fund is the market value of the assets minus the liabilities on the day of valuation. In other words, it is the amount which the shareholders will collectively get if the fund is dissolved or liquidated. The net asset value of a unit is the net asset value of fund divided by the number of outstanding units. Thus NAV = Market Price of Securities + Other Assets - Total Liabilities + Units Outstanding as at the NAV date. NAV = Net Assets of the Scheme + Number of units outstanding, that is, Market value of investments + Receivables + Other Accrued Income + Other Assets - Accrued Expenses - Other Payables - Other Liabilities + No. of units outstanding as at the NAV date. A fund's NAV is affected by four sets of factors: purchase and sale of investment securities, valuation of all investment securities held, other assets and liabilities, and units sold or redeemed. SEBI has issued guidelines on valuation of traded securities, thinly traded securities and non-traded securities. These guidelines were issued to streamline the procedure of calculation of NAV of the schemes of mutual funds. The aggregate value of illiquid securities as defined in the guidelines shall not exceed 15% of the total assets of the scheme and any illiquid securities held above 15% of the total assets shall be valued in the manner as specified in the guidelines issued by the SEBI. Where income receivables on investments has accrued but has not been received for the period specified in the guidelines issued by SEBI, provision shall be made by debiting to the revenue account the income so accrued in the manner specified by guidelines issued by SEBI.

MANAGEMENT OF FINANCIAL SERVICES :

Mutual funds are required to declare their NAV s and sale repurchase prices of all schemes updated daily on regular basis on the AMFI website by 8.00 p.m. and declare NAVs of their close-ended schemes on every Wednesday. According to SEBI (Mutual Funds) (Second Amendment) Regulations, 2000, a mutual fund can now invest up to 5% of its NAV in the unlisted equity shares or equity related instruments in case of open-ended schemes; while in case of close-ended schemes, the mutual fund can now invest up to 10% of its NAV. Mutual Fund Investors Mutual funds in India are open to investment by a. Residents including ·Resident Indian Individuals, including high net worth individuals and the retail or small investors. Indian Companies ·Indian Trusts/Charitable Institutions ·Banks ·Non-Banking Finance Companies ·Insurance Companies ·Provident Funds b. Non-Residents, including ·Non-Resident Indians ·Other Corporate Bodies (OCBs) c. Foreign entities, namely, Foreign Institutional Investors (FIIs) registered with SEBI. Foreign citizens/ entities are however not allowed to invest in mutual funds in India.

2.2.1.3 PRESENT POSITION OF MUTUAL FUNDS IN INDIA

Average Assets Under Management (AAUM) of Indian Mutual Fund Industry for the month of November 2017 stood at ₹ 22.73 lakh crore. Assets Under Management (AUM) as on November 30, 2017 stood at ₹ 22.79 lakh crore. The AUM of the Indian MF Industry has grown from ₹ 3.26 trillion as on 31st March 2007 to ₹ 22.79 trillion as on 30th November, 2017, about seven fold increase in a span of about 10 and half years. The MF Industry's AUM has grown from ₹5.87 trillion as on 31st March, 2012 to ₹ 22.79 trillion as on 30th November, 2017, about four fold increase in a span of about 5 and half years. The Industry's AUM had crossed the milestone of ₹10 Trillion (₹10 Lakh Crore) for the first time in May 2014 and in a short span of about three and half years, the AUM size has increased more than two folds and stood at ₹ 22.79 Trillion (₹ 22.79 Lakh Crore) as on 30th November, 2017.The total number of accounts (or folios as per mutual fund parlance) as on November 30, 2017 stood at 6.49 crore (64.9 million), while the number of folios under Equity, ELSS and Balanced schemes, wherein the maximum investment is from retail segment stood at 5.30 crore (53 million).

2.2.2 Part B: Portfolio Management: Meaning, Objectives, Importance, Issues in Portfolio Construction-Revision-Evaluation

2.2.2.1 INTRODUCTION OF PORTFOLIO:

"Portfolio means combined holding of many kinds of financial securities i.e. shares, debentures, government bonds, units and other financial assets." The term investment portfolio refers to the various assets of an investor which are to be considered as a unit. It is not merely a collection of unrelated assets but a carefully blended asset combination within a unified framework. It is necessary for investors to take all decisions as regards their wealth position in a context of portfolio. Making a portfolio means putting ones eggs in different baskets with varying element of risk and return. The object of portfolio is to reduce risk by diversification and maximise gains. Thus, portfolio is a combination of various instruments of investment. It is also a combination of securities with different risk-return characteristics. A portfolio is built up out of the wealth or income of the investor over a period of time with a view to manage the risk-return preferences. The analysis of risk-return characteristics of individual securities in the portfolio is made from time to time and changed that may take place in combination with other securities are adjusted accordingly. The object of portfolio is to reduce risk by diversification and maximize gains.

PORTFOLIO MANAGEMENT

Portfolio management means selection of securities and constant shifting of the portfolio in the light of varying attractiveness of the constituents of the portfolio. It is a choice of selecting and revising spectrum of securities to it in with the characteristics of an investor. Portfolio management includes portfolio planning, selection and construction, review and evaluation of securities. The skill in portfolio management lies in achieving a sound balance between the objectives of safety, liquidity and profitability. Timing is an important aspect of portfolio revision. Ideally, investors should sell at market tops and buy at market bottoms. Investors may switch from bonds to share in a bullish market and vice-versa in a bearish market. Portfolio management is all about strengths, weaknesses, opportunities and threats in the choice of debt vs. equity, domestic vs. international, growth vs. safety, and many other tradeoffs encountered in the attempt to maximize return at a given appetite for risk. Portfolio management is an art and science of making decisions about investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and balancing risk against performance. Portfolio management in common parlance refers to the selection of securities and their continuous shifting in the portfolio to optimize the returns to suit the objectives of the investor. This however requires financial expertise in selecting the right mix of securities in changing market conditions to get the best out of the stock market. In India, as well as in many western countries, portfolio management service has assumed the role of specialized service now a days and a number of professional merchant bankers compete aggressively to provide the best to high net-worth clients, who have little time to manage their investments. The idea is catching up with the boom in the capital market and an increasing number of people are inclined to make the profits out of their hard earned savings. Markowitz analysed the implications of the fact that the investors, although seeking high expected returns, generally wish to avoid risk. It is the basis of all scientific portfolio management. Although the expected return on a portfolio is directly related to the expected returns on component securities, it is not possible to deduce a portfolio riskiness simply by knowing the riskiness of individual securities. The riskiness of portfolio depends upon the attributes of individual securities as well as the interrelationships among securities. A professional, who manages other people's or institution's investment portfolio with the object of profitability, growth and risk minimization is known as a portfolio manager. He is expected to manage the investor's assets prudently and choose particular investment avenues appropriate for particular times aiming at maximization of profit. Portfolio management includes portfolio planning, selection and construction, review and evaluation of securities. The skill in portfolio management lies in achieving a sound balance between the objectives of safety, liquidity and profitability. Timing is an important aspect of portfolio revision. Ideally, investors should sell at market tops and buy at market bottoms. They should be guarded against buying at high prices and selling at low prices. Timing is a crucial factor while switching between shares and bonds. Investors may switch from bonds to shares in a bullish market and vice-versa in a bearish market. Portfolio management service is one of the merchant banking activities recognized by Securities and Exchange Board of India (SEBI). The portfolio management service can be rendered either by the SEBI recognized categories I and II merchant bankers or portfolio managers or discretionary portfolio manager as defined in clause (e) and (f) of rule 2 SEBI (portfolio managers) Rules 1993. According to the definitions as contained in the above clauses, a portfolio manager means any person who pursuant to contract or arrangement with a client, advises or directs of undertakes on behalf of the client (whether as a discretionary portfolio manager or otherwise) the management or administration of a portfolio of securities or the funds of the client, as the case may be. A merchant banker acting as a portfolio Manager shall also be bound by the rules and regulations as applicable to the portfolio manager. Realizing the importance of portfolio management services, the SEBI has laid down certain guidelines for the proper and professional conduct of portfolio management services. As per guidelines only recognized merchant bankers registered with SEBI are authorized to offer these services. Portfolio management or investment helps investors in effective and efficient management of their investment to achieve their financial goals. The rapid growth of capital markets in India has opened up new investment avenues for investors. The stock markets have become attractive investment options for the common man. But investors should be able to effectively and efficiently manage investments in order to keep maximum returns with minimum risk. A portfolio manager by virtue of his knowledge, background and experience is expected to study the various avenues available for profitable investment and advise his client to enable the latter to maximize the return on his investment and at the same time safeguard the funds invested.

2.2.2.2 OBJECTIVES OF PORTFOLIO MANAGEMENT

1) Security/Safety of Principal: Security not only involves keeping the principal sum intact but also keeping intact its purchasing power intact. Safety means protection for investment against loss under reasonably variations. In order to provide safety, a careful review of economic and industry trends is necessary. In other words, errors in portfolio are unavoidable and it requires extensive diversification. Even investor wants that his basic amount of investment should remain safe.

2) Stability of Income: So as to facilitate planning more accurately and systematically the reinvestment consumption of income is important.

3) Capital Growth: This can be attained by reinvesting in growth securities or through purchase of growth securities. Capital appreciation has become an important investment principle. Investors seek growth stocks which provides a very large capital appreciation by way of rights, bonus and appreciation in the market price of a share.

4) Marketability: It is the case with which a security can be bought or sold. This is essential for providing flexibility to investment portfolio.

5) Liquidity i.e. nearness to money: It is desirable to investor so as to take advantage of attractive opportunities upcoming in the market.

6) Diversification: The basic objective of building a portfolio is to reduce risk of loss of capital and / or income by investing in various types of securities and over a wide range of industries. 7) Favorable Tax status (Tax Incentives): The effective yield an investor gets form his investment depends on tax to which it is subject. By minimizing the tax burden, yield can be effectively improved. Investors try to minimise their tax liabilities from the investments. The portfolio manager has to keep a list of such investment avenues along with the return risk, profile, tax implications, yields and other returns. Investment programmers without considering tax implications may be costly to the investor.

PORTFOLIO MANAGEMENT PROCESS

Portfolio management is on-going process involving the following basic tasks: i. Identification of the investor's objectives, constraints and preferences. ii. Strategies are to be developed and implemented in tune with investment policy formulated. iii. Review and monitoring of the performance of the portfolio. iv. Finally the evaluation of the portfolio and make some adjustments for the future.

CONSTRUCTION OF PORTFOLIO:

Portfolio construction means determining the actual composition of portfolio. It refers to the allocation of funds among a variety of financial assets open for investment. Portfolio theory concerns itself with the principles governing such allocation. Therefore, the objective of the theory is to elaborate the principles in which the risk can be minimized subject to a desired level of return on the portfolio or maximize the return subject to the constraints of a certain level of risk. The portfolio manager has to set out all the alternative investments along with their projected return and risk, and choose investments which satisfy the requirements of the investor and cater to his preferences. It is a critical stage because asset mix is the single most determinant of portfolio performance. Portfolio construction requires a knowledge of the different aspects of securities. The components of portfolio construction are (a) Asset allocation (b) Security selection and (c) Portfolio structure. Asset allocation means setting the asset mix. Security selection involves choosing the appropriate security to meet the portfolio targets and portfolio structure involves setting the amount of each security to be included in the portfolio. Investing in securities presupposes risk. A common way of reducing risk is to follow the principle of diversification. Diversification is investing in a number of different securities rather than concentrating in one or two securities. The diversification assures the benefit of obtaining the anticipated return on the portfolio of securities. In a diversified portfolio, some securities may not perform as expected but other securities may exceed expectations with the effect that the actual results of the portfolio will be reasonably close to the anticipated results.

MEARCHANT BANKING / INVESTMENT BANKING

A merchant bank is a financial institution primarily engaged in offering financial services and advice to corporations and to wealthy individuals. The term can also be used to describe the private equity activities of banking. The chief distinction between an investment bank and a merchant bank is that a merchant bank invests its own capital in a client company whereas an investment bank purely distributes (and trades) the securities of that company in its capital raising role. Both merchant banks and investment banks provide fee based corporate advisory services. Merchant banking services are provided by the financial institutions, subsidiaries of many commercial banks and by the private sector. The activities that merchant bankers are authorised to perform are listed by the SEBI and include issue management, loan syndication, lease financing, corporate advisory services, underwriting, portfolio management services and managers or consultants to public issues.

ROLE OF PORTFOLIO MANAGER

A portfolio manager is a person who makes investment decisions using money other people have placed under his or her control. In other words, it is a financial career involved in investment management. They work with a team of analysts and researchers, and are ultimately responsible for establishing an investment strategy, selecting appropriate investments and allocating each investment properly for a fund- or asset-management vehicle. Portfolio managers are presented with investment ideas from internal buyside analysts and sell-side analysts from investment banks. It is their job to sift through the relevant information and use their judgment to buy and sell securities. Throughout each day, they read reports, talk to company managers and monitor industry and economic trends looking for the right company and time to invest the portfolio's capital. A team of analysts and researchers are ultimately responsible for establishing an investment strategy, selecting appropriate investments and allocating each investment properly for a fund or asset-management vehicle. Portfolio managers make decisions about investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and balancing risk against performance. A professional, who manages other people's or institution's investment portfolio with the object of profitability, growth and risk minimization, is known as a portfolio manager. They are expected to manage the investor's assets prudently and choose particular investment avenues appropriate for particular times aiming at maximization of profit. The role of portfolio manager includes the following,

1. Quantify their clients’ risk tolerances and return needs by taking into account his liquidity, income, time horizon, expectations
2. Do an optimal asset allocation and choose strategy that meets the clients needs
3. Diversify the portfolio to eliminate the unsystematic risk
4. Monitor the changing market scenario, expectations, client needs etc and rebalance accordingly
5. Lower the transaction cost by minimizing the taxes, trading turnover, and liquidity costs.

COLLECTING THE BASIC DATA :

Initially, the portfolio manager has to devote a great deal of attention to basic consideration such as pension plans, life insurance and educational funds for children. Usually, the basic needs must be satisfied before making an investment programme. Every individual investor has a priority of expenditures. The following list of priority expenditure is probably representative. a) Food, clothing, housing and transportation. b) Life insurance. c) Pension plan. d) Savings for emergency. e) Investments. Investments in securities can be considered only after basic family needs are satisfied. The type of data that can be collected about the investor includes the following items: a) Stated purpose for the portfolio, b) Age and health of the family. c) Marital status and responsibilities. d) Occupation. e) Approximate income, sources and expected duration. f) Saving habits. g) Property ownership. h) Current security holdings. . If all priority expenditures have been satisfied, the portfolio manager has greater freedom to pursue a more aggressive policy.

FORMULATING THE PORTFOLIO OBJECTIVES

The portfolio objectives can be determined by ascertaining the constraints on portfolio. The greater the number of constraints and the more binding these constraints, more conservative the portfolio must be. The following are the six possible portfolio constraints which are evaluated to determine the appropriate objectives:

1. Need for current income to meet the living expenses.
2. Need for constant income to face inflation.
3. Need for safety principal to liquidate the investments on a short notice.
4. Need for safety principal to reduce the effect of purchasing power.
5. Need for tax exemption.
6. Temperament

2.2.2.3 NEED FOR DESIGNING AN INVESTMENT PORTFOLIO

There are large numbers of savers in India. It is also surprising that the saving rate in India is as high as 32% of GDP per annum and investment at 34% of GDP. High levels of investment could not generate comparable rates of growth of output because of poor investment strategy, high capital output ratios, low productivity of capital and high rates of obsolescence of capital. Thus, the use of capital in India is wasteful and inefficient. The portfolio managers lack the expertise and experience. The average Indian household saves around 55% in financial form and 45% in physical form. As per latest RBI data, savings in the financial form is held 64% in cash and bank deposits which gives negative real returns. Around 24% of financial savings is held in the form of Insurance, Provident Fund, Pension Funds and 5% is in Government Securities like post office savings, NSCs, Public Provident Funds, National Savings Schemes etc. The investment in capital market instruments is around 6% of the total financial savings. Their objectives are capital appreciation, safety marketability, liquidity and hedge against inflation. The investors should follow proper strategy for investment management. Therefore, portfolio management becomes desirable. Indian markets are developing and all the basic principles and theories of portfolio management would apply in the market. Since 1952, investors have better understood the dimension of attractiveness and why the rational and professional management of portfolios includes more than the listing of securities by the magnitude of their expected returns. The great 1952 event was the publication of Harry Markowitz's celebrated article "Portfolio selection." Markowitz analyzed the implications of the fact that investors although seeking high expected returns generally wish to avoid risk. Since there is overwhelming evidence that risk aversion characterizes most investors, especially most large-investor's rationality in portfolio management demands that account be taken not only expected returns for a portfolio but also of the risk that is incurred. Although the expected return on a portfolio is directly related to the expected returns on component securities, it is impossible to deduce a portfolio's riskiness simply by knowing the riskiness of individual securities. The riskiness of portfolios depends not only on the attributes of individual securities, but also on the interrelationships among securities. Therefore, it is primarily for this reason that portfolio management is desirable. Another reason for the need for portfolio management is that it depends upon the preferences of individual investors. It is possible to estimate expected returns for individual securities without regard to any investor, but it is impossible to construct on optimal portfolio for an investor without taking personal preferences into account. The output of security analysts is essential for portfolio management or at least portfolio managers make use of security analysts output but this output must be analyzed with reference to the tastes and financial circumstances of individual investors when building portfolios. Portfolio management is still in its infancy in India. Professional portfolio management started in India after the setting up of public sector mutual funds in 1987. After the success of mutual funds in portfolio management, a number of brokers and investment consultants have become portfolio managers. Basically portfolio management is required for proper investment decision-making regarding buy and sell of securities. There is a need for proper money management in terms of investment as a basket of assets so as to satisfy the asset preferences of the investors and to reduce the risk and increase the returns on investment.

POPULARITY OF EQUITY PORTFOLIO MANAGEMENT SERVICES

Portfolio Management Service (PMS) is a professional service rendered for management of portfolio of others with the help of experts in Investment advisory services. It involves continuing relationship with client to manage investments with or without discretion for the client as per his requirements. Portfolio management is an art and requires high degree of expertise. The SEBI has set out guidelines in which the relationship of the client and the portfolio manager and the respective rights and duties of both have been set out. The job of the portfolio manager in managing the client's fund either on discretionary or non-discretionary basis has become challenging and difficult due to the multitude of obligations laid on his shoulders by the SEBI, in respect of their operations, accounts and audit. Thus, portfolio management has become a complex and responsible job which requires an in-depth training and expertise. The activities of buying and selling of securities in the primary as well as secondary market are carried out through the mechanism of stock exchanges. There has been a substantial growth of capital market in India during the last 25 years. There are 23 stock exchanges in India and more than 9500 listed companies. There were 56,588 capital issues and the market value of capital was Rs.12,01,207 crores till 2004-05. As per SEBI regulations, only those who are registered with SEBI are eligible to operate as a portfolio manager. They have to pay required license fees. For this purpose the eligible persons should have necessary infrastructure with professionally qualified persons and minimum net worth of Rs.50 lakhs. The SEBI has imposed a number of obligations and a code of conduct on the portfolio managers.

TYPES OF PORTFOLIO

When it comes to investing there are many options available to individuals. A person can invest in stocks, bonds, mutual funds, etc. Once a person invests in multiple products their performance needs to be tracked and strategies made to ensure the investor reaps the most profit possible. This is where the investment portfolio comes into play. According to Investor Awareness, it is a term that describes all investments owned. To take this definition a little farther, an investment portfolio is a significant aspect in diversification. Maintaining a diverse portfolio helps to mitigate loss because the investor has not placed all of their eggs in one basket. There are different types of investment portfolios. Perhaps the most common type’s individuals are exposed to are: Conservative, Balanced and Aggressive Growth. A portfolio is a combination of different investment assets mixed and matched for the purpose of achieving an investor's goals. Items that are considered a part of Investors portfolio can include any asset that they own - from real items such as art and real estate, to equities, fixed-income instruments and their cash and equivalents. For the purpose of this section, Investors will focus on the most liquid asset types: equities, fixed-income securities and cash and equivalents. The asset mix they choose according to their aims and strategy will determine the risk and expected return of their portfolio. 1. Aggressive Investment Portfolio In general, aggressive investment strategies - those that shoot for the highest possible return - are most appropriate for investors who, for the sake of this potential high return, have a high risk tolerance and a longer time horizon. Aggressive portfolios generally have a higher investment in equities. Aggressive investment portfolios are for investors not afraid of high risk. This type of portfolio may incorporate mutual funds that aim for high capital gain, equities, stocks, bonds, cash and maybe some commodities. In the short-term, growth will be very small and some loss will be observed. As a result, aggressive portfolios perform better in the long term - about five years or longer. An actively traded aggressive portfolio will typically gain maximum returns for the investor. The loss factor is why only individuals who are willing to take a high financial risk should seek an aggressive investment portfolio. An aggressive portfolio contains high growth investments that will hopefully appreciate in value. This strategy attempts to achieve high long-term growth by investing in often risky but profitable, short-term stocks. Under normal market conditions, the Aggressive Growth Portfolio will invest approximately 100% of its total assets in equity securities. The Aggressive Growth Portfolio can invest up to 100% of its total assets in equity securities and up to 25% of its total assets in fixed income securities. 2. Balanced or Moderate Investment Portfolio A moderately aggressive portfolio is meant for individuals with a longer time horizon and an average risk tolerance. Investors who find these types of portfolios attractive are seeking to balance the amount of risk and return contained within the fund. The portfolio would consist of approximately 50-55% equities, 35-40% bonds, 5-10% cash and equivalents. The Moderate Portfolio's primary investment objective is to seek long-term capital appreciation and also the Moderate Portfolio seeks current income. 3. Conservative Investment Portfolio The conservative investment strategies, which put safety at a high priority, are most appropriate for investors who are risk averse and have a shorter time horizon. Conservative portfolios will generally consist mainly of cash and cash equivalents, or high-quality fixed-income instruments. The main goal of a conservative portfolio strategy is to maintain the real value of the portfolio, or to protect the value of the portfolio against inflation. The portfolio shown below would yield a high amount of current income from the bonds and would also yield long-term capital growth potential from the investment in high quality equities. The conservative investment portfolio is geared towards preserving capital. A minimal risk investment strategy is used. This type of portfolio is ideal for retirees who are focused more on having assets available than a stream of income from interest. Since the primary goal is to preserve capital, investors can dip into their principal to supplement living expenses instead of relying on the portfolio's earned income. The Conservative Portfolio's primary investment objective is to seek preservation of capital and current income. The Conservative Portfolio also seeks capital appreciation. Under normal market conditions, the Conservative Portfolio will invest approximately 65% of its total assets in fixed income securities and cash and approximately 35% of its total assets in equity securities. The Conservative Portfolio can invest up to 100% of its total assets in fixed income securities and or some time up to 20% of its total assets in equity securities. Investors can further break down the above asset classes into subclasses, which also have different risks and potential returns. For example, an investor might divide the equity portion between large companies, small companies and international firms. The bond portion might be allocated between those that are short-term and long-term, government versus corporate debt, and so forth. More advanced investors might also have some of the alternative assets such as options and futures in the mix. As, the number of possible asset allocations is practically unlimited.

NEED AND IMPORTANCE OF PORTFOLIO MANAGEMENT

Portfolio management is a process encompassing many activities of investment in assets and securities. It is a dynamic and flexible concept and involves regular and systematic analysis, judgment and action. The objective of this service is to help the unknown and investors with the expertise of professionals in investment portfolio management. It involves construction of a portfolio based upon the investor's objectives, constraints, preferences for risk and returns and tax liability. The portfolio is reviewed and adjusted from time to time in tune with the market conditions. The evaluation of portfolio is to be done in terms of targets set for risk and returns. The changes in the portfolio are to be effected to meet the changing condition. Portfolio construction refers to the allocation of surplus funds in hand among a variety of financial assets open for investment. Portfolio theory concerns itself with the principles governing such allocation. The modern view of investment is oriented more go towards the assembly of proper combination of individual securities to form investment portfolio. A combination of securities held together will give a beneficial result if they grouped in a manner to secure higher returns after taking into consideration the risk elements. The modern theory is the view that by diversification risk can be reduced. Diversification can be made by the investor either by having a large number of shares of companies in different regions, in different industries or those producing different types of product lines. Modern theory believes in the perspective of combination of securities under constraints of risk and returns.

2.2.3 Part C: Financial Inclusion: Meaning, Need, Government Policy

2.2.3.1 Introduction :

With the progress of the Indian economy, especially when the focus is on the achievement of sustainable development, there must be an attempt to include maximum number of participation from all the sections of the society. But the lack of awareness and financial literacy among the rural population of the country is hindering the growth of the economy as majority of the population does not have access to formal credit. This is a serious issue for the economic progress of the country. In order to overcome such barriers, the banking sector emerged with some technological innovations such as automated teller machines (ATM), credit and debit cards, internet banking, etc. Though introduction of such banking technologies brought a change in the urban society, a majority of the rural population is still unaware of these changes and is excluded from formal banking. Financial inclusion enables improved and better sustainable economic and social development of the country. It helps in the empowerment of the underprivileged, poor and women of the society with the mission of making them self-sufficient and well informed to take better financial decisions. Financial inclusion takes into account the participation of vulnerable groups such as weaker sections of the society and low income groups, based on the extent of their access to financial services such as savings and payment account, credit insurance, pensions etc. Also the objective of financial inclusion exercise is easy availability of financial services which allows maximum investment in business opportunities, education, save for retirement, insurance against risks, etc. by the rural individuals and firms. The penetration of financial services in the rural areas of India is still very low. The factors responsible for this condition can be looked at from both supply side and demand side and the major reason for low penetration of financial services is, probably, lack of supply. The reasons for low demand for financial services could be low income level, lack of financial literacy, other bank accounts in the family, etc. On the other hand, the supply side factors include no bank branch in the vicinity, lack of suitable products meeting the needs of the poor people, complex processes and language barriers. Since 2005, the Reserve Bank of India (RBI) and the Government of India (GOI) have been making efforts to increase financial inclusion. Measures such as SHG-bank linkage program, use of business facilitators and correspondents, easing of Know Your Customer (KYC) norms, electronic benefit transfer, separate plan for urban financial inclusion, use of mobile technology, bank branches and ATMs, opening and encouraging 'no-frill-accounts' and emphasis on financial literacy have played a significant role for increasing the use of formal sources for availing loan/ credit. Measures initiated by the government include, opening customer service centers, credit counselling centers, Kisan Credit Card, Mahatma Gandhi National Rural Employment Guarantee Scheme and Aadhar Scheme. These renewed efforts are more focused than the earlier measures which were more general in nature having a much wider scope. Though the measures were initiated earlier, their impact on the rural population needs to be analysed and reframed in order to understand the present scenario in the rural areas. This paper is arranged in six sections.

Definition of Financial Inclusion:

According to the Planning Commission (2009), Financial inclusion refers to universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity products. The household access to financial services includes access to contingency planning, credit and wealth creation. Access to contingency planning would help for future savings such as retirement savings, buffer savings and insurable contingencies and access to credit includes emergency loans, housing loans and consumption loans. On the other hand, access to wealth creation includes savings and investment based on household's level of financial literacy and risk perception.

GOI (2008) defines Financial inclusion as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost. The meaning of financial inclusion is delivery of financial services to the low income groups especially the excluded sections of the population with the provision of equal opportunities. The main target is the access of financial services for better standard of living and income.

According to Chakraborty (2011), Financial inclusion is the process of ensuring access to appropriate financial products and services needed by all sections of society including vulnerable groups such as weaker sections and low income groups at an affordable cost in a fair and transparent manner by mainstream institutional players. This issue started gaining importance recently in the news media. However, as is the case with several issues in India, financial inclusion has remained a pipe dream with a majority of Indians continuing to lack access to banking services.

Dimensions of Financial Inclusion The level of financial inclusion in India can be measured based on three tangible and critical dimensions. These dimensions can be broadly discussed under the following heads:

I. Branch Penetration Penetration of a bank branch is measured as number of bank branches per one lakh population. This refers to the penetration of commercial bank branches and ATMs for the provision of maximum formal financial services to the rural population.

II. Credit Penetration Credit Penetration takes the average of the three measures: number of loan accounts per one lakh population, number of small borrower loan accounts per one lakh population and number of agriculture advances per one lakh population.

III. Deposit Penetration Deposit penetration can be measured as the number of saving deposit accounts per one lakh population. With the help of this measure, the extent of the usage of formal credit system can be analysed. Among the three dimensions of financial inclusion, credit penetration is the key problem in the country as the all India average ranks the lowest for credit penetration compared to the other two dimensions. Such low penetration of credit is the result of lack of access to credit among the rural households. Therefore, the problem of low penetration needs to be understood more deeply. An attempt has been made to study the problem by examining the progress of financial inclusion over the years and efforts made by the government for reducing the low penetration of credit. The progress in the development of financial inclusion in India can be examined by understanding the stages involved in it. The concept of examining financial access became important immediately after the All-India Rural Credit Survey that was completed in the 1950s. The results of the survey revealed that farmers relied heavily on money-lenders in the year 1951-52. Only the urban areas had large number of bank branches compared to rural areas. Such a condition continued in the country until RBI started financial inclusion growth model in the 2000s. Because the urban areas were fully concentrated with numerous bank branches, this resulted in the higher absorption of bank credit in the urban areas. Thus, the growth of the private business credit was seen in the year 1957-61 from 44 percent to 60 percent in the year 19702.

2.2.3.2 Policy Initiatives for Financial Inclusion

For increasing the level of financial inclusion, the GOI and RBI have taken few actions which include the following:

- Nationalization of banks (1969, 1980)
- Priority Sector Lending requirements
- Establishment of Regional Rural Banks (RRBs) (1975, 1976)
- Service area approach (1989)
- Self-help group-bank linkage program (1989,1990)

The other measures taken by GOI, RBI and National Bank for Agriculture and Rural Development (NABARD) are :. Customer Service Centres, Credit Counselling Centres,Adhaar Scheme The National Agricultural Insurance Scheme, No-frill Account, Know Your Customer, General Credit Card Project on Processor Cards, Micro Finance Development Fund, Financial Inclusion Fund Project on “e-Grama” SHG-Post Office Linkage Financial Inclusion Technology Fund Separate Plan for Urban Financial Inclusion and Electronic Benefit Transfer Scheme Financial Literacy through Audio Visual medium - Doordarshan Support to Cooperative Banks and RRBs for setting up of Financial Literacy Centres Farmers’ Club Program Rural Volunteers etc. Though a number of measures have been initiated by the GOI, RBI and NABARD, the status of financial inclusion in the country still needs more support. The condition of financial inclusion in the different states of India in 2002 was not encouraging It shows that the all India percentage of the level of non-indebtedness, i.e. level of not accessing formal credit, of the rural household is 51.4 percent. This low credit penetration after years of measures was a matter of concern and still there is a lot of work to be done in the area of financial inclusion.

2.2.4 Part D: Micro Finance: Concept, Characteristics, Need, Present Position in India

2.2.4.1 Introduction:

Microfinance is the provision of loans and other financial services to the poor. The microfinance has evolved due to the efforts of committed individuals and financial agencies to promote self-employment and contribute to poverty alleviation and provision of social security. India has been able to develop its own model of microfinance organizations in the form of savings and credit groups known as the Self Help Group (SHGs), which are bank-linked. These SHGs are mainly formed and managed by women and this has become an instrument, which has led to women's empowerment and social change. Most of the microfinance institutions in India attempt to go beyond savings and credit groups to provide microfinance services in the form of savings and insurance. Microfinance provides financial services to those whose income is small and unstable. These people are in need of credit facilities for several reasons (i) their needs are small and arise suddenly (2) the institutional providers of finance namely the banks demand collateral security which they cannot provide (3) most of the time, they are in needs of funds to meet their consumption demands, for example, to meet expenses related to education, illness, funerals, weddings for which it is difficult to obtain institution finance (4) for purpose of investment in income generating activities.

The Indian microfinance scene is dominated by SHGs and their linkage with Banks. Owing to the importance of microfinance and self help groups in the eradication of poverty and in the empowerment of women.

2.2.4.2 The Concept of Microfinance:

Microfinance is a concept that is helping the poor to avail of an create opportunities for economic growth. In India, microfinance has fulled the efforts of rural development, women empowerment and wealth generation by providing small scale savings, credit, insurance and other financial services to poor and low income households. Microfinance thus serves as a means to empower the poor and provides a valuable tool to help the economic development process. The concept of microfinancing and self-employment activities in rural areas has developed considerably over the last two decades. It is working neither on domain/charity nor on subsidy. It is basically rotational investment done to motivate the poor to empower themselves and practice the dictum 'Save for the future and use those resource during the time of need.' Theoretically, microfinance also known as microcredit or microlending means making provision for smaller working capital loans to the selfemployed or self-employment seeking poor. Microcredit has defined as the extension of small loans to be given in multiple doses based on the absorption capacity of the needy beneficiaries, who are too poor to qualify for formal bank loans, as they have no assets to offer as collateral security against loans. 'Microcredit' may be defined as the credit and repeated credit provided in small measures to suit the recipient's requirements, with a comfortable pace of repayment and at an appropriate rate of interest. Microcredit has been defined by the microcredit summit held in Washington D.C. in February 1997 as "programmes that provide credit for self employment, other financial and business services to very poor persons." Microfinance can be interpreted in a broader context both as microcredit and microsavings, even though microcredit and microfinance have come to used interchangeably. However, when the term 'microfinance' is used it implies some other services accompanying credit viz. facilities for saving and availability of services for insurance of the assets acquired with microcredit. Microfinance has come to be referred to as a small scale financial services and technical assistance provided to rural people who operate small or micro-enterprises, provide services, work for wages or commission and other individuals and group working at local levels. NABARD has defined microfinance as "provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semiurban and urban provided to customers to meet their financial needs; with only qualification that (1) transactions value is small and (2) customers are poor." In essence, therefore, microfinance could be referred to as an institutional mechanism of providing credit support in small amount and usually linked with small groups along with other complementary support such as training and other related services to the people with poor resources and skills for enabling them to take up economic activities. In the November 1995 Microcredit Summit, U.S. first lady Hillary Clinton wrote; "Microenterprise is the heart of development because microenterprise programmes work - they lift women and families out of poverty. It is called micro but its impact on people is macro, we have seen that it takes just a few dollars, often as little it takes as dollar 10, to help a woman gain self employment, lift her and her family out of poverty. It is not a hand out; it is a helping hand." Let us begin by understanding some of the distinct characteristics of microfinance. The term 'microfinance' is often confused with the related term 'microcredit', so much so, that the two are often treated as synonymous and used interchangeably. While there are certain similarities between the two terms, there are also certain differences, which require to be classified at the very start to avoid confusion of time. The term microcredit refers to a small size loan, to be repaid within a short period of time, used mostly low income households and micro entrepreneurs for the purpose of income generation and enterprise development. The mobilization of such credit is restricted to external sources such as banks and moneylenders. Microfinance on the hand, provides a greater menu of options whereby the small loan can be garnered not just from the external sources but also through selfmobilization, by way of saving and sale of assets. Also, in case of microcredit, due to the definite obligation to repay the loan, a physical collateral may sometimes be needed. However, the biggest flexibility in the case of microfinance is the lack of any physical collateral, even in case of loan from the bank. The options available with microfinance, therefore, are much broader and flexible than the ones available with microcredit

The Important Features of Microfinance

1. Microfinance is a tool for the empowerment of poor women;
2. Loans under microfinance programmes are very small;
3. Microfinance targets the poor rural and urban households;
4. Credit under microfinance follows thrift i.e. mobilize savings and lend the same;
5. Low transaction cost due to group lendings;
6. Transparencies in operation;
7. Short repayment period;
8. Simple procedure for reviewing, processing and approving loan applications and delivery credit;
9. Chances of misutilization are rare and there is assured repayment;
10. Peer pressure act as the collateral security required for loans;
11. Need based loan disbursement;
12. Prompt repayment; and
13. There is no ceiling from the RBI in respect of minimum and maximum amounts.

Microfinance is not a financing system but a tool for social change. It does not spring from market forces along - it is potentially welfare enchaining there is public interest in promoting the growth of microfinance - this is what makes it acceptable as valid goal for public policy.

2.2.4.3 Present Position of Microfinance in India :

The profile of microfinance in India at present can be traced out in terms of poverty. It is estimated that 350 million people live below poverty line. The following are some components of microfinance :-

(a) This translates to approximately 75 million households.

(b) Annual credit demand by the poor in the country is estimated to be about Rs. 60,000 crores. (c) A cumulative disbursement under microfinance programmes is only about Rs. 5000 crores. (d) Total outstanding of all microfinance initiative in India estimated to be Rs. 1600 crores.

(e) Only about 5% of rural poor have access to microfinance.

(f) Though a cumulative of about 20 million families have accepted accessed.

(g) While 10% lending to weaker sections is required for commercial banks; they neither have the network for lending and supervision on a larger scale or confidence to offer term loan to big microfinance institutions.

(h) The non poor comprise of 29% of the outreach.

2.2.4.4 Need for Microfinance:

Microfinance aims at assisting communities of the economically excluded to achieve greater levels of asset creation and income security at the household and community level. Access to financial services and the subsequent transfer of financial resources to poor women enable them to become economic agents of change. Women become economically self-reliant, contribute directly to the well being of their families, play a more active role in decision making and are able to confront systematic gender inequalities. Access to credit has been given considered a major poverty alleviation strategy in India. Micro-credit has given women in India an opportunity to become agents of change. Poor women, who are in the forefront micro-credit movement in the country use small loans to jump start a long chain of economic activity. Microfinance is accessing financial services in an informally formal route, in a flexible, responsive and sensitive manner which otherwise would not have been possible for the formal system for providing such services because of factors like high transaction cost emanating from the low scale of operation, high turnover of clients; frequency of transaction etc. Microfinance and self help group must be evolved to see that SHGs do not charge high rates of interest from their clients and improve access to those who cannot sign by their use through thumb impression. The current literature on microfinance is also dominated by the positive linkages between microfinance and achievement of millennium development goals (MDGs). Micro-credit Summit Campaign's 2005 report argues that the campaign offers much needed hope for achieving the millennium development goals especially relating to poverty reduction. IFAD along with food and agriculture organization (FAO) and the world food programme (WFP) declared that it will be possible to achieve the eight MDGs by the establishing deadline of 2015 "if the developing and industrialized countries take action immediately by implementing plans and projects, in which micro-credit could play a major role."Credit is vital to the poor for overcoming the inevitable and common imbalance between income and expenditure. Credit is also crucial to the poor for income generating activities, like investing in their marginal farms or other small scale self-employment ventures. Their access to formal banking channels, however, is limited due to their low resource bases as well as due to the nature of formal credit institutions. The popularity of the microfinance, self help groups stems from widespread recognition that formal banking channels are largely ineffective in catering to the credit needs of the poor. Tiny savings and loans are generally an unattractive business proposition for formal banking institutions. In addition to disincentives faced by the banks, there are also problem faced by the poor in accessing loans from formal banking institutions. For example, to minimize risks, banks demand, collateral security that the average micro borrower does not possess. Banks also insist on complicated procedures that are too time consuming and often too complicated for the poor and illiterate. Even in the implementation of direct lending programmes formal institutions find it difficult to overcome the problem of targeting. The experience is that the rich and powerful typically manage to corner the scare loanable funds. Thus formal banking channels remain largely inaccessible to the poor in India. As a result, the poor continue to be dependent on informal sector lending, paying exorbitant rates or underselling the product and their labour power to the creditor. It was in response to these limitations in formal banking channels that micro credit mechanism were innovated. A quite from the former U.N. Secretary

General Kofi Annan's video message on the launch of the international year of micro credit on 18th November 2004 also shows the significance of microfinance. "Microfinance has proved its value, in many countries, as a weapon against poverty and hunger. It really can change people's lives for the better - especially the lives of those who need it most. It is a way to extend the same rights and services to lowincome households that are available to everyone else. It is recognition that poor people are the solution, not the problem. It is a way to build on their energy and vision. It is a way to grow productive enterprise and so allow communities to prosper." In conclusion, it can be said that, it is a high time to focus on regulation for micro financing institutions in India.

2.3 Summary:

In the recent past, new weapons of investment have emerged in financial markets. Mutual fund is a collective investment vehicle which caters to the needs of small investors with lot of advantages. Similarly, investors with relatively higher funds need professional management of the fund and for that they are ready to bear the cost. For such investors, portfolio management services are provided.

On the other hand, some people even do not have access to formal banking services. They need these services at an affordable cost. Microfinance is an attempt in this direction. Still a lot needs to be done in this aspect. But with some coordinated efforts from banks, post offices and other intermediations, India can achieve the target of financial inclusion of all the people in rural and remote area.

2.4 Terms to Remember

- **Mutual Fund :** It is a financial intermediary that pools the savings of investors for collective investment.
- **Net Asset Value :** It is value of a fund reflect in the market minus liabilities on the day of valuation.
- **Portfolio Management :** Selection of securities and constant shifting of the portfolio in the light of varying circumstances.
- **Financial Inclusion :** Universal access to a wide range of financial services at a reasonable cost.

2.5 Check Your Progress

A) Fill in the blanks with appropriate alternative.

i) .... is known as a collective investment vehicle

a) Venture Capital b) Equity Share c) Mutual Fund d) Debenture

ii) Mutual funds have advantage of ....

a) Diversification b) Professional Management
c) Liquidity d) All of the above

iii) .... scheme of mutual fund has tax benefit.

a) Debt fund b) Balance fund c) Money market d) ELSS

iv) Combined holding of many kinds of financial securities i.e. shares, debentures, bonds etc. is known as ....

a) Microfinance b) Portfolio c) Venture capital d) Mutual fund

v) Only those who are registered with .... are eligible to operate as portfolio manager.

a) AMFI b) SEBI c) RBI d) All of the above

vi) RBI and Govt. of India have been making efforts to increase financial inclusion since ....

a) 1991 b) 2005 c) 2011 d) 2014

vii) Provision of loans and other financial services to the poor at affordable cost is known as ....

a) Financial inclusion b) Microfinance
c) Mutual fund d) Portfolio Management

viii) .... linkage programme resulted into women empowerment to some extent in rural area.

a) Aadhar b) SHG-Bank
c) Bank-Income Tax d) None of the above

B) Fill in the blanks

i) N.A.V. stands for ....

ii) .... schemes are open for investment during specific period only.

iii) In india, mutual fund industry started in the year ....

iv) Selection of securities and constant shifting of the portfolio in the light of changing circumstances is known as.................

v) ATM stands for ....

vi) Branch expansion, credit penetration and deposit penetration are dimensions of ....

vii) Credit for self employment, other financial and business services to poor people is ....

viii) SHG stands for ....

C) State whether the following statements are true or false.

i) Microfinance and microcredit are one and the same.

ii) UTI is considered as pioneer in Indian mutual fund industry.

iii) Balance fund has the features of both equity and debt fund.

iv) All mutual fund schemes have tax benefit.

v) Seeking high expected returns by avoiding risk in basis of portfolio management.

vi) Both merchant banks and investment banks provide fee based corporate advisory services.

vii) Providing credit at affordable cost is known as financial inclusion.

viii) Loans under microfinance are relatively low.

2.6 Answers to Check Your Progress

A) i) c ii) d iii) d iv) b v) b vi) b vii) b viii) b

B) i) Net Asset value ii) Close ended iii) 1964 iv) Portfolio management
v) Automated Teller Machine vi) Financial inclusion
vii) Micro Credit viii) Self Help Group

c) i) False ii) True iii) True iv) False v) True
vi) True vii) False viii) True

2.7 Exercise

A) Short Notes

i) Importance of Mutual Funds

ii) Objectives of portfolio management

iii) Need of financial inclusion

iv) Characteristics of microfinance

B) Answer in brief

i) Explain advantages of mutual funds

ii) Describe the concept of portfolio management

iii) Discuss the government policy towards financial inclusion

iv) Explain the need of microfinance in India

C) Broad Questions

i) What is mutual fund? Explain the present status of mutual funds in India.

ii) Explain the phasewise development of mutual fund industry in India.

iii) What do you mean by portfolio management? What are issues in construction of a portfolio.

iv) What are various types of portfolios?

v) Explain the progress of financial inclusion in India.

vi) What is micro finance? What is its present status in India?

2.8 Further Readings

i) Security Analysis and Portfolio Management - A. V. Avadluin

ii) Financial Institutions and Markets - B. L. Bhole

iii) Financial Management - I. M. Pundey

iv) RBI Report on Financial Indusion - RBI

v) Annual Reports - RBI

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Unit 3

Corporate Restructuring

Unit Structure

3.0 Objectives.

3.1 Introduction.

3.2 Subject Matter

3.2.1 Corporate Failure: Meaning

3.2.1.1 Causes

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Know Your Progress Part I

3.2.2 Corporate Restructuring: Meaning

3.2.2.1 Forms of Corporate Restructuring

Know Your Progress Part II

Practical :

Prepare and presentation of latest five cases of corporate restructuring

3.3 Summary

3.4 Key words

Answers of Know Your Progress Part I & II

3.6 Exercises.

3.7 Books for Additional Reading

3.0 Objectives :

The study of this unit will enable students to

(i) Understand the concept of Corporate Failure

(ii) Know the Causes and Remedies of Corporate Failure

(iii) Understand the concept of Corporate Restructuring.

(iv) Know the Forms of Corporate Restructuring.

(v) Understand the financial restructuring and Strategic alliances.

3.1 Introduction:

Financial crisis is the main reason for restructuring the company. When any company suffers heavy losses consistently or having critical financial position may require restructure of its capital structure. If the company has potential to maximize profit in near future, then and then only the corporate restructuring is advisable.

Corporate failure means the inability of a corporate organization to fulfill its economic needs and attain its financial objectives as well as legal obligations. There are several factors which affected on corporate failure such as managerial inefficiency and ineffectiveness, economic instability, socio-cultural factors and public policies.

This topic emphasize the concept, causes and remedies of corporate failure as well as concept & forms of corporate restructuring, financial restructuring and strategic alliances.

3.2 Subject Matter:

3.2.1 Corporate Failure: Meaning

Corporate failure is very vital issue in view point of economist, bankers, creditors, share holders, marketing and management experts, financial and corporate managers etc. In simple words corporate failure means the inability of a corporate organization to fulfill its economic needs and attain its financial objectives as well as legal obligations. There are several factors which affected on corporate failure such as managerial inefficiency and ineffectiveness, economic instability, socio-cultural factors and public policies. The corporate failure may destabilize the economic system in various ways such as increasing unemployment and level of poverty, depriving people, increase in the rate of crime and tax earning may reduce. In accordance with these issues every corporate organization should continuously monitor their performance by establishing research and development department. In short Corporate failure means the inability to pay debts when they become due, the market value of assets of the firm is less than its total liabilities.

Definition : " Corporate failure could be seen in terms of the inability of a corporate organization to confirm itself with its strategic path of growth and development to attain its economic and financial objectives as well as legal obligations."(David O. Mbat & Eyo I. Eyo, 2013)

From the above definition it is clear that corporate failure refers to companies operations following its inability to make profit or to earn revenue to meet out their routine expenses. There are three types of corporate failure such as.

1. A corporate body with low or negative return
2. A corporate body which is technically insolvent.
3. A corporate body which is bankrupt.

A body corporate which continuously earn very low profit or in loss is may fail because there is no opportunity for expansion in future. A corporate that is unable to meet its liabilities as and when due is technically insolvent. Where as a corporate who's total assets are less than total liabilities is bankrupt.

3.2.1.1Causes of Corporate Failure

Generally any body corporate may fail because of hampered its ability to properly apply the financial resources which they have. Every corporate has a strategy to fulfill the demand of market and to generate maximum profit. However many organizations fail because of inappropriately formulated strategy or lack of it. There are several reasons / causes of corporate failure such as managerial inefficiency and ineffectiveness, socio cultural factors and economic instability which are discussed as follows.

A) Managerial inefficiency and ineffectiveness: It is the main cause of corporate failure. It consists of ineffective sales force, over expansion, high production cost inappropriate costing plan, low productivity, poor financial management, etc.

1. Over expansion: A corporate solvency is mainly depend upon the mobilization of short term funds. But the organizations which undertakes over expansion may not mobilize the short term funds properly and it is the cause of corporate failure. Hence corporate expansion should strictly follow the strategic plan.

2. Ineffective sales force: Profit may increase by way of increasing volume of sales. A stability of any organization is depends on cash flow which again depends on effective sale of production. If the sales force is not properly trained, it is difficult to sell its product effectively. This circumstances creates problem of cash flow and solvency problem.

3. High Production Cost: Now a day there is a cut throat competition in the market. To compete different product in the market it is necessary to control cost of production. But due to over employment, non-availability of proper material and technical inefficiency in the production process the cost of production may increase. It is the cause of corporate failure.

4. Poor Financial Management: The investment decision, financing and dividend policy decisions are mainly rely upon financial decisions. If financial manager is unable to take fast and effective financial management decisions is bound to experience acute liquidity problem.

5. Lack of proper commercial policy : The commercial policies affects the volume of sales which adversely affects the earning capacity of the organization. It creates the liquidity crises in organization.

6. Risk Assessment Policy: The investment in various sector particularly investment in assets constitute the most important source of corporate earnings. A corporate income would be hampered if risk assessment is not properly done.

7. Lack of manpower training and development policy : The achievement of corporate objectives are rely upon skilled and trained manpower. A corporate that does not have training and development policy cannot make the use of such well trained staff which create critical situation in the corporation.

B) Other Factors:

1. Lack of Capital: The undercapitalized body corporate is bound to fail sooner or latter. Due to lack of sufficient capital such companies faced problems regarding buying the fixed assets, invest in proper income generating assets or enough working capital.

2. Socio Cultural Factors: The final aim of the organization is to sell the product which produced. If such product is not absorbed in immediate environment will have tough times selling its product. In such case organization look for another market which will lead to higher marketing costs and inability to sell its product.

3. Public Policy: It is most important external source of corporate failure. If government policies are against the interest of a corporate in a short term period, the corporate could go insolvent.

In addition to that following are the causes of corporate failure.

1. Failure to understand the market and customers.
2. Opening a business in an industry that is not profitable.
3. Failure to understand and communicate what the company is selling.
4. Inadequate financing
5. Reactive attitude
6. Overdependence on a single customer
7. Poor management
8. No customer strategy
9. No planning
10. Neglect of technology updating
11. Inertia to change
12. Neglect of research and innovation
13. Rely on few major customers,
14. Dishonest audit committees etc.

3.2.1.2 Remedies for Corporate Failure :

By considering all the above mentioned causes of corporate failure one can identify the cause and could be used to minimize its incidence. The institution of efficient and effective management is one of the most important measure to avoid corporate failure. Generally it includes the following factors.

1. **Managerial Training and development :** A performance and success of the corporate is depends upon the effective and efficient employees. Managerial Training and development policy make them improve on job performance.

2. **Improvement in productivity and business process reengineering:** Enhancement of productivity and business process reengineering consists of improvement in productivity, application of appropriate financial structure and increasing the level of competitive advantage in the market.

3. **Control the Various Variance :** Management should continuously monitor and control the various variance level such as a) Sales Price Variance, b) Sales Volume Variance, c) Sales Mix Variance, d) Sales Quantity Variance, e) Market Size Variance and f) Market Share Variance.

4. **Strategic Performance Measurement:** This is an accounting system used by top management to evaluate well known strategic business units.In addition to that

   - Restructuring business activities
   - Reducing debt burden
   - Improving productivity, quality
   - Strategic partnership
   - Cost reduction and control
   - Enhancing competitiveness
   - Adapting to changing environment
   - honest audit committee, and appointment of non executive directors are the some remedies for corporate failure.

For effectively carried out the various measures mentioned above to minimize corporate failure, a corporate body must have effective and functioning research and development department.

3.2.1.3 Corporate Failure: Some Examples

1. **Kingfisher grounded:** The airline started with much fanfare by the King of Good Times Vijay Mallya, but it faced anything but good times in 2012. Deteriorating financial position meant that Vijay Mallya could not meet lessors & vendors payments for months. Bankers failed to recover their dues and disgruntled employees went on several strikes because they were not paid for months on end. Operations were hit and the airline lost customers and market share. As the crisis worsened, Kingfisher first reduced operations to just 20 aircraft and finally forced to stop operations on the October 1. With safety concerns rising, aviation regulator Director General of Civil Aviation suspended the airlines operations on the October 20.

2. **Swissair:** The former national airline of of Switzerland, Swissair, used to be so financially stable that it was known as the "Flying Bank." Founded in 1931, Swissair epitomized international transportation until the late 1990s, when the airline's board decided to follow an aggressive borrowing and acquisition policy called the Hunter strategy. Then, the terrorist attacks of September 11, 2001 put a void in the company's plans Swissair found itself hamstrung with debt. Unlike some other airlines, however, Swissair couldn't handle the financial hit. Mismanagement and bad ideas trundling large sums of cash to purchase fuel at foreign airports, for example left the airline gasping for oxygen. In 2002, Switzerland was embarrassed to lose its national icon for good.

Know Your Progress Part-I

A) Select the appropriate alternative

1. Corporate ……………..could be seen in terms of the inability of a corporate organization to confirm itself with its strategic path of growth and development to attain its economic and financial objectives as well as legal obligations.

   a) failure b) Restructuring c) Planning d) none of these

2. Corporate failure means the …………….to pay debts when they become due, the market value of assets of the firm is less than its total liabilities.

   a) ability b) inability c) recovery d) All of the above

3. Control the various …………level such as Sales Price Variance, Sales Volume Variance, Sales Mix Variance etc. is one of the remedial measures for corporate failure

   a) Variance b) Standard Deviation c) Mean d) Mode

4. Over ………………..is the cause of corporate failure.

   a) Time b) Confidence c) Expansion d) none of these

5. ……………..is most important external source of corporate failure.

   a) Private Policy b) Public Policy c) Life Policy d) All of the above

B) Write True or False

1. The corporate failure may destabilize the economic system in various ways such as increasing unemployment and level of poverty, depriving people, increase in the rate of crime and tax earning may reduce
2. Managerial inefficiency and ineffectiveness is the main cause of corporate failure.
3. Low Production Cost is also one of the cause of corporate failure
4. The fair capitalized body corporate is bound to fail sooner or latter.

C) Fill in the blanks

1. ………………..refers to companies operations following its inability to make profit or to earn revenue to meet out their routine expenses.
2. Overdependence on a single …………….is adversely affected on corporate.
3. Poor ……………..Management get corporate instability
4. Improvement in …………and business process reengineering is essential to come out from corporate failure

3.2.2 Corporate Restructuring : Meaning:

Financial crisis is the main reason for restructuring the company. When any company suffers heavy losses consistently or having critical financial position may require restructure of its capital structure. Many times the companies having bad financial position and suffering heavy losses may lead to dissolution or liquidation.

However corporate restructuring is the best alternative for liquidation as well as dissolution. It is mainly depending upon the assumption of that the company has the bright future and they can earn sufficient profit in near future. If the company has potential to maximize profit in near future, then and then only the corporate restructuring is advisable. If there is no hope for making sufficient profit in future, in such case the winding up of company is better than restructuring.

Restructuring means to rebuild or to reorganize. The term restructuring regarding companies refers to reorganizing the capital structure. The term corporate restructuring is defined as follows.

"Corporate Restructuring means reorganizing the capital structure of a company through reduction of claims of both the share holders and the creditors of a company or calling additional funds from share holders or creditors or both."

3.2.2.1 Forms of Corporate Restructuring:

Corporate Restructuring may be divided in to two types such as Internal Restructuring and External Restructuring. They are discussed as follows.

I) Internal Restructuring:

When capital structure of the company is reorganized by company internally it is called as internal reconstruction. It includes only reorganization of its own capital structure. The forms of internal restructuring are as follows.

1) **Alteration of Share Capital :** The right of alteration of share capital is provided by companies act 1956 to every company. Generally the share capital is altered by various ways such as i) Increase the share capital by issue of new shares ii) Cancellation of unissued shares iii) Conversion of fully paid shares into stocks iv) Consolidation of shares into larger denomination iv) Division of shares into smaller denomination. It is simple way of restructuring, hence it require ordinary resolution

2) **Reduction of share capital :** As stated above a company has right of alteration in share capital. According to companies act 1956, section 100 to 105 a company may reduce its share capital under corporate restructuring. Generally company may reduce share capital by i) The lost capital may written off; ii) Surplus share capital may refunded iii) The liability on uncalled share capital may reduced.

This type of reconstruction is generally requires special resolution of the general body and permission from the court. Before the reduction of share capital, company must be complete some legal formalities.

3) **Surrender of shares :** Under the scheme of corporate restructuring a company may surrender its shares. This type of reconstruction is also requires completion of necessary legal formalities. Under this system a part of share holdings is surrendered. Generally it includes i) For cancellation of shares some part of the share holdings are surrendered ii) Surrender of some of part of share holdings to some of the creditors.

4) **Divesture:** When any company sells its all the assets or sells its all business or branches to another company for cash is called as divestiture. Under divestiture all the assets i.e. fixed assets, current assets, raw material, work in progress, finished goods are sold to other company for consideration of cash as a lumpsum. Here, it is keep in mind that the purchase consideration may not be paid in other than cash such as shares, debentures or in any other form. To improve the goodwill in the stock market is one of the motives of the divestiture as well as to mobilize the resources for development of the organization.

5) **Buy-back of shares:** The main object of the buy-back of shares is to reduce excess capital of the company. It is one of the way of restructuring the existing organization. Under this system the company declares the scheme of buy back of its shares. The price for which the shares are to be taken back is determined by the company itself. The scheme of buy back is published in the regional as well as national newspapers. It includes price of the shares, opening and closing date of the buy back etc. Generally when excess capital found in company which remains idle, in such case company may return the cash i.e. capital to share holders by taking the shares back.

6) **Delisting of shares**: The SEBI regulates the stock market. It is beneficial to company to register or to enroll their shares in any stock exchange in India. It increases the reliance of investors. It helpful to attract the semi-conscious and small investors. But in some cases a company may choose the way of delisting the shares for restructuring the capital structure of the organization. Generally it is not preferred by companies or very rarely adopted.

7) **Demergers:** It is the opposite term of merger. Demerger simply means splitting of the one company or business in to two or more companies. When any company

sells or transfers its business or division of business to another one company or more than one company is called as demerger. Under this scheme the share holders of the existing company get the consideration of the demergers in the form of shares of the transferor company. For demerger the sanction of the existing share holders, as well as court and sanction of the SEBI is necessary.

II) External Reconstruction

When a company reorganized the capital structure with the help of external forms is called as external reconstruction. There are various forms of external reconstruction. They are as follows.

1) **Mergers** :

When two or more companies come together where one company survives and other company get merged into survived company. In this case one company may dissolved in another existing company and one company survives. All the assets and liabilities of one company are merged in to another existing company. Generally merger take place for the purpose of eliminating cut throat competition and to maximize profit earning capacity.

It may be of three types i.e. 1.Vertical 2. Horizontal 3.Conglomerate .

Vertical merger means combining two or more companies which are involved in related stages of production .e.g. weaving and spinning companies join together .

Horizontal merger means , two or more companies got merged in the same area of business . e.g. two T.V. companies join together.

When two firms engaged in unrelated lines of business merged , it is conglomerate merger .e.g. Chemical and fertilizer companies merge together .

Reasons for Merger :

Merger is form of external restructuring. Generally it is carried out for maximizing profits through eliminating competition among two similar types of companies.

1) **To Eliminate competition** : There is cut throat competition in the market. If it is avoided or eliminated the smooth progress of any business is possible. Generally the procedure of merger is take place for the purpose of elimination of this competition. It helps to reduce or eliminate this cut throat competit0on.

2) **To reduce cost** : Cost effectiveness is the *MANTRA* of the globalized era. Any organization must be careful about cost effectiveness. Cost of production and distribution cost is reduced to large extent with the help of merger. It is one of the important reason of merger to reduce cost and economy in the expenditure.

3) **To maximize profit** : It is one of the reason of merger. Mainly profit is depending upon cost effectiveness of product. If merger is take place the cost of production may reduce as well as competition is avoided which resulted in to maximization of profit.

4) **To survive in the market** : Due to cut throat competition in the market small and weak companies or organizations may collapsed and closed down. Therefore merger is the only way to survive in the highly competitive market .

5) **Economic stability**: The financial strength of one and single unit is less as compared to big unit. For increasing economic stability and financial soundness organizations may opt for merger. It helps to small organizations to expand their financial strength.

6) **Optimum utilization** : Optimum utilization of available resources is not possible to small and weak units. If such units merged into each other they can use these resources properly. Merger helps for maximum utilization of productivity and resources of the company .

7) **To increase competitive strength** : In the globalized era the competition is increased tremendously. To survive in the market it is necessary to increase the competitive strength of the organization. It is mainly possible with the help of merger. Merger leads to reduce the number of competitors.

8) **Expansion** : Merger is the way of expansion. For getting the benefit of large sale business merger helps to expand size of business.

Legal Procedure for Mergers

In merger two or more companies are willingly comes together. Generally merger takes place for elimination of competition and to maximize profit earning capacity of the organization. SEBI has controlled over these merger procedure. SEBI has laid down some guidelines and rules for mergers. However, the organization may completed some legal formalities regarding merger. It is as follows.

1) **Preparation of scheme of Merger** : First of all the top level management prepares the scheme of merger. It is the policy decision of the top level management. For this purpose they take the help of expert consultant. By considering Memorandum of Association of the company the team of expert prepares scheme of merger.

2) **Intimation to stock exchanges :** The stock exchanges where merging and merged companies are listed should be informed about the merger proposal. From time to time the copies of all notices, resolutions and orders should be mailed to the concerned stock exchanges. It is obligatory as per SEBI regulations.

3) **Approval of board of directors**: The formal approval of the BOD's of acquiring company is necessary. The draft merger proposal is submitted to the board of directors for its approval. It should be approved by the BOD's. They should pass resolution authorizing its directors and executives to pursue the matter further.

4) **Approval of Financial agencies :** The merging company should take the approval of the financial agencies i.e. bankers and lenders of the target company. For the approval of the merger the meeting of the financial agencies, banker, lenders and trustees of the debenture holders is arranged.

5) **Application to High Court :** Once the draft of the merger proposal is approved by the respective boards, merging and merged companies should apply to the high court of the state where its registered office is situated. High court approve the proposal and give direction to the acquirer company to call the meeting of the share holders of both the companies.

6) **Meeting of share holders** : The special general meeting of the share holders of both the companies are held to approve the scheme of merger. After approval of the high court, the notice of the meeting should be dispatched to share holders and creditors of each company. The notice should be reached to them in such a manner that they should get 21 days advance intimation.

7) **Notice in newspaper** : The notice of the extra ordinary general meeting should be published in the leading newspapers. Such notice is also published before 21 days of the actual meeting.

8) **Holding of meeting :** A meeting of the share holders and creditors should be held by both the companies. The resolution of the scheme of merger is passed in this

meeting at least by 75 % of share holders who votes either in person or by proxy. The same rule is applicable to creditors also.

9) **Petition to high court** : When the scheme of merger is passed in the extra ordinary general meeting of the share holders and creditors, both the companies should present a joint petition to high court for approval of the merger scheme.

10) **Filling the court order with the registrar** : The certified true copies of the high court order should be filed with the registrar of the companies. It must be filed with in the time limit specified by the court.

11) **Transfer of Assets and Liabilities** : After completion of all the formalities and final order –passed by both the courts , all the assets and liabilities of the target company are transferred to the acquirer company.

12) **Allotment of shares and Debentures;** After fulfillment of the provisions of the law the acquirer company should issues shares and debentures to the share holders of the target company. it means the share holders of the merged company become the share holders of the merging company.

13) **Application for Listing :** After issue of shares to merger company, the merging company submits the application for listing these shares in stock market. After completion of all the formalities the stock market listed the securities for trading purpose.

Examples of biggest merger :

1. Arcelor Mittal : In 2006, Mittal Steel announced its initial bid of $23 billion for Arcelor which was later increased to $38.3 billion. It is the biggest merger. This resulted in the new company Arcelor-Mittal controlling 10% of global steel production.

2. Vodafone Idea Merger : Both the Vodafone and Idea companies struggled amidst the growing competition in the telecom industry. Particularly due to the entry of Reliance Jio and the price war that followed, these two companies decided to merge. The value of Vodafone Idea merger is $23 billion. The deal worked both for Idea and Vodafone as Vodaphone went on to hold a 45.1% stake in the combined entity with the Aditya Birla group holding a 26% stake and the remaining by Idea. The new identity of Vodafone Idea is marked as ‘Vi’.

2) **Amalgamation –**

When two or more than two companies comes together and start a new company is called as amalgamation. It is combination of two or more companies and formation of new company. It means there are two or more liquidations and one formation. e.g. X Ltd and Y Ltd amalgamated and to form XY Ltd. In this case Vendor Company going into liquidation and new company is formed. Here XY Ltd to take over the business of X Ltd and Y Ltd. The business of vendor companies is taken over by new company on agreed terms and conditions.

3) **Absorption –**

When one existing company take overs the business of another existing company is called as the absorption. In this case another company looses its identity and merged into the first company. e.g. A Ltd to take over the B Ltd. Here, the business of B Ltd will be closed, but there is formation of new company. It is voluntary process. In this case one existing company may absorb into another company voluntarily. Generally for survival purpose the small company may absorb into big company. The company going into liquidation is called the asorbed company and the company taking over the business is called absorbing company.

4) **Acquisitions –**

When one company acquire or take over the business of another existing company is called as acquisition. Here a company which acquires the business of other company is knows as purchasing company or vendee company and other company is known as vendor company. It is also known as take over's. In this case acquiring company take overs the assets, net assets or stocks of another company. This company acquires control over another company directly by owing the assets or indirectly by obtained the control over management of that company.

Example of acquisition **: Walmart Acquisition of Flipkart :** Walmarts acquisition of Flipkart marked its entry into the Indian Markets. Walmart won the bidding war against Amazon and went onto acquire a 77% stake in Flipkart for $16 billion. Following the deal, eBay and Softbank sold their stake in Flipkart. The deal resulted in the expansion of Flipkart's logistics and supply chain network. Flipkart itself had earlier acquired several companies in the eCommerce space like Myntra, Jabong, PhonePe, and eBay.

5) **Take over :**

Take over means to make control over others by forcefully. Here, when one company forcefully taking over or acquiring the business of other company is known as take over. It is the popular form of reconstruction. It is external form of reconstruction. Takeover is the backdoor tool for control over the management and ownership. But as per SEBI's rules and regulations the backdoor takeover is illegal and it is treated as crime. Now it is compulsory to make PAN and Demat Account for purchasing the shares. Today takeover shall be only through front door. The SEBI prescribed legal procedure for take over. In India takeover can be only friendly and not hostile.

The take over come in to existence by following ways.

i) One existing company purchase the majority shares of another existing company from market.

ii) The creditors of the company may pressurize the existing company for take over.

It is also known as back door acquisition. However, SEBI has right to control over such practices.

Definition: "When one company takeover another company through acquiring control over the ownership and management of the another company by mutual agreement between both the companies."

Generally the takeover exists for eliminating the cut throat competition and to improve the leadership position in the market. The company which takeovers the other is known as acquirer company and other company is known as target company.

Benefits of Takeover :

1) Takeover means taking over the total business of the target company. It reduces the cut throat competition between target company and acquiring company.

2) It also strengthen the competiveness of the acquiring company.

3) Takeover helps t reduce cost of production.

4) It also helps to reduce cost of distribution and marketing.

5) The distribution channel of the targeted company is captured by acquiring company. It gives additional access to new distribution channel.

6) It gives boost to economy for their growth.

7) It helps to increase and expand the market and to attract the new customers.

8) It helps to optimum utilization of available natural as well as other valuable resources.

9) It helps to maximize the profit earning capacity of the acquiring company.

10) It is also beneficial to society and customers at large due to cost effectiveness of the company. They get product in time and at fair prices.

11) Takeoves makes financial position the acquiring company more sound.

12) It helps to overall development of the organization.

Example of takeover : Tata and Corus Steel : Tata's takeover of Corus Steel in 2006 was valued at over $10 billion. The initial offers from Tata were at £4.55 per share but following a bidding war with CSN, Tata raised its bid to £6.08 per share. Following the Corus Steel had its name changed to Corus Steel and the combination resulted in the fifth-largest steel making company.

Legal procedure for Takeover :

Today takeover shall be only through front door, back door takeover is treated as crime and heavy punishment is prescribed for it. Though the takeover is unwilling combination of two companies the SEBI prescribed legal procedure for it which is as follows.

1) Appointment of Merchant Banker : The top management takes the decision of takeover of the target company. After taking the decision of takeover the acquiring company may take the expert advice of the merchant banker. The SEBI classifieds the merchant bankers and as per SEBI's guidelines acquiring company may appoint the merchant banker from category-I.

2) Collecting information : After appointing the merchant banker, they collect the relevant and necessary information of the target company. Generally it includes information regarding production, market, distribution channels, share holders profile, debtors and creditors information etc.

3) Submission of expert report : The merchant banker prepares the expert advice report by considering all the important information as well as examining the memorandum and articles of association. It is submitted to top management of the acquiring company. The final decision of takeover is rely upon this report.

4) Approval of the BOD : The advice report submitted by merchant banker is first of all studied by top management and later on It is put before the Board of Directors of the acquiring company. The BOD approves the report and appoints a team of expert for formal negotiations with Target Company.

5) Making negotiations: The expert team makes formal and informal negotiation with Target Company. The details of the final negotiation are put on the paper. These final papers are signed by both the parties i.e. acquiring and target company.

6) Make public announcement : After the finalization of the negotiation of the takeover the acquiring company shall make public announcement within four days. It should be published in one National English or Hindi newspaper and one regional newspaper. This public announcement includes all the details regarding takeover.

7) Preparation of Letter of Offer : The acquiring company prepares the draft of the letter of offer. It contain offer price , mode of payment, date of payment, opening date of offer and closing date of offer etc. It is necessary to take approval of SEBI before sending this letter of offer to share holders of the target company.

8) Approval of SEBI : It is necessary to take approval of SEBI for takeover. For this purpose the acquiring company may submit letter of offer, MOU, documents of negotiations and other necessary papers to SEBI office with necessary fees.

9) Letter of Offer to Target Company : The final draft of the letter of offer is sent to target company for its consideration. It may be corrected with the consent of both the parties.

10) Letter of Offer to Stock Exchange: The approved and final draft of the letter of offer is then submitted to stock exchange where the shares of both the companies are listed. The submission of letter of offer to stock exchange is obligatory on the acquiring company.

11) Letter of Offer to Share Holders : The letter of offer approved by SEBI is then sent to share holders of the target company. This offer is optional and share holders of the target company may or may not be accept such offer. The offer remains open for 30 days. The share holders who accept the offer should fill up the acceptance form and sent to merchant banker.

12) Opening Account : After sanction of the letter of the offer by share holders of the target company the offer price is paid to them. For the payment of offer price in the bank. the acquiring company opens the escrow account. The amount of offer price is deposited in to that account.

13) Making payment and completion of takeover : The acquiring company paid the offer price to the share holders of the target company through escrow account. Such payment must be paid within 30 days from the date of closure of offer and all the formalities of the takeover may complete within that period.

6) Joint Venture:

When two or more than two companies sharing the equity capital and advanced technology for carrying the business is called as joint venture. It is a partnership with other company in the form of equity capital and modern technology. Generally this partnership is made with foreign company. However under this reconstruction scheme the terms and conditions of joint venture may follow. In the era of globalization such type of reconstruction is popularized.

Examples of Joint Venture: I) The 2008 Joint venture of NBC Universal Television Group (Comcast) and Disney ABC Television Group (The Walt Disney Company). The objective of the joint venture was to create a video streaming application or a website named “HULU”. This product provides streaming quality content which is on computers, laptops or mobile phones. The product became a huge success with the offering lining upto $1 billion.

II) Another example of a joint venture is the joint venture between the taxi giant UBER and the heavy vehicle manufacturer Volvo. The joint venture goal was to produce driverless cars The ratio of the ownership is 50%-50%. The business worth was $350 million as per the agreement in the joint venture.

III) Vistra the joint venture between the Tata Son’s Group and Singapore Airlines where in this JV the majority of sake held by Tata Son’s with 51% and the rest 49% is under Singapore Airlines.

7) Buyout:

Generally Buyouts occur when purchaser believes a company's assets are undervalued and can be resold for a profit. In addition to that when purchaser believe that they will get financial and strategic benefits with the help of buyout , such as higher revenues, easier entry into new markets, less competition or improved operational efficiency, buyout come into existence. In finance, a buyout refers to the purchase of a company's voting stock in which the acquiring party gains control of the target company. A buyout can be funded with a combination of cash or debt.

When any purchaser purchase at least 51% of a company it is called as Buyout . Under a buyout, the previous ownership loses control over the company in exchange for compensation. In brief, a buyout is the purchase of a company's shares in which the acquiring party gains controlling interest of the targeted firm.

The company performing the leveraged buyout (LBO) may provide a small amount of the financing, typically 10%, and finance the rest through debt. The return generated on the acquisition is expected to be more than the interest paid on the debt. Therefore, high returns may be realized while risking a small amount of capital.

Examples of Buyout:

I) Hilton Hotels: In 2007, Blackstone Group bought Hilton Hotels for $26 billion through an LBO. Blackstone put up $5.5 billion in cash and financed $20.5 billion in debt. Before the financial crisis of 2009, Hilton had issues with declining cash flows and revenues. Hilton later refinanced at lower interest rates and improved operations. Blackstone sold Hilton for a profit of almost $10 billion.

II) Gibson Greeting Cards :In 1982, Wesray Capital acquired Gibson Greeting Cards for a purchase price of $80 million. The deal was financed with $1 million in cash, while the rest was borrowed by issuing junk bonds. After some time interval, Wesray sold Gibson Greeting Cards for $220 million, with investors earning about 200 times their initial equity invested.

Process of Buyout:

It may takes three to six months' time to complete a buyout procedure. Generally buyout process is as follows.

1. Examination of Financial Documents : The purchaser examines the target company's balance sheet, income statement and statement of cash flows, and conducts a financial analysis on any subsidiaries or divisions seen as valuable.
2. Discussion with purchaser and target Company: After careful examination of Financial Documents , the purchaser and target begin discussing a buyout.
3. Offer of Buyout from Purchaser: The purchaser then makes an offer of cash and debt to the board of directors (BOD) of the target company.
4. Decision of Buyout: The decision of buyout i.e. whether to sell the business is decided by shareholders. The board either recommends the shareholders sell the buyer their shares or discourages the shareholders from doing so. They do not always welcome buyout offers. Therefore, buyouts may be friendly or hostile.

After completing the buyout process, the purchaser implements its strategy for restructuring and improving the company. The purchaser may sell divisions of the business, merge the business with another company for increased profitability, or improve operations and take the business public or private.

8) Financial Restructuring

The process of financial restructuring is often associated with corporate restructuring, in that restructuring the general function and composition of the company is likely to impact the financial health of the corporation. Financial restructuring is the reorganization of the financial assets and liabilities of a corporation in order to create the most beneficial financial environment for the company. The financial restructuring can be either from the assets side or the liabilities side of the balance sheet. If one is changed, accordingly the other will be adjusted.

Financial restructuring is any substantial change in a company's financial structure, or ownership or control, or business portfolio, designed to increase the value of the firm. If you want to increase the value of your firm, you may need to reorganize your financial assets in order to create the most financially beneficial environment for the company.

The term "Financial restructuring" is the process of reshuffling or reorganizing the financial structure, which primarily comprises of equity capital and debt capital.

Financial restructuring can be done because of either compulsion or as part of the financial strategy of the company. (Naveenkumar and TarunVenai)

Financial Restructuring is done for various business reasons and those could be Debt restructuring & Equity restructuring.

1. **Debt Restructuring :** Debt restructuring is the process of reorganizing the whole debt capital of the company. It involves reshuffling of the balance sheet items as it contains the debt obligations of the company. When a company is in crisis, it may try to renegotiate with its creditors to reduce or eliminate some of its debts. Financial restructuring is not only a tool used by companies that are in financial trouble. Healthy companies may also choose to restructure their debt if it will provide a benefit. If interest rates fall, a company may refinance its loans to take advantage of this drop.

2. **Equity Restructuring :** Equity restructuring is the process of reorganizing the equity capital. It includes reshuffling of the shareholders capital and the reserves that are appearing in the balance sheet. A company having less debt as compared to their equity may use some of their equity to buy back stock which help to company to pay higher dividend to existed shareholders. If company doesn't have extra cash available, it may sell off some assets that are not bringing in profits or borrow money for the buyback. A company also restructure by written down its assets which are overvalued. It declines the profit which in turn reduces the tax liability.

9) Strategic Alliance

Meaning:

A strategic alliance is a relationship between two or more entities that agree to share resources to achieve a mutually beneficial objective. For example, a company manufactures and distributes a product in India and desires to sell it in other countries. Another company wants to expand its product line with the type of product the first company creates, and has a worldwide distribution channel. The two companies establish an alliance to expand the distribution of the first company's product.

That means, the two companies form a strategic alliance to pursue mutual benefits. Strategic alliances can develop in outsourcing relationships where the parties desire to achieve long-term win-win benefits and innovation based on mutually desired outcomes.

Definitions:

A strategic alliance is an agreement between two or more parties to pursue a set of agreed upon objectives needed while remaining independent organizations.

A legal agreement between two distinct organizations that provides for sharing resources collaboratively in pursuit of a mutually beneficial goal.

Example: The strategic alliance agreement between Monsanto and Grass Roots Biotechnology is a recent example of an alliance between a large company and small research-focused organization. Monsanto is a globally recognized agriculture company. Grass Roots Biotechnology is a small, research-oriented agricultural biotechnology company. The Monsanto/ Grassroots strategic alliance agreement called for Grass Roots to conduct research on Monsanto's behalf.

The strategic alliance between the Dutch airline KLM and the American carrier Northwest Airlines is a famous example of a strategic alliance that allowed two companies to share their routing networks but still remain distinct companies.

Benefits of Strategic Alliance

- Access to new technology and intellectual property rights,
- Diversification,
- To take Opportunities for growth
- Access to new market, new customers, to talent
- Improve agility, R&D, material flow, speed to market,
- Reduce administrative costs, R&D costs,
- To take competitive advantage of each partner.
- Reduce political risk while entering into a new market
- Access to new industries and reduce unhealthy competition
- To spur investments in innovation for Strengthening it.
- Partners in a Strategic Alliance can help each other by giving access to resources, (personnel, finances, technology)

Know Your Progress Part II

A) Select the appropriate alternative

1. Under divestiture form, the consideration is to be paid in ……………… Only.

   a) shares b) debentures c) cash d) bonds

2. Buy back of shares is a ………………….form of restructuring.

   a) Internal b) External c) middle d) None of the above

3. Under demergers form, the consideration is to be paid in the form of …………Only.

   a) Equity shares b) debentures c) cash d) bonds

4. Merger is the form of …………….reconstruction.

   a) Internal b) external c) middle d) none

5. Alteration of share capital require…………………resolution

   a) Ordinary b) extra ordinary c) both d) none

6. Generally ……………. occur when purchaser believes a company's assets are undervalued and can be resold for a profit.

   a) Amalgamation b) Absorption

   c) Buyouts d) None of these

7. ……………..is the process of reshuffling or reorganizing the financial structure of a company.

   a) Financial restructuring b) Financial Failure

   c) Alteration of share capital d) None of these

B) Write True or False

1. Financial crisis is the main reason for restructuring the company.
2. Demerger is External form of restructuring.
3. In India, Takeover is hostile form of reconstruction.
4. SEBI has controlled over merger procedure.

5. Restructuring means to rebuild or to reorganize
6. Buyout is the purchase of a company's shares in which the acquiring party gains controlling interest of the targeted firm.

C) Fill in the blanks

1. ……………..is the best alternative for liquidation as well as dissolution.
2. When capital structure of the company is reorganized by company internally it is called as……………….
3. ……….means to make control over others by forcefully.
4. When any company sells its all the assets or sells its all business or branches to another company for ……………is called as divestiture.
5. …………simply means splitting of the one company or business in to two or more companies.
6. When any purchaser purchaseat least 51% of a company it is called as ………….
7. Debt restructuring is the process of reorganizing the whole …………capital of the company.

Practical:

Prepare and presentation of five latest cases of corporate restructuring

Case No. 1: Three-way amalgamation of Vijaya Bank, Dena Bank and Bank of Baroda

On 1st April, 2019, Bank of Baroda, Vijaya Bank and Dena Bank were merged in a three-way amalgamation. In this amalgamation, 2,135 branches of Vijaya Bank and 1,777 branches of Dena Bank were merged with that of Bank of Baroda. The government of India announced the merger on 17thSeptember, 2018.In September 2018, the 'Alternative Mechanism' (AM) headed by Finance Minister Arun Jaitley had decided to merge Dena Bank and Vijaya Bank with Bank of Baroda. The basic aim of merging is to create a stronger and sustainable global-sized lender.

Type of Reconstruction :Three-way amalgamation

Name of the Companies :Vijaya Bank , Dena Bank and Bank of Baroda,

Who merged:Vijaya Bank and Dena Bank merged with Bank of Baroda

When : The government of India announced the merger of Bank of Baroda, Vijaya Bank and Dena Bank on September 17, 2018 and actual implementation is take place on 1st April, 2019,

Why : The decision of merging is taken to create the country's third largest ,a stronger and sustainable global-sized lender.

Effects of Reconstruction :

What happens to Vijaya Bank and Dena Bank shares after merger?

According to the Scheme of Amalgamation, shareholders of Vijaya Bank will get 402 equity shares of BoB for every 1,000 shares held.

In the case of Dena Bank, its shareholders will get 110 shares of BoB for every 1,000 shares held.

Conclusion:

On 25th May 2020, Bank of Baroda completed IT integration of 132 branches of the former Vijaya bank. On 1st April, 2019, Bank of Baroda, Vijaya Bank and Dena Bank were merged in a three-way amalgamation. In this amalgamation, 2,135 branches of Vijaya Bank and 1,777 branches of Dena Bank were merged with that of Bank of Baroda.

The migration process started after the payment channels of both the Vijaya bank and Dena Bank were merged with Bank of Baroda. After integrating ATMs, NEFT, RTGS, IMPS and UPI with BoB, merging of the branches of Vijaya Bank marked the start of the merging process.

While the IT integration of Vijaya Bank’s 152 branches is completed with 20 branches that had been migrated earlier, bringing it to the same IT platform, Finacle 10, as that of Bank of Baroda, the IT integration of Dena Bank is expected to be completed by end of this year or January 2021.

Case No. 2 : Merger (horizontal merger) of Allahabad Bank (Kolkata-headquartered) and Indian Bank (Chennai headquartered).

Both lenders had a rich legacy that went back to the pre–independence era. Indian bank with 113 years and Allahabad Bank with 155 years will create an institution with sound financial strength and nationwide connectivity consisting of 6,000-plus branches, 4,800-plus ATMs, 43,000-plus employees serving 120 million-plus customers and business mix of over Rs 8 trillion. Allahabad Bank had a total business of Rs.3.77-lakh crore as on March 31, 2019. Deposits were at Rs. 2.14-lakh crore, while advances were close to Rs.1.63-lakh crore. Indian Bank's total business stood at Rs.4.29-lakh crore with deposits of around Rs.2.42-lakh crore and advances of Rs.1.87-lakh crore.

All branches of Allahabad Bank will function as branches of Indian Bank following the amalgamation of the two lenders as per Reserve Bank of India (RBI)'s notification dated March 28, 2020. Effective April 1, Allahabad Bank will cease to exist in its present form and will be officially merged with Indian Bank.

Type of Reconstruction : Merger (horizontal merger)

Name of the Companies: Allahabad Bank Kolkata-headquartered and Indian Bank Chennai headquartered

Who merged : Allahabad Bank merged into Indian Bank, Indian Bank will retain its name after its merger with Allahabad Bank

When : April 1, 2020

Why : As on March 2019, Indian Bank and Allahabad Bank's combined business is estimated to be close to Rs. 8-lakh crore. Their branch network put together is close to 6,104. They have a plan to expand the total branches of the merged entity to 10,000 and register Rs.10-lakh crore business in another two to three years. Bank will make the new entity the seventh-largest bank in India. The increased lending capacity shall be utilised to serve Corporate and MSME clientele

CEO /Chairman :Managing Director and CEO of Indian Bank : Padmaja Chunduru,

Managing Director and CEO of Allahabad Bank : S.S. Mallikarjun Rao

Effects of Reconstruction: Allahabad Bank will cease to exist in its present form and will be officially merged with Indian Bank. The bank would continue to deliver top-grade products and services to all its old customers. None of the branch is going to be closed. Only those branches that are just adjacent to each other will be combined. Both banks have a common core banking platform, BaNCS, developed by TCS.

A fair equity share exchange ratio of 115 equities of Rs. 10 each for every 1000 shares of Rs.10 of Allahabad Bank as a part of the amalgamation.

Conclusion : The merger of Kolkata-headquartered Allahabad Bank and Chennai-based Indian Bank will make the new entity the seventh-largest bank in India. Indian Bank is the anchor bank in this merger process. At the end of the third quarter this fiscal, the combined business of the two banks stood at Rs 8.44 lakh crore with a total of 6,104 branches. Indian Bank's business stood at Rs 4.29 lakh crore with 2,887 branches as on December 31, 2019, while Allahabad Bank's total business as on December 31 last year stood at Rs 3.77 lakh crore with 3,175 branches. Bank will make the new entity the seventh-largest bank in India.

Case No. 3 : Joint Venture of Tata Steel and ThyssenKrupp

Tata Steel and Thyssenkrupp (TK), a German multinational conglomerate, have signed a deal to merge their European steel operations. As per the final terms of the deal, each company shall hold a 50% stake in the new venture, known as Thyssenkrupp Tata Steel B.V. This merger is set to become the second-largest steel company in Europe, only behind Arcelor Mittal. The company is expected to have a labour force of around 48,000 workers.

Type of Reconstruction : Joint Venture

Name of the Companies: Indian steel major Tata Steel and German giant ThyssenKrupp

When : September 2017

Why : According to investment bankers, both Tata Steel and Thyssenkrupp are facing a tough financial situation and will take steps to sell some assets so that they can meet Europe's anti-competition norms. Since June 2017, steel prices have crashed and the financial metrics of both companies have deteriorated.

In the past few years, Tata Steel Europe has not performed very well due to high competition in Europe, weak global conditions and cheap Chinese imports in the market. All of these factors resulted in a negative Profit after Tax (PAT) of Rs 304 crore for Tata Steel in 2017. The merger with TK and Tata Steel Europe's restructuring activities in the past year could help improve operational performance.

CEO /Chairman : ThyssenKrupp CEO Heinrich Hiesinger, Tata Steel chairman Natarajan Chandrasekaran

Capital ratio : 50: 50

Effects of Reconstruction

- What this means for Tata Steel

The joint venture (JV) could help Tata Steel to reduce leverage and focus on creating a strong Indian platform in the European market. This deal would reduce Tata Steel Europe's debt by Rs 20,000 crore or €2.5 billion.

- What this means for Thyssenkrupp

The performance of Thyssenkrupp was better than Tata Steel after the MOU was signed in September 2017. The joint venture between Tata Steel and Thyssenkrupp could result in sales equal to Rs 13 lakh crore ($ 19.9 billion). In addition, the joint synergies of both the companies could help them to realise additional significant value of around Rs 40,000 crore (€5 billion) for each company.

Conclusion :

The merger between Tata Steel and TK is expected to have a positive impact on Tata Steel's shareholders. The merger could contribute around Rs 57,000 crore to Tata Steel's consolidated financials. The merger with TK and Tata Steel Europe's restructuring activities in the past year could help improve operational performance. This could benefit shareholders' prospects. After murger, Tata Steel's stock price increased by around 10% in view of the merger. According to CEO of TK the joint synergies of both the companies could help them to realize additional significant value of around Rs 40,000 crore (€5 billion) for each company

Case No. 4 : Merger of Idea Cellular and Vodafone India(merger of two equals)

It was announced in March 2017 that Idea Cellular and Vodafone India would merge. The merger got approval from Department Of Telecommunications in July 2018. On 30 August 2018, National Company Law Tribunal gave the final nod to the Vodafone-Idea merger. The merger was completed on 31 August 2018, and the newly merged entity was named Vodafone Idea Limited. The merger created the largest telecom company in India by subscribers and by revenue. Under the terms of the deal, the Vodafone Group holds a 45.2% stake in the combined entity, the Aditya Birla Group holds 26% and the remaining shares will be held by the public. Vodafone Idea lost a significant number of gross and active subscribers in the month of August 2020 after the merger. The nature of both the companies are as, Vodafone – a postpaid & Prepaid GSM service and Idea – a prepaid GSM service, similar to Vodafone Prepaid.

Type of Reconstruction: Merger

Name of the Companies: Vodafone India Limited and Idea Cellular

Name after Reconstruction: Vodafone Idea Limited ('VI')

When: The merger was completed on 31 August 2018

Why: The two companies decided to merge their business after the sector witnessed a huge tariff war and reduction in margins with entry of new telecom operator Reliance Jio and to create the country's largest telecom company with 408 million active subscribers and a revenue market share of 32.2%., the merged entity could be the biggest telecom company in India. It would have nearly 40 crore customers, 35% customer market share and 41% revenue market share. Months ago, the entry of Reliance Jio in the market disrupted the operations of other service providers. This merger is a strategic response to Jio's significant move.

Capital Ratio : Equal (1:1)

Effects of Reconstruction:

Effect on Shareholder

The two companies agreed to merge their operations with a swap ratio of 1:1. This means every Idea share you hold will be exchanged with a new share in the merged company. This suggests that operationally, it is a merger of two equals.

However, an independent valuation of the two businesses suggests Vodafone's business is worth more. The assessment suggests Vodafone India's business is worth Rs 82,800 crore, while Idea's business is valued at Rs 72,200 crore.

However, Idea's shares fell 14% after the announcement of the deal. This is because investors were not clear about the deal despite a detailed announcement. The price of ABN shares fell as much as 25% post the announcement.

To maintain an equal partnership, Vodafone will have 45.1% stake in the combined company. This is after transferring a 4.9% stake at Rs 110 per share to Aditya Birla Group for Rs 3,900 crore in cash. Aditya Birla Group will then own 26% of the combined company. The remaining 28.9% will be owned by Idea shareholders. The Birla Group will have the right to buy additional 9.5% stake from Vodafone over the next 4 years. This is to ensure that both the companies have an equal stake in the new company.

Conclusion :

The two companies agreed to merge their operations with a swap ratio of 1:1. It is a merger of two equals. The merger is very fruitful and profitable to both the companies, but shareholders did not take the merger announcement well. Therefore, Idea's shares fell 14% after the announcement of the deal. This is because investors were not clear about the deal despite a detailed announcement. The price of ABN shares fell as much as 25% post the announcement. Shares in Grasim did not fell as much. However, they corrected by 10% before the announcement when the merger rumors started. One reason for this could be that the numbers don't tally. The merger equals 10 shares of ABN with 3 shares of Grasim. However, 10 shares of ABN cost Rs 12,880, while 3 Grasim shares are worth Rs 13,602.

Case No. 5 :Acquisition of Sun Pharma and Ranbaxy Laboratories

About Sun Pharma:

Sun Pharmais established by Dilip Shanghvi in 1983. Its headquarter is in Mumbai.It is an international, integrated, specialty pharmaceutical company. It manufactures and markets a large basket of pharmaceutical formulations as branded generics as well as generics in India, the US and several other markets across the world. In India, the company is a leader in niche therapy areas of psychiatry, neurology, cardiology, diabetology, gastroenterology, orthopedics and ophthalmology. The company has strong skills in product development, process chemistry, and manufacturing of complex dosage forms and APIs. Over 72% of Sun Pharma sales are from markets outside India, primarily in the US. Manufacturing is across 26 locations, including plants in the US, Canada, Brazil, Mexico, and Israel. Sun Pharma was listed on the stock exchange in 1994. Today Sun Pharma is the second largest and the most profitable pharmaceutical company in India, as well as the largest pharmaceutical company by market capitalization on the Indian exchanges.

Sun Pharma made 13 acquisitions between the 1997 and 2012, starting with the purchase in 1997 of Detroit-based Caraco Pharmaceutical Laboratories. That was the year in which it also bought stakes in two Indian pharma firms—Tamilnadu Dadha Pharmaceuticals Ltd and MJ Pharmaceuticals Ltd. In 2010, it acquired a majority stake in Israel-based Taro Pharmaceutical Industries, a move that more than doubled its revenue in the US to $1.1 billion from $484 million. Within two years, Sun Pharma bought two more drug makers in the US—Dusa Pharmaceuticals Inc. and the generic business of URL Pharma Inc.

About Ranbaxy Laboratories:

Ranbaxy is established in 1961 and headquartered in Gurgaon. It is an integrated, research based, international pharmaceutical company producing a wide range of quality, affordable generic medicines, trusted by healthcare professionals and patients across geographies. Ranbaxy's continued focus on R & D has resulted in several approvals in developed and emerging markets, many of which incorporate proprietary Novel Drug Delivery Systems and technologies developed at its own labs. The company has further strengthened its focus on generics research and is increasingly working on more complex and specialty areas. Ranbaxy serves its customers in over 150 countries and has an expanding international portfolio of affiliates, joint ventures, and alliances, ground operations in 43 countries and 21 manufacturing facilities spread across 8 countries. Ranbaxy is a member of the Daiichi Sankyo Group. Daiichi Sankyo is a leading global pharma innovator, headquartered in Tokyo, Japan. Daiichi Sankyo Co Ltd, Japan holds approximately 63.4% stake in the company. Ranbaxy went public in February 1973. Daiichi Sankyo acquired controlling in Ranbaxy in 2008 from its earlier promoters Malvinder Mohan Singh and family. Singh resigned in 2009 after Ranbaxy posted losses and after

Daiichi Sankyo decided to get more actively involved in the newly acquired Indian unit.

Type of Reconstruction: Acquisition

Name of the Companies: Sun Pharma and Ranbaxy Laboratories

Who acquired : Sun Pharmaceutical acquired 100% of Ranbaxy Laboratories

When: In April 2014, Sun Pharmaceutical acquired 100% of Ranbaxy Laboratories for $4 billion and completed the acquisition process on 25th March 2015.

Why: To create world's fifth largest specialty generic pharma company is the main objective of this transaction. The Ranbaxy has been incurring a net loss and suffering a decline in net worth since 2011. These include the settlement amount of US$ 515 million paid to the US Department of Justice (DOJ) in May 2013 after civil and criminal charges were brought against it for misrepresentation of data and irregularities found in two of its facilities in India, diminution in the value of its investments and a loss on foreign currency option derivatives. Thus, the merger of the company with Sun Pharma comes at a crucial time when Ranbaxy is struggling to improve its financial position.

Conclusion

The combination of Sun Pharma and Ranbaxy will create fifth-largest specialty generic company in the world and the largest pharmaceutical company in India. A combined Sun Pharma and Ranbaxy will have a diverse, highly complementary portfolio of specialty and generic products targeting a spectrum of chronic and acute treatments.

Sun Pharma has followed a strategy of acquiring poorly performing companies and turning them around. The merger won't have too many cultural and integration issues since both companies are Indian. Besides, an all-stock deal, Sun Pharma has also been able to avoid any open offer possibility to the minority shareholders. Given the large diversified operations of Ranbaxy and potential synergy benefits, we find the transaction more value accretive for Sun Pharma shareholders. Ranbaxy shareholders will receive 0.8 of a share of Sun Pharma for each Ranbaxy share.

3.3 Summary:

Corporate failure means the inability of a corporate organization to fulfill its economic needs and attain its financial objectives as well as legal obligations. There are several factors which affected on corporate failure such as managerial inefficiency and ineffectiveness, economic instability, socio-cultural factors and public policies.

When any company suffers heavy losses consistently or having critical financial position may require restructure of its capital structure. Restructuring means to rebuild or to reorganize. The term restructuring regarding companies refers to reorganizing the capital structure. Corporate Restructuring may be divided in to two types such as Internal Restructuring and External Restructuring. Corporate restructuring includes Buyouts, Financial restructuring and Strategic Alliance also.

When any purchaser purchases at least 51% of a company it is called as Buyout. In brief, a buyout is the purchase of a company's shares in which the acquiring party gains controlling interest of the targeted firm. Financial restructuring is the process of reshuffling or reorganizing the financial structure, which primarily comprises of equity capital and debt capital. Financial restructuring is not only a tool used by companies that are in financial trouble. Healthy companies may also choose to restructure their debt if it will provide a benefit. If interest rates fall, a company may refinance its loans to take advantage of this drop. A strategic alliance is a relationship between two or more entities that agree to share resources to achieve a mutually beneficial objective. Access to new market, new customers, to talent, new industry, new technology and to reduce competition, cost of production and to enhance the business are the major reasons for strategic alliance.

Though, financial crisis is the main reason for restructuring the company, healthy companies may also choose to restructure their debt if it will provide a benefit.

3.4 Key words:

1. **Corporate Failure :** It refers to companies operations following its inability to make profit or to earn revenue to meet out their routine expenses.
2. **Strategic Performance Measurement :** This is an accounting system used by top management to evaluate well known strategic business units.

3. **Restructuring :** To rebuild or to reorganize
4. **Merger :** When two or more companies come together where one company survives and other company get merged into survived company
5. **Takeover :** when one company forcefully taking over or acquiring the business of other company is known as take over
6. **Divestiture** : When any company sells its all the assets or sells its all business or branches to another company for cash is called as divestiture.
7. **Demerger :** it means splitting of the one company or business in to two or more companies.
8. **A strategic alliance :** is a relationship between two or more entities that agree to share resources to achieve a mutually beneficial objective.
9. **Financial restructuring :** is the process of reshuffling or reorganizing the financial structure
10. **Buyout :** means when any purchaser purchase at least 51% of a company

Answers of Know Your Progress Part I

A) Select the appropriate alternative

1. a) failure   2. b) inability   3. a) Variance   4. c) Expansion

5. b) Public Policy

B) Write True or False

1. True   2. True   3.False   4. False

C) Fill in the blanks

1. corporate failure   2. customer   3. Financial   4.productivity

Answers of Know Your Progress Part II

A) Select the appropriate alternative

1.Cash   2. Internal   3. Equity shares   4. External   5. Ordinary

6. Buyouts   7. Financial restructuring

B) Write True or False

1. True 2. False 3.False 4. True 5.True 6. True

C) Fill in the blanks

1. Corporate restructuring 2. internal reconstruction

3. Take over 4. cash

5. Demerger 6. Buyout 7.debt

3.5 Exercise:

A) Short Answer / Notes:

1. What is corporate failure ?
2. Explain the internal forms of corporate restructuring.
3. Explain the external forms of corporate restructuring.
4. State the benefits of Takeovers
5. What do you mean by strategic alliance?
6. Explain the term financial restructuring.

B) Short Notes:

1. Benefits of Takeovers
2. Internal forms of corporate restructuring
3. External forms of corporate restructuring
4. Merger
5. Takeover
6. Strategic alliance
7. Financial restructuring

C) Long answer type questions:

1. Explain the forms of corporate restructuring.
2. What is merger ? State the legal procedure for mergers.
3. Explain the legal procedure of takeover.

4. What is takeover? Explain the benefits of takeover.
5. Explain the term Strategic Alliance and state its advantages.
6. Explain the concept financial restructuring.

D) Prepare and presentation on latest five cases of corporate restructuring

3.6 Books for Additional Reading

1. Corporate mergers, amalgamation and Takeover – Varma J.C.
2. Corporate Finance _ S.C.Kuchal
3. Essentials of Business Finance –Dr.R.M.Shrivastav
4. Business Finance –Chaudhari, Mankar, Shinde5. Corporate Restructuring and Indian Perspective – Matoo P.K.
6. Financial restructuring, Naveenkumar and TarunVenai
7. Corporate Financial Restructuring, Prof. Ian H. Giddy, New York University

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Unit 4

Financial Decision Making

Unit Structure

4.0 Objectives

After Studying this unit you will be able to:

- Understand the term project Feasibility or Viability Analysis
- Understand the concept of Free Cash Flow
- Understand the concept of Net Present Value (NPA)
- Understand the concept of Pay Back Period

- Understand the concept of Make or Buy Decision
- Understanding the concept of Profit Maximization through optimum Product Mix

4.1 Introduction

Everything you need to know about the types of financial decisions taken by a company. The key aspects of financial decision-making relate to financing, investment, dividends and working capital management. Decision making helps to utilize the available resources for achieving the objectives of the organization, unless minimum financial performance levels are achieved, it is impossible for a business enterprise to survive over time.

Therefore financial management basically provides a conceptual and analytical framework for financial decision making. In this chapter we must understand the decisions like Project Feasibility & Viability Analysis, Make or Buy decision and Profit Maximization through Optimum Product Mix.

4.2 Presentation of Subject Matter

4.2.1 Project Feasibility & Viability Analysis

Before going to launch a project, the first thing on a project manager's agenda is the feasibility study. While project managers are not required to conduct the feasibility study themselves, they use it as a guideline to drive the project and to get an end-to-end understanding of project parameters, business goals, and risk factors.

What is a Feasibility Study?

A feasibility study is an analysis done to determine the viability of a project from an economical, legal, and technical perspective. Simply put, it gives us an insight into whether a project is doable or worth the investment. A feasibility study, that's well-designed, should offer insights on the description of the project, resource allocation, accounting statements, financial data, legal requirements, and tax obligations. It helps to determine whether the project is both possible and profitable for the company to undertake. Hence, this study is mandatorily done before technical development and project execution.

Types of Feasibility Studies

There are five types of feasibility studies based on the area that is examined:

1. Technical Feasibility

This study takes stock of the technical resources available to undertake a project from an organization's perspective. It includes ensuring that the technical resources are adequate, and the hardware and software requirements are met. Technical feasibility will also include if proven technologies and methodologies exist to support the proposed development.

2. Economic Feasibility

This assessment performs a cost/ benefits analysis of the project before the financial resources are allocated. This type of study gives a clear-cut idea of project credibility (viability) as well as the economic benefits to the organization from the project.

3. Legal Feasibility

In this type of feasibility study, the legal requirements of the proposed project are analyzed. Several parameters, ranging from zonal laws to data protection acts are checked, and compliance mandates are mapped out.

4. Operational Feasibility

This study will help analyze and determine whether the organization's goals can be satisfied by completing the project.

5. Scheduling Feasibility

This is the most important assessment for project success. It estimates the time necessary to complete the project after considering the organization's capabilities and determines whether that amount of time is available.

Benefits of a Feasibility Study

1. Below are the benefits of doing a feasibility study in project management: Get a clear-cut idea of whether the project is likely to be successful, before allocating budget, manpower, and time.
2. Enhances the project teams' efficiency and focus

3. Helps detect and capitalize on new opportunities
4. Substantiates with evidence of why and how a project should be executed
5. Streamlines the business alternatives
6. Diagnoses errors and aids in troubleshooting them
7. Prevents threats from occurring and helps in risk mitigation
8. Gives valuable insights to both the team and stakeholders associated with the project

Steps to conduct feasibility study-

The following stages are involved while conducting any feasibility study, in general:

1. **A preliminary analysis:** This is like a pre-screening of the project. It helps discover the viability of the project as well as identify any roadblocks if any.
2. **Scope definition:** This step includes outlining the project's scope as well as its potential impact on the organization.
3. **Market research:** This is an essential factor, as no project is begun without adequate market research. A thorough analysis of the existing market and competition is done to manage the project accordingly.
4. **Financial assessment:** In this stage, all the costs related to the project, including equipment, man-hours, the financial risks, and the benefits associated with the project are estimated and scrutinized.
5. **Alternative solutions:** Whenever any hiccups arise, the team should be well-prepared to come up with a solution. This is an integral yet dynamic part of a feasibility study.
6. **Go/no-go decision:** The final stage of a feasibility study is the course of action, in other words, whether the project is worth proceeding with or not.

The feasibility study is an integral aspect of project management. Well-planned projects are less likely to fail. A detailed, well-defined feasibility study will only increase the likelihood of project success.

Viability study – is it viable?

Before going to study the viability study we must understand the word viable. The word 'viable' is an adjective. If something is viable, it means that it can work successfully. If a company is viable, it means that we expect it to make a profit year after year.

Viable refers to anything or any situation which can carry on developing, growing, advancing, or thriving.

The word viability, a mass noun, refers to something's ability or capacity to work successfully. It could be a proposal, idea, project, or even a plan to change how a company does business.

A viability study tries to determine whether something is viable.

Viability study vs. feasibility study

People often use the two terms interchangeably. However, they do not have the same meaning.

Feasibility study

A feasibility study is an assessment of how practical or doable a proposed method or plan is. It is an analysis that tries to find out whether it is possible to complete a project, successfully.

Viability study

A viability study is an investigation into a business idea. Specifically, whether the idea will make money? i.e. whether it will be profitable or not?

The viability study is not about whether something is doable, but rather whether it is worth doing.

Simply; a feasibility study looks at whether something can be done, while a viability study looks at whether it is worth doing.

However, a growing number of feasibility studies today also include an analysis of the expected profitability of a project or idea.

A number of appraisal methods may be recommended for evaluating the capital expenditure proposals or projects. The most important and commonly used techniques are explained below.

4.2.2 Concept of Free Cash Flow (FCF):

Free cash flow (FCF) represents the cash a company generates after accounting for cash outflows to support operations and maintain its capital assets. Unlike earnings or net income, free cash flow is a measure of profitability that excludes the non-cash expenses of the income statement and includes spending on equipment and assets as well as changes in working capital from the balance sheet. Interest payments are excluded from the generally accepted definition of free cash flow. Investment bankers and analysts who need to evaluate a company's expected performance with different capital structures will use variations of free cash flow like free cash flow for the firm and free cash flow to equity, which are adjusted for interest payments and borrowings.

Similar to sales and earnings, free cash flow is often evaluated on a per share basis to evaluate the effect of dilution. Free cash flow (FCF) is the cash a company generates after taking into consideration cash outflows that support its operations and maintain its capital assets. In other words, free cash flow is the cash left over after a company pays for its operating expenses and capital expenditures. It is the money that remains after paying for items such as payroll, rent, and taxes, and a company can use it as it pleases. Knowing how to calculate free cash flow and analyze it will help a company with its cash management and will provide investors with insight into a company's financials, helping them make better investment decisions. Free cash flow is an important measurement since it shows how efficient a company is at generating cash. Investors use free cash flow to measure whether a company might have enough cash, after funding operations and capital expenditures, to pay investors through dividends or share buybacks. In addition, the more free cash flow a company has, the better it is placed to pay down debt and pursue opportunities that can enhance its business, making it an attractive choice for investors. This article will cover how a company calculates free cash flow and how to interpret that free cash flow number to choose good investments that will generate a return on your capital.

Features of Free Cash Flow-

- Free cash flow (FCF) is the money a company has left over after paying its operating expenses and capital expenditures.

- The more free cash flow a company has, the more it can allocate to dividends, paying down debt, and growth opportunities.
- There are three ways to calculate free cash flow: using operating cash flow, using sales revenue, and using net operating profits.
- If a company has a decreasing free cash flow that is not necessarily bad if the company is investing in its growth.
- Free cash flow is just one metric used to gauge a company's financial health; others include return on investment (ROI), the debt-to-equity ratio, and earnings per share (EPS).

How to Calculate Free Cash Flow

There are three different methods to calculate free cash flow because all companies don't have the exact same financial statements. Regardless of the method used, the final number should be the same given the information a company provides. The three ways in which to calculate free cash flow are by using operating cash flow, using sales revenue, and using net operating profits.

1. Using Operating Cash Flow

Using operating cash flow to calculate free cash flow is the most common method because it is the simplest and uses two numbers that are readily found in financial statements: operating cash flow and capital expenditures. To calculate FCF, locate the item cash flow from operations (also referred to as "operating cash" or "net cash from operating activities") from the cash flow statement and subtract capital expenditure, which is found on the income statement.

The formula is:

Free Cash Flow= Operating Cash Flow −Capital Expenditures

2. Using Sales Revenue

Using sales revenue focuses on the revenue that a company generates through its business and then subtracting the costs associated with generating that revenue. This method utilizes the income statement and balance sheet as the source of information. To calculate FCF, locate sales or revenue on the income statement, subtract the sum of taxes and all operating costs (or listed as "operating expenses"), which include items such as cost of goods sold (COGS) and selling, general and administrative costs (SG&A). Finally, subtract the required investments in operating capital, also known as the net investment in operating capital, which is derived from the balance sheet.

The formula is:

Free Cash Flow=Sales Revenue −(Operating Costs + Taxes) −Required Investments in Operating Capital

where:
Required Investments in Operating Capital=Year One Total Net Operating Capital − Year Two Total Net Operating Capital

and where:
Total Net Operating Capital=Net Operating Working Capital +Net Plant, Property, and Equipment(Operating Long-Term Assets)

and where:
Net Operating Working Capital=Operating Current Assets −Operating Current Liabilities

and where:
Operating Current Assets=Cash +Accounts Receivables+InventoryOperating Current Liabilities=Accounts Payables +Accruals

Using Net Operating Profits

To calculate free cash flow using net operating profits after taxes (NOPAT) is similar to the calculation of using sales revenue, but where operating income is used.

The formula is:

Free Cash Flow=Net Operating Profit After Taxes −Net Investment in Operating Capital

where:

Net Operating Profit After Taxes=Operating Income × (1 - Tax Rate)

and where:

Operating Income=Gross Profits−Operating Expenses

The calculation for net investment in operating capital is the same as described above.

3. Amortization and Depreciation

To calculate free cash flow another way, locate the income statement and balance sheet. Start with net income and add back charges for depreciation and amortization. Make an additional adjustment for changes in working capital, which is done by subtracting current liabilities from current assets. Then subtract capital expenditure (or spending on plants and equipment):

Net Income + Depreciation/ Amortization- Change in Working Capital- Capital Expenditure= Free Cash Flow

It might seem odd to add back depreciation/amortization since it accounts for capital spending. The reasoning behind the adjustment is that free cash flow is meant to measure money being spent right now, not transactions that happened in the past. This makes FCF a useful instrument for identifying growing companies with high up-front costs, which may eat into earnings now but have the potential to pay off later.

Free Cash Flow Benefits

Free cash flow can provide a significant amount of insight into the financial health of a company. Because free cash flow is made up of a variety of components in the financial statement, understanding its composition can provide investors with a lot of useful information.

Of course, the higher the free cash flow the better. But we have already seen from our Macy's example that a declining free cash flow is not always bad if the reason is from further investments in the company that poise it to reap larger rewards down the line.

In addition, cash flow from operations takes into consideration increases and decreases in assets and liabilities, allowing for a deeper understanding of free cash flow. So for example, if account payable continued to decrease, it would signify that a company is paying its suppliers faster. If accounts receivable was decreasing, it would mean that a company is receiving payments from its customers faster.

Now, if accounts payable was decreasing because suppliers wanted to be paid quicker but accounts receivable was increasing because customers weren't paying quickly enough, this could result in decreased free cash flow, since money is not coming in quickly enough to meet the money going out, which could result in problems for the company down the line.

The overall benefits of a high free cash flow, however, mean that a company is able to pay its debts, contribute to growth, share its success with its shareholders through dividends, and has prospects for a successful future.

Free Cash Flow Limitations

One drawback to using the free cash flow method is that capital expenditures can vary dramatically from year to year and between different industries. That's why it's critical to measure FCF over multiple periods and against the backdrop of a company's industry.

It's important to note that an exceedingly high FCF might be an indication that a company is not investing in its business properly, such as updating its plant and equipment. Conversely, negative FCF might not necessarily mean a company is in financial trouble, but rather, investing heavily in expanding its market share, which would likely lead to future growth.

Value investors often look for companies with high or improving cash flows but with undervalued share prices. Rising cash flow is often seen as an indicator that future growth is likely.

4.2.3 Concept of Net Present Value:

As an organization expands, it needs to take important decisions which involve immense capital investment. An organization must take the decisions regarding the expansion of business and investment very wisely. In such cases, the organization will take assistance of Capital Budgeting tools, one of the most popular NPV method and take a call on the most profitable investment.

Net present value is a tool of Capital budgeting to analyze the profitability of a project or investment. It is calculated by taking the difference between the present value of cash inflows and present value of cash outflows over a period of time.

Net present value (NPV) is a financial metric that seeks to capture the total value of a potential investment opportunity. The idea behind NPV is to project all of the future cash inflows and outflows associated with an investment, discount all those future cash flows to the present day, and then add them together. The resulting number after adding all the positive and negative cash flows together is the investment's NPV. A positive NPV means that, after accounting for the time value of money, you will make money if you proceed with the investment.

Cash inflows are discounted to their present value and then compared with the capital outlay required by the investment.

The interest rate used in discounting is the required minimum rate of return.

Proposal is acceptable when NPV is zero or positive.

The higher the positive NPV, the more attractive the investment

Net Present Value is the excess of present value of total cash inflows over the initial investment. Thus,

NPV= Discounted value of cash inflows – Initial Investment

As the name suggests, net present value is nothing but net off of the present value of cash inflows and outflows by discounting the flows at a specified rate.

Formula for NPV

NPV = (Cash flows)/(1+r)^t

Cash flows= Cash flows in the time period

r = Discount rate

t = time period

As seen in the formula – To derive the present value of the cash flows we need to discount them at a particular rate. This rate is derived considering the return of investment with similar risk or cost of borrowing, for the investment.

NPV takes into consideration the time value of money. The time value of money simply means that a rupee today is of more value today than it will be tomorrow. NPV helps in deciding whether it is worth to take up a project basis the present value of the cash flows.

After discounting the cash flows over different periods, the initial investment is deducted from it. If the result is a positive NPV then the project is accepted. If the

NPV is negative the project is rejected. And if NPV is zero then the organization will stay indifferent.

Illustration

Let us say Nice Ltd wants to expand its business and so it is willing to invest

Rs. 10, 00,000.

The investment is said to bring an inflow of Rs. 100,000 in first year, 250,000 in the second year, 350,000 in third year, 265,000 in fourth year and 415,000 in fifth year. Assuming the discount rate to be 9%. Let us calculate NPV using the formula.

Year	Flow	Present value	Computation
0	-1000000	-1000000	
1	100000	91743	100000/(1.09)
2	250000	210419	250000/(1.09)^2
3	350000	270264	350000/(1.09)^3
4	265000	187732	265000/(1.09)^4
5	415000	269721	415000/(1.09)^5

Here NPV is Rs. 29,879.

Since the NPV is positive the investment is profitable and hence Nice Ltd can go ahead with the expansion.

Selection Criteria:

The project is recommended if Net Present value is positive. If two or more proposals are to be evaluated then proposal with higher Net Present value is selected.

Advantages of Net present value method

1. Time value of money

Net present value method is a tool for analyzing profitability of a particular project. It takes into consideration the time value of money. The cash flows in the future will be of lesser value than the cash flows of today. And hence the further the cash flows, lesser will the value. This is a very important aspect and is rightly considered under the NPV method. This allows the organisation to compare two similar projects judiciously, say a Project A with a life of 3 years has higher cash flows in the initial period and a Project B with a life of 3 years has higher cash flows in latter period, then using NPV the organisation will be able to choose sensibly the Project A as inflows today are more valued than inflows later on.

2. Comprehensive tool

Net present value takes into consideration all the inflows, outflows, period of time, and risk involved. Therefore NPV is a comprehensive tool taking into consideration all aspects of the investment.

3. Value of investment

The Net present value method not only states if a project will be profitable or not, but also gives the value of total profits. Like in the above example the project will gain Rs. 29879 after discounting the cash flows. The tool quantifies the gains or losses from the investment.

Limitations of the Net Present Value method

1. Discounting rate

The main limitation of Net present value is that the rate of return has to be determined. If a higher rate of return is assumed, it can show false negative NPV, also if a lower rate of return is taken it will show the false profitability of the project and hence result in wrong decision making.

2. Different projects are not comparable

NPV cannot be used to compare two projects which are not of the same period. Considering the fact that many businesses have a fixed budget and sometimes have two project options, NPV cannot be used for comparing the two projects different in period of time or risk involved in the projects.

3. Multiple Assumptions

The NPV method also makes a lot of assumptions in terms of inflows, outflows. There might be a lot of expenditure that will come to surface only when the project actually takes off. Also the inflows may not always be as expected.

Today most software's perform the NPV analysis and assist management in decision making. With all its limitations, the NPV method in capital budgeting is very useful and hence is widely used.

4.2.4 Profitability Index:

This technique is also known as 'Cost Benefit Ratio' if profitability index is less than one then the proposal is rejected.

Profitability Index (PI) Rule

The profitability index rule is a decision-making exercise that helps evaluate whether to proceed with a project. The index itself is a calculation of the potential profit of the proposed project. The rule is that a profitability index or ratio greater than 1 indicates that the project should proceed. A profitability index or ratio below 1 indicates that the project should be abandoned.

Formula:

Profitability Index = Present Value of Cash Inflows / Present Value of Initial Investment

The formula for PI is the present value of future cash flows divided by the initial cost of the project.

The PI rule is that a result above 1 indicates a go, while a result under 1 is a loser.

The PI rule is a variation of the NPV rule.

Understanding the Profitability Index Rule

The profitability index is calculated by dividing the present value of future cash flows that will be generated by the project by the initial cost of the project. A profitability index of 1 indicates that the project will break even. If it is less than 1, the costs outweigh the benefits. If it is above 1, the venture should be profitable.

For example, if a project costs Rs.10, 000 and will return Rs.12, 000, it's a "go."

PI vs. NPV

The profitability index rule is a variation of the net present value (NPV) rule. In general, a positive NPV will correspond with a profitability index that is greater than one. A negative NPV will correspond with a profitability index that is below one.

PI differs from NPV in one important respect: Since it is a ratio, it provides no indication of the size of the actual cash flow.

For example, a project with an initial investment of Rs.1 crore and a present value of future cash flows of 1.2 crores would have a profitability index of 1.2. Based on the profitability index rule, the project would proceed, even though the initial capital expenditure required are not identified.

4.2.5 Pay Back Period:

Payback period is typically used to evaluate projects or investments before undergoing them, by evaluating the associated risk. An investment can either have a short or long payback period. A shorter payback period means the investment will be 'repaid' fairly shortly, in other words, the cost of that investment will quickly be recovered by the cash flow that investment will generate. Typically, a shorter payback period is considered better, since it means the investment's risk level associated with the initial investment cost is only for a shorter period of time. In order to determine whether the payback period is favourable or not, management will determine the maximum desired payback period to recover the initial investment costs. Depending on the calculated payback period of a project, management can decide to either accept or reject the project. An investment project will be accepted if the payback period is less than or equal to the management's maximum desired payback period.

Features of Payback period

Payback period is a simple calculation of time for the initial investment to return. It ignores the time value of money. All other techniques of capital budgeting consider the concept of time value of money. Time value of money means that a rupee today is more valuable than a rupee tomorrow. So other techniques discount the future inflows and arrive at discounted flows. It is used in combination with other techniques of capital budgeting. Owing to its simplicity the payback period cannot be the only technique used for deciding the project to be selected.

Payback period example

Payback period is usually expressed in years. You can calculate the payback period by accumulating the net cash flow from the initial negative cash outflow, until the cumulative cash flow is a positive number. When the cumulative cash flow becomes positive, this is your payback year.

There are two methods to calculate the payback period, and this depends on whether your expected cash inflows are even (constant) or uneven (changing every year).

1. Payback period - even cash inflows

If cash inflows from the project are even, then the payback period is calculated by taking the initial investment cost divided by the annual cash inflow.

For example: Company A wants to invest in a new project. This project requires an initial investment of Rs. 30 000, and is expected to generate a cash flow of Rs. 5000 per year. Managements maximum desired payback period is 7 years.

Calculation:

Rs. 30,000 (initial cost) divided by the Rs. 5,000 (annual cash inflow) = 6

Therefore, the payback period for this project is 6 years

This means the payback period (6 years) is less than managements maximum desired payback period (7 years), so they should accept the project.

2. Payback period - odd cash inflows

If cash inflows from the project are uneven, then we need to calculate the cumulative cash inflow, and use the following formula to compute the payback period:

Payback period = A+ (B/C)

Where:

A = The last year with a negative cumulative cash flow

B = The absolute value of cumulative cash inflow at the end of Year A (the last year with a negative cumulative cash flow)

C = Total cash flow during the year after Year A

For example: Company B wants to invest in a new project, and managements maximum desired payback period is 3 years. The project requires an initial investment of Rs. 4,50 000, and is expected to generate the following cash inflows:

Year	Cash inflows in Rs.
1	75,000
2	1,40,000
3	2,00,000
4	1,10,000
5	60,000

Calculation:

Year	Cash inflows in Rs.	Cumulative Cash inflows
1	75,000	75,000
2	1,40,000	2,10,000
3	2,00,000	4,15,000
4	1,10,000	5,25,000
5	60,000	5,85,000

Payback Period is 3years and 2.72 months

Therefore, the payback period for this project is 3 years and 2.72 months.

This means the payback period (3 years and 2.72) is more than managements maximum desired payback period (3 years), so they should reject the project.

Although the concept of a payback period is an easy one to get your head around, and the information you gain from it is useful in assessing whether a project is a good idea to take on, there are some definite up and downsides to using the method.

Advantages of payback period:

- Easy to understand and straightforward to computation.
- Risk is considered up front, and it is possible to get a clear picture rather quickly on whether the investment is a bad idea to begin with.
- It gives importance to the early recovery of initial investment.
- This is commonly used method for project appraisal.

Disadvantages of payback period:

1. It ignores time value of money
2. Cash inflows after the payback period are not considered for evaluation.

Cash generated from the project after the agreed maximum payback period is not taken into account, which means that in some cases a project might be rejected if the payback period is the only time frame taken into account.

This is most commonly used method. Payback period is the period within which initial investment is recovered by the cash inflows generated by the project.

Formula:

Payback period= Initial Investment / annual cash inflows

Example:

Initial investment is Rs. 200000 and annual cash inflows are Rs. 40000 then,
Payback period= 200000 / 40000

= 5 years

(If uniform cash inflows are not available then, cumulative cash inflows to be taken.)

Selection Criteria:

The project with least payback period is selected.

Problem No. 1

Palus Electronics Ltd. is considering the purchase of a machine. Two machines, X and Y are available each costing Rs. 100000. In comparing the profitability of the machines, a discount rate 10% is to be used. Earning after taxation but before depreciation is expected to be as follows:

Year	Machine X	Machine Y
1	30000	10000
2	40000	30000
3	50000	40000
4	30000	60000
5	20000	40000

Indicate which machine would be more profitable under the following method of ranking the investment proposals:

a) Pay Back Period

b) Net Present Value

c) Profitability Index.

The present value of Re. 1 to be received at the end of each year, 10% p.a. is given below**:**

Year	1	2	3	4	5
Present Value	0.909	0.826	0.751	0.683	0.621

Solution:

a) Pay Back Period

Year	Machine 'X'		Machine 'Y'	
	Yearly Earnings Rs.	Cumulative Earnings Rs.	Yearly Earnings Rs.	Cumulative Earnings Rs.
1	30000	30000	10000	10000
2	40000	70000	30000	40000
3	50000	120000	40000	80000
4	30000	150000	60000	140000
5	20000	170000	40000	180000

1. Pay Back Period of Machine 'X' = 2 years + [12/50000×30000]

= 2years and 7.2months

2. Pay Back Period of Machine 'Y' = 3 years + [12/60000×20000]

= 3years and 4 months

Therefore Machine 'X' is profitable on Pay Back Criteria because it's payback period is less than Machine 'Y'.

b) Net Present Value-

Year	PV Factor	Machine 'X' Rs.	Present Value	Machine 'Y' Rs.	Present Value
1	0.909	30000	27270	10000	9090
2	0.826	40000	33040	30000	24780
3	0.751	50000	37550	40000	30040
4	0.683	30000	20490	60000	40980
5	0.621	20000	12420	40000	24840
Total Present Value Less Initial Investment				130770 100000	129730 100000
Net Present Value				30770	29730

Therefore Machine 'X' is more profitable as per Net Present Value because machine 'X' has more NPV than Machine 'Y'

c) Profitability Index

Profitability Index= Total Present Value / Initial Investment

1. Profitability Index of Machine 'X' = 130770 / 100000

= 1.31

2. Profitability Index of Machine 'Y' = 129730 / 100000

= 1.30

Therefore Machine 'X' is more profitable as per Profitability Index because machine 'X' has more PI than Machine 'Y'

Problem No. 2

A company has to make a choice between the possible investments- Project A, B & C. The immediate capital outlays on each being Rs. 11000 each will continue for 5 years and it has been decided that discount rate of 10% is acceptable for all three projects. The cash flow for these projects are:

Year	**Projects**		
	A Rs.	**B Rs.**	**C Rs.**
1	1000	2000	3000
2	2000	3000	4000
3	3000	5000	3500
4	4000	3000	2500
5	5000	2000	2000

The Discount factor @ 10% is:

Year	1	2	3	4	5
Present Value	0.909	0.826	0.751	0.683	0.621

Which project would you recommend under:

a) Pay Back Period

b) Net Present Value

c) Profitability Index.

Solution:

a) Pay Back Period

Year	**Project Cash inflows**			**Cumulative Cash inflows**		
	A Rs.	**B Rs.**	**C Rs.**	**A Rs.**	**B Rs.**	**C Rs.**
1	1000	2000	3000	1000	2000	3000
2	2000	3000	4000	3000	5000	7000
3	3000	5000	3500	6000	10000	10500

4	4000	3000	2500	10000	13000	13000
5	5000	2000	2000	15000	15000	15000

a) Pay Back Period period of Project A= 4 years+12/5000×1000

= 4 years and 72 days

(Out of Rs. 11000, Rs. 10000 are recovered in 4 years and remaining Rs. 1000 would be recovered in 12/5000×1000)

Pay Back Period period of Project B = 3 years+12/3000×1000

= 3 years and120 days

(Out of Rs. 11000, Rs. 10000 are recovered in 3 years and remaining Rs. 1000 would be recovered in 12/3000×1000)

Pay Back Period period of Project C = 3 years+12/5000×1000

= 3 years and 72 days

(Out of Rs. 11000, Rs. 10000 are recovered in 3 years and remaining Rs. 500 would be recovered in 12/500×1000)

Thus under Pay Back Period Method project 'C' is recommended.

b) Net Present Value

Year	**PV factor @ 10%**	**Cash inflows A**		**Cash inflows B**		**Cash inflows C**	
		Yearly Cash inflows	**Discounted Cash inflows**	**Yearly Cash inflows**	**Discounted Cash inflows**	**Yearly Cash inflows**	**Discounted Cash inflows**
1	0.909	1000	909	2000	1818	3000	2727
2	0.826	2000	1652	3000	2478	4000	3304
3	0.751	3000	2253	5000	3755	3500	2629
4	0.683	4000	2732	3000	2049	2500	1708
5	0.621	5000	3105	2000	1242	2000	1242
Total of Discounted Cash flows			10651 11000		11342 11000		11610 11000

Less Initial Investment					
Net Present Value	(349)		342		610

Under NPV Method Project ‘C’ recommended.

c) Profitability Index.

Profitability Index= Total Present Value / Initial Investment

1. Profitability Index of Machine ‘A’ = 10651 / 11000

= 0.97

2. Profitability Index of Machine ‘B’ = 11342 / 11000

= 1.03

3. Profitability Index of Machine ‘C’ = 11610 / 11000

= 1.05

Under Profitability Index Method Project ‘C’ recommended.

4.2.6 Make or Buy Decision

Decision making is the prime function of management along with other functions such as planning, organizing, staffing, directing, communicating and controlling. Make or Buy Decision is one of the important decisions takes by the management, which is very important to increase the wealth and profitability of the business organization. The business organization may be manufacture or receive order from an outside supplier to supply the product.

The decision in relation to make or buy will be made by comparing the price being paid to outside supplier and saving can be effected on cost. The saving will be only in terms of marginal cost of the product and generally no savings can be effected in fixed cost.

As the same, a firm may buy a product from outside supplier or to manufacture the product itself. This decision will be based on the price paid to outsiders and all additional costs that will have to be incurred for manufacturing the product itself. This additional cost’s includes not only direct material, direct labor and salaries of additional supervisors required, rent of premises and interest of additional capital essential to produce the product. Besides that surplus capacity utilization will losing by the firm but on the other hand the idle capacity will be utilized for other production.

If a firm decides to get a product manufactured from outsiders to obtain the benefits of savings the business organization must take in to account the following important factors:

- Quality of product
- Prompt supply of required product and
- The supplier is financially and technically sound.

Features of Make or Buy:

- It is the determination whether to produce a product internally or to buy from outside supplier.
- The decision is based on the cost.
- The cost for both the alternatives should be calculated and the alternative with less cost is to be chosen for implementation.

Criteria for make:

- The product can be made cheaper by the firm
- The manufactured product needs extremely close quality control
- The products can be manufactured from existing facilities with experienced employees.
- The finished product is being manufactured by limited firms.

Criteria for buy:

- High investment essential for manufacturing the product.
- Does not have facilities for making the product.
- If skilled workers are not available.
- Demand for the product is either temporary or seasonal.
- Patents and legal formalities prevent from making the products.

Factors affecting make or buy decision

Every firm engaged in the production of one or more type of goods aims at profit maximization. To accomplish this objective, it tries to procure the desired material for the operation of its plant at a low cost. It has usually the alternative of satisfying its requirements by producing the goods or material from within the firm itself.

In some cases, a firm can manufacture materials in the desired quantity at a relatively low cost; but in certain other cases, the procurement of these goods from outsiders is more advantageous. In determining whether goods or material should be purchased or produced within the firm arises the “make or buy” problem.

The policies of the firms vary considerably in make or buy decision considerably. There are certain industries which follow the policy of self-support to the extent of manufacturing all the items required by them. On the other hand, there are concerns which believe in procuring material from other companies that specialize in the manufacture of those items/products.

Every company uses a variety of suppliers and services; they need stationery, cartons, polyethylene bags, detergents, chemicals, power, heat, and many others. But it is not possible for them to procure all of them or produce all of them. They, therefore, take decisions on which items they should make and which goods and services they should buy.

Factors influencing “Make or Buy” decision:

The following are some of the factors influencing make or buy decisions.

1. Size of the company influence Make or Buy decision

The sizes of a concern have a greater influence on Make or Buy decision. The decisions are taken on the basis of their financial implications for a growing concern.

For small companies, with an annual expenditure of a few lakhs of rupees, it is always desirable to buy materials from outside.

In big concerns, where a substantial amount is involved, a full-scale analysis is required covering company matters relating to overall corporate policy, direct cost, personnel relations, plant layout, and other details which are incidental to any manufacturing programme.

2. Difficulties in Manufacturing

Manufacturing may be undertaken to ensure a regular supply. This is specially necessary where a close coordination between demand and supply is required. The decision to make goods appears to be quite attractive from the point of view of self-sufficiency, the high cost of procurement, and the interruptions in deliveries by vendors confronted with labor difficulties or natural calamities. It has been said that the difficulties which manufacturers are trying to avoid to arise even when they buy material for their own production. But the danger is less, for there is a greater assurance of regular supply, when the item is manufactured by the user himself.

3. Quality of goods

In some cases, the decision to make flows from the company's expectations to have goods of a desired quality. It has been observed that, in a seller's market, vendors do not bother about quality and specifications. Sometimes they sell only high quality goods and enjoy a profitable sales volume; they do not, therefore, have any interest in lower quality goods which at times may be needed by some manufacturers. In such a situation, the producer has no option but to manufacture the goods himself.

4. Profit factor

There are conditions under which it is profitable for a company to produce certain items more economically than they can be bought from outside. If it discovers a new process which enables it to produce some items at a definitely low cost or if it acquires equipment at a relatively low price that can manufacture goods cheaply, the decision to make goods instead of buying them will be quite profitable.

5. Capacity to manufacture

Capacity of a firm to manufacture materials also affects the make or buy decision. During the period of depression or recession, the manufacturer with idle plant capacity may find it desirable to undertake the production of those goods which they were formerly buying. Even during normal times, the decision to make is taken with a view to increasing the total volume of production. In this way, the overhead costs can be distributed. Sometimes, protection of quality design also tempts companies to make decisions.

Guidelines to "Make or Buy" policy:

The following are often an answer to most "make or buy" decisions relating to supplies and services:

1. When a dependable source does not exist outside, it is desirable for the company to produce the goods of the desired quality, unless some unforeseen circumstances develop. For instance, most big companies prefer to have their own thermal supply because public power plants are not reliable.
2. When a dependable source exists outside which provides goods at an economical price, it should be used, unless there is a strong case for not doing so. For instance, under the following conditions, it is always desirable to depend on their own resources:

When an item is required in large quantities which can be produced at a low cost by the company itself;

When suppliers are not willing to provide goods of the desired quality or cater to the special needs of their buyers; and when coordination with suppliers seems to be quite difficult.

PROBLEM NO. 1

An ABC ltd company finds that cost of making the price of the part no. 001 is Rs. 6 each while the same is available in the market for Rs. 5.60 with an assurance of quality and continuous supply. Give your view in case the suppliers reduce the price from 5.60 to 4.60 whether to make or buy this part. The cost data is as follows:

Particulars	Rs.
Material	2.00
Direct Labor	2.50
Direct Expenses	0.50
Depreciation And Other Fixed Costs	1.00
	6.00

SOLUTION NO. 1

Particulars		Selling Price	
Buying Price		5.60	4.60
Material	2.00		
Labor	2.50		
Direct Expenses	0.50	5.00	5.00
Loss / Savings		(0.60)	(0.40)

Therefore it is better to make the part if the price is quoted is Rs. 5.60.

And it is advisable if the price is quoted Rs. 4.60 buy the part because it saves the marginal cost by 40 paisa.

PROBLEM NO: **2**

From the following data suggest which decision is profitable for the company i.e. make or buy the part of machinery.

Fixed Cost- 10,00,000

Material cost- Rs. 350 p.u.

Labour Cost -Rs. 300 p.u.

Direct Overhead Cost- Rs. 100 p.u.

Buying Price- Rs. 1000 each

SOLUTION NO: 2

CALCULATION OF MARGIONAL COST AND TOTAL COST

Particulars	**Per Unit (Rs.)**	**Total (Rs.) for 5000 units**
Variable Cost:		
Material cost-	350	17,50,000
Labour Cost -	300	15,00,000
Direct Overhead Cost-	100	5,00,000
Total V.C.	**750**	**37,50,000**
Fixed Cost		10,00,000
Total Cost (VC+FC)		**47,50,000**

Cost of Manufacturing per unit = Total Cost / Number of units

= 47,50,000/5000

= 950

Since the cost of making is less than cost of buying, therefore it is decided that to make the product.

PROBLEM NO: **3**

Dhoramnath furniture's Palus manufactures computer tables. Recently a supplier has offered the tables of the same quality @ Rs.14 each with an assurance of continued supply. The following is the budget for 4000 units prepared for the quarter ending 30 September 2020:

Particulars	Rs.
Raw material cost	20000
Direct wages	18000
Production overheads:	
Variable-	12000

Fixed-	14000
Administration costs:	
Variable-	5000
Fixed-	12500
Distribution costs:	
Variable-	6000
Fixed-	7500

Required:

(a) Should Dhoramnath furniture's Palus accept the offer from the supplier?

(b) What would be the decision if the supplier offered the tables at Rs. 12 each?

Solution No. 3

Calculation of per table marginal cost of production

Particulars	Rs.
Direct material	20000
Direct labor cost	18000
Production overheads (Variable)	12000
Marginal cost of production	50000
Marginal cost per unit= Marginal cost of production / number of units produced =50000/4000	12.50

(a) As marginal cost of production is less than the buying price offered by the supplier so Dhoramnath Furniture should continue production of tables. The distribution, administration and fixed production are irrelevant in the decision as presumptively they will be incurred in either case.

(b) As in this case they buy in price Rs.12 is less than the marginal cost of production so Dhoramnath furniture's should buy the tables from the supplier and discontinue production of tables provided other things are favorable.

4.2.7 Profit Maximization through Optimum Product Mix

Normally, a business concern will select the product mix which gives the maximum profit. Product mix is the ratio in which various products are produced and sold. The marginal costing technique helps management in taking appropriate decisions regarding the product mix, i.e., in changing the ratio of product mix so as to maximize profits. The technique not only helps in dropping unprofitable products from the mix but also helps in dropping inefficient departments , activities etc.

The most-profitable product mix can be determined by applying marginal costing technique. Fixed cost remaining constant, the most profitable product-mix is determined on the basis of contribution only. That product-mix which gives maximum contribution is to be considered as best products mix.

The following is the cost data relating to product A, B and C

Product	A	B	C	Total
Sales	150000	90000	60000	300000
Variable Cost	120000	63000	36000	219000
contribution	30000	27000	24000	81000
Fixed Cost				40500
Profit				40500

You are required to suggest the management in changing the sales mix in order to increase profits of the company.

Solution:

Particulars	Products			Total Rs.
	A Rs.	B Rs.	C Rs.	
Sales	150000	90000	60000	300000
Variable Cost	120000	63000	36000	219000
contribution	30000	27000	24000	81000
Fixed Cost				40500

Profit				40500
P/V Ratio (C / S)100	20%	30%	40%	
Product Priorities	II	II	I	

From the above statement it is clear that product A is less profitable as its profit-volume ratio is less than other products. If total production is to remain the same, the company should change the sales mix in such a way that emphasis on producing more units remains on C and B.

From the following data you are required to calculate-

1) The contribution and profits resulting from each of the suggested sales mixtures and the best combinations thereof.

Particulars	Product X Rs.	Product Y Rs.
Direct Material Per Unit	21.00	17.00
Direct Wages Per Unit	6.00	4.00
Selling Price Per Unit	41.00	29.00

Fixed Expenses- (Total) Rs. 1600

Variable Expenses- 100% on direct wages

Suggested Sales Mixture:	Product X Units	Product Y Units
a)	200	400
b)	300	300
c)	400	200

Solution:

Calculation and Marginal Cost and Contribution per Unit:

Particulars			Product X Rs.	Product Y Rs.
Selling Price			41.00	29.00
	X	Y		
Direct Material Per Unit	21.00	17.00		
Direct Wages Per Unit	6.00	4.00		
Variable Expenses	6.00	4.00	33.00	25.00
Contribution Per Unit			8.00	4.00

Contribution and profits resulting from each of the suggested sales mixtures:

Suggested sales mixtures	(a) X-200 Y-400	(b) X-300 Y-300	(c) X-400 Y-200
Contribution: on sales Mixtures:			
On X @ Rs. 8 Per Unit	1600	2400	3200
On Y @ Rs. 4 Per Unit	1600	1200	800
Total Contribution	3200	3600	4000
Less Fixed expenses	1600	1600	1600
Profit	1600	2000	2400

Product Mix (c) is the best combination because it gives maximum contribution and profit.

4.3 Summary

A feasibility study is an analysis done to determine the viability of a project from an economical, legal, and technical perspective. A feasibility study, that's well-designed, should offer insights on the description of the project, resource allocation, accounting statements, financial data, legal requirements, and tax obligations. A viability study is an investigation into a business idea. Specifically, whether the idea will make money? i.e. whether it will be profitable or not? The viability study is not about whether something is doable, but rather whether it is worth doing. Free cash flow (FCF) represents the cash a company generates after accounting for cash outflows to support operations and maintain its capital assets. Unlike earnings or net income, free cash flow is a measure of profitability that excludes the non-cash expenses of the income statement and includes spending on equipment and assets as well as changes in working capital from the balance sheet. Net present value is a tool of Capital budgeting to analyze the profitability of a project or investment. It is calculated by taking the difference between the present value of cash inflows and present value of cash outflows over a period of time. The profitability index rule is a decision-making exercise that helps evaluate whether to proceed with a project. The index itself is a calculation of the potential profit of the proposed project. The rule is that a profitability index or ratio greater than 1 indicates that the project should proceed. Payback period is typically used to evaluate projects or investments before undergoing them, by evaluating the associated risk. An investment can either have a short or long payback period. Decision making is the prime function of management along with other functions such as planning, organizing, staffing, directing, communicating and controlling. Make or Buy Decision is one of the important decisions takes by the management, which is very important to increase the wealth and profitability of the business organization. The business organization may be manufacture or receive order from an outside supplier to supply the product. Normally, a business concern will select the product mix which gives the maximum profit. Product mix is the ratio in which various products are produced and sold. The marginal costing technique helps management in taking appropriate decisions regarding the product mix,

4.4 Terms to Remember

1. **Project Feasibility or Viability Analysis:** feasibility study is an analysis done to determine the viability of a project from an economical, legal, and technical perspective. A viability study is an investigation into a business idea.
2. **Free Cash Flow:** Free cash flow (FCF) represents the cash a company generates after accounting for cash outflows to support operations and maintain its capital assets.
3. **Net Present Value (NPV):** Net present value is a tool of Capital budgeting to analyze the profitability of a project or investment

4. **Profitability Index:** The profitability index rule is a decision-making exercise that helps evaluate whether to proceed with a project

5. **Pay Back Period:** Payback period is typically used to evaluate projects or investments before undergoing them, by evaluating the associated risk

6. **Make or Buy Decision:** Make or Buy Decision is one of the important decisions takes by the management, which is very important to increase the wealth and profitability of the business organization

7. **Profit Maximization through Optimum Product Mix:** a business concern will select the product mix which gives the maximum profit. Product mix is the ratio in which various products are produced and sold.

4.5 Check Your Progress

A. Choose the correct alternative

1. The span of time within which the investment made for the project will be recovered by the net returns of the project is known as

   (A) Period of return (B) Payback period

   (C) Span of return (D) None of the above

2. Projects with __________ are preferred

   (A) Lower payback period (B) Normal payback period

   (C) Higher payback period (D) Any of the above

3. A project is accepted when

   (A) Net present value is greater than zero.

   (B) The project with least payback period.

   (C) Profitability index will be greater than one.

   (D) Any of the above

B. Fill in blank

1. A ________ study is an assessment of how practical or doable a proposed method or plan is.

2. A ________ study is an investigation into a business idea is profitable or not.

3. If profitability index is less than one then the proposal is _______.

C. State the following statement 'True or False'

1. Free cash flow can provide a significant amount of insight into the financial health of a company.

2. The higher the positive NPV, the more attractive the investment.

3. NPV did not take into consideration the time value of money.

4.6 Answers Check Your Progress

A. Choose the correct alternative

1. B
2. A
3. D

B. Fill in blank

1. Feasibility
2. Viability
3. rejected

C. State the following statement 'True or False'

1. True
2. True
3. False

4.7 Exercise

a) Short Notes

1. Concept of NPV
2. Viability study vs. feasibility study

b) Long Answer Type Questions

1. Explain the concept of Free Cash Flow.
2. Explain the factors affecting on make or buy decision.
3. What are the different steps involved in feasibility study?

4.8 References to Further Study:

1. Stock Exchange Trading in India- Gupta L.C.

2. Stock Exchange and Investment- Raghunathan

2. International Business-Aswthappa, TMH,N,Delhi

3. Security Analysis and Portfolio Management- Sasidharan/Mathews

4. Security Analysis and Portfolio Management- Punithavathy Pandian

5. Portfolio Management Handbook- Robert A. Strong

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