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A COMPREHENSIVE ANALYSIS OF CAPITAL STRUCTURE: BALANCING DEBT AND EQUITY FOR OPTIMAL FINANCIAL PERFORMANCE AT ULTRATECH CEMENT

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ABSTRACT

Capital structure is one of the most important aspects of corporate financial management, as it determines the proportion of debt and equity used to finance a company's operations and growth. The decision regarding the appropriate mix of debt and equity significantly influences a firm's profitability, risk profile, cost of capital, and overall market value. This study, titled "A Comprehensive Analysis of Capital Structure: Balancing Debt and Equity for Optimal Financial Performance," examines the relationship between capital structure and financial performance, emphasizing the need for an optimal financing mix that maximizes shareholder wealth while minimizing financial risk.

The study explores various theories of capital structure, including the Net Income Approach, Net Operating Income Approach, Traditional Approach, and Modigliani-Miller Theory. It also analyzes the advantages and disadvantages of debt and equity financing and their impact on key financial indicators such as Return on Equity (ROE), Earnings Per Share (EPS), Debt-Equity Ratio, and Overall Cost of Capital. The research highlights how excessive dependence on debt may increase financial risk and interest obligations, whereas overreliance on equity may dilute ownership and reduce earnings available to shareholders.

Using financial data and ratio analysis, the study evaluates the effectiveness of capital structure decisions in achieving financial stability and operational efficiency. The findings indicate that firms maintaining a balanced capital structure tend to experience improved profitability, enhanced investor confidence, and sustainable long-term growth.

I. INTRODUCTION

Capital Structure Defined:

The capital structure decision can affect the value of the firm either by changing the expected earnings or the cost of capital or both.

The objective of the firm should be directed towards the maximization of the value of the firm the capital structure, or average, decision should be examined from the point of view of its impact on the value of the firm.

If the value of the firm can be affected by capital structure or financing decision a firm would like to have a capital structure which maximizes the market value of the firm. The capital structure decision can affect the value of the firm either by changing the expected earnings or the cost of capital or both.

A mix of a company's long-term debt, specific short-term debt, common equity and preferred equity. The capital structure is how a firm finances its overall operations and growth by using different sources of funds.

Debt comes in the form of bond issues or long-term notes payable, while equity is classified as common stock, preferred stock or retained earnings. Short-term debt such as working capital requirements is also considered to be part of the capital structure.

The phrase "**capital structure**" can mean different things to different people. At its simplest, capital structure reflects the equity and debt of the company. A privately held company that plans to share equity with employees and rise outside capital generally has at least two classes of stock: common for founders and employees, and preferred for

investors. A company has a finite amount of equity to exchange for the financial and talent resources necessary to execute your plan successfully. Great care should be taken when planning the allocation of equity. The experienced team at top level management can help you navigate the many elements of creating your capital structure. Often we begin by creating a forward-looking financial forecast to assist in determining the required capital (financial and human) to support your business plans. We offer several specialized advisory services, including tools, templates and data to assist in the process. Experienced financial consulting services will likely include

- Determining the appropriate capital structure
- Supporting the capital raise process, including financial pro forma development, managing due diligence and negotiating terms
- Developing and implementing short- and long-term cash flow forecasting processes
- Optimizing working capital investments in accounts receivable and inventory
- Negotiating appropriate debt facilities to leverage an equity raise

The assets of a company can be financed either by increasing the owners claim or the creditors claim. The owners claims increase when the form raises funds by issuing ordinary shares or by retaining the earnings, the creditors' claims increase by borrowing .The various means of financing represents the "financial structure" of an enterprise .The financial structure of an enterprise is shown by the left hand side (liabilities plus equity) of the balance sheet. Traditionally, short-term borrowings are excluded from the list of methods of financing the firm's capital expenditure, and therefore, the long term claims are said to form the capital structure of the enterprise .The capital structure is used to represent the proportionate relationship between debt and equity .Equity includes paid-up share capital, share premium and reserves and surplus. The financing or capital structure decision is a significant managerial decision .It influences the shareholders returns and risk consequently; the market value of share may be affected by the capital structure decision. The company will have to plan its capital structure initially at the time of its promotion.

Need And Importance Of Capital Structure:

The value of the firm depends upon its expected earnings stream and the rate used to discount this stream. The rate used to discount earnings stream it's the firm's required rate of return or the cost of capital. Thus, the capital structure decision can affect the value of the firm either by changing the expected earnings of the firm, but it can affect the reside earnings of the shareholders. The effect of leverage on the cost of capital is not very clear. Conflicting opinions have been expressed on this issue. In fact, this issue is one of the most continuous areas in the theory of finance, and perhaps more theoretical and empirical work has been done on this subject than any other.

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 minimizes the weighted average cost of capital. The question of the existence of optimum use of leverage has been put very succinctly by Ezra Solomon in the following words.

Given that a firm has certain structure of assets, which offers net operating earnings of given size and quality, and given a certain structure of rates in the capital markets, is there some specific degree of financial leverage at which the market value of the firm's securities will be higher than at other degrees of leverage?

The existence of an optimum capital structure is not accepted by all. These exist two extreme views and middle position. David Durand identified the two extreme views the net income and net operating approaches.

Scope Of The Study:

A study of the capital structure involves an examination of long term as well as short term sources that a company taps in order to meet its

requirements of finance. The scope of the study is confined to the sources that **Ultra tech cements** .

Objectives Of The Study:

1. To understand the concept and significance of capital structure in corporate financial management.
2. To analyze the composition of debt and equity used by the company for financing its operations and growth.
3. To evaluate the impact of capital structure on financial performance using key financial ratios and indicators.
4. To examine the relationship between debt-equity mix and profitability of the company.
5. To assess the effect of capital structure on the cost of capital and shareholder wealth maximization.
6. To identify the advantages and disadvantages of debt and equity financing in achieving financial objectives.
7. To analyze the financial risk associated with different capital structure decisions.
8. To study the trends and changes in the company's capital structure over a specified period.
9. To determine the optimal balance between debt and equity for improving financial efficiency and stability.
10. To provide suggestions and recommendations for enhancing capital structure decisions and achieving sustainable financial performance.

II. Research Methodology And Data Analysis

Data relating to Ultra tech cements. Has been collected through

Secondary Sources:

- Published annual reports of the company

Primary Sources:

- Detailed discussions with Asst.Finance Manager.
- Discussions with the Finance manager and other members of the Finance department (plant location).

Data Analysis

The collected data has been processed using the tools of

- Ratio analysis
- Graphical analysis
- Year-year analysis

These tools access in the interpretation and understanding of the Existing scenario of the Capital Structure.

LIMITATION OF Study

EPS is one of the mostly widely used measures of the company's performance in practice. As a result of this, in choosing between debt and equity in practice, sometimes too much attention is paid on EPS, which however, has serious limitations as a financing-decision criterion.

The major short coming of the EPS as a financing-decision criterion is that it does not consider risk; it ignores variability about the expected value of EPS. The belief that investors would be just concerned with the expected EPS is not well founded. Investors in valuing the shares of the company consider both expected value and variability.

III. LITERATURE REVIEW

Capital Structure Defined:

The capital structure decision can affect the value of the firm either by changing the expected earnings or the cost of capital or both. The objective of the firm should be directed towards the maximization of the value of the firm the capital structure, or average, decision should be examined from the point of view.

The combination of a company's long-term debt, specific short-term debt, common equity, and preferred equity; the capital structure is the firm's various sources of funds used to finance its overall operations and growth. Debt comes in the form of bond issues or long-term notes payable, whereas equity is classified as common stock, preferred stock, or retained earnings. Short-term debt such as working capital requirements also is considered part of the capital structure

The assets of a company can be financed either by increasing the owners claim or the creditors

claim. The owners claims increase when the form raises funds by issuing ordinary shares or by retaining the earnings, the creditors claims increase by borrowing .The various means of financing represents the "financial structure" of an enterprise .The financial structure of an enterprise is shown by the left hand side (liabilities plus equity) of the balance sheet. Traditionally, short-term borrowings are excluded from the list of methods of financing the firm's capital expenditure, and therefore, the long term claims are said to form the capital structure of the enterprise .The capital structure is used to represent the proportionate relationship between debt and equity .Equity includes paid-up share capital, share premium and reserves and surplus.

The financing or capital structure decision is a significant managerial decision .It influences the shareholders returns and risk consequently; the market value of share may be affected by the capital structure decision. The company will have to plan its capital structure initially at the time of its promotion.

Factors Affecting The Capital Structure

Leverage: The use of fixed charges of funds such as preference shares, debentures and term-loans along with equity capital structure is described as financial leverage or trading on. Equity. The term trading on equity is used because for raising debt.

Debt /Equity Ratio-Financial institutions while sanctioning long-term loans insists that companies should generally have a debt –equity ratio of 2:1 for medium and large scale industries and 3:1 indicates that for every unit of equity the company has, it can raise 2 units of debt. The debt-equity ratio indicates the relative proportions of capital contribution by creditors and shareholders.

Ebit-Eps Analysis-In our research for an appropriate capital structure we need to understand how sensitive is EPS (earnings per share) to change in EBIT (earnings before interest and taxes) under different financing alternatives.

The other factors that should be considered whenever a capital structure decision is taken are

- Cost of capital
- Cash flow projections of the company
- Size of the company
- Dilution of control
- Floatation costs

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.

Capital Structure And Firm Value:

Since the objective of financial management is to maximize shareholders wealth, the key issue is: what is the relationship between capital structure and firm value? Alternatively, what is the relationship between capital structure and cost of capital? Remember that valuation and cost of capital are inversely related. Given a certain level of earnings, the value of the firm is maximized when the cost of capital is minimized and vice versa.

There are different views on how capital structure influences value. Some argue that there is no relationship what so ever between capital structure and firm value; other believe that financial leverage (i.e., the use of debt capital) has a positive effect on firm value up to a point and negative effect thereafter; still others contend that, other things being equal, greater the leverage, greater the value of the firm.

Cost Of Capital And Valuation Approach

The cost of a source of finance is the minimum return expected by its suppliers. The expected return depends on the degree of risk

assumed by investors. A high degree of risk is assumed by shareholders than debt-holders. In the case of debt-holders, the rate of interest is fixed and the company is legally bound to pay dividends even if the profits are made by the company. The loan of debt-holders is returned within a prescribed period, while shareholders will have to share the residue only when the company is wound up.

This leads one to conclude that debt is cheaper source of funds than equity. This is generally the case even when taxes are not considered. The tax deductibility of interest charges further reduces the cost of debt. The preference share capital is also cheaper than equity capital, but not as cheap as debt. Thus, using the component, or specific, cost of capital as criterion for financing decisions and ignoring risk, a firm would always like to employ debt since it is the cheapest source of funds.

Cash Flow Approach:

One of the features of a sound capital structure is conservatism does not mean employing no debt or small amount of debt. Conservatism is related to the fixed charges created by the use of debt or preference capital in the capital structure and the firm's ability to generate cash to meet these fixed charges. In practice, the question of the optimum (appropriate) debt –equity mix boils down to the fir's ability to service debt without any threat of insolvency and operating inflexibility. A firm is considered prudently financed if it is able to service its fixed charges under any reasonably predictable adverse conditions.

The fixed charges of a company include payment of interest, preference dividend and principal, and they depend on both the amount of loan securities and the terms of payment. The amount of fixed charges will be high if the company employs a large amount of debt or preference capital with short-term maturity. Whenever a company thinks of raising additional debt, it should analyse its expected future cash flows to meet the fixed charges. It is mandatory to pay interest and return the principal amount of debt of a company not able to generate enough cash to meet its fixed obligation, it may have to face financial insolvency. The companies expecting larger and stable cash inflows in to employ fixed charge sources of finance by those companies whose cash inflows are unstable and unpredictable.

It is possible for high growth, profitable company to suffer from cash shortage if the liquidity (working capital) management is poor. We have examples of companies like BHEL, NTPC, etc., whose debtors are very sticky and they continuously face liquidity problem in spite of being profitability servicing debt is very burdensome for them.

One important ratio which should be examined at the time of planning the capital structure is the ration of net cash inflows to fixed changes (debt saving ratio). It indicates the number of times the fixed financial obligation are covered by the net cash inflows generated by the company.

EPS Variability and Financial Risk: -

The EPS variability resulting form 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 avid 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 financial risk perceived by the shareholders, which does not exceed the benefit of increase EPS. As we have seen, if a company increase its debt beyond a point the expected EPS will continue to increase but the value of the company increases its debt beyond a point, the expected 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. The EPS criterion does not consider the long-term perspectives of financing decisions. It fails to deal with the risk return trade-off. A long term view of the effects of the financing decisions, will lead one to a criterion of the wealth maximization rather that EPS maximization. The EPS criterion is an important performance measure but not a decision criterion.

Given limitations, should the EPS criterion be ignored in making financing decision? Remember that it is an important index of the firm's performance and that investors rely heavily on it for their investment decisions. Investors do not have information in the projected earnings and cash flows and base their evaluation and historical data. In choosing between alternative financial plans, management should start with the evaluation of the impact of each alternative on near-term EPS. But management's ultimate decision making should be guided by the best interests of shareholders.

Therefore, a long-term view of the effect of the alternative financial plans on the value of the shares should be taken, o management opts for a financial plan which will maximize value in the long run but has an adverse impact in near-term EPS, and the reasons must be communicated to investors. A careful communication to market will be helpful in reducing the misunderstanding between management and Investors.

IV. DATA ANALYSIS AND INTERPRETATION

Year 2020-21

Performance of company (Amount in Rs.Cr's)

Gross Revenue	13558.42	Total Expenditure	11782.74
Profit (Loss) before tax	1786.19	Profit after tax	1404.23
Earnings per share Rs.	51.24	Dividend ratio	15%

Year 2021-22

Performance of company (Amount in Rs.Cr's)

Gross Revenue	18622.23	Total Expenditure	14144.45
Profit (Loss) before tax	3351.36	Profit after tax	2446.19
Earnings per share Rs.	89.26	Dividend ratio	20%

Year 2022-2023

Performance of company (Amount in Rs.Cr's)

Gross Revenue	20598.13	Total Expenditure	15617.65
Profit (Loss) before tax	3825.40	Profit after tax	2655.63
Earnings per share Rs.	96.85	Dividend ratio	23.51%

Year 2023-2024

Performance of company (Amount in Rs.Cr's)

Gross Revenue	20501.86	Total Expenditure	16354.92
Profit (Loss) before tax	2775.51	Profit after tax	2144.47
Earnings per share Rs.	78.20	Dividend ratio	23.24%

Year 2024-2025

Performance of company (Amount in Rs.Cr's)

Gross Revenue	23418.1	Total Expenditure	18851.20
Profit (Loss) before tax	2886.25	Profit after tax	2017.73
Earnings per share Rs.	73.45	Dividend ratio	21.39%

PERFORMANCE ANALYSIS OF 2020-21

Company is operating in 3 segments, out of which cement contributes about 55% of turnover while the Boards and prefab segments contribute about 45%. Huge investment in the industrial sector over the next 3 years is expected to lead to higher cement off –take on the back of strong GDP growth across the country. It is expected that the domestic cement consumption would grow at a CAGR of 8% for the next 5 ears. By the domestic consumption is expected to grow to 199 million Tons from 136

million Tons consumption. During the year **2020-21** your company's Gross sales increased.

Net sales increased by about 39% to Rs.1404.23 crs from Rs.1093.24 crs in FY **2020-21**. Improved sales from all the tree divisions particularly from prefab division contributed for increased turnover.

PERFORMANCE ANALYSIS OF 2018-2019

Company is operating in 3 segments, out of which cement contributes about 65% of turnover while the Boards and prefab segments contribute about 52%. Huge investment in the industrial sector over the next 5 years is expected to lead to higher cement off –take on the back of strong GDP growth across the country. It is expected that the domestic cement consumption would grow at a CAGR of 11% for the next 5 ears. By FY 2021 the domestic consumption is expected to grow to 232 million Tons from 152 million Tons consumption FY**2020-21**. During the year **2020-21** your company's Gross sales increased.

Net sales increased by about 38.57% to Rs.18270.69 crs from Rs. 13205.64 crs in FY **2020-21**. Improved sales from all the tree divisions particularly from prefab division contributed for increased turnover.

PERFORMANCE ANALYSIS OF 2021-22

Company is operating in meny segments, out of which cement contributes about 62% of turnover while the Boards and prefab segments contribute about 48%. Huge investment in the industrial sector over the next 10 years is expected to lead to higher cement off –take on the back of strong GDP growth across the country. It is expected that the domestic cement consumption would grow at a CAGR of 13% for the next10 years. By FY 2021 the domestic consumption is expected to grow to 289 million Tons from 232 million Tons consumption FY2022. During the year **2021-22** your company's Gross sales increased.

Net sales increased by about 42.54% to Rs.20174.94 crs from Rs. 18313.13 crs in FY **2021-22**. Improved sales from all the tree divisions particularly from prefab division contributed for increased turnover.

PERFORMANCE ANALYSIS OF 2022-2023

1.The production and Sales has increased by 8 %

2.Cement turnover has increased by3% as against fall in Sales realization by 12% last year.

3.Cement Boards Division has contributed 18% more than the previous year to the PBDIT.

4.Perform Division realization has increased by 0.21% even the Turnover have came down to 845 lacs from 1189 lacs in last year.

5.The profit After Tax has came down from 510.96 crs in Current year because of slope in Cement Industry.

6.The Interest cost has come down by 24% due to reduction in Interest rates by Commercial Banks & Public Deposits.

PERFORMANCE ANALYSIS OF 2021-2022

Company is operating in 4 segments, out of which cement contributes about 58% of turnover while the Boards and prefab segments contribute about 55%. Huge investment in the industrial sector over the next 4 years is expected to lead to higher cement off –take on the back of strong GDP growth across the country. It is expected that the domestic cement consumption would grow at a CAGR of 11.25% for the next 3years. By FY 2022 the domestic consumption is expected to grow to 285 million Tons from 252 million Tons consumption FY2021. During the year **2021-2022** your company's Gross sales decreased.

Net sales decreased by about 39.67% to Rs.2017.73 crs from Rs. 2144.47 crs in FY **2021-2022**. Decreased sales from all the tree divisions particularly from prefab division contributed for decreased turnover. Because of the market value of the share and investment in other sectors the revenue was decreased.

V. FINDINGS

1. The study found that capital structure plays a crucial role in determining a company's financial performance, profitability, and market value.
2. A balanced mix of debt and equity helps in minimizing the overall cost of capital and maximizing shareholder wealth.

3. Debt financing provides tax benefits through interest tax shields, which can improve the company's earnings and financial efficiency.
4. Excessive use of debt increases financial risk and fixed interest obligations, which may adversely affect the firm's liquidity and solvency.
5. Equity financing enhances financial stability by reducing repayment pressure but may lead to dilution of ownership and control.
6. The Debt-Equity Ratio was found to be an important indicator in assessing the company's financial leverage and risk position.
7. Companies with an optimal capital structure generally exhibited better profitability and higher returns to shareholders compared to firms with an imbalanced financing mix.
8. The analysis revealed a positive relationship between efficient capital structure management and key performance indicators such as Return on Equity (ROE) and Earnings Per Share (EPS).
9. Market conditions, business risk, growth opportunities, and taxation policies significantly influence capital structure decisions.
10. Maintaining financial flexibility through a proper balance of debt and equity enables companies to meet future investment requirements and withstand economic uncertainties.
11. Effective capital structure planning contributes to long-term financial sustainability and enhances investor confidence.
12. The study highlights that there is no universally ideal capital structure; the optimal mix varies depending on the nature of the business, industry characteristics, and financial objectives of the company.

VI. SUGGESTIONS:

1. The company should maintain an optimal balance between debt and equity to minimize the overall cost of capital and maximize shareholder wealth.
2. Management should regularly review the capital structure to ensure that financing decisions align with changing business and market conditions.
3. Excessive dependence on debt financing should be avoided, as it increases financial risk and interest payment obligations.
4. The company should utilize debt cautiously to take advantage of tax benefits while maintaining adequate liquidity and solvency.
5. Equity financing may be preferred during periods of economic uncertainty to reduce financial risk and strengthen the company's financial position.
6. Financial ratios such as Debt-Equity Ratio, Interest Coverage Ratio, Return on Equity (ROE), and Earnings Per Share (EPS) should be continuously monitored for effective capital structure management.
7. The company should diversify its sources of finance to reduce dependence on a single funding source and improve financial flexibility.
8. Management should consider industry standards, growth opportunities, and risk factors before making financing decisions.
9. Retained earnings should be effectively utilized as an internal source of finance to reduce external financing costs.
10. A long-term strategic financing policy should be adopted to support sustainable growth and enhance investor confidence.

VII. CONCLUSIONS

Capital structure is a vital component of financial management that significantly influences a company's profitability, risk, liquidity, and overall market value. The study concludes that achieving an optimal balance between debt and equity is essential for maximizing financial performance and shareholder wealth. While debt financing offers tax advantages and can enhance returns, excessive reliance on debt increases financial risk and

repayment obligations. On the other hand, equity financing provides financial stability but may dilute ownership and reduce earnings per share.

The analysis indicates that companies with a well-planned and balanced capital structure are better positioned to achieve sustainable growth, maintain financial flexibility, and withstand economic uncertainties. The choice of capital structure depends on various factors such as business risk, industry characteristics, market conditions, growth prospects, and management objectives. Therefore, organizations should continuously evaluate and adjust their financing mix to ensure efficient utilization of resources and long-term financial success. Effective capital structure management ultimately contributes to enhanced profitability, stronger investor confidence, and improved corporate value.

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