

## UNIT- V

### CAPITAL AND CAPITAL BUDGETING

the Financial Management can be broken down in to three major decisions or functions of finance. They are: (i) the investment decision, (ii) the financing decision and (iii) the dividend policy decision.

#### Investment Decision

The investment decision relates to the selection of assets in which funds will be invested by a firm. The assets as per their duration of benefits, can be categorized into two groups: (i) long-term assets which yield a return over a period of time in future (ii) short-term or current assets which in the normal course of business are convertible into cash usually within a year. Accordingly, the asset selection decision of a firm is of two types. The investment in long-term assets is popularly known as capital budgeting and in short-term assets, working capital management.

1. **Capital budgeting**: Capital budgeting – the long – term investment decision – is probably the most crucial financial decision of a firm. It relates to the selection of an asset or investment proposal or course of action that benefits are likely to be available in future over the lifetime of the project.

The long-term investment may relate to acquisition of new asset or replacement of old assets. Whether an asset will be accepted or not will depend upon the relative benefits and returns associated with it. The measurement of the worth of the investment proposals is, therefore, a major element in the capital budgeting exercise. The second element of the capital budgeting decision is the analysis of risk and uncertainty as the benefits from the investment proposals pertain the future, which is uncertain. They have to be estimated under various assumptions and thus there is an element of risk involved in the exercise. The return from the capital budgeting decision should, therefore, be evaluated in relation to the risk associated with it.

The third and final element is the ascertainment of a certain norm or standard against which the benefits are to be judged. The norm is known by different names such as cut-off rate, hurdle rate, required rate, minimum rate of return and so on. This standard is broadly expressed in terms of the cost of capital is,

thus, another major aspect of the capital; budgeting decision. In brief, the main elements of the capital budgeting decision are: (i) The total assets and their composition (ii) The business risk complexion of the firm, and (iii) concept and measurement of the cost of capital.

2. **Working Capital Management**: Working capital management is concerned with the management of the current assets. As we know, the short-term survival is a pre-requisite to long-term success. The major thrust of working capital management is the trade-off between profitability and risk (liquidity), which are inversely related to each other. If a firm does not have adequate working capital it may not have the ability to meet its current obligations and thus invite the risk of bankrupt. On the other hand if the current assets are too large the firm will be losing the opportunity of making a good return and thus may not serve the requirements of suppliers of funds. Thus, the profitability and liquidity are the two major dimensions of working capital management. In addition, the individual current assets should be efficiently managed so that neither inadequate nor unnecessary funds are locked up.

## **Finance Decision**

The second major decision involved in financial management is the financing decision, which is concerned with the financing – mix or capital structure of leverage. The term capital structure refers to the combination of debt (fixed interest sources of financing) and equity capital (variable – dividend securities/source of funds). The financing decision of a firm relates to the choice of the proportion of these sources to finance the investment requirements. A higher proportion of debt implies a higher return to the shareholders and also the higher financial risk and vice versa. A proper balance between debt and equity is a must to ensure a trade – off between risk and return to the shareholders. A capital structure with a reasonable proportion of debt and equity capital is called the optimum capital structure.

The second aspect of the financing decision is the determination of an appropriate capital structure, which will result, is maximum return to the shareholders and in turn maximizes the worth of the firm. Thus, the financing decision covers two inter-related aspects: (a) capital structure theory, and (b) capital structure decision.

## **Dividend Policy decision**

The third major decision of financial management is relating to dividend policy. The firm has two alternatives with regard to management of profits of a firm. They can be either distributed to the shareholder in the form of dividends or they can be retained in the business or even distribute some portion and retain the remaining. The course of action to be followed is a significant element in the dividend decision. The dividend pay out ratio i. e. the proportion of net profits to be paid out to the shareholders should be in tune with the investment opportunities available within the firm. The second major aspect of the dividend decision is the study of factors determining dividend policy of a firm in practice.

## **WORKING CAPITAL ANALYSIS**

Finance is required for two purpose viz. for it establishment and to carry out the day-to-day operations of a business. Funds are required to purchase the fixed assets such as plant, machinery, land, building, furniture, etc, on long-term basis. Investments in these assets represent that part of firm's capital, which is blocked on a permanent of fixed basis and is called fixed capital. Funds are also needed for short-term purposes such as the purchase of raw materials, payment of wages and other day-to-day expenses, etc. and these funds are known as working capital. In simple words working capital refers that part of the firm's capital, which is required for financing short term or current assets such as cash, marketable securities, debtors and inventories. The investment in these current assets keeps revolving and being constantly converted into cash and which in turn financed to acquire current assets. Thus the working capital is also known as revolving or circulating capital or short-term capital.

### **Concept of working capital**

There are two concepts of working capital:

1. Gross working capital
2. Net working capital

#### **Gross working capital:**

In the broader sense, the term working capital refers to the gross working capital. The notion of the gross working capital refers to the capital invested in total current assets of the enterprise. Current assets are those assets, which in the ordinary course of business, can be converted into cash within a short period, normally one accounting year.

Examples of current assets:

1. Cash in hand and bank balance
2. Bills receivables or Accounts Receivables
3. Sundry Debtors (less provision for bad debts)
4. Short-term loans and advances.
5. Inventories of stocks, such as:
  - (a) Raw materials
  - (b) Work – in process
  - (c) Stores and spares
  - (d) Finished goods
6. Temporary Investments of surplus funds.
7. Prepaid Expenses
8. Accrued Incomes etc.

#### **Net working capital:**

In a narrow sense, the term working capital refers to the net working capital. Networking capital represents the excess of current assets over current liabilities.

Current liabilities are those liabilities, which are intended to be paid in the ordinary course of business within a short period, normally one accounting year out of the current assets or the income of the business. Net working capital may be positive or negative. When the current assets exceed the current liabilities net working capital is positive and the negative net working capital results when the liabilities are more than the current assets.

Examples of current liabilities:

1. Bills payable
2. Sundry Creditors or Accounts Payable.
3. Accrued or Outstanding Expenses.
4. Short term loans, advances and deposits.
5. Dividends payable
6. Bank overdraft
7. Provision for taxation etc.

### **Classification or kinds of working capital**

Working capital may be classified in two ways:

- a. On the basis of concept.
- b. On the basis of time permanency

On the basis of concept, working capital is classified as gross working capital and net working capital is discussed earlier. This classification is important from the point of view of the financial manager. On the basis of time, working capital may be classified as:

1. Permanent or fixed working capital
2. Temporary or variable working capital

1. **Permanent or fixed working capital**: There is always a minimum level of current assets, which is continuously required by the enterprise to carry out its normal business operations and this minimum is known as permanent or fixed working capital. For example, every firm has to maintain a minimum level of raw materials, work in process; finished goods and cash balance to run the business operations smoothly and profitably. This minimum level of current assets is permanently blocked in current assets. As the business grows, the requirement of permanent working capital also increases due to the increases in current assets. The permanent working capital can further be classified into regular working capital and reserve working capital. Regular working capital is the minimum amount of working capital required to ensure circulation of current assets from cash to inventories, from inventories to receivables and from receivable to cash and so on. Reserve working capital is the excess amount over the requirement for regular working capital which may be provided for contingencies that may arise at unstated period such as strikes, rise in prices, depression etc.

2. **Temporary or variable working capital:** Temporary or variable working capital is the amount of working capital, which is required to meet the seasonal demands and some special exigencies. Thus the variable working capital can be further classified into seasonal working capital and special working capital. While seasonal working capital is required to meet certain seasonal demands, the special working capital is that part of working capital which is required to meet special exigencies such as launching of extensive marketing campaigns, for conducting research etc.

Temporary working capital differs from permanent working capital in the sense that it is required for short periods and cannot be permanently employed gainfully in the business. Figures given below illustrate the difference between permanent and temporary working capital.

### **Importance of working capital**

Working capital is referred to be the lifeblood and nerve center of a business. Working capital is as essential to maintain the smooth functioning of a business as blood circulation in a human body. No business can run successfully without an adequate amount of working capital. The main advantages of maintaining adequate amount of working capital are as follows:

1. **Solvency of the business:** Adequate working capital helps in maintaining solvency of the business by providing uninterrupted flow of production.
2. **Good will:** Sufficient working capital enables a business concern to make prompt payment and hence helps in creating and maintaining good will.
3. **Easy loans:** A concern having adequate working capital, high solvency and good credit standing can arrange loans from banks and others on easy and favorable terms.
4. **Cash Discounts:** Adequate working capital also enables a concern to avail cash discounts on the purchases and hence it reduces costs.
5. **Regular supply of raw materials:** Sufficient working capital ensures regular supply of raw materials and continuous production.
6. **Regular payments of salaries wages and other day to day commitments:** A company which has ample working capital can make regular payment of salaries, wages and other day to day commitments which raises the morale of its employees, increases their efficiency, reduces wastage and cost and enhances production and profits.
7. **Exploitation of favorable market conditions:** The concerns with adequate working capital only can exploit favorable market conditions such as purchasing its requirements in bulk when the prices are lower.
8. **Ability to face crisis:** Adequate working capital enables a concern to face business crisis in emergencies.
9. **Quick and regular return on Investments:** Every investor wants a quick and regular return on his investment. Sufficiency of working capital enables a concern to pay quick and regular dividends to its investors, as there may not be much pressure to plough back profits. This gains the confidence of its investors and creates a favorable market to raise additional funds in the future.
10. **High morale:** Adequacy of working capital creates an environment of security, confidence, and high morale and creates overall efficiency in a business. Every business concern should have

adequate working capital to run its business operations. It should have neither redundant excess working capital nor inadequate shortage of working capital. Both, excess as well as short working capital positions are bad for any business. However, out of the two, it is the inadequacy of working capital which is more dangerous from the point of view of the firm.

### **The need or objectives of working capital**

The need for working capital arises mainly due to the time gap between production and realization of cash. The process of production and sale cannot be done instantaneously and hence the firm needs to hold the current assets to fill-up the time gaps. There are time gaps in purchase of raw materials and production; production and sales; and sales and realization of cash. The working capital is needed mainly for the following purposes:

1. For the purchase of raw materials.
2. To pay wages, salaries and other day-to-day expenses and overhead cost such as fuel, power and office expenses, etc.
3. To meet the selling expenses such as packing, advertising, etc.
4. To provide credit facilities to the customers and
5. To maintain the inventories of raw materials, work-in-progress, stores and spares and finishes stock etc.

Generally, the level of working capital needed depends upon the time gap (known as operating cycle) and the size of operations. Greater the size of the business unit generally, larger will be the requirements of working capital. The amount of working capital needed also goes on increasing with the growth and expansion of business. Similarly, the larger the operating cycle, the larger the requirement for working capital. There are many other factors, which influence the need of working capital in a business, and these are discussed below in the following pages.

### **Factors determining the working capital requirements**

There are a large number of factors such as the nature and size of business, the character of their operations, the length of production cycle, the rate of stock turnover and the state of economic situation etc. that decide requirement of working capital. These factors have different importance and influence on firm differently. In general following factors generally influence the working capital requirements.

1. **Nature or character of business**: The working capital requirements of a firm basically depend upon the nature of its business. Public utility undertakings like electricity, water supply and railways need very limited working capital as their sales are on cash and are engaged in provision of services only. On the other hand, trading firms require more investment in inventories, receivables and cash and such they need large amount of working capital. The manufacturing undertakings also require sizable working capital.
2. **Size of business or scale of operations**: The working capital requirements of a concern are directly influenced by the size of its business, which may be measured in terms of scale of operations. Greater the size of a business unit, generally, larger will be the requirements of working capital. However, in some cases, even a smaller concern may need more working capital due to high overhead charges, inefficient use of available resources and other economic disadvantages of small size.

3. **Production policy**: If the demand for a given product is subject to wide fluctuations due to seasonal variations, the requirements of working capital, in such cases, depend upon the production policy. The production could be kept either steady by accumulating inventories during slack periods with a view to meet high demand during the peak season or the production could be curtailed during the slack season and increased during the peak season. If the policy is to keep the production steady by accumulating inventories it will require higher working capital.
4. **Manufacturing process/Length of production cycle**: In manufacturing business, the requirements of working capital will be in direct proportion to the length of manufacturing process. Longer the process period of manufacture, larger is the amount of working capital required, as the raw materials and other supplies have to be carried for a longer period.
5. **Seasonal variations**: If the raw material availability is seasonal, they have to be bought in bulk during the season to ensure an uninterrupted material for the production. A huge amount is, thus, blocked in the form of material, inventories during such season, which give rise to more working capital requirements. Generally, during the busy season, a firm requires larger working capital than in the slack season.
6. **Working capital cycle**: In a manufacturing concern, the working capital cycle starts with the purchase of raw material and ends with the realization of cash from the sale of finished products. This cycle involves purchase of raw materials and stores, its conversion into stocks of finished goods through work-in-progress with progressive increment of labour and service costs, conversion of finished stock into sales, debtors and receivables and ultimately realization of cash. This cycle continues again from cash to purchase of raw materials and so on. In general the longer the operating cycle, the larger the requirement of working capital.
7. **Credit policy**: The credit policy of a concern in its dealings with debtors and creditors influences considerably the requirements of working capital. A concern that purchases its requirements on credit requires lesser amount of working capital compared to the firm, which buys on cash. On the other hand, a concern allowing credit to its customers shall need larger amount of working capital compared to a firm selling only on cash.
8. **Business cycles**: Business cycle refers to alternate expansion and contraction in general business activity. In a period of boom, i.e., when the business is prosperous, there is a need for larger amount of working capital due to increase in sales. On the contrary, in the times of depression, i.e., when there is a down swing of the cycle, the business contracts, sales decline, difficulties are faced in collection from debtors and firms may have to hold large amount of working capital.
9. **Rate of growth of business**: The working capital requirements of a concern increase with the growth and expansion of its business activities. The retained profits may provide for a part of working capital but the fast growing concerns need larger amount of working capital than the amount of undistributed profits.

## **SOURCE OF FINANCE**

In case of proprietorship business, the individual proprietor generally invests his own savings to start with, and may borrow money on his personal security or the security of his assets from others. Similarly, the capital of a partnership firm consists partly of funds contributed by the partners and partly of borrowed funds. But the company form of organization enables the promoters to raise necessary funds from the public who may contribute capital and become members (share holders) of the company. In course of its business, the company can raise

loans directly from banks and financial institutions or by issue of securities (debentures) to the public. Besides, profits earned may also be reinvested instead of being distributed as dividend to the shareholders.

Thus for any business enterprise, there are two sources of finance, viz, funds contributed by owners and funds available from loans and credits. In other words the financial resources of a business may be own funds and borrowed funds.

### **Owner funds or ownership capital:**

The ownership capital is also known as ‘risk capital’ because every business runs the risk of loss or low profits, and it is the owner who bears this risk. In the event of low profits they do not have adequate return on their investment. If losses continue the owners may be unable to recover even their original investment. However, in times of prosperity and in the case of a flourishing business the high level of profits earned accrues entirely to the owners of the business. Thus, after paying interest on loans at a fixed rate, the owners may enjoy a much higher rate of return on their investment. Owners contribute risk capital also in the hope that the value of the firm will appreciate as a result of higher earnings and growth in the size of the firm.

The second characteristic of this source of finance is that ownership capital remains permanently invested in the business. It is not refundable like loans or borrowed capital. Hence a large part of it is generally used for acquiring long – lived fixed assets and to finance a part of the working capital which is permanently required to hold a minimum level of stock of raw materials, a minimum amount of cash, etc.

Another characteristic of ownership capital related to the management of business. It is on the basis of their contribution to equity capital that owners can exercise their right of control over the management of the firm. Managers cannot ignore the owners in the conduct of business affairs. The sole proprietor directly controls his own business. In a partnership firm, the active partner will take part in the management of business. A company is managed by directors who are elected by the members (shareholders).

### **Merits:**

Arising out of its characteristics, the advantages of ownership capital may be briefly stated as follows:

1. It provides risk capital
2. It is a source of permanent capital
3. It is the basis on which owners ‘acquire their right of control over management
4. It does not require security of assets to be offered to raise ownership capital

### **Limitations:**

There are also certain limitations of ownership capital as a source of finance. These are:



The amount of capital, which may be raised as owners fund depends on the number of persons, prepared to take the risks involved. In a partnership confer, a few persons cannot provide ownership capital beyond a certain limit and this limitation is more so in case of proprietary form of organization.

A joint stock company can raise large amount by issuing shares to the public. But it leads to an increased number of people having ownership interest and right of control over management. This may reduce the original investors' power of control over management. Being a permanent source of capital, ownership funds are not refundable as long as the company is in existence, even when the funds remain idle.

A company may find it difficult to raise additional ownership capital unless it has high profit-earning capacity or growth prospects. Issue of additional shares is also subject to so many legal and procedural restrictions.

**Borrowed funds and borrowed capital:** It includes all funds available by way of loans or credit. Business firms raise loans for specified periods at fixed rates of interest. Thus borrowed funds may serve the purpose of long-term, medium-term or short-term finance. The borrowing is generally at against the security of assets from banks and financial institutions. A company to borrow the funds can also issue various types of debentures.

Interest on such borrowed funds is payable at half yearly or yearly but the principal amount is being repaid only at the end of the period of loan. These interest and principal payments have to be met even if the earnings are low or there is loss. Lenders and creditors do not have any right of control over the management of the borrowing firm. But they can sue the firm in a law court if there is default in payment, interest or principal back.

### **Merits:**

From the business point of view, borrowed capital has several merits.

1. It does not affect the owner's control over management.
2. Interest is treated as an expense, so it can be charged against income and amount of tax payable thereby reduced.
3. The amount of borrowing and its timing can be adjusted according to convenience and needs, and
4. It involves a fixed rate of interest to be paid even when profits are very high, thus owners may enjoy a much higher rate of return on investment than the lenders.

### **Limitations:**

There are certain limitations, too in case of borrowed capacity. Payment of interest and repayment of loans cannot be avoided even if there is a loss. Default in meeting these obligations may create problems for the business and result in decline of its credit worthiness. Continuing default may even lead to insolvency of firm.

Secondly, it requires adequate security to be offered against loans. Moreover, high rates of interest may be charged if the firm's ability to repay the loan is uncertain.

## **Source of Company Finance**

Based upon the time, the financial resources may be classified into (1) sources of long term (2) sources of short – term finance. Some of these sources also serve the purpose of medium – term finance.

### **I. The source of long – term finance are:**

1. Issue of shares
2. Issue debentures
3. Loan from financial institutions
4. Retained profits and
5. Public deposits

### **II. Sources of Short-term Finance are:**

1. Trade credit
2. Bank loans and advances and
3. Short-term loans from finance companies.

## **Sources of Long Term Finance**

1. **Issue of Shares:** The amount of capital decided to be raised from members of the public is divided into units of equal value. These units are known as share and the aggregate values of shares are known as share capital of the company. Those who subscribe to the share capital become members of the company and are called shareholders. They are the owners of the company. Hence shares are also described as ownership securities.
2. **Issue of Preference Shares:** Preference share have three distinct characteristics. Preference shareholders have the right to claim dividend at a fixed rate, which is decided according to the terms of issue of shares. Moreover, the preference dividend is to be paid first out of the net profit. The balance, if any, can be distributed among other shareholders that is, equity shareholders. However, payment of dividend is not legally compulsory. Only when dividend is declared, preference shareholders have a prior claim over equity shareholders.

Preference shareholders also have the preferential right of claiming repayment of capital in the event of winding up of the company. Preference capital has to be repaid out of assets after meeting the loan obligations and claims of creditors but before any amount is repaid to equity shareholders.

Holders of preference shares enjoy certain privileges, which cannot be claimed by the equity shareholders. That is why; they cannot directly take part in matters, which may be discussed at the general meeting of shareholders, or in the election of directors.

Depending upon the terms of conditions of issue, different types of preference shares may be issued by a company to raise funds. Preference shares may be issued as:

1. Cumulative or Non-cumulative
2. Participating or Non-participating
3. Redeemable or Non-redeemable, or as
4. Convertible or non-convertible preference shares.

In the case of cumulative preference shares, the dividend unpaid if any in previous years gets accumulated until that is paid. No cumulative preference shares have any such provision.

Participatory shareholders are entitled to a further share in the surplus profits after a reasonable dividend has been paid to equity shareholders. Non-participating preference shares do not enjoy such right. Redeemable preference shares are those, which are repaid after a specified period, whereas the irredeemable preference shares are not repaid. However, the company can also redeem these shares after a specified period by giving notice as per the terms of issue. Convertible preference shares are those, which are entitled to be converted into equity shares after a specified period.

#### **Merits:**

Many companies due to the following reasons prefer issue of preference shares as a source of finance.

1. It helps to enlarge the sources of funds.
2. Some financial institutions and individuals prefer to invest in preference shares due to the assurance of a fixed return.
3. Dividend is payable only when there are profits.
4. It does not affect the equity shareholders' control over management

#### **Limitations:**

The limitations of preference shares relate to some of its main features:

1. Dividend paid cannot be charged to the company's income as an expense; hence there is no tax saving as in the case of interest on loans.
2. Even though payment of dividend is not legally compulsory, if it is not paid or arrears accumulate there is an adverse effect on the company's credit.
3. Issue of preference share does not attract many investors, as the return is generally limited and not exceed the rates of interest on loan. On the other hand, there is a risk of no dividend being paid in the event of falling income.

**1. Issue of Equity Shares:** The most important source of raising long-term capital for a company is the issue of equity shares. In the case of equity shares there is no promise to shareholders a fixed dividend. But if the company is successful and the level profits are high, equity shareholders enjoy very high returns on their investment. This feature is very attractive to many investors even though they run the risk of having no return if the profits are

inadequate or there is loss. They have the right of control over the management of the company and their liability is limited to the value of shares held by them.

From the above it can be said that equity shares have three distinct characteristics:

1. The holders of equity shares are the primary risk bearers. It is the issue of equity shares that mainly provides 'risk capital', unlike borrowed capital. Even compared with preference capital, equity shareholders are to bear ultimate risk.
2. Equity shares enable much higher return to be earned by shareholders during prosperity because after meeting the preference dividend and interest on borrowed capital at a fixed rate, the entire surplus of profit goes to equity shareholders only.
3. Holders of equity shares have the right of control over the company. Directors are elected on the vote of equity shareholders.

#### **Merits:**

From the company's point of view; there are several merits of issuing equity shares to raise long-term finance.

1. It is a source of permanent capital without any commitment of a fixed return to the shareholders. The return on capital depends ultimately on the profitability of business.
2. It facilitates a higher rate of return to be earned with the help of borrowed funds. This is possible due to two reasons. Loans carry a relatively lower rate of interest than the average rate of return on total capital. Secondly, there is tax saving as interest paid can be charged to income as an expense before tax calculation.
3. Assets are not required to give as security for raising equity capital. Thus additional funds can be raised as loan against the security of assets.

#### **Limitations:**

Although there are several advantages of issuing equity shares to raise long-term capital.

1. The risks of fluctuating returns due to changes in the level of earnings of the company do not attract many people to subscribe to equity capital.
2. The value of shares in the market also fluctuates with changes in business conditions, this is another risk, which many investors want to avoid.

## **2. Issue of Debentures:**

When a company decides to raise loans from the public, the amount of loan is divided into units of equal value. These units are known as debentures. A debenture is the instrument or certificate issued by a company to acknowledge its debt. Those who invest money in debentures are known as 'debenture holders'. They are creditors of the company. Debentures are therefore called 'creditor ship' securities. The value of each debenture is generally fixed in multiples of 10 like Rs. 100 or Rs. 500, or Rs. 1000.

Debentures carry a fixed rate of interest, and generally are repayable after a certain period, which is specified at the time of issue. Depending upon the terms and conditions of issue there are different types of debentures. There

are:

- a. Secured or unsecured Debentures and
- b. Convertible or Non convertible Debentures.

If debentures are issued on the security of all or some specific assets of the company, they are known as secured debentures. The assets are mortgaged in favor of the debenture holders. Debentures, which are not secured by a charge or mortgage of any assets, are called unsecured debentures. The holders of these debentures are treated as ordinary creditors.

Sometimes under the terms of issue debenture holders are given an option to convert their debentures into equity shares after a specified period. Or the terms of issue may lay down that the whole or part of the debentures will be automatically converted into equity shares of a specified price after a certain period. Such debentures are known as convertible debentures. If there is no mention of conversion at the time of issue, the debentures are regarded as non-convertible debentures.

#### **Merits:**

Debenture issue is a widely used method of raising long-term finance by companies, due to the following reasons.

1. Interest payable on Debentures can be fixed at low rates than rate of return on equity shares. Thus Debenture issue is a cheaper source of finance.
2. Interest paid can be deducted from income tax purpose; thereby the amount of tax payable is reduced.
3. Funds raised for the issue of debentures may be used in business to earn a much higher rate of return than the rate of interest. As a result the equity shareholders earn more.
4. Another advantage of debenture issue is that funds are available from investors who are not entitled to have any control over the management of the company.
5. Companies often find it convenient to raise debenture capital from financial institutions, which prefer to invest in debentures rather than in shares. This is due to the assurance of a fixed return and repayment after a specified period.

#### **Limitations:**

Debenture issue as a source of finance has certain limitations too.

1. It involves a fixed commitment to pay interest regularly even when the company has low earnings or incurring losses.
2. Debenture issue may not be possible beyond a certain limit due to the inadequacy of assets to be offered as security.

**Methods of Issuing Securities:** The firm after deciding the amount to be raised and the type of securities to be issued, must adopt suitable methods to offer the securities to potential investors. There are four common methods followed by companies for the purpose.

When securities are offered to the general public a document known as Prospectus, or a notice, circular or advertisement is issued inviting the public to subscribe to the securities offered thereby all particulars about the company and the securities offered are made to the public. Brokers are appointed and one or more banks are authorized to collect subscription.

Some times the entire issue is subscribed by an organization known as Issue House, which in turn sells the securities to the public at a suitable time.

The company may negotiate with large investors of financial institutions who agree to take over the securities. This is known as 'Private Placement' of securities.

When an exiting company decides to raise funds by issue of equity shares, it is required under law to offer the new shares to the existing shareholders. This is described as right issue of equity shares. But if the existing shareholders decline, the new shares can be offered to the public.

### **3. Loans from financial Institutions:**

Government with the main object of promoting industrial development has set up a number of financial institutions. These institutions play an important role as sources of company finance. Besides they also assist companies to raise funds from other sources.

These institutions provide medium and long-term finance to industrial enterprises at a reason able rate of interest. Thus companies may obtain direct loan from the financial institutions for expansion or modernization of existing manufacturing units or for starting a new unit.

Often, the financial institutions subscribe to the industrial debenture issue of companies some of the institutions (ICICI) and (IDBI) also subscribe to the share issued by companies.

All such institutions also underwrite the public issue of shares and debentures by companies. Underwriting is an agreement to take over the securities to the extent there is no public response to the issue. They may guarantee loans, which may be raised by companies from other sources.

Loans in foreign currency may also be granted for the import of machinery and equipment wherever necessary from these institutions, which stand guarantee for re-payments. Apart from the national level institutions

mentioned above, there are a number of similar institutions set up in different states of India. The state-level financial institutions are known as State Financial Corporation, State Industrial Development Corporations, State Industrial Investment Corporation and the like. The objectives of these institutions are similar to those of the national-level institutions. But they are mainly concerned with the development of medium and small-scale industrial units. Thus, smaller companies depend on state level institutions as a source of medium and long-term finance for the expansion and modernization of their enterprise.

#### **4. Retained Profits:**

Successful companies do not distribute the whole of their profits as dividend to shareholders but reinvest a part of the profits. The amount of profit reinvested in the business of a company is known as retained profit. It is shown as reserve in the accounts. The surplus profits retained and reinvested may be regarded as an internal source of finance. Hence, this method of financing is known as self-financing. It is also called sloughing back of profits.

Since profits belong to the shareholders, the amount of retained profit is treated as ownership fund. It serves the purpose of medium and long-term finance. The total amount of ownership capital of a company can be determined by adding the share capital and accumulated reserves.

#### **Merits:**

This source of finance is considered to be better than other sources for the following reasons.

1. As an internal source, it is more dependable than external sources. It is not necessary to consider investor's preference.
2. Use of retained profit does not involve any cost to be incurred for raising the funds. Expenses on prospectus, advertising, etc, can be avoided.
3. There is no fixed commitment to pay dividend on the profits reinvested. It is a part of risk capital like equity share capital.
4. Control over the management of the company remains unaffected, as there is no addition to the number of shareholder.
5. It does not require the security of assets, which can be used for raising additional funds in the form of loan.

#### **Limitations:**

However, there are certain limitations on the part of retained profit.

1. Only well established companies can be avail of this sources of finance. Even for such companies retained profits cannot be used to an unlimited extent.
2. Accumulation of reserves often attract competition in the market,
3. With the increased earnings, shareholders expect a high rate of dividend to be paid.
4. Growth of companies through internal financing may attract government restrictions as it leads to concentration of economic power.

## **5. Public Deposits:**

An important source of medium – term finance which companies make use of is public deposits. This requires advertisement to be issued inviting the general public of deposits. This requires advertisement to be issued inviting the general public to deposit their savings with the company. The period of deposit may extend up to three years. The rate of interest offered is generally higher than the interest on bank deposits. Against the deposit, the company mentioning the amount, rate of interest, time of repayment and such other information issues a receipt.

Since the public deposits are unsecured loans, profitable companies enjoying public confidence only can be able to attract public deposits. Even for such companies there are rules prescribed by government limited its use.

### **Sources of Short Term Finance**

The major sources of short-term finance are discussed below:

1. **Trade credit:** Trade credit is a common source of short-term finance available to all companies. It refers to the amount payable to the suppliers of raw materials, goods etc. after an agreed period, which is generally less than a year. It is customary for all business firms to allow credit facility to their customers in trade business. Thus, it is an automatic source of finance. With the increase in production and corresponding purchases, the amount due to the creditors also increases. Thereby part of the funds required for increased production is financed by the creditors. The more important advantages of trade credit as a source of short-term finance are the following:

It is readily available according to the prevailing customs. There are no special efforts to be made to avail of it. Trade credit is a flexible source of finance. It can be easily adjusted to the changing needs for purchases.

Where there is an open account for any creditor failure to pay the amounts on time due to temporary difficulties does not involve any serious consequence Creditors often adjust the time of payment in view of continued dealings. It is an economical source of finance.

However, the liability on account of trade credit cannot be neglected. Payment has to be made regularly. If the company is required to accept a bill of exchange or to issue a promissory note against the credit, payment must be made on the maturity of the bill or note. It is a legal commitment and must be honored; otherwise legal action will follow to recover the dues.

2. **Bank loans and advances:** Money advanced or granted as loan by commercial banks is known as bank credit. Companies generally secure bank credit to meet their current operating expenses. The most common forms are cash credit and overdraft facilities. Under the cash credit arrangement the maximum limit of credit is fixed in advance on the security of goods and materials in stock or against the personal security of directors. The total amount drawn is not to exceed the limit fixed. Interest is charged on the



amount actually drawn and outstanding. During the period of credit, the company can draw, repay and again draw amounts within the maximum limit. In the case of overdraft, the company is allowed to overdraw its current account up to the sanctioned limit. This facility is also allowed either against personal security or the security of assets. Interest is charged on the amount actually overdrawn, not on the sanctioned limit.

The advantage of bank credit as a source of short-term finance is that the amount can be adjusted according to the changing needs of finance. The rate of interest on bank credit is fairly high. But the burden is not excessive because it is used for short periods and is compensated by profitable use of the funds.

Commercial banks also advance money by discounting bills of exchange. A company having sold goods on credit may draw bills of exchange on the customers for their acceptance. A bill is an order in writing requiring the customer to pay the specified amount after a certain period (say 60 days or 90 days). After acceptance of the bill, the company can draw the amount as an advance from many commercial banks on payment of a discount. The amount of discount, which is equal to the interest for the period of the bill, and the balance, is available to the company. Bill discounting is thus another source of short-term finance available from the commercial banks.

3. **Short term loans from finance companies:** Short-term funds may be available from finance companies on the security of assets. Some finance companies also provide funds according to the value of bills receivable or amount due from the customers of the borrowing company, which they take over.

## **CAPITAL BUDGETING**

**Capital Budgeting:** Capital budgeting is the process of making investment decision in long-term assets or courses of action. Capital expenditure incurred today is expected to bring its benefits over a period of time. These expenditures are related to the acquisition & improvement of fixed assets.

Capital budgeting is the planning of expenditure and the benefit, which spread over a number of years. It is the process of deciding whether or not to invest in a particular project, as the investment possibilities may not be rewarding. The manager has to choose a project, which gives a rate of return, which is more than the cost of financing the project. For this the manager has to evaluate the worth of the projects in terms of cost and benefits. The benefits are the expected cash inflows from the project, which are discounted against a standard, generally the cost of capital.

### **Capital Budgeting Process:**

The capital budgeting process involves generation of investment, proposal estimation of cash-flows for the proposals, evaluation of cash-flows, selection of projects based on acceptance criterion and finally the continuous revaluation of investment after their acceptance. The steps involved in capital budgeting process are as follows.

1. Project generation

2. Project evaluation
3. Project selection
4. Project execution

**1. Project generation:** In the project generation, the company has to identify the proposal to be undertaken depending upon its future plans of activity. After identification of the proposals they can be grouped according to the following categories:

- a. **Replacement of equipment:** In this case the existing outdated equipment and machinery may be replaced by purchasing new and modern equipment.
- b. **Expansion:** The Company can go for increasing additional capacity in the existing product line by purchasing additional equipment.
- c. **Diversification:** The Company can diversify its product line by way of producing various products and entering into different markets. For this purpose, It has to acquire the fixed assets to enable producing new products.
- d. **Research and Development:** Where the company can go for installation of research and development suing by incurring heavy expenditure with a view to innovate new methods of production new products etc.,

**2. Project evaluation:** In involves two steps.

- a. **Estimation of benefits and costs:** These must be measured in terms of cash flows. Benefits to be received are measured in terms of cash flows. Benefits to be received are measured in terms of cash in flows, and costs to be incurred are measured in terms of cash flows.
- b. **Selection of an appropriate criterion to judge the desirability of the project.**

**3. Project selection:** There is no standard administrative procedure for approving the investment decisions. The screening and selection procedure would differ from firm to firm. Due to lot of importance of capital budgeting decision, the final approval of the project may generally rest on the top management of the company. However the proposals are scrutinized at multiple levels. Some times top management may delegate authority to approve certain types of investment proposals. The top management may do so by limiting the amount of cash out lay. Prescribing the selection criteria and holding the lower management levels accountable for the results.

**4. Project Execution:** In the project execution the top management or the project execution committee is responsible for effective utilization of funds allocated for the projects. It must see that the funds are spent in accordance with the appropriation made in the capital budgeting plan. The funds for the purpose of the project execution must be spent only after obtaining the approval of the finance controller. Further to have an effective cont. It is necessary to prepare monthly budget reports to show clearly the total amount appropriated, amount spent and to amount unspent.

## Capital budgeting Techniques:

The capital budgeting appraisal methods are techniques of evaluation of investment proposal will help the company to decide upon the desirability of an investment proposal depending upon their; relative income generating capacity and rank them in order of their desirability. These methods provide the company a set of norms on the basis of which either it has to accept or reject the investment proposal. The most widely accepted techniques used in estimating the cost-returns of investment projects can be grouped under two categories.

1. Traditional methods
2. Discounted Cash flow methods

### 1. Traditional methods

These methods are based on the principles to determine the desirability of an investment project on the basis of its useful life and expected returns. These methods depend upon the accounting information available from the books of accounts of the company. These will not take into account the concept of 'time value of money', which is a significant factor to determine the desirability of a project in terms of present value.

**A. Pay-back period method:** It is the most popular and widely recognized traditional method of evaluating the investment proposals. It can be defined, as 'the number of years required to recover the original cash out lay invested in a project'.

According to Weston & Brigham, "The pay back period is the number of years it takes the firm to recover its original investment by net returns before depreciation, but after taxes".

According to James. C. Vanhorne, "The payback period is the number of years required to recover initial cash investment.

The pay back period is also called payout or payoff period. This period is calculated by dividing the cost of the project by the annual earnings after tax but before depreciation under this method the projects are ranked on the basis of the length of the payback period. A project with the shortest payback period will be given the highest rank and taken as the best investment. The shorter the payback period, the less risky the investment is the formula for payback period is

$$\text{Pay-back period} = \frac{\text{Cash outlay (or) original cost of project}}{\text{Annual cash inflow}}$$

### Merits:

1. It is one of the earliest methods of evaluating the investment projects.
2. It is simple to understand and to compute.
3. It does not involve any cost for computation of the payback period
4. It is one of the widely used methods in small scale industry sector
5. It can be computed on the basis of accounting information available from the books.

**Demerits:**

1. This method fails to take into account the cash flows received by the company after the pay back period.
2. It doesn't take into account the interest factor involved in an investment outlay.
3. It doesn't take into account the interest factor involved in an investment outlay.
4. It is not consistent with the objective of maximizing the market value of the company's share.
5. It fails to consider the pattern of cash inflows i. e., the magnitude and timing of cash in flows.

**B. Accounting (or) Average rate of return method (ARR):**

It is an accounting method, which uses the accounting information repeated by the financial statements to measure the probability of an investment proposal. It can be determined by dividing the average income after taxes by the average investment i.e., the average book value after depreciation.

According to 'Soloman', accounting rate of return on an investment can be calculated as the ratio of accounting net income to the initial investment, i.e.,

$$ARR = \frac{\text{Average net income after taxes}}{\text{Average Investment}} \times 100$$

$$\text{Average net income after taxes} = \frac{\text{Total Income after Taxes}}{\text{No. Of Years}}$$

$$\text{Average investment} = \frac{\text{Total Investment}}{2}$$

On the basis of this method, the company can select all those projects whose ARR is higher than the minimum rate established by the company. It can reject the projects with an ARR lower than the expected rate of return. This method can also help the management to rank the proposal on the basis of ARR. A highest rank will be given to a project with highest ARR, whereas a lowest rank to a project with lowest ARR.

**Merits:**

1. It is very simple to understand and calculate.
2. It can be readily computed with the help of the available accounting data.
3. It uses the entire stream of earning to calculate the ARR.

#### **Demerits:**

1. It is not based on cash flows generated by a project.
2. This method does not consider the objective of wealth maximization
3. IT ignores the length of the projects useful life.
4. It does not take into account the fact that the profits can be re-invested.

## **II: Discounted cash flow methods:**

The traditional method does not take into consideration the time value of money. They give equal weight age to the present and future flow of incomes. The DCF methods are based on the concept that a rupee earned today is more worth than a rupee earned tomorrow. These methods take into consideration the profitability and also time value of money.

### **A. Net present value method (NPV)**

The NPV takes into consideration the time value of money. The cash flows of different years are valued differently and made comparable in terms of present values for this the net cash inflows of various periods are discounted using required rate of return which is predetermined.

According to Ezra Solomon, “It is a present value of future returns, discounted at the required rate of return minus the present value of the cost of the investment.”

NPV is the difference between the present value of cash inflows of a project and the initial cost of the project.

According to the NPV technique, only one project will be selected whose NPV is positive or above zero. If a project(s) NPV is less than ‘Zero’. It gives negative NPV hence. It must be rejected. If there are more than one project with positive NPV’s the project is selected whose NPV is the highest.

The formula for NPV is

NPV = Present value of cash inflows – investment.

$$NPV = \frac{C_1}{(1+K)} + \frac{C_2}{(1+K)^2} + \frac{C_3}{(1+K)^3} + \dots + \frac{C_n}{(1+K)^n} - \text{Investment}$$

Co- investment

C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>... C<sub>n</sub> = cash inflows in different years.

K = Cost of the Capital (or) Discounting rate

D= Years.

**Merits:**

1. It recognizes the time value of money.
2. It is based on the entire cash flows generated during the useful life of the asset.
3. It is consistent with the objective of maximization of wealth of the owners.
4. The ranking of projects is independent of the discount rate used for determining the present value.

**Demerits:**

1. It is difficult to understand and use.
2. The NPV is calculated by using the cost of capital as a discount rate. But the concept of cost of capital. If self is difficult to understand and determine.
3. It does not give solutions when the comparable projects are involved in different amounts of investment.
4. It does not give correct answer to a question whether alternative projects or limited funds are available with unequal lines.

**B. Internal Rate of Return Method (IRR)**

The IRR for an investment proposal is that discount rate which equates the present value of cash inflows with the present value of cash out flows of an investment. The IRR is also known as cutoff or hurdle rate. It is usually the concern's cost of capital.

According to Weston and Brigham "The internal rate is the interest rate that equates the present value of the expected future receipts to the cost of the investment outlay.

When compared the IRR with the required rate of return (RRR), if the IRR is more than RRR then the project is accepted else rejected. In case of more than one project with IRR more than RRR, the one, which gives the highest IRR, is selected.

The IRR is not a predetermined rate, rather it is to be trial and error method. It implies that one has to start with a discounting rate to calculate the present value of cash inflows. If the obtained present value is higher than the initial cost of the project one has to try with a higher rate. Like wise if the present value of expected cash inflows obtained is lower than the present value of cash flow. Lower rate is to be taken up. The process is continued till the net present value becomes Zero. As this discount rate is determined internally, this method is called internal rate of return method.

$$IRR = L + \frac{P_1 - Q}{P_1 - P_2} \times D$$

L- Lower discount rate

P1 - Present value of cash inflows at lower rate.

P2 - Present value of cash inflows at higher rate.

Q- Actual investment

D- Difference in Discount rates.

**Merits:**

1. It considers the time value of money
2. It takes into account the cash flows over the entire useful life of the asset.
3. It has a psychological appeal to the user because when the highest rate of return projects are selected, it satisfies the investors in terms of the rate of return on capital
4. It always suggests accepting projects with maximum rate of return.
5. It is in conformity with the firm's objective of maximum owner's welfare.

**Demerits:**

1. It is very difficult to understand and use.
2. It involves a very complicated computational work.
3. It may not give unique answer in all situations.

**C. Probability Index Method (PI)**

The method is also called benefit cost ratio. This method is obtained with a slight modification of the NPV method. In case of NPV the present value of cash outflows are divided by the present value of cash inflows to get the profitability index (PI), while NPV is an absolute measure, the PI is a relative measure.

If the PI is more than one ( $>1$ ), the proposal is accepted else rejected. If there are more than one investment proposals with the more than one PI the one with the highest PI will be selected. This method is more useful in case of projects with different cash outlays and hence is superior to the NPV method.

The formula for PI is

$$\text{Probability index} = \frac{\text{Present Value of Future Cash Inflow}}{\text{Investment}}$$

**Merits:**

1. It requires less computational work than IRR method
2. It helps to accept / reject investment proposal on the basis of value of the index.
3. It is useful to rank the proposals on the basis of the highest/lowest value of the index.

4. It is useful to rank the proposals on the basis of the highest/lowest value of the index.
5. It takes into consideration the entire stream of cash flows generated during the useful life of the asset.

**Demerits:**

1. It is somewhat difficult to understand
2. Some people may feel no limitation for index number due to several limitations involved in their competitions
3. It is very difficult to understand the analytical part of the decision on the basis of probability index.