



A STUDY ON CAPITAL STRUCTURE ITS IMPACT ON PROFITABILITY

¹M. Abdul Basid, Assistant Professor,

²P. Mahalakshmi, Student,

Dept. of MBA, Santhiram Engineering College(A), Nandyal,A.P., India

Abstract:

The financing decisions occupy a pivotal role in the overall finance function in a corporate firm which mainly concerns itself with an efficient utilization of the funds provided by the owners or obtained from external sources together with those retained or ploughed back out of surplus or undistributed profits. These decisions are mainly in the nature of planning capital structure, working capital and mechanism through which funds can be raised from the capital market whenever required. The financing decisions explains how to plan an appropriate mix with least cost, how to raise long term funds, and how to mobilize the funds for working capital within a short span of time. Such a financing policy provides an appropriate backdrop for formulating effective policies for investment of funds as well as management of earnings. It contributes to magnifying the earnings on equity as profitability (expressed as return on equity), to a large extent, is dependent on the degree of leverage in the

capital structure. Besides, the valuation of the structure of physical assets depends fundamentally on the financing mix. This makes it necessary for the management of a firm to pursue a well thought out of financing policy, which ought to be framed initially, incorporating, among other things, the proportion of the debt and equity, types of debts and own funds to be used and volume of the funds to be raised from each source or combination of sources, to enable the firm to have a proper capitalization. In the absence of this, the firm may face the problem of either over capitalization or under capitalization impeding its smooth financial functioning.

Index terms: capital structure, Risk, flexibility, funds

1. Introduction:

It is obvious that functioning decisions are extremely important for corporate firms. Such decisions, in management parlance, are termed as capital structure decisions. The term capital structure is used to



describe the combination of various source of financial employed to raise funds. It implies, in other words, that when a firm chooses to use a group of sources in certain proportions the resulting pattern is referred to as capital structure of the firm. The sources of finance could be divided in terms of ownership of funds and duration of funds. The former comprises owned and borrowed funds while the latter includes long, medium and short term funds[1]. Of the two, the duration-based classification is useful for preparing a plan to meet long term as well as short term capital requirements while ownership-based classification is useful for selection of specified sources, determining debt-equity ratio and analyzing impact of capital structure decisions on the earnings on equity.

Capital structure refers to the mix of long – term sources of funds, such as debentures, long-term debt, preference share capital and equity share capital including reserved and surpluses (i.e. retained earnings). Some companies do not plan their capital structure, and it develops as a result of the financial decisions taken by the financial manager without any formal planning.

These companies may proper in the short-run, but ultimately they may face considerable difficulties in raising funds to finance their activities. With unplanned capital structure, these companies may also fail to economies the use of their funds. Consequently, it is being increasingly realized that a company should plan its capital structure to maximize the use of the funds and to be able to adapt more easily to the changing conditions. Theoretically, the financial manager should plan an optimum capital structure for his company. The optimum capital structure is obtained when the market value per share is maximum. In practice, the determination of an optimum capital structure is a formidable task, and one has to go beyond the theory. There is significant variation among industries and among individual companies within an industry in terms of capital structure. Since a number of factors influence the capital structure decision of a company, the judgment of the person making the capital structure decision plays a crucial part.

2. Definition of Capital Structure:

Capital structure is the mix of the long-term sources of funds used by a firm. It is made up of debt and equity securities and refers



to permanent financing of a firm. It is composed of long-term debt, preference share capital and shareholders' funds[2].

2.1. Some of the important definitions are presented below:

'Capital structure of a company refers to the composition or make up of its capitalization and it includes all long term capital resources viz., loans, reserves, shares and bonds'. Keown et al. defined capital structure as, 'balancing the array of funds sources in a proper manner, i.e. in relative magnitude or in proportions'. By Gerestenberg

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

Hence capital structure implies the composition of funds raised from various sources broadly classified as debt and equity. It may be defined as the proportion of debt and equity in the total capital that will remain invested in a business over a long period of time. Capital structure is concerned with the quantitative aspect. A decision about the proportion among these

types of securities refers to the capital structure decision of an enterprise.

Theoretically, the financial manager should plan an optimum capital structure for his company. The optimum capital structure is obtained when the market value per share is maximum. In practice, the determination of an optimum capital structure is a formidable task, and one has to go beyond the theory. There is significant variation among industries and among individual companies within an industry in terms of capital structure. Since a number of factors influence the capital structure decision of a company, the judgment of the person making the capital structure decision plays a crucial part.

3. A sound or appropriate capital structure should have the following features:

- **Return** The capital structure of the company should be most advantageous. Subject to other considerations, it should generate maximum returns to the shareholders without adding additional cost to them.
- **Risk** The use of excessive debt threatens the solvency of the company. To the point debt does not add significant risk it should be used, otherwise its use should be avoided.



- **Flexibility** The capital structure should be flexible. It should be possible for a company to adapt its capital structure with a minimum cost and delay if warranted by a changed situation. It should also be possible for the company to provide funds whenever needed to finance its profitable activities.
- **Capacity** The capital structure should be determined within the debt capacity of the company, and this capacity should not be exceeded. The debt capacity of a company depends on its ability to generate future cash flows. It should have enough cash to pay creditors' fixed charges and principal sum.
- **Control** The capital structure should involve minimum risk of loss of control of the company. The owners of closely-held companies are particularly concerned about dilution of control.

Capital structure of a company refers to the make up of its capitalization. A company procures funds by issuing various types of securities *i.e.*, ordinary shares, preference shares, bonds and debentures. Before issuing any of these securities, a company should decide above the kinds securities to be issued. In what proportion will the various kinds securities be issued, should also be considered[3].

However, in broader sense, capital structure includes all the long term capital resource including loans, bonds, shares issued, reserves etc., and the components of the total capital.

4. EPS variability and financial risk :

The EPS variability resulting from the use of leverage is called financial risk. Financial risk is added with the use of debt because of (a) the increased variability in the shareholders' earnings and (b) the threat of insolvency. A firm can avoid financial risk altogether if it does not employ any debt in its capital structure. But then the shareholders will be deprived of the benefit of the expected increases in EPS. Therefore, a company may employ debt to the extent of the financial risk perceived by shareholders which does not exceed the benefit of increased EPS will continue to increase, but the value of the company will fall because of the greater exposure of shareholders to financial risk in the form of financial distress.

4.1. Debt Capacity:

The technique of cash flow analysis is helpful in determining the firm's debt capacity. Debt capacity is the amount which a firm can service easily even under adverse conditions; it is the amount that the firm should employ. There may be lenders who are prepared to lend to you. But you should borrow only if you can service debt without any problem.



4.2. Cash Flow Analysis Versus EBIT-EPS

Analysis:

Is cash flow analysis superior to EBIT-EPS analysis? How does it incorporate the insights of the financial theory? The cash analysis has the following advantages over EBIT-EPS analysis.

- It focuses on the liquidity and solvency of the firm over a long-period of time, even encompassing adverse circumstances. Thus, it evaluates the firm's ability to meet fixed obligations.
- It goes beyond the analysis of profit and loss statement and also considers charges in the balance sheet items.
- It identifies discretionary cash flows. The firm can thus prepare an action plan to face adverse situations.
- It provides a list of potential financial flows which can be utilized under emergency.
- It is long-term dynamic analysis and does not remain confined to a single period analysis.

5. Cash Flow Analysis versus Debit – Equity

Ratio :

The cash flow analysis clearly reveals that a higher debt-equity ratio is not risky if the company has the ability of generating substantial cash inflows

in the future to meet its fixed financial obligations. Financial risk in this sense is indicated by the company's cash-flow ability, not by the debt-equity ratio. To quote Van Horne:....the analysis of debt-to-equity ratios along can be deceiving, and analysis of the magnitude and stability of cash-flows relative to fixed charges is extremely important in determining the appropriate capital structure for the firm. To the extent that creditors and investors analyse a firm's cash-flow ability to service debt, and management's risk preferences correspond to those of investors, capital structure decisions made in this basis should tend to maximize share price : The cash flow analysis does have its limitations. It is difficult to predict all possible factors which may influence the firm's cash flows. Therefore, it is not a fool-proof technique to determine the firm's debt policy.

6. Capital structure and planning:

Capital structure refers to the mix of long-term sources of funds. Such as debentures, long-term debt, preference share capital including reserves and surplus (i.e., retained earnings) The board of directors or the chief financial officer (CEO) of a company should develop an appropriate capital structure, which are most factors to the company. This can be done only when all those factors which are relevant to the company's capital



structure decision are properly analyzed and balanced[4]. The capital structure should be planned generally keeping in view the interests of the equity shareholders, being the owners of the company and the providers of risk capital (equity) would be concerned about the ways of financing a company's operations. However, the interests of other groups, such as employees, customers, creditors, society and government, should also be given reasonable consideration. When the company lays down its objective in terms of the shareholder's wealth maximization (SWM), it is generally compatible with the Interests of other groups. Thus while developing an appropriate capital structure for its company, the Financial manager should inter alia aim at maximizing the long-term market price per share. Theoretically, there may be a precise point or range within an industry there may be a range of an appropriate capital structure within which there would not be great differences in the market value per share. One way to get an idea of this range is to observe the capital structure patterns of companies' vis-à-vis their market prices of shares. It may be found empirically that there are not significant differences in the share values within a given range. The management of a company may fix its capital structure near the top of this range in order to make maximum use of favorable

leverage, subject to other requirements such as flexibility, solvency, control and norms set by the financial institutions, the security exchange Board of India (SEBI) and stock exchanges.

7. Features of an optimal capital structure:

An optimal capital structure should have the following features,

- 1. PROFITABILITY:** - The Company should make maximum use of leverages at a minimum cost.
- 2. FLEXIBILITY:** - The capital structure should be flexible to be able to meet the changing conditions .The company should be able to raise funds whenever the need arises and costly to continue with particular sources.
- 3. CONTROL:** - The capital structure should involve minimum dilution of control of the company.
- 4. SOLVENCY:** - The use of excessive debt threatens the solvency of the company. In a high interest rate environment, Indian companies are beginning to realize the advantage of low debt.

Theories of capital structure:

Different kinds of theories are have been

1. Net Income Approach(NI)
2. Net Operating Income Approach(NOI)
3. The Traditional Approach
4. Modigliani and Millar Approach(MM)



1. Net Income Approach (NI): This approach introduced by ‘Durand’. A firm can minimize weighted average cost of capital and increase the value of the firm and share value in the market.

This approach is based upon the following assumptions:

- (I) The cost of debt is less than the equity.
- (ii) There are no taxes.
- (iii) The risk percentages of inversion are not changed by the use of the debt.

Degree of leverage: The reasons for assuming cost of debt is less than cost of Equity are that interest rates are lower than dividend rates due to element of risk and the benefit of tax as the interest is a deductible expense.

The total market value of a firm on the basis of NI is:

$$V=S+D$$

V=Total market value of firm.

S=Total market value of equity

shares

(Or)

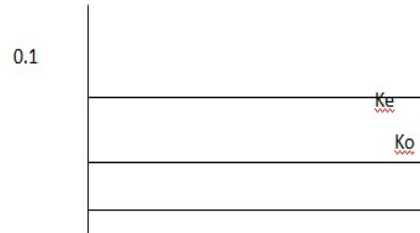
NI/Equity capitalization rate.

D=market value of debt.

Weighted Average Cost of Capital

can be calculated as:

$$KO=EBIT/V$$



Cost of Capital 0.05

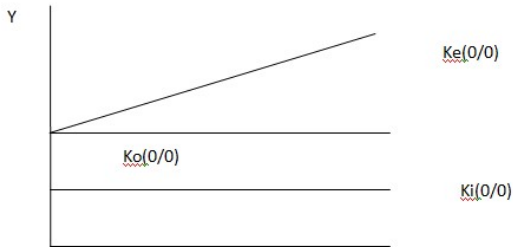
2. Net Operating Income Approach: This theory suggested by ‘Durand’. It is opposite to the NI approach. Here Change in the capital structure of a company does not effect in the market value of the firm and the weighted cost of capital remains constant whether the debt-equity mix is 50:50 or 20:80 or 0:130. This theory presumes that:

- (i) The market capitalizes the value of the firm as a whole
- (ii) The business risk remains constant.
- (iii) There are no corporate taxes.

The value of the firm can be determined as:

$$V=EBIT/KO$$

KO=Overall cost of capital



Leverage and cost of capital (NOI)

The market value of equity is:

$$S = V - D$$

S = Market value of equity shares

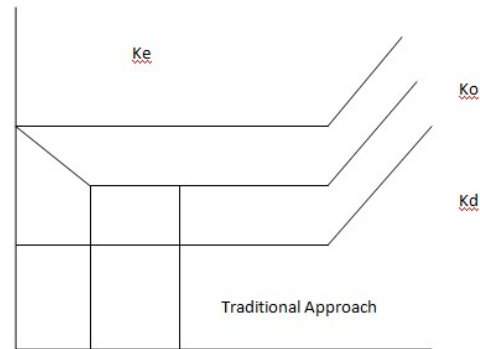
V = Total market value of firm

D = Total market value of debt

8. The Traditional Approach:

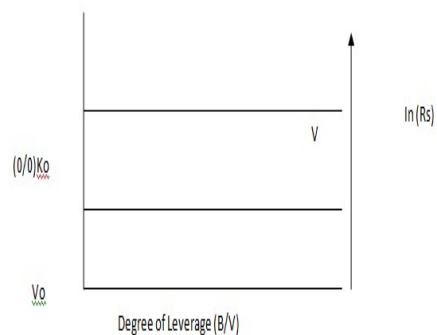
The traditional approach also known, as 'Intermediate Approach' is a compromise between the two extremes of income approach and net operating Income approach. According to this theory, the value of the firm can increase initially or the cost of capital can be decreased by use more debt is a cheaper sources of funds than equity. Thus, a proper debt-equity mix can reach the capital structure When the increased cost of equity can't be offset by the advantage of low cost debt. Thus the overall cost of capital according to this theory, decrease up to a certain point, remains more are less unhinged for

moderate increase in debt thereafter, and increase or rise beyond a certain point.



9. Modigliani -Miller (MM) Approach:

The MM thesis relating to the relationship between capital structures, cost structures, cost of capital and valuation is a kin to the NOT approach, in other words, does not provide operational justification for the irrelevance of the Capital Structures. The MM proportion supports the NOT approach relating to the independence of the independence of the capital of the degree of leverage level of debt-equity ratio.



Basis Proportions:



- 1) The overall cost of capital (KO) and the value of the firm (V) are independent of the capital structure.
- 2) K_e is equal to the capitalization rate of a pure equity stream plus premium for financial risk to the difference to the pure equity capitalization (K_e) time the ratio of debt to equity.
- 3) The cut off rate for investment purposes is completely independent of the way in which an investment is financed.

Assumption:

Perfect capital market the implication of a perfect capital market is that.

- Securities are infinitely divisible.
- Investors are free to buy/sell securities.
- Investors can borrow without restrictions;
- There is no transaction cost.
- Investors are rational.

10. Data Analysis & Interpretation:

Table1: Calculation of return on capital employed (ROCE):

10.1: Calculation of net profit:

PBT :Profit before tax (PBT) is a profitability measure that looks at a

company's profits before the company has to pay corporate income tax by deducting all expenses from revenue including interest expenses and operating expenses except for income tax.

Interest: Interest is payment from a borrower or deposit-taking financial institution to a lender or depositor of an amount above repayment of the principal sum (*i.e.* the amount borrowed). It is distinct from a fee which the borrower may pay the lender or some third party.

Net profit: **Net profit** represents the number of sales dollars remaining after all operating expenses, interest, taxes and preferred stock dividends (but not common stock dividends) have been deducted from a company's total revenue.

Working notes:

Net profit = Profit before tax + Interest

Net profit for the year 2019-2020: $-2023354 + 2870585 = 852231$

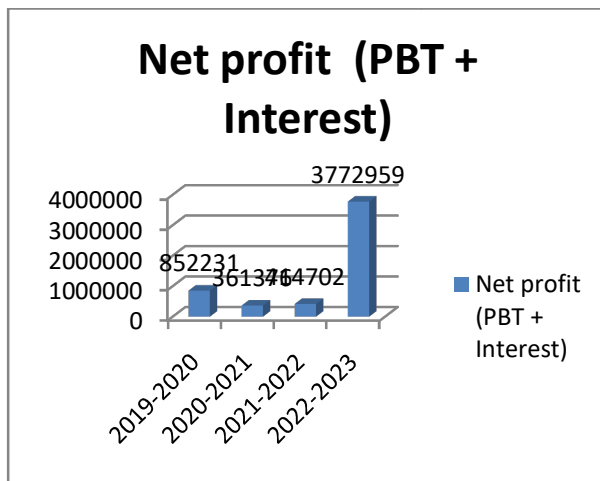
2020-2021: $-4279451 + 4640607 = 361376$

2021-2022: $-4653888 + 5066590 = 414702$

2022-2023: $-73758 + 3846717 = 3772959$

Table :Calculation of net profit:

Year	PBT	Interest	Net profit (PBT + Interest)
2019-2020	(2023354)	2870585	852231
2020-2021	(4279451)	4640607	361376
2021-2022	(4653888)	5066590	414702
2022-2023	(73758)	3846717	3772959



Interpretation:

- From the above data, we can notice that, there has been a fluctuation in the past four financial years in net profit of the company.
- From 2019-2020 to 2020-2021, the net profit has fallen from 852231 to 361376 and in the next year it has slightly increased to 414702.
- In the year 2022-2023, the net profit has greatly increased from 414702 to 3772959.
- Increase in the net profit of the company is a healthy sign.

- It shows the company’s ability to pay off its debts and operating costs in time.
- It also indicates that the company is operating efficiently.

11. Conclusion: Several studies have been conducted on the examination of the impact of capital structure on profitability, but there are mixed results in different conceptual framework. Banks generally play a crucial role in economic development of every country. One critical decision banks face the debt-equity choice. Among others, this choice is necessary for the profit determination of firms. What this means is that the banks that are able to make their financing decisions prudently would have a competitive advantage in the industry and thus making superior profits. Nonetheless, it is essential for us to recognize that this decision can only be wisely taken if banks know how debt policy influences their profitability. This study examined the relationship between capital structure and profitability in SME. The study covered Sukjit Stratch Mills. Over the period of 2019-2023. The analysis of listed SME shows the debt-equity ratio is positively associated with all profitability ratios such as return on equity and return on capital employed[5]. Total debt was found to be insignificant in determining return on capital employed. Debt to total funds ratio is



positively associated with ROE. It is significantly correlate to ROE. There is a correlation between return on capital employed one of the variable of profitability with debt-equity and debt to total funds.

❖ www.creditguru.com/ratios/ratiopg1.htm

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