Chapter -2
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Capital Structure

Meaning

Funds are essential requirement for management of company starting from promotion till winding, it play an important role. If fund are not managed properly or due to its inadequacy business suffers a lot. Therefore it necessary to have a correct estimate of current & future need of capital.

Working capital is always after the capital in a company. A correct evaluation of capital through optional capital structure helps in prompt management of working capital.

According to Gerestenberg "Capital Structure of a company refers to the composition or making of its capitalisation and it includes all long term capital resources i.e; loan, reserves, Shares & Bonds."

Capital Structure concerned with qualitative aspects of financial planning which refers to the kind of securities and the proportionate amount that makes up capitalisation Long term finance consist of Equity share, Preference share & Debentures. Decision regarding proportionate mix of these securities refers capital structure.

Some thinker also include retained earning, capital surplus for the purpose of capital structure. Because though it not effect in promotional stage but it is having a wide connection in long run.

2.1 Forms of capital structure:

Capital structure can be consists of any one of below mentioned 4 forms.

1. Equity share only.
2. Equity & Preference share only
3. Equity Shares & Debentures.
4. Equity shares, Preference share & Debenture.

11. (Management Accounting, Sharma/Gupta P-16.1)
2.2 **Objective of Capital Structure:**

The objective of Capital Structure can be envisaged from the point that its main aim is to balance the mix of debt & equity, & to attain its other objective, which are as follow.

2.2.1. **Economic Objective:**

(1) **Minimizing Cost of Capital** - Minimisation of Capital cost leads no maximum return to the equity holders.

(2) **Minimization of Risk** - The various risk associated with business is to be minimised by making suitable adjustment in various component of Capital Structure. To maintain sound financial position & goal of liquidity.

(3) **Maximum return** - The earning of the enterprises should be such that it provides maximum return to it real owner. It necessitate the stability as well as regularly in the earning.

(4) **Control on financial Issue** - Proper control design of sound capital structure helps in preserve control of the firm. It must ensure maximum control over financial issue.

2.2.2 **Other objective**:

(1) **Simple & flexible** - The Capital structure should be simple & flexible. So that it must be understandable by all. Flexible because its a world of changing yera every now & then changes are taking place so that if any subject has to be introduced it can be placed convinently.

2.3 **Optimal capital structure**:

Optimal capital structure can be defined as that mix of debt & equity which will maximise the market value of company & minimise the cost of capital.\(^\text{12}\)

\(^\text{12}\) (Solomon E. Theory of Financial Management P-42)
Hence we can say that sound capital structure can be properly defined as a combination of Debt & Equity in manner which will result in maximization of firms market value & attainments of stated marginal goals. It can also be tuned the mix of debt & equity for minimization of firms cost of capital. The total value of the firm is unaffected by its Capital Structure. It will remain constant in every degree of leverage.

2.4 Determinants of Capital Structure:

(1) **Stability & Growth of Sales** - Stability in Sales help in meeting in day to day debt requirement. Rate of growth of sales also effect in making of decision of capital structure.

(2) **Cost of Capital** - Cost of Capital refers minimum return excepted by supplier while formulation a Capital Structure an effort must be made to minimise the overall cost of capital.

(3) **Trading on Equity** - The use of long term fixed interest bearing debt and preference share capital alongwith equity share capital is called Trading on equity. Rate of interest on Long term loan make it caution to plan the capital structure of a firm.

(4) **Flexibility** - Since future market is uncertain therefore capital structure of firm should be flexible so that it is to be capable of being adjust according to the needs of the changing conclusion.

(5) **Requirements of Investors** - The requirement or investor is another factor that influences that capital structure of firm. In what nature they invest also helps in determine Capital Structure i.e., Equity, preference or debenture.

(6) **Cash flow ability to Service debt** - A firm which able to generate ledger & stable cash inflow can employ more debt in its capital structure as compared to the one who has unstable of ledger ability of cash generation.

(7) **Control** - Where additional funds are required management has to take care over the matter of control before floting additional requirement.
(8) **Nature and Size of Firm** - Nature & size of firm also influence its capital structure. Manufacturing of Heavy goods concerns, capital structure is quite different from service industrial concern.

(9) **Legal Requirements** - The Government here issued some guidelines for the issue of shares of debentures. The legal restrictions are very significant as they lay down a framework within capital structure decisions have to be made. However, cement industries have to follow strictly the Government framework because it comes under Big manufacturing units.

(10) **Capital Market Condition** - Market condition fluctuates every now & then. Some time there may be depression & some time boom. Like in cement industries, increases in price of cement make market booms.

(11) **Corporate Tax Rate** - High rate of corporate taxes on profits compel the companies to prefer debt financing, because interest is allowed to be deducted while computing taxable profits.

(12) **Asset Structure** - Since cement companies acquire major portion of assets as fixed assets therefore it has to raise long term debts.

(13) **Flotation Cost** - The cost of floating a debt is very important while deciding the capital structure. The cost of floating as a percentage of total funds decreases with increases in size of issue.

(14) **Period of Finance** - Since cement companies are large scale ones. Hence the finance are required for a long period. Therefore it is important factor to kept while selecting appropriate capital mix.

(15) **Purpose of Financing** - If fund are required for the operation then capital structure is different if post operative then it will different.

From the above we can conclude that capital structure of a concern depends upon large number of factors. It is not possible to rank them because all such factors are of different importance & the influence of individual factor of a firm changes over a period of time. A manager has to study its Pros & Cons time to time for companies benefits.
2.4.1 Sound Capital Mix:

It must includes -

1. Maximum possible use of leverage.
2. The Capital structure should be flexible.
3. To avoid undue financial risk.
4. The use of debt should be within capacity of firm.
5. It should involve minimum possible risk of loss of control.

2.4.2 Theories of Capital Structure:

Different kind of theories have been presented by the great thinkers of finance to express the meaning of capital structure. Some assumption has also been drawn from them.

They are -

1. Source of funds are only perpetual riskless debt & ordinary shares.
2. Dividend payout ratio is 100
3. There is no corporate taxes.
4. The total assets does not change.
5. The total finance remains constant.
6. EBIT(Earning before Interest & tax) are not expected to grow.
7. Perpetual life of firm.

On the basis of following assumption four theories has been propound by thinkers of financial management.

1. Net Income approach.
2.4.2.1 **Net Income Approach:**

Net Income approach are suggested by Durand a firm can minimise the weighted average cost of capital and increase the value of firm as well as market price of equity share by using debt financing to maximum possible extent.

The financial leverage as per Net Income approach an important variable to the capital structure of a firm. which a accurate mixture of debt & equity a firm can involve an optimal capital structure which will be the one at which value of firm is highest & overall cost of capital is lowest. At this stage market price per share will be maximum price per share will be maximum. This approach say that cost of debt capital & cost of equity capital Ke remains unchanges. the degree of leverage varies. The average cost of capital can be measured as

\[
K_0 = K_d \left( \frac{B}{B+S} \right) + K_e \left( \frac{S}{B+S} \right)
\]

**Behaviour of \(K_0, K_d \& K_e\) as NI approach**

Ko = Cost of Capital, Kd = Cost of Debt, Ke = Cost of Equity
2.4.2.2 Net Operating Income Approach:

According to this approach the overall capitalization rate and the cost of capital remain constant for all degree of leverage.

This theory is suggested by David Durand. He argued that the market value of a firm depends upon its net operating income & business risk. According to this theory change in Capital Structure of a company does not affect the market value of the firm & the overall cost of capital remain constant irrespective of the method of financing. This theory also argues that there is nothing like optimal capital structure but every capital structure is optimal capital structure.

Behaviour of Kd Ke & Ke as per Net Operating Income Approach.

Ko = Cost of Capital, Kd = Cost of Debt, Ke = Cost of Equity

2.4.2.3 Traditional Approach:

It is also known an Intermediate approach. The principal implication to the traditional position is that the cost of capital is dependent of the capital structure and there is an optimal capital structure which minimise the cost of capital. This theory also argues that the value of firm can be increased initially or the cost of capital can be decreased by using more debt, as debt are the cheaper source of finance than equity. Thus optimal capital structure can be reached by a proper debt

equity mix. This theory also says that overall cost of capital decreases up to a certain point remain more or less unchanged increases or rises beyond a certain point.

\[
K_e, K_d, K_o \text{ as per traditional approach}
\]

\[
\begin{align*}
\text{Percentage Cost} & \quad \text{Leverage} \\
K_e & \quad K_o \\
K_d &
\end{align*}
\]

\(K_o = \text{Cost of Capital}, K_d = \text{Cost of Debt}, K_e = \text{Cost of Equity}\)

2.4.2.4 Modigliani & Miller Approach:

Modigliani & Miller\(^{14}\) (MM Approach) is identical as per NOI Approach if taxes are ignored.

This theory is based on the assumption that -

(1) There are no corporate taxes.
(2) There is a perfect market.
(3) Investor act rationally.
(4) The cut off point of investment in a firm is capitalisation rate.
(5) All earning as distributed to the Share holders.

The operational justification for the MM hypothesis the arbitrage process. The term arbitrage refers to process of buying an asset form the market at a

\(^{14}\) (Modigliani & Miller N.H., The cost of capital, corporation finance, the theory of investment, American Economic Review Vol.US,261-77)
lower price and selling at a higher price. The process is essentially a balancing operation. The MM Approach illustrates the arbitrage process with reference to valuation in terms of two firms which are exactly similar in all respects except leverage so that one of them has debt in its capital structure while the other does not.

However, validity of the MM hypothesis depends on whether the arbitrage process is effective in the sense that personal leverage is a perfect substitute for corporate leverage.

2.5 Capital Structure of Grasim Cement Industries:

As Grasim Cement Industries is an umbrella organization under Aditya Vikram Birla Group, the source & finance is fulfilled by Head organization i.e; AV group.
## 2.1 CAPITAL STRUCTURE OF GRASIM CEMENT

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Ending on 31 Mar.00</th>
<th>Ending on 31 Mar.01</th>
<th>Ending on 31 Mar.02</th>
<th>Ending on 31 Mar.03</th>
<th>Ending on 31 Mar.04</th>
</tr>
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<tbody>
<tr>
<td><strong>Source of Fund</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Head office Fund</td>
<td>3619375538.14</td>
<td>3290341398.31</td>
<td>3050665370.44</td>
<td>2679894789.03</td>
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<td>Loan Fund</td>
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<td>1873371917.13</td>
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<td>1653808716.09</td>
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<tr>
<td>Secured Loan</td>
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<td>150513728.93</td>
<td>80134381.74</td>
<td>747000.00</td>
<td>672300.00</td>
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<td>Un secured Loan</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>5893090240.32</td>
<td>5357354763.93</td>
<td>5014071669.31</td>
<td>4518207029.13</td>
<td>4066386326.22</td>
</tr>
</tbody>
</table>

### Analysis of Table 2.1:

The capital structure in the five years has been reduced by around 25% with an average of 5% per year which is a positive sign.

1. Head office fund is going down because of running company is going self sufficient due to its operation.

2. Secured Loan has reduced from 2108149600.36 to 1653808716.09 because of good management of company.

3. Unsecured Loan has tremendously gone down by year 02-03 as well as overall in 5 years also.

4. Reduction in overall capital structure shows a good sign that company is going on reducing outside intervention in case of finance.