CHAPTER-1
CAPITAL STRUCTURE, CAPITALIZATION AND ITS PERTINENT ASPECTS - THEORETICAL FRAMEWORK

1.1 CONCEPT OF CAPITAL:

The concept of capital structure is understood variously. To an individual capital is synonymous with cash in hand and at bank. The Standard English Dictionaries have used the term mostly in this sense. The Random House Dictionary of the English Language defines capital in the following manner.

I. The wealth, whether in money or property, owned or employed in business by an individual, firm, corporation etc.

II. An accumulated stock of such wealth.

III. Any form of wealth employed or capable of being employed in the production of more wealth.

IV. Accounting:
   a. Assets remaining after deduction of liabilities: The net worth of a business
   b. The ownership interest in a business.

According to LONGMAN DECTIONARY capital means money of property, especially when it is used to start a business or to produce more wealth. But in economic viewpoint capital is one of the factors of production which is used in the production of further wealth in accounting practice, capital is used in the sense of a fund and an asset. Under the fund concept, the capital of a firm is the sum total of funds that have been employed for its running. It corresponds to the idea of the total capital and may also be described as financial capital. The fund concept recognizes the separate entity of the firm and considers capital from liability side of the balance sheet.

Funds collected from various sources are interested in acquisition of assets of a business. The assets are employed for earning revenue and, as such, they are called capital goods or produced means of production. But in the accountant’s eyes capital is rather, the collected funds invested in the business. Such a capital which in other words, may be called the financial capital. Financial capital, as consisted of
components derived from various sources, is usually known as the capital structure of a business.

According to the assets concept, capital means capital invested in fixed assets and current assets. In both the cases, the assets may comprise either of tangible or intangible including fictitious assets. To an accountant, as asset is a capitalized expenditure and represents claims to services. It need not always be associated with material object having a tangible existence. Further, though assets in general should possess value, all assets may not have value in exchange. Thus, in so far as the intangible assets satisfy these criteria, there is no constraint on the part of the accountants in including intangibles among assets. Fictitious assets, such as, debit balance of profit and loss account, balance of share or debenture discount are, however, to be rated more as deduction from relevant liabilities than assets by themselves.

From the above mention fact we can take chance to say that every business requiring capital will exist. The amount of capital needed by a concern should also be adequate. As the capital gives the return, the return should be reasonable. To get an appropriate return the capital invested should also be appropriate. No businessman wants to invest if the return is not proper. As such every firm tries to get adequate return as the amount invested. Then ultimately the amount invested will also be adequate. If the capital is not adequate to the returns, then the concern may face the danger of over capitalization or under capitalization. So in order to prevent this danger, every firm should have adequate capital keeping in view the return on that.

1.2 CAPITAL STRUCTURE:

The Random House Dictionary of the English defined the Word “structure” as: Mode of building, Mode of construction organization or arrangement of parts, elements or constituents, a pyramidal structure. Anything composed of parts arranged together in someway: and organization the system of relations between the constituent groups of a society.
To give a structure, organization or arrangement to construct a systematic framework for. Essentially the Word “Structure” is a term used in the science of engineering. In case of construction of a building there are some standard proportion in which various elements are integrated together. It is expected that business enterprises while raising the resources should also think of proportions in which they can mix the sources of capital. This is the basis for the concept of capital structure.

Capital structure is defined in two ways. According to some authors capital structure refers to the relationship between the long term debt and equity. In other worlds, it takes into consideration only the long term sources of capital it excludes short term capital from its purview. The RBI and the All India Financial Institutions also use the term in this sense. As a matter of fact the controller of capital issues fixed a guideline for the capital structure of companies basing on the relation between long term debt and equity.

On other hand, some believe that capital structure refers to the relationship among all sources all sources of capital. They do not want to distinguish between long term and short term sources. In the opinion of Walker and Baughn capital structure is synonymous with total capital: this term refers to the makeup of the credit side of the balance sheet or the division of claims among trade creditors, bank creditors bond holders stock holders, stock holders etc. The latter expression has wide connotation and is known as financial structure. Landsay and Sametz feel that in view of the great importance of bank credit and trade credit it seems artificial to short term or informal debt from capital structure problems especially for small firms where current liabilities compromise a large part of the sources of funds. Thus, the concept of capital structure is interpreted in two ways. This problem is tackled cleverly in finance by interpreting the second situation as that of financial structure. Above these, there are different definition given by different authors viz Gesternberge, Bhandari & Kulshreshtha, J.K. Sarkar M.C. Shukla, James C. Vanukne, I.M. pandey, Ravi Kishor etc. Considering the various expressions capital structure, only long term sources also.

In this study, the Word capital structure is used to the to the firm’s concept, which includes the composition of different sources also in this study Word capital structure is used to the firm’s concept, Which includes the composition of different sources of long funds only, i.e. long term debt and equity.
1.3 CAPITALIZATION:

1.3.1 Meaning of Capitalization:-

Capitalization is an important constituent of financial plan in common parlance, the phrase ‘capitalization’ refers to total of all kinds of long term securities at their par values. However, scholars are not unanimous so far as the concept of capitalization is concerned. While some of them have viewed it in a narrower sense. Others interpret it in broader terms. Broadly Speaking, a capitalization refers to not only the quantity of finance needed but also the Way in Which its long -term obligations are distributed between different types of securities including long term borrowing in the interest of the film i.e. patter & administration of capital thus, the term capitalization has been used as alternative to the Word “Financing Plan”.

Broader concept of capitalization is erroneous and misleading and practically meaningless. According to experts holding the narrower view, the term capitation connotes the process of determining the quantum of founds that a film would require to run its business. Decisions pertaining to the term ‘capitalization’. Majority of the experts have used the term capitalization in sense. We also perfectly agree with concept of capitalization because the definition is free from any ambiguity and brings out clearly the distinction between capitalization and capital structure. Gerstenberg defines capitalization as the total accounting value of all the capital regularly employment in the business. Bonneville & Dewey have defined capitalization as “The balance sheet value of stock & bonds outstanding”

Walker and Baughn are of the opinion that the use of capitalization refers to only long term debt and capital stock and short term creditors, do not constitute of capital is erroneous in reality, total capital is funded bay short-term creditors long –term creditors and others. They further opine that the sum of long-term debt and capital rather than the capitalization the above concept of capitalization is most logical. Capitalization should comprise all sources of capital, which are employed to raise desired amount of capital for a firm.

1.3.2 Base of capitalization
One of problems facing the financial manager is determination of value at which a firm should be capitalized because it have to raise funds accordingly there are two theories that contain guidelines with which the amount of capitalization can be surmised

1. **Cost Theory of Capitalization** - According to this theory capitalization of a firm is regarded as the sum of cost actually incurred in setting of the business. A firm needs funds to acquire fixed assets, to defray promotional and organizational expenses and to meet current asset requirements of the enterprise sum of the costs of the above asset gives the amount of capitalization of the firm, acquiring fixed assets and to provide working capital and to cover possible initial losses, it will capitalized. Under this method more emphasis is laid on current investments. They are static in nature and do not have any direct relationship with the future earning capacity. This approach gives as the value of capital only at a particular point of time which would not reflect the future changes.

2. **Earning Theory of Capitalization** - According to this theory, firm should be capitalized on the basis of its expected earning. A firm is profit seeking entity and hence its value is determiner according to what it earns. The probable earning are forecast and then they are capitalized at a normal representative rate of return. Capitalization of a company as per the earning theory can thus be determined with help following formula.

\[
\text{Capitalization} = \text{Annual Net Earnings} \times \text{Capitalization Rate}
\]

Thus for the purpose of determining amount of capitalization in an enterprise the financial manager has to first estimate of annual net earnings of the enterprise where after he will have to determine the capitalization rate. The future earning cannot be forecast exactly and depend to a large extent on such external factors which are beyond control management.

A. **Estimating Annual Earnings:**
In capitalization of earning only future annual net earnings is used. The task of estimating future returns is difficult one. In the case of an existing concern, future
earning can be based on the past earnings since the latter gives a partial evidence of what future earnings will be in computing these historical figures care is taken to remove non –recurring gains such as gain realized on the sale of building. Usually only the earning attributable to operations of the enterprise are included to the future that is to be capitalized. Also income tax is deducted from the earnings figures. The earning figures is further adjusted for any other factors that would make the adjusted amount more representative of the expected future earnings. The long run prospects of the company should also be taken into consideration. These estimates are then compared with the actual figures of firms engaged in the same business. Allowance of course, must be made for differences in size, age, location, managerial experience, growth rate and the like factors in such comparison. The earnings so estimated are used for capitalization purpose.

B. Determining Capitalization Rate:
Capitalization rate is investor’s expected rate of return. More specifically capitalization rate is same as to cost of capital. Capitalization rate can at best be determined by studying the rate of earnings of the similarly situated companies in the same industry and the rate at which market is capitalizing the earnings. Such a study involves as analysis of the return on stocks and bonds. Thus capitalization rate must reflect return on the invested capital that would adequately compensate the investors for the use of his funds and the risk undertakes. In actual practice, average price earnings ratio of companies engaged in a particular industrial activity is taken as capitalization rate of the company. In actual practice business enterprises rely on different sources of financing for their capital needs and share capital constitutes only a part of the total funds. Under such a situation capitalization rate arrived at on the basis of price earnings ratio will not be a representative one.

1.4 OVER CAPITALIZATION:
1.4.1. Concept of Over Capitalization.
The phrase ‘Over Capitalization’ should not be confused with excess of capital. Truly speaking, over capitalization is a relative term used to denote that the firm in question is not earning reasonable income on its funds.
According to Bonneville, Dewey and Kelly, when a business is unable to earn a fair rate of return on its outstanding securities, it is over capitalized. Thus over capitalization refers to that state of affairs where earning of the corporation do not justify the amount of capital invested in the business.

The main symptom of over capitalization in a company is the amount of earning which it is making on its total capital. Thus, a company is said to be over capitalized when it earns less than what it should have earned as fair rate of return on its total capital. To ascertain whether the company is earning reasonable rate of return, a comparison of the company’s rate of earnings should be made with earning rates of return, it is indicative of the fact that the company is not able to earn fair rate of return on its capital. However, this is not logical. In the first instance, par value-face value of shares is static in character, which remains unaffected by business oscillation, Secondly, market value of shares of a company is highly volatile. It is a state of affair in which dividend rate is too low to sell shares at their par value. It denotes low earning for share and high proprietary ratio. Similarly, the capital gearing ratio will be low and the current ratio will be high. It depends mainly upon internal factors like present and perspective earnings position of enterprise and its dividend policy and external factors such as general price level changes, purchasing power and economic and industry policy of government. In view of this, market value of shares of a company can at best be worked out by averaging out the market price of shares of the company ruling in the market over different dates. Thus, comparison of book value with real value of share is the most satisfactory criterion to test the state over capitalization.

1.4.2. Cause of Over Capitalization.

There are various factors responsible for over capitalized state of a company important among these are listed below:-

(1) Company promoted with Higher Promotion Expenses.
(2) Promotion of a company with inflated assets: - A company right from its incorporation falls prey to over capitalization if it has been established with assets acquired at higher prices which do not bear any relation to their earning capacity.
(3) Issuing of more capital than required.
(4) Over estimating Earning at the Time of Promotion.
1. Formation of Expansion of Company during inflationary period.
2. Applying High Capitalization Rate to Capitalization Earnings.
3. Liberal Dividend Policy.
4. Fiscal Policy.
5. Defective Depreciation Policy i.e. inadequate depreciation.
6. Higher Rate of Borrowing.

1.4.3. Result of over capitalization:

The state of over capitalization affects the company and its owners and also engulfs the society as a whole in the following manner.

1. **On Company:** The effect of over capitalization on company is disastrous. Its financial stability is spoiling something important. The company loses investor’s confidence owing to irregularity in dividend payments caused by reduced earning capacity. Consequently it has to encounter enormous problem in raising capital from the capital market to satisfy it’s developmental and expansion requirements. Commercial banks too feel any shy of lending short term advances to such company to meet its working capital requirements. This will hamper production. Over capitalized concerns may at times fail to make regular payments of interest sums and repay principal amounts by the date. Under this situation creditors demand reorganization of the company. Banks and other financial institutions for similar reasons hesitate to lend. Even if they agree to grant loan terms and condition hardly acceptable.

2. **On Society:** Over capitalization effects the society as a whole. Over capitalized concerns to maintain their credit take every possible means to raise prices to tide over declining tendency of income. They try to increase the price and deteriorate the quality of products. But to take recourse to this practice becomes difficult under perfect competition and the result is the liquidation of such concerns.

1.4.4. Remedies of Over Capitalization:
Effect of over capitalization is so grave that the management should take immediate measures to rectify the situation of over capitalization as soon as the symptoms of over capitalization are observed.

(1) Redemption of High Dividend Preferred Stock.
(2) Reduction in Interest Rate on Debt.
(3) Reduction in Bonded Debt.
(4) Reducing par value of shares.
(5) Reducing number of shares.

1.5 UNDER CAPITALIZATION:

1.5.1 Concept of Under Capitalization.

The phrase under capitalization should never be misconstrued with inadequacy of capital Gerstenberge says ‘A corporation may be undercapitalized when the rate of profit is exceptionally high in relation to the return enjoyed by similarly situated companies in the same industry or it has too little capital to conduction business. It’s against over capitalization, under capitalization implies an effective utilization of finance, a high rate of dividend & the enhanced price of share. Here the capital of the company is less in proportion to its total requirements. In this state of affairs the real worth of the assets exceeds their book value and the rate of earning is higher than a corporation is able to offer. When a company succeeds in earning abnormally large income continuously for a pretty long time symptoms of under capitalization gradually develop in the companies. Under capitalization is an index of effective and proper utilization of funds employed in the enterprises.

1.5.2 Causes of Under Capitalization:

Point causes of under capitalization in corporation are s under:

1. Using low capitalization Rate
2. Under estimation of Initial Earnings.
3. Conservative Dividend Policy.
5. Deflationary Conditions.
6. Retained earnings.

1.5.3 Consequences of Under Capitalization:

A. **On Company:** Although under capitalization does not trouble if they do not do what you want financial capability and solvency of the enterprise, still the management should not be replacement towards this situation because the company may suffer in the following ways:

a. Tax liability of undercapitalized concerns increases in correspondence with an increase on the volume of profits.

b. In view of continued rise in profitability rate, labour may demand increase in wage rates and the non-fulfillment of their demand may because discontentment among the workers. The labour management relation is embittered which may adversely affect production efficiency of the company.

c. Limited marketability higher prices of shares may restrict the market and the stock may be traded at price below those justified by the usually high earnings.

d. Consumer dissatisfaction seeing the excess profits the consumers may feel they are over charged.

e. Under capitalization intensifies the degree of competition, which may have a telling effect on profit margin of undercapitalized companies. High earning rates of undercapitalized companies entice many entrepreneurs to set up enterprises in the same line of business.

B. **On Shareholders:**

Under capitalization is advantageous to stock holders in as much as they get high dividend income regularly. Because of soaring rise in share price of undercapitalized concerns, shareholders’ investment in these companies appreciates phenomenally which they may encase at any time. In another way also under capitalization benefits the shareholders. They can, in periods of
necessity get loans on soft terms against the security of their shares because of high credit standing of the undercapitalized concerns in the market.

C. **On Society:**

Under capitalization does not pose any economic problem to society. On the contrary, it may prove boom to it. It encourages new entrepreneurs to set up new ventures and encourages the existing ones to expand. This, in result, boosts industrial production. Consumers get variety of products at relatively cheaper rates. Establishment of more firms and expansion of existing ones help mitigate the suffering of unemployed persons.

**1.5.4. Remedies for Under Capitalization:**

In order to cure the condition of under capitalization, it is imminent on the part of the company to reorganize its capital structure in such a way that number of shares increases and earnings per share is reduced. For this purpose the following two measures might be helpful:

I. **Splitting the shares:** Under capitalization can be corrected by splitting up the shares in order to clear case the rate of earning per share but it does not reduce the total amount of capitalization as only the par value of the stock is decreased.

II. **Capitalization of Surplus of Company:** If a company has adequate surplus in hand the whole or part of it can be capitalized by issue of bonus share. This will, in no way, affect the quantum of capitalization. Of course make up of capitalization will under go marked change. Thus, with issue of bonus share capital will increase along with number of shares but surplus of the company will lie reduced by the amount of bonus shares.

**1.6. CAPITAL STRUCTURE:**

The Random House Dictionary of the English defined the Word “structure” as: Mode of building, Mode of construction organization or arrangement of parts, elements or constituents, a pyramidal structure.
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system of relations between the constituent groups of a society.

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the resources should also think of proportions in which they can mix the sources of
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1.6.1. GUIDING PRINCIPLES OF CAPITAL STRUCTURE

Which of the above patterns would be most suited to the company can be decided in the light of the fundamental principles. The guiding principles of capital structure decision are:

1. Cost principle: According to this principle ideal pattern of capital structure is one that tends to minimize cost of financing and maximize the earnings per share. Cost of capital is subject to interest rate at which payments have to be made to suppliers of funds and tax status of such payments.

2. Risk principle: This principle suggests that such a pattern should be devised so that the company does not run the risk of brining on a receivership with all its difficulties and losses. Risk principle places relatively greater reliance on common stock for financing capital requirements of the corporation and forbids as far as possible the use of fixed income bearing securities.

3. Control principle: While deciding appropriate capital structure the financial manager should also keep in mind that controlling position of residual owners remains undisturbed. The use of preferred stock and also bonds offers a means of raising capital without jeopardizing control.

4. Flexibility principle: According to this principle, the management should strive towards achieving such combinations of securities that the management finds it easier to maneuver sources of funds in response to major changes in needs for funds. Not only several alternatives are open for assembling required funds but also bargaining position of the corporation is strengthened while dealing with the supplier of funds.

5. Timing principle: Timing is always important in financing and more particularly in a growing concern. Maneuverability principle is sought to be adhered to in choosing the types of funds so as to enable the company to seize market opportunities and minimize cost of raising capital and obtain substantial savings. Depending on business cycles, demand of different types of securities oscillates. In times of boom when there is all-round business expansion and economic prosperity and investors have strong desire to invest,
it is easier to sell equity shares. But in periods of depression bonds should be issued to attract money because investors are afraid to risk their money in stocks which are more or less speculative.

1.6.2. FACTORS INFLUENCING CAPITAL STRUCTURE DECISION

A number of factors influence the capital structure decision of a firm. These factors can be categorized into three categories, i.e., as per characteristics of the economy, characteristics of the industry and characteristics of the company.

Characteristic of the Economy

1. Tempo of the business activity: If the economy is to recover from current depression and the level of business activity is expected to expand, the management should assign greater weightage to maneuverability so that the company may several alternative sources available to procure additional funds to meet its growth needs and accordingly equity stock should be given more emphasis in financing programmers and avoid issuing bonds with restrictive covenants.

2. State of capital market: Study of the trends of capital market should be undertaken in depth since cost and availability of different types of funds is essentially governed by them. If stock market is going to be plunged in bearish state and interest rates are expected to decline, the management may provide greater weightage to maneuverability factor in order to take advantage of cheaper debt later on.

3. Taxation: The existing tax provision makes debt more advantageous in relation to stock. Although it is too difficult to forecast future changes in tax rates, there is no doubt that the tax rates will not be adjusted downwards.

4. State regulation: Decision as to the make-up of capitalization is subject to state control. For e.g. Control of Capital Issues Act in India has preferred 4:1 ratio between debt and equity and 3:1 between equity and preferred stock.

5. Policy of Term-Financing Institutions: If financial institutions adopt harsh lending policy and prescribe highly restrictive terms, the management must give more significance to maneuverability principle and abstain from borrowing from those institutions so as to preserve the company’s flexibility in capital funds.
Characteristics of the Industry

1. Cyclical variations: There are industries whose products are subject to wider variations in sales in response to national income, whereas some products have low income elasticity and their sales do not change in proportion in variation in national income. The management should attach more significance to flexibility and risk principle in choosing suitable sources of funds in an industry dealing in products whose sales fluctuate very markedly over a business cycle so that the company may have freedom to expand or contract the resources used in accordance with business requirements.

2. Degree of competition: Public utility concerns are generally free from intra-industry competition. In such concerns the management may wish to provide greater weightage to cost principle. But in industry which faces neck to neck competition, risk principle should be given more consideration.

3. Stage in life cycle: In infant industry risk principle should be the sub-guide line in selecting sources of funds since in such industry the rate of failure is very high. During the period of growth flexibility factor should be given special consideration so as to leave room open for easy and rapid expansion of funds used.

Characteristics of the Company

1. Size of the business: Smaller companies confront tremendous problem in assembling funds because of poor credit worthiness. In this case, special attention should be paid to flexibility principle so as to assure that as the company grows in size it is able to obtain funds when needed and under acceptable terms. This is why common stock represents major portion of the capital in smaller concerns. However, the management should also give special consideration to the factor of control. Larger concerns have to employ different types of securities to procure desired amount of funds at reasonable cost. To ensure availability of large funds for financing future expansion larger concerns may insist on flexibility principle. On the contrary, in medium sized companies who are in a position to obtain the entire capital from a single source, leverage principle should be given greater consideration so as to minimize cost of capital.
2. Form of Business Organization: Control principle should be given higher weightage in private limited companies where ownership is closely held in a few hands. In case of public limited companies maneuverability looms large because in view of its characteristics it finds easier to acquire equity as well as debt capital. In proprietorship or partnership form control is an important consideration because it is concentrated in a few hands.

3. Stability of earnings: With greater stability in sales and earnings a company can insist on leverage principle and accordingly it can undertake the fixed obligation debt with low risk. But a company with irregular earnings will not choose to burden itself with fixed charges. Such company should pay greater attention to risk principle.

4. Age of company: Younger companies find themselves in difficult situation to raise capital in the initial years. It is therefore worthwhile to give more weightage to flexibility principle so as to have as many alternatives open as possible in future to meet the growth requirement. Established companies should insist on cost principle.

5. Asset structure of company: A company which have invested major portion of funds in long lived fixed assets and demand of whose products is assured should pay greater attention to leverage principle to take advantage of cheaper source of fund. But risk principle is more important in company whose assets are mostly receivables and inventory.

6. Credit standing: A company with high credit standing has greater ability to adjust sources of funds. In such a case, the management should pay greater attention too flexibility principle.

7. Attitude of management: Attitude of persons who are at the helm of affairs of the company should also be analyzed in depth while assigning weights to different factors affecting the pattern of capitalization. Where the management has strong desire for exclusive control, preference will have to be given to borrowing for raising capital in order to be assured of continued control. If the principal objective of the management is to stay in office, they would insist more on risk principle. But members of the Board of Directors who have been in office for pretty long time feel relatively assured and they would prefer to insist on cost principle.
1.7. **Productivity of Capital:**

In diagnosing and designing the financial structure for corporate organization, it is essential to pay good attention to the analysis and projection of productivity of capital. The objective of maximizing the ratio of net profit to net worth is basically depends on productivity of capital employed expressed in term of relationship of operating profit or EBIT or capital employed. Capital employed in a corporate body can be determined from its balance sheet by analyzing either the liabilities side, i.e. net worth plus long term debt, or the assets side, i.e. net fixed assets plus net current assets. Capital employed determined by adopting either of these two approaches will give the same result.

Productivity of capital can be examined under two heads: (a) Productivity of capital employed, and (b) Productivity of capital owned.

1.7.1. **Productivity of Capital Employed**

Productivity of capital employed depends on an interaction of the following three financial ratios:

\[
\frac{\text{Sales}}{\text{Capital Employed}} \times \frac{\text{Contribution}}{\text{Sales}} \times \frac{\text{Operating Profit}}{\text{Contribution}} = \frac{\text{Operating Profit}}{\text{Capital Employed}}
\]

The productivity of capital employed is the result not only on action taken to improve these three financial relationships independently and separately but also of an interaction of these relationships. It may be noted that the numerator of one ratio becomes denominator of the other ratio viz. turnover of capital employed contribution to sale and margin of contribution. Independence and interdependence of these three financial ratios determine the magnitude of the productivity of capital employed.

1.7.2. **Productivity of capital owned**
Productivity of capital owned (Net Profit/Net Worth) is based on the interaction of productivity of capital employed ratio (Operating Profit/Capital Employed) to the other two ratios:

\[
\frac{\text{Operating Profit}}{\text{Capital Employed}} \times \frac{\text{Net Profit}}{\text{Operating profit}} \times \frac{\text{Capital Employed}}{\text{Net worth}} = \frac{\text{Net Profit}}{\text{Net worth}}
\]

1.7.3. Sensitivity of Productivity of Capital.

For analyzing the real profitability of a corporate enterprise attention should be given not only to the amount of ‘productivity of capital employed’ but also to ‘sensitive’. Sensitive of productivity of capital employed is determined by finding out operating leverage. To corporate bodies may be having same productivity of capital employed but varying operating leverages. The enterprise with a higher operating leverage is inclined to face greater business risk than the enterprise with a lower operating leverage. It is therefore, essential on the part of corporate management to aim at improving not only the amount of productivity of capital employed but also to manage its sensitivity by keeping it at a low level. This can be possible by exercising an effective control on costs variable and fixed.

Similarly, corporate management must aim not only to enhance the amount of productivity of capital owned i.e. Net profit/Net worth but also pay requisite attention to its sensitive. Sensitive of productivity of capital owned can be assessed by calculating the financial leverage.

1.7.4. Managing productivity of corporate capital.

Managing the productivity of capital is one of the most challenging tasks of corporate management. The first step towards it is to determine the main areas in which capital is actually employed. The next step is to seek answer to the following questions: How much productive work does the capital employed in various areas do? How much productive work does the capital employed in various area do? How does it get a return or contribute? How can it be made to work not only “header” but also “smarter”?

Fixed capital and working capital while both capitals; require different approaches in managing productivity. Nothing is more wasteful in a fixed asset than time-not-
worked. Managing time-not-worked is an effective way to improve the productivity of capital for most fixed (physical and human) assets.

Working capital needs to be measured and managed differently. Unlike fixed assets. It is not “producing” capital but “supporting” capital. The question arise: what does it, and what should it, support?

The management of productivity of capital has been engaging our attention during the few years. Most companies do not even have the data for the productivity of capital and without the same one cannot manage. Productivity of capita. Correctly analyzed, can act as an effective tool for corporate management to plan and control.

It may, however, be noted that productivity is by no means the exclusive preserve of exclusive in the finance and accounting areas of a company, but the common and collective responsibility of all the executives. I have been interactive with corporate executives at various levels and from various function and disciplines with a view to developing and integrated index for the measurement of productivity of capital which could be useful for management and other stakeholders.

1.7.5. Composite index for measuring productivity.

The composite index is computed by integrating the following six parameters of corporate financial behaviors:

- Liquidity
  - Current assets to current liabilities
- Operating efficiency
  - Gross sales to capital employed
  - Contribution to gross sales
- Profitability of capital employed
  - Operating profit to capital employed
  - Operating leverage (Contribution to operating profit)
- Profitability of capital owned
  - Net profit to net worth
  - Financial leverage (earnings before interest and tax to profit before tax)
- Management of earnings
- Dividends to share capital
- Retained earnings to net profit

- Market appraisal
  - Price to EPS ratio

Several indices and ratios do exist to measure various aspects of productivity. But they serve only limited purpose. The other problem is that on some aspects of productivity a company might do well and on other not so well or even poorly. The question would then arise as to evaluate its overall performance and how to compare its performance over a period and/or with other companies.

We have tried to overcome these shortcomings and design a versatile tool by which productivity in all its aspects could be represented by a single number thereby facilitating ease of understanding and comparison. Such an approach permits companies to be ranked and compared and also allows computation of average performance in an industry or sector.

These parameters were decided as a result of “brainstorming” with company executives, academicians, bankers, industrialist and other professionals. It was felt that these six parameters being key areas of performance could be measured by the 10 ratios indicated above. The consensus of opinion was that each ratio could be given equal importance to avoid subjectivity.

The next step was to design a scale for each of these ratios and to assign weight to them, the minimum weight on any ratio is zero and maximum is 5. There is no negative marketing. Each weight is to be multiplied by 2 so that there is a maximum of 10 marks for each ratio. The overall index, therefore, provides for a total of 100 marks. The gradient in these ratios is based on experience, hopefully, gained during the last several years.

1.7.6. Market appraisal

For assessing the market rating of a company a commonly used yardstick is the ratio of market price to earnings per share, popularly known as P/E ratio. We have taken the market price of the share of the companies covered but our sample at the end of the four months of their accounting period. This time lag has been provided with a
view to allowing enough time for the market to assimilate the reported corporate financial performance.