Chapter-II

CAPITAL STRUCTURE OF INDUSTRIAL ENTERPRISES
A THEORETICAL FRAME WORK

The assets of any industrial enterprises are financed through a variety of financial sources as shown on the liabilities side of its balance sheet. These sources may be referred as common share or equity share, preference share short and long term debt, deferred items and accruals, capital and revenue surpluses etc. These sources constitute the capital structure of any industrial enterprises.\(^1\)

Capital is as essential for all business enterprises as the blood circulation in human body. However the term capital has its different connotations to different target groups; such as, for an individual; capital is synonymous with cash in hand and at bank; in economics; capital is represented as a factor of the production which plays vital role in increasing the overall productive capacity of the economy and for a business unit; capital refers to the sources of finance for its assets and business operations.\(^2\)
A business enterprise, thus, takes capital as its total investment in physical properties and valuable intangibles.\textsuperscript{4} While in accounting sense, it generally means net worth or shareholder's equity.\textsuperscript{5} Finance has, thus, come to play a very vital role in modern business organization. The progress and prosperity of a business concern mostly depends upon its financial soundness. It is rightly remarked that finance is as essential for the trade, commerce and industry as the oil of the wheels, as the marrow of bones and as the blood in the veins.\textsuperscript{3}

Legal aspect of capital expresses that it is the contraction of the word capital stock, which is also denoted as the value per shares which is based on capital structure i.e. mixture of different sources of long term funds (such as equity shares, preference shares, long term loan, retained earnings etc.) in the total capitalization of the company. From the analytical point of view, the term capital structure differs from financial structure. Financial structure refers to such mechanism in which the company's assets are financed.\textsuperscript{7} It includes both long term as well as short term sources of funds. Whereas capital structure is the permanent financing of the company represented primarily by long term debt and share holders funds but excluding all short term credit. Thus, the capital structure is a part of overall financial structure of a business enterprise.\textsuperscript{8}

According to another view of capital structure, it includes not only long-term obligations and equity capital but also short term obligations.
One of the primary reasons for suing debt is to increase earning on equity capital. The use of debt generally increases the rate of return on equity capital, but simultaneously it increases the financial risk of the firm. Majority of the firms are perfectly capable of assuming a certain amount of risk, which provides the background for employing a level of debt. If otherwise happens, it is expected that investors will reduce the price which they are willing to pay for both debt and equity instruments.\(^9\)

The effects of leverage are also very important in the determination of an optimal mix of the capital structure. The capital structure has many relevant dimensions of which the financing mix is the important one. Other dimensions involve the investment decisions of the firm, and the optimal use of leverage, supported by the internal and external environmental conditions. These conditions in turn effect the decision of the firm with respect to the timing of investment and financing transactions as well as the acceptable level of risk and liquidity.\(^{10}\)

There are differences of opinions in respect of composition of funds in capital structure, as such some believe that capital structure is tantamount of financial structure and it represents both long term and short term sources of funds. Capital structure thus, represents owned and barrowed funds. Owned funds include share capital and free reserves and surplus and borrowed funds includes debentures, short term and long term loans from specialized financial institutions.\(^{11}\)
The capital structure of industrial enterprises is generally influenced by a variety of factors which are of varying nature. At the initial stages it is designed in the context of operational financial attributes of the concerned enterprises. In fact, the capital structure of an enterprise has to make reconciliation between the internal and external factors. Both these sets of factors operate on the capital structures on a continuous basis. Some has opined that the cheapest source of finance for a business enterprise should be created by its own operations in terms of retained earnings. The capital structure providing the lowest overall cost of capital would then be the one which has the largest percentage of prior claim securities and the lowest percentage of common stock.

Capital structure thus refers to the long term financing mix. It has significant effect on corporate financial policy. Management of capital structure is concerned with maintaining a proper balance between borrowed funds and concerned with maintaining a proper balance between borrowed funds and owned funds. Capital structure, thus, in its broadest sense, it indicates the proportion of long term loans, the proportion of equity capital, as well as the proportion of short term obligations to some extent. Financial structure, on the other hands, means the composition of the entire items in the liabilities side of the balance sheet. Financial structure refers to all the financial resources
tapped by the firm, short as well as long term and all forms of debt as well as equity.\textsuperscript{16}

The word structure connotes the arrangements of the various parts of a building or some other construction. In case of construction of a building etc. there are some standard proportions in which various ingredients are arranged together. They naturally depend on the size and nature of the erection. Similarly corporate enterprises raise their capital from different sources such as issue of shares, debenture long term loans, and short term loans. Initially equity capital is arranged but barrowings etc. are arranged on the basis of equity depth.

Some financial experts believe that there is no difference between capital and capital structure. According to Wolker and Baughn capital structure is synonymous with total capital, which refers to the credit side of the balance sheet or the division of claims among trade creditors, Bank Creditors, bond holders. Stock holders etc.\textsuperscript{17} even the fictitious assets like, debit balance of profit loss account. Balance of share or debenture discount, etc. are to be treated more as deduction from relevant liabilities than assets by themselves. Thus, capital is the actual wealth or total assets of the enterprise.\textsuperscript{18}

In industrial enterprises, capital structure management has thus, become one of the most important functions of the financial manager because it affects the return to the equity share holders and the price, of
their shares in the market which are supposed to be the most important goal of the firm. The primary aim of any business enterprises is to earn profit. To achieve the objective of profit maximization business concerns a sound financial plan for proper utilization of various sources of funds. Financial plan is no doubt, a key to successful business operation.

Financial plan is a broad term. It consists mainly in determination of total capital, determination of capital structure and determination of financial policies. Financial structure is a part of the financial plan. The term 'financial structure' means liability structure, in this structure, all the sources of finance such as owned capital, preference capital, long term debt, short term debt and current liabilities are included.

On the basis of time period the requirement of finance for an enterprise could be divided into three parts i.e. long term finance, medium term finance and short term finance. Requirement of funds for not more than one year is included in short term finance for more than one year but not exceeding five years included medium term and beyond five year comes under the category of long term finance. Capital structure is used to represent the proportionate relationship between the various long terms financing, such as debentures, long term debt, preference capital and equity share capital, reserve and surplus. The term capital structure is frequently used to indicate the long term sources of funds employed in business enterprises.
Distribution of assets reveal that the financial requirements of a business enterprise are of two kinds i.e., permanent and temporary assets. Permanent assets of a company will comprise land, building plant & machinery etc. and the temporary assets are needed for purchase of raw material, payment of salaries and wages and for meeting several daily requirements. The permanent assets are generally financed by the long term fund, while the temporary assets are financed by both long term and short term funds.22

Capital on all accounts refers to a quantity, where as the structure refers to the quality of capital.23 Generally the term capital structure refers to the total composition of the long term methods of financing.24 While differentiating financial structure with capital structure, it can be said that retained earnings and short term debts must be excluded from capital structure. Short term debts also provides leverage benefit to the shareholders and involve cost and risk a like the long term debts. Hence the term financial structure and capital structure have been used interchangeably.25
PRINCIPLES FOR DETERMINING OPTIMUM CAPITAL STRUCTURE

There are some basic principles of determine optimum capital structure; one should pay proper attention on determine favorable capital structure. These principles are enumerated as follow:

1. **Principle of Cost**

   The cost of capital has assumed greater significance largely because its role as a devise for rational mechanism in making the investment decision of the firm.\(^{26}\) This principle suggests for an ideal pattern of capital structure which tends to minimize cost of financing and maximize earning per share. Cost of capital varied from one source of capital to another. For example, debt capital is cheaper than equity capital if the profitability of the enterprises is higher than the rate of interest and vice versa. This happens due to the treatment of interest in the Profit and Loss Account of a business concern. Tax is levied on the net profit which is obtained after deduction of interest incurred on the utilization of debt capital.\(^{27}\)

2. **Principle of Risk**

   This principle suggests that capital structure should be devised in such a fashion that the firm does not run the risk of bringing on a
receivership with all its difficulties and losses. Since the debenture is commitment for a long period, it involves a lot of risks.

3. **Principle of Control**

   While designing sound capital structure for the firm, the financial manager should also keep in mind that controlling position of residual owners remains undisturbed. Management designing to retain control must raise funds through funds. Since common stock provides voting rights, issue at new common stock will dilute the control of existing shareholders. It would be more desirable to issue common stock and share control with new stockholders. the management must maintain a correct balance between voting and nonvoting capital.\(^\text{28}\)

4. **Principle of Flexibility**

   Principle of flexibility high lights that management should have such combinations of securities that should be flexible in such a way that the funds could be adjusted as per the requirements of the organization. Accordingly the companies shared re-appropriate its capital structure comprising debt capital and equity capital.

5. **Principle of Timing**

   Closely related to flexibility in deciding the types of funds to be used another principle is related with timing. Substantial saving may be obtained by ascertaining proper timing of security issues. Depending on
business cycles demand of different types of securities oscillates. For example in the inflationary phase, when there is abundant business expansion and economic prosperity and the investors have strong desire to invest, it is easier to sell equity shares and raise funds by this source. However in period of depression bonds should be issued to attract money because investors are afraid of risk in stock, which are more or less speculative.29

However, it should be borne in mind that timing is not the only consideration. Timing analysis may suggest for use of debt but the company may not be able to go in for debt as its existing capital structure is already overburdened with capital.39

THEORIES OF CAPITAL STRUCTURE

A number of empirical studies were conducted by Modigliani and Miller on the investment and financing decisions and the market valuation of a firm. Alexander Berges improved upon the methodology of Modigliani and Miller and Fred J. Weston attempted to improve upon the specification of the functional relationship first provided by Modigliani and Miller for the cost of capital hypothesis. Modigliani and Miller again conducted a study in which they attempted a modified regression equation, searching for the trends in the cost of capital variable.31
As regards capital structure determination, several theoretical approaches have been advanced by Soloman, Modigliani and Miller, Donaldson and John E. Childs. Soloman emphasized a capital structure at the minimum cost of capital. Except M.M. approach, which is an extreme case, all these approaches are important in the sense that they emphasize the cost of capital and financial risk as the main determinants of capital structure. Some theories of capital structure are discussed as follows:

1. **Net Income Theory**

   This approach is based on the crucial assumptions that the use of debt does not change the risk perception of the investor. Net Income (NI) theory recognizes the existence of optimum capital structure the cost of capital is the lowest.

   Net Income theory =

   \[
   K_0 = \frac{O}{V}
   \]

   Where
   \( K_0 \) = Net Income
   \( O \) = Net operating Income
   \( V \) = Total Market Value at the Firm

2. **Net operating income approach**

   It is an alternative approach, also known as 'Fixed Key' theory'. As per this approach the overall capitalization rate of the firm key does not
change with any degree of financial leverage. In the other words, K0 is independent of the Capital Structure. All Capital Structure are optimal, because market price per share does not change with leverage. According to this theory total market value of the firm is equal to the capitalized value of net operating income. However, it is possible that beyond a high level of leverage, the cost of debt may increase. Net operating income is that overall capitalization rate of the firm is constant for all degree of leverage. Net operating income is capitalized over all capitalization rate to obtain the total market value of the firm. It can be presented in terms of formula as follows:

\[
\frac{E}{Kd} = \frac{Ke}{S}
\]

Where
- \(Ke\) = Net operating Income
- \(E\) = Equity capitalization
- \(S\) = Market Value of stock

3. **Traditional Approach**

The Traditional approach assumes that there is an optimum Capital structure by increasing the value of the firm or the cost of capital by a judicious use of debt and equity Capital. As per this approach there is optimum capital structure, when the cost of capital of the firm is lowest and the value of the company is the highest.33
4. **Modigliani Miller Approach**

The Modigliani Miller approach is identical with the net operating income approach. It rejects the traditional theory by justifying that the cost of capital remains constant, in all degree of leverage. This approach provides analytically sound and logically consistent behavior. Justifications in favour of their hypotheses and reject the traditional view as incorrect.\(^34\)

Modigliani Miller approach states the relationship between leverage and the cost of capital. According to this approach, more debt in the capital structure will not increase the value of the firm because the benefits of cheaper debt will be exactly offset an increase in the cost of equity. Thus the basic M.M. hypothesis is that the value of the firm and its cost of capital are completely unaffected by its capital structure. The main features of this approach are as follows:

1. The total market value of the firm and its cost of capital are independent at its capital structure.

2. The expected yield of a share of stock is equal to the capitalization rate of a pure equity stream.

3. The cut off rate of investment is completely independent in which an investment is financed.
The capital structure has to be determined initially at the time of promotion of a company. The financial manager has also to deal with existing capital structure. The company needs funds to finance its activities continuously. The capital structure decision is a continuous process. It has to be taken whenever a firm needs additional finance.

1. Capital Structure Planning During Gestation Period

The word gestation may connote many things. The term 'gestation' may be denoted either -

A. as the period up to the point when the construction of the factory in operation or,
B. as the period up to the point when the whole plant is commissioned or,
C. as the period up to the point when the plant is fully utilized.
D. as the period of break even point, or
E. as the period up to the point when the plant operators at the maximum rate of profit.\(^{35}\)

In fact, the last three Versions are not dependable because they do not have any precise meaning. Full utilization of the plant may be handicapped due to demand constraints. The gestation period refers to the preoperative state of an enterprise.\(^{36}\)
2. Capital Structure Planning the Operative Period

Operative period denotes a stage of an enterprise during which goods are produced and put for sale. With regard to formulation of financial policies during the operating period, the main objectives of such policies will be the maintenance of liquidity and minimization of the cost of short term finance. In order to achieve these objectives, the firms as mentioned earlier, may formulate three types of policies.

a. Policies in regard to the amount of capital required.

b. Policies in regard to the ways of financing these requirements.

c. Policies concerning credit and collection activities of the firm. They may be included in the policies concerning the amount of capital required during the operating period called as working capital or circulating capital or short term financing.

3. Capital Structure Planning During Expansion Period

In addition to the gestation and operative period a public undertaking many also pursue certain specific goals during the period of expansion. Financial goals during the expansion will be quite different would depend considerably upon its form of organisations during the expansion period of an enterprise; the major emphasis on the policy formulation has to be on financing. The elementary theory of finance suggests that in ordinary circumstances external financing, particularly
loan capital, though cheaper, is relatively more risky capital than internal financing. The more advantageous approach may be to analyze policies in regard to internal NAD external financing. Internal finances are the result of the efficient working of an enterprise and take the form of ploughed back surpluses. Such surpluses include not only the net profit but also the depreciation and other reserve funds. External financing will come out of the sources external to the enterprises. Sources external to the enterprise may be of two types, namely, local and foreign sources.40

There is several possibilities current capital structure either before or after the projected new financing: marginal capital structure i.e. proportion of various types of capital in the total of additional funds to be raised as a certain time, and optimal capital structure. The marginal capital structure is related not only to the optimal but also to the current capital structure. Moreover, it assumes that each financing decision is independent of all other capital raising activities. Whereas optimal structure is based on proper balance with the effects of risk, leverage income control and other relevant factors.

Investors are usually average to risk and risk overseen leads them to require high yield on risky investments. If a company gets more debt, the required rate of return on its equity goes up. The component cost of debt is also affected by the financial leverage. The cost of debt can be expected to rise at an increasing rate with leverage.41
Capital structure thus focuses on the value of the firm. The value of the firm is affected by earning and cost of capital, management of capital structure. The capital structures generally vary depending upon the stages in the life cycle of the enterprise. There are three basic elements in determination of capital structure.

i) Retained earning;

ii) Financial risk; and

iii) Cost of capital.

i) **Retained earning**

Retained earnings belong to equity shareholders. The firms retain a part of the earnings to finance their forthcoming investment projects. The firm should adopt the policy to retain earnings. Retained profits become the additional capital resources of the company. Cost of retained earning is thus, the rate of return which the firm can earn by investing the retained earnings in another enterprises.\(^42\)

ii) **Financial Risks**

It includes the risk of possible insolvency and the variability in the earnings available to equity shareholders. Risk of possible insolvency is determined by the probability of cash to meet fixed financial charges such as interest on debt. Payment for lease contracts and dividend. Variability
in the earnings to equity shareholders increases the uncertainty of return on their investment which ultimately affects the value of the firm.  

iii) Cost of Capital

Cost of capital is another important consideration formulating the capital structure of a firm. This term is used in different sense such as cost of specific sources of capital such as cost of debt, the cost of equity etc. but it has been suggested that the term cost of capital should be used in the composite sense of the weighted average cost of capital. This cost consideration is significant not only as an investment criterion, but also as a yardstick to evaluate the financial performance of top management.

COMPOSITION OF CAPITAL STRUCTURE

Modern concept of capitalization suggests that logical capitalization should comprise all sources of capital available for a firm. Capital is the most important aspect of financial planning. The form or composition of capital structure may be regarded as the result of planning by management but often it is the outcome opportunism arising out of conditions in the investment market, capitalization should comprise of all sources of capital which are employed to raise desired amount of capital for a firm. Such capital may come in many forms long term debt, equity shares, preference shares, reserves and other sources etc.
The term capital structure has several dimensions amongst which, financing mix is very significant. Its other dimensions include the investment decisions of the firm, the optimal use of leverage, the timing and pricing of issues as well as determining acceptable level of risk and liquidity. The basic pattern of capital structure may take any one of these forms in the arena of their financing decision making as discussed below.

i) Share capital - preference share and equity share.

ii) Long term loans - debentures and other long term loans.

iii) Reserve & surplus.

1. Preference share capital

Preference share capital represents a hybrid form of financing. The preference shares are those shares which are entitled to have statutory priority in payment of dividends and repayment of capital. They have no voting right or privileges except on the resolutions which vitally affect their interests or legal position. The reason for not giving voting rights perhaps seems to be that their interest in the enterprise is more or less secured. The main objective for these shares is to cater the needs of the investors who care for safety of principal and feel satisfied with lower but definite and regular income. Preference share holders. Thus occupy a position between that of equity share holders and debenture holders in the capital structure. The preference share holders are owners of the
enterprise but not controllers. Several rights and privileges are attached with the preference shares of the company.47

The preference share may be cumulative or non-cumulative with respect to dividend. Barring a few exceptions, preference shares in India carry cumulative features with respect to dividends. Preference shares issue may also contain a call feature by which the issuing company has the right to call the preference shares wholly or partly at a certain price. Preference shares may be convertible or nonconvertible in to equity shares. The holders of convertible preference shares enjoy the option of converting preference shares in to equity shares at a certain ratio during a specified period. Preference share capital is advantageous to company in several ways, such as there is no legal obligation to pay preference dividend; preference share capital is generally regarded as part of net worth and preference share under normal circumstances, do not carry the voting right and, therefore, there is no dilution of control.

2. **Equity share capital**

Equity share capital is regarded as an important part of share capital.48 The equity shares holders are entitled to be repaid their capital on the winding up or an reduction of capital only after the preference shares have been fully paid and are entitled to be paid dividend on their shares only after all preference dividends have been paid. The management of the company is controlled by the equity share holders as
such the voting power at the annual general meeting belongs to the equity shareholders.49

Equity shares are the variable cost bearing securities and they provide the necessary flexibility in capital structure and marginal discretions. They provide the financial base on which the ability of the firm to own debt is estimated. Equity shares are always irredeemable. There are some advantage in issuing equity share capital from the company’s point of view, such as equity shares provides long term capital to the firm; equity shares have no fixed burden on the income of the company; equity share capital increases the credit worthiness of the firm.

Equity shares give more income to investors as they are residual claimant in the income of the firm, in it is running on a better way. The use of debt may enable the firm to utilize funds at a fixed cost. Furthermore, the equity shares provide them voting right or right of control. They appoint directors and auditors of the company.50 In case a company issues equity shares for additional capital, it can not take the advantage of leverage.

The equity share dividend is not deductible as expenses for calculating the taxable income of the enterprises. The board of directors may postpone the payment of dividend on equity share capital in spite of sufficient profits on the ground that they would require further financial requirement in the near future. The equity shares are definitely better than
the preference shares. In case the company generates more earnings, it can pay dividends on equity shares. The management can adjust the capital structure by redeeming preference shares if necessary, they provide capital without any voting right in the company. Thus both types of shares have their definite advantages and limitations. So it is clear that both the equity share and the preference share alone will furnish all the advantages of a sound capital structure and therefore an optimum ratio is necessarily required.51

3. Debt financing

Debt financing is related to the availability of long term loans which consists of bonds, and debentures, and public deposit which are payable after the expiry of some long term period. They should be shown separately in the balance sheet, as their effect on financial position of undertaking is quite different from short term loan. It may be either in form of debenture financing or term loan financing or financing through rising of public deposits.

(a) Debentures

The term 'debenture' is given under the seal of the company and containing a contract for the repayment of the principal amount at a specified date and also for the payment of interest. It is one of the frequently used methods by which a business can procures long term fund
for its initial financial needs or, for its subsequent requirements of growth and modernisation. Debenture means a document which either creates a debt or acknowledges it, and any document which fulfils either of these conditions is a debenture. A debenture is thus a creditor ship security issued in the same manner as shares. These can be issued at par, at premium, or at a discount. Debenture has got a definite and significant place in the financial plan of a company. A company has to employ this source of finance for its initial needs and also for its expansion and development schemes. Financing by debentures gives certainty of finance for a specific period and provides an opportunity to trade on equity. The specific cost of debt capital, represented by debentures, is much lower than the cost of preference or equity capital.

(b) Term Loans

Long term debt is often called funded debt. When a firm is said to be planning to fund its floating debt is planning to replace short term debt with securities of longer maturity.

Term loan is a contract under which a borrower agrees to make a series of interest and principal payments specific dates to a lender. Term loan have three major advantages over public offerings - speed, flexibility and low issuance costs. These are negotiated directly between the lender and the borrower. Bond is a long term contract under which a borrower agrees to make payments of interest and principal on specific dates, to the
holder of the bonds. A bond issue is generally advertised to the public, and actually sold to several investors.

(c) Public Deposits

Many industrial organizations in India seek to raise part of their required fund in the form of deposits from the public. Deposits are accepted for 6 month to none year. Public deposit is a direct method of channeling the public money in to industrial activity it is the direct and quick method of current financing.

4. Reserves and Surpluses

Reserves and surpluses also constitute an important source of financing which comprise of the various provisions, general reserves and funds that are created out of operating and non-operating profits. The provision is a charge against the profit where as the reserve is an appropriation of the profits. The reserve may be created for a specific purpose like repairs and renewal reserve or it may be created for general purpose like general reserve.

The reserve may be revenue reserve or capital reserve. The revenue reserve is created by setting aside certain portion of profit while capital reserve is created from sale or revaluation of assets at a price higher than their book value or through transfer of share premium account. Revenue reserve is available for distributional way of dividends among share
holders. While a capital reserve is not available for distribution among the
share holders.\textsuperscript{55}

**Optimum capital structure**

If leverage affects the cost of capital and the value of the firm, an
optimum capital structure would be obtained at that combination of debt and equity that maximizes the total value of the firm or minimize the weighted average cost of capital.\textsuperscript{56} There is an optimum capital structure at which the value of the firm is the highest and the cost of capital the lowest.\textsuperscript{51}

An optimal capital structure helps in accounting for the effects of risk, leverage incomes, control and other relevant factors, which also minimizes the overall cost of capital to the firm and provides a correct cut-off value for investment decision. In case the firm has determined a long range optimal capital structure and has plans under which it expects to achieve that desired mixture of total finance. The existing capital structure of the company can also be used unless there are reasons to believe that it deviates substantially from the optimal capital structure. The optimal capital structure may be defined as the relationship of debt and equity securities which maximize the value of a firm's equity stock. The optimum capital structure occurs when a firm's overall cost of capital is at lowest point. There is thus a link between the cost of capital and the optimum capital structure.\textsuperscript{58}
A firm should try to maintain an optimum capital structure with a view to maintain financial stability. The optimum capital structure is obtained when the market value per equity share is the maximum. It may, therefore be defined as that relationship of debt and an equity security which maximizes the value of a company's share in the stock exchange. The objective of the term should therefore be to select a financing or debt-equity mix which will lead to maximum value of the firm. Optimum leverage can be defined as that mix of debt and equity which will maximize the market value of a company. Further the advantage of having an optimum financial structure, such an optimum does exist, is two fold., it minimizes the company's cost of capital which in turn increases its ability to find new wealth - creating investment opportunity to engage in future wealth creating investment it increases the economy's rate of investment and growth.59

CAPITALISATION

Capitalization includes a firm's ownership capital and barrowed capital as represented by its long term indebtedness. Capitalization is used to indicate the total amount of securities outstanding in form of long term securities. Sometimes capitalization means the total accounting value of all the capital regularly employed in the business. Thus, the capitalization refers to the volume of capital while the capital structure refers to the composition of capital which is represented by the capital
stock, the reserves and surpluses and the long term debt. The capitalization on the other hand, involves computation, appraisal or estimation of present value of capital.

There is a sizeable difference between the capitalizations of an established concern with that of a new company. The past records of operations provide a basis upon which one has to proceed and the future needs may be more nearly computed than when starting with an untried and unknown venture. The capitalization of a going concern can be determined on the basis of value of the concern as expressed in the securities market and value of the concern of the capitalized earnings.

The volume of capitalization is arrived at by adding up the cost of fixed assets, such as land and building, plant and machinery, the working capital required for the continuous operation of the concern, the cost of establishing the company and the expenditures related to promotion. Such calculation of capitalization is useful in case of a new company because it helps the promoters to know the amount of funds to be raised. According to earning theory, the capitalization of a company depends upon its earning and expected rate of earnings for the capital invested in the business. For determining the value of capitalization, new companies cannot depend on this theory because it is difficult to know the expected earnings of such companies which depends on the various unpredictable factors. The cost theory provides a better basis for capitalization than the
earning theory of capitalization in the case of new company. Capitalization may further be studied into two groups such as over capitalization and under capitalization which are being discussed as follows:

**Over-Capitalization**

The term over capitalization is generally used to convey the sense of over statement of the value of the properties held by the concern of a redundancy of capital. A company is over capitalized when its earning are not enough to yield a fair return on the amount of equity and bonds that have been issued on when the amount of securities outstanding exceeds the current value of the assets. It is obvious that over capitalization is an economic irregularity experienced in the long term and caused by the inability of management in assessing the future prospects care fully. It connotes the situation of issuing excess shares, debentures or bonds etc. by the company than that actually acquired.

Over capitalization does not always mean excess of capital. With any amount of given capital, if a firm fails to earn a fair rate of return on its assets, it is said to be over capitalized. Over capitalization can be determined either by a comparison between par value and marked value of equity shares of the firm where the market value is less than par value, there is over capitalisation. Par value of shares refers to the face value of shares which is stated in the capital clause of the memorandum of
association of the company. Book value of shares represent the value which is obtained by the company by the number of the shares outstanding. Over capitalization may, sometimes, result because high expenses were incurred in promoting an enterprise and promoters were paid high price for their promotional services. Over capitalization may also be the result of shortage of capital as on account of under estimation of financial requirements, a firm may be capitalized at low level. Taxation policy of the government may also be responsible for companies over capitalization, as to negative taxation policy firm's tax liability increases and is left with small residual income for dividend distribution and retention purposes.

**Under Capitalization**

The under capitalization is just opposite to over capitalization. It does not necessarily mean the shortage of capital. Under capitalization occurs when the rate of earnings of a firm's exceptionally high as compared to the rates of earnings of similar firms in the same industry. A firm is also under capitalized when it has quite small amount of capital with which it operates. 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. When a company under capitalized, the rate of dividend on its
equity shares goes up and the market value of equity shares goes high and high encouraging speculators to buy them.

Over capitalized concern have always earnings superiority over average concern engaged in same line of activity. Thus under capitalization is indicative of sound financial position and good management of the company. Under capitalization is not an economic problem but a problem in adjusting the capital structure. An enterprises becomes under capitalized if the earnings of new venture were under estimated, its actual earnings much more than what was anticipated; a low capitalization rate was employed to determine capitalization of a company; it is set up in recessionary conditions, and it follows a conservative dividend policy. Under capitalization is advantageous to share holders in as much as they get high dividend income regularly.

Financial Structure and the of Capital

Cost of capital is a standard of comparison used in modern financial decisions. Acceptance or rejection of an investment project depends on the cost which a company is required to pay for financing it. Prudent principle of financial management calls for selection of such projects as promise return higher than the cost of capital. Cost of capital is also an important factor in designing capital structure. This is equivalent to the average rate of return that an investor in a firm would
expect for supplying capital. The minimum rate of return is tantamount to cost of capital.\footnote{68}

The cost of capital plays a crucial role in capital budgeting decision. The cost of capital determines the acceptability of all investment opportunities regardless of the techniques employed to judge the financial viability of a project. Again cost of capital provides useful guidelines in determining the optimal capital structure of a company. The financial manager determines the optimal level by means of establishing relationship between cost of capital and value of stock of the company because they reflect the capital mix.\footnote{69} The relationship between financial structure and the cost of capital may be viewed in the light of the following points:

(i) **Sales Stability**

Sales stability and debt ratios are directly related. The stability of the utility industry, combined with relatively favorable growth prospects has resulted in high leverage ratios in that industry.

(ii) **Competitive Structure**

Debt servicing ability is dependent upon the profitability, as well as the volume of sales. Hence the stability of profit margins is as important as the stability of sales. A growth industry promises higher profit margins, but such margins are likely to narrow.
(iii) **Assets-Structure**

Assets structure influences the sources of financing in several ways. Firms with long lived fixed assets especially when demand for their output is relatively assured, use long term mortgage debt extensively.

(iv) **Management Attitudes**

The management attitudes directly influence the choice of financing with the objective of Control of the enterprise and risk. Large corporations whose stock is widely owned may choose additional sales of common stock. Because they will have little influence on the control of the company and also because management represents ward ship for the owners, it is often less willing to take the risk of heavy fixed charges.  

Capital or financial components are the items on the liability side of the balance sheet along with various types of debt preferred stock and common equity. Any net increase in assets must be financed by an increase in one or more capital components. Capital is a necessary factor of production, and like and other factor, it has a cost. The cost of each component is defined as the component cost of that particular source incurs.  

Cost of capital is the value of the shareholders funds in the business, plus borrowing. In setting the objectives of the business, management specifics the proportion in which sources of funds are to be
used. This proportion is used in determining the cost of capital in future. All funds contribute to a pool of funds available for investment and from that point they can not be distinguished to specific uses.\textsuperscript{72}

Cost of capital is another important concept in formulating a firm's capital structure. This term is used in different sense such as cost of specific sources of capital, cost of debt, the cost of equity etc. But it has been now agreed that the term cost of capital should be used in the composite sense of the weighted average cost of capital.\textsuperscript{73} This concept is significant not only as an investment criterion, but can also be used to evaluate the financial performance of top management.\textsuperscript{74}

The cost of capital represents the rate of return which the company must pay to the supplies of capital for use of their funds. A company's cost of capital is really a rate of return that will be required from an investment in order to maintain the value of the enterprise. Economists define cost of capital in two sense, Cost of capital in terms of cost of gearing funds needed to finance the project and Cost of capital in terms of the opportunity cost of the funds to the firm.\textsuperscript{75}

The cost of capital as an operational criterion is related to the firms objective of wealth - maximization. The cost of capital is visualized as being composed of several elements. These elements are the cost of each component of capital. The term cost of capital, weighted cost of capital,
composite cost of capital, and combined cost of capital are used in synonymously and interchangeably.\textsuperscript{76}

The wealth maximization objective requires that the share holders fund raised by issuing shares or by retaining net earning. The funds raised by issuing debt and preference capital should be used only when they do not reduce the market value per share. Cost of capital may be discussed as follows:

(1) **Future Cost and Historical Cost**

It is generally known that in decision making, the relevant costs are future costs, not the historical costs. The financial decision making is no exception in this regard. It is the future cost of capital which is significant in making financial decisions. In designing the capital structure, the firm aims at minimizing the future cost of capital not the costs incurred in the past.\textsuperscript{77}

(2) **Specific Cost and Combined Cost**

The cost of each component of capital (common shares, debt, preference share etc.) is known as the specific cost of capital. This is the most appealing concept of the cost of capital. Over the long run, the firm would maintain a balance between debt and equity component of capital. Because of the connection between the methods of financing and the firms desire to have a target capital structure.\textsuperscript{78}
The composite or combined cost of capital is an inclusive cost of capital from all sources: debt, equity and preference capital. The combined cost of capital is, thus the weighted cost of capital. In the capital structure decisions. It is the overall mix of financing which is important in valuing firm as an on going over all entity.\textsuperscript{79}

(3) **Average Cost or Marginal Cost**

The average cost of capital, is the weighted average of the costs each component of funds employed by the firm, the weights being the proportions of each component in the capital structure, whereas the marginal cost of capital is the average cost of additional funds raised by the firm.\textsuperscript{80}

(3) **Explicit Cost and Implicit Cost**

A firm raises funds by issuing equity, preference or debt or by retaining earnings or selling assets etc. All these financing opportunities are known as the sources of capital or funds. The explicit cost of any source of capital may be defined as the discount rate.\textsuperscript{81}

The implicit cost of capital arises when the firm considers alternative uses of the funds raised. The implicit cost is the opportunity cost. It is the rate of return on other investments available to the firm in addition to that currently being considered.\textsuperscript{82}
The cost of capital is an important concept in formulating a firm's capital structure. In recent years, it has received considerable attention from theoreticians and practitioners. Business firms have not been able to solve the problems of fixing financial standards in an uncertain world. Management in progressive enterprises, however, set minimum standards of required performance decide the size and composition of capital structure.83

The cost of capital to a company is the rate of return it must earn on its investment in order to satisfy the expectations of investors who provide long term funds to it. The important concept in financial management is the linkage of investment and financing decisions, the cost of capital is important to study this linkage. It is also important for a proper analysis of capital expenditure decisions, which are the most important decisions taken by a firm; several decisions like leasing, long term financing, and working capital policy require estimates of cost of capital, and in order to maximize the value of the firm, the cost of all inputs (including the capital input) must be minimized and in this context the firm should be able to measure the cost of capital.84

The value of the firm increases when return on investment is greater than cost of capital. Cost of equity capital is the minimum rate of return that a company must earn on equity financed portion of its investment in order to leave unchanged the market price of its stock.85
Cost of capital is affected by hypotheses about risk, capital structure and market valuation. The role and measurement of risk, capital structure and market valuation are fairly controversial. Two important conditions i.e. the existence of uncertainty and variety of sources of funds present difficulty in the measurement of the cost of capital. The cost of capital has undoubtedly great significance in financial decision making. 86

In order to compute the composite cost (over all cost) of capital, the financial manager has to determine the types of funds to be raised and their share in the total capitalization of the company, to calculate the combined cost of capital of the company by assigning weights to each type of funds in terms of the proportion of funds so raised to total fund.87

(A) Cost of Preference Share Capital

Cost of preference share capital is a function of the dividend expectation of investors. Preference share capital is never issued with an intention not to pay dividends. Although it is not legally binding upon the firm to pay dividends on preference capital, yet it is generally paid when the firm makes sufficient profits. As a consequence, the firm may find difficulty in raising funds by issuing preference or common shares. Moreover, the market value of the common shares can be adversely affected if dividends are not paid to the preference share holders.
(b) **Cost of Equity Share Capital**

The cost of equity share is defined as the minimum rate of return required by the equity shareholders or the minimum rate of return that a company must earn on an investment of leave the current share price unchanged.\(^8\) The cost of equity share capital indicates the minimum rate which must be obtained on the projects before their acceptance and the raising of equity capital to finance them, it should lead to an increase in the net present value of their wealth.\(^9\)

The common stock holders are generally interested in having the highest possible earnings per share, provided that there is no decrease in the rate at which their earnings are capitalized in the market. Thus any capital budgeting decision that increases the market price of the common stock treated as the best decision.

The problem is complicated further by price fluctuations in common stocks. The cost of retained earnings or earned surplus also presents difficulties to the financial manager. However retained earning belongs to the common stock holders. If the corporation were required to pay out all profits to the common share holder and issue new common stock every time if the corporation wanted to increase its equity capital.\(^1\)
(c) **Cost of Debt Capital**

The company also raises debt capital to meet the financial requirements. Seasonal fund needs are of short duration which is generally met by banks through short term loans for working capital. They charges interest rate, which is an annual and prescribed in the loan agreement. The long term debt arises when a firm promises to pay after a specified time period. Long term financing is closely related with the capital structure trend as reflected by the debt equity ratio in various industries.

The important source of long term debt is debenture. This source has recently raised the capital in such magnitudes that the Reserve Bank of India was required to fix norm of debt – equity ratio from time to time. The company may also increase its financial resources and issue of debentures. Debentures are one of the main sources of raising capital to meet long and medium term financial needs. Over the years debentures have occupied a significant position in the financial structure of companies.\(^{92}\) The excess use of debt may reduce the price of the common stock in the market. The financial manager may wish to consider this effect as part of the cost of the debt.\(^{93}\)
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