# THE EFFECT OF FINANCIAL LEVERAGE ON PROFITABILITY OF SELECTED CEMENT COMPANIES OF INDIA

Prof. (Dr.) CA. Haresh Kothari\*

#### **ABSTRACT**

This research is an attempt to establish a stochastic relationship between financial leverage and Profitability of selected cement companies of India. Since financial reports are important in forecasting and decision making of users, therefore, in this research has been addressed to effect of financial leverage on profitability during 2012-13 to 2016-17 period. In this researcher has taken 3 cement companies and 5 years of financial data to study the effect of financial leverage of profitability of cement industry. Five years of financials taken from annual report for the years 2012-13 to 2016-17 regarding financial leverage and profitability. Based on the data analysis it can be concluded that there is significant effect of financial leverage on cement companies' profitability.

\_\_\_\_

Keywords: Financial Leverage, Operating Leverage, Combined Leverage, Profitability, Financials.

# Introduction

Financial leverage use is a measure of how much firms utilize value and debt to back its advantages. An organization can back its speculations by debt and value. The organization may likewise utilize inclination capital. The rate of enthusiasm on debt is settled regardless of the organization's rate of profit for resources. The financial leverage use utilized by an organization is expected to gain more on the settled charges stores than their expenses. As debt increments, financial leverage use increments.

The essential rationale of an organization in utilizing financial leveraged use is to amplify the investors' arrival under positive monetary conditions. The part of budgetary use in amplifying the arrival of the investors depends on the suppositions that the settled charges reserves, (for example, the credit from financial leveraged establishments and different sources or debentures) can be acquired at a cost lower than the association's rate of profit for net assets.

#### Leverage

Leverage is an essential factor having awesome effect on the financing choice or capital structure choice of a firm. There are a few sources at the transfer of a firm to raise capital or satisfy its financing necessities. Every one of these wellsprings of financing involves diverse expenses. In this specific situation, Leverage is of principal significance. Leverage can be portrayed as a work of a wellspring of store which requires the firm to pay the settled charges or settled return- e.g. on the off chance that debentures are utilized, enthusiasm on debentures must be paid or if inclination shares are utilized, profit must be paid.

# Types of Leverage

There are essentially two sorts of Leverage 1) Operating Leverage and 2) Financial Leverage however when a firm falls back on a Leverage which soaks up the components of both the sorts of Leverage, a third kind of Leverage appears which Combined Leverage is:

<sup>\*</sup> Vice Chancellor, KK Modi University, Chhattisgarh, India.

#### Operating Leverage

At the point when there are settled expenses or costs in the company's wage stream, Operating Leverage comes about. The firm which utilizes settled costs must have the capacity to utilize the same to amplify the impacts of changes in its deals on its profit before intrigue and charges (EBIT). The abrogating worry for the firm is that it must have the capacity to meet the settled costs paying little mind to volume.

#### Financial Leverage

Monetary Leverage relates to financing movement of a firm. The sources from where a firm can raise its assets can be classified into two sorts 1) Those sources which convey a settled monetary charge 2) those sources which don't have include settled charges. Financial leverage is a drop out of work of settled charges bearing securities or wellsprings of fund. The superseding worry of the firm here is to satisfy the legally binding commitments and still the adjustments in the earnings before interest and tax (EBIT) should result in greater Earning Per Share (EPS).

#### Combined Leverage

At the point when a firm utilizes settled expenses in its salary streams and in addition settled charge bearing wellsprings of back, it can be said to have utilized Combined Leverage. This entails not only operating risk but also financial risk.

# Financial Leverage - Meaning & Significance

When a company settles on a financing choice, it needs to consider all conceivable approaches to satisfy its budgetary prerequisites. The choice to utilize a specific wellspring of fund is enormously impacted by the kind of undertaking to be financed, nature of capital necessity; the company's acquiring limit as likewise its debt reimbursement limit and the overarching economic situations among numerous different variables. The management of a company experiences many meetings to generate new ideas previously settling on a specific capital structure-Equity overwhelmed or Debt-ruled or exchange off between the two and so on. Obviously, the primary reason for existing is to amplify the market estimation of the offer and to bring better than average comes back to the speculators.

For the investors, Equity is a dangerous road for venture when contrasted and Debt stores. There turns on Equity Share Capital generally rely upon the monetary execution of the company, profit approach of the company and so forth and accordingly, the profits are not ensured. While the debt finance gives guaranteed returns and furthermore guarantees security of investment. For a company, Equity Shares is the slightest hazardous of all wellsprings of back. Conveyance of value profit is constantly subject to company's financial leverage position and its future development designs. However, debt reserve or use when utilized additionally involves general instalment of adjusting charges (intrigue) and recovery of capital. The dictionary meaning of the word leverage is 'the power to control' or 'augmentation' or 'dominance'. In terms of business finance, the leverage is employment of debt fund or borrowed capital. Although leverage is purely a financial tool, it is used immensely by managers involved in the decision-making processes related to capital structuring decisions, mergers and acquisitions, ascertainment of cost of capital etc.

Financial Leverage has an immediate bearing on the state of the capital structure of an company or firm. Capital Structure fundamentally speaks to different sources that a firm has utilized to satisfy its financial leverage prerequisites. It likewise uncovers the extent of debt capital and value capital. At the point when a firm uses debt finances or settled charges wellsprings of assets, for example, inclination capital or debentures alongside the proprietors' assets or value in the capital structure, it is portrayed as Financial Leverage or exchanging on value. The coinage of the term 'exchanging on value' is because of the way that it is the proprietor's value that is utilized by the company to raise debt.

In the present economic situations when the desires of the Equity investors are rising, an company must have the capacity to decide a sensible blend of debt finances and possessed assets. It needs to confirm whether the work of debt reserve to a specific degree enables, the company to understand the appreciated objectives or not. All things considered, use is an effective wonder influencing a company's benefit and liquidity and general financial performance. At the point when a company includes debt in its capital structure, it constantly brings about settled charges that must be paid to benefit the debt. This is a critical occasion on the grounds that the company needs to utilize these assets to expand its benefit. On the off chance that such debt reserves are not profitably used, their utilization will end up being counterproductive. As it were, the work of debt in the capital structure deeply affects the benefit of the company. In this regard, the cost of acquiring accepts noteworthy significance opposite the rate return on net resources that a firm appreciates.

Then again, the liquidity of a company is likewise affected by use. The more prominent the level of debt reserves utilized, the more prominent will be surge of trade out terms of cost of overhauling the debt. That affects the money benefit earned by a company.

Furthermore, debt subsidizes likewise must be recovered after certain length of time. That is significant money out stream for the company. Be that as it may, if an company's capital structure is commanded by value alone, the benefit of assessment shield won't be accessible. With a specific end goal to satisfy desires of high number of value investors, the company needs to disperse a more prominent bit of benefit as profit to value investors.

Financial Leverage additionally gives assess shield in that the charges paid to benefit debt are impose deductible and along these lines they lessen the duty risk of a firm. This likewise upgrades the income accessible to investors. This again is helpful to the firm.

For whatever length of time that the rate of procuring is higher than the cost of acquiring, use is useful. However, in the event that there is a plausibility of a decrease in the rate of income, the company should endeavour to discard debt reserve to the degree allowed by accessibility of adequate assets or profit age or expendable here and now ventures.

#### Literature Review

CA Sachchidanand Pachori and Dr. Navindra Totala (2012) made an endeavour to think about the impact of financial leverage use on the investors' arrival and market capitalisation of car bunch organizations of Pithampur, Madhyapraesh, India. Their examination covers five years' day and age from 2006-07 to 2010-2011. Aside from managing the essentials of Financial Leverage, the paper unmistakably clarifies the effect of use on the gainfulness of the car enterprises of the locale. The creators opine that the investor's returns are influenced by the effectiveness of all business, operational and budgetary movement of the endeavour. The creators have talked about in the detail the financial leverage ergonomics for the car part fabricating units. Pithampur is otherwise called the Detroit of India as all the significant auto organizations are based here. Every one of these organizations works in a colossal bunch and have comparable items portfolio as well as utilize comparable wellsprings of fund to back their operations.

Aasia Asif, Wagas Rasool and Yasir Kamal (2011) have analyzed the connection between profit arrangement and monetary use of 403 organizations, recorded with Karachi Stock Exchange amid the period 2002 to 2008. In the underlying segment the paper talks about the connection between studs of an organization and its effect on profit appropriation. The paper talks about in detail the well-established problem of the organization that enormous profit pay-out means excessively dependence on outer value and miniscule profit pay-out means frustrating the investors. The paper tests the profit approach, immeasurably took after by the organizations, by applying the expanded model of Linter (1956) with the debt proportion of the firm, the earlier year's profit yield as its free factors and change in income as a spurious variable. At to start with, the creators ascertain the graphic insights for whole factors and afterward connection framework was figured to recognize the preparatory relationship among every one of the factors, trailed by relapse examination on board information to inspect the importance and extent through settled and irregular impacts models. Hypothetical statements have been defended through irregular impact demonstrate that the level of corporate debt (use) and broadly honed profit approach, altogether, influence the profit arrangement of the Pakistani firms. Then again, financial leverage use is found to negatively affect profit pay-out, showing less profit instalments by much levered firms. The creators additionally closed from the discoveries that adjustment in profit has no huge effect on profit arrangement if there should arise an occurrence of Pakistani firms while the profit yield has positive effect and the other way around. Settled impact demonstrates, connected for the examination, and bolsters just the noteworthy impact of profit yield on profit per share. The paper conveys to the fore an interesting point that occasionally firms need to acquire for its monetary prerequisites and afterward despite the enormous financial leverage weight that these obtaining involve, the organizations get considerably more, in spite of the fact that at died down rate, to disseminate adequate profit to value investors.

Murray Z. Straight to the point and Vidhan K. Goyal (2009) affirm that the writing on financial leverage use has misjudged the connection amongst benefits and use and that exceptionally beneficial firm normally issue debt and repurchase value and ordinarily low benefit firms decrease debt and issue value. Keeping in mind the end goal to examine and support their assessment they took a specimen of 2, 26,355 firm year perceptions from 1971-2006. They utilized time arrangement examination and relapse investigation and scaling strategy with the end goal of examination. They infer that the consequences of their exploration are steady with the exchange off

hypothesis of capital structure. That infers those benefits emphatically impact debt issuance. They additionally state, on the premise of the outcomes, that the measure of the organizations is essential on the grounds that bigger firms influence more dynamic utilization of debt and little firms to make more dynamic utilization of value. It likewise implies that the littlest firm will surely fall back on value and the biggest firm will definitely turn to debt. The impact of firm size is generously bigger on debt issuances than it is on value issuances. This inclination additionally influences the gainfulness of the organizations. In the underlying area of the paper the creators have talked about the fine parts of capital structure hypotheses and their effect on the organizations. The creators express that the economic situations additionally impact the decision of debt as a wellspring of fund. The great circumstances at the budgetary market imply that the organizations covetous to look for assets would perpetually pick debt. Be that as it may, when the circumstances are turbulent at the business sectors, firms wind up plainly short of contracting debt. That isn't all; even the biggest of the organizations demonstrate repugnance toward debt when the business sectors hint at smallest drowsiness or retreat.

#### **Research Objective**

- To study the effect of financial leverage on profitability of selected cement companies of India.
- To study the relation between debt equity ratios with the profitability measures.

# **Research Methodology**

# **Method of Data Collection**

The secondary data necessarily required to perform the research was gathered from the annual report of selected cement companies of India.

# Sample Size

Three Cement companies of India has been taken for this study.

#### **Variables Description**

Profitability ratios such as Gross Profit Margin (%), Net Profit Margin (%) and Operating Profit Margin (%) has been taken as depend variable and debt to equity ratio taken as independent variable for this study

# **Data Analysis Tool**

For this study researcher has used ANOVA and ratio analysis tool.

#### **Data Analysis**

| Debt Equity Ratio |      |      |      |      |      |  |
|-------------------|------|------|------|------|------|--|
|                   | 2017 | 2016 | 2015 | 2014 | 2013 |  |
| UltraTech Cement  | 0.22 | 0.23 | 0.35 | 0.28 | 0.29 |  |
| India Cements     | 0.52 | 0.71 | 0.81 | 0.76 | 0.75 |  |
| JK Lakshmi Cement | 1.42 | 1.27 | 1.26 | 1.09 | 0.93 |  |

| Gross Profit Margin (%) |       |       |       |       |       |  |
|-------------------------|-------|-------|-------|-------|-------|--|
|                         | 2017  | 2016  | 2015  | 2014  | 2013  |  |
| UltraTech Cement        | 15.49 | 13.8  | 13.34 | 13.63 | 18.48 |  |
| India Cements           | 10.45 | 13.05 | 9.59  | 5.15  | 11.77 |  |
| JK Lakshmi Cement       | 6.63  | 4.09  | 10.29 | 8.1   | 13.61 |  |

| Net Profit Margin (%) |       |      |      |       |       |  |
|-----------------------|-------|------|------|-------|-------|--|
|                       | 2017  | 2016 | 2015 | 2014  | 2013  |  |
| UltraTech Cement      | 10.99 | 9.02 | 8.78 | 10.57 | 13.15 |  |
| India Cements         | 3     | 3.26 | 0.66 | -3.65 | 3.55  |  |
| JK Lakshmi Cement     | 2.81  | 0.23 | 4.14 | 4.52  | 8.55  |  |

| Operating Profit Margin (%) |       |       |       |       |       |  |  |
|-----------------------------|-------|-------|-------|-------|-------|--|--|
|                             | 2017  | 2016  | 2015  | 2014  | 2013  |  |  |
| UltraTech Cement            | 20.79 | 19.14 | 18.29 | 18.82 | 23.16 |  |  |
| India Cements               | 14.9  | 18.21 | 15.42 | 11.37 | 17.9  |  |  |
| JK Lakshmi Cement           | 12.55 | 10.31 | 15.14 | 14.68 | 20.86 |  |  |

# Relation between Debt Equity Ratio and Gross Profit Margin (%)

| ANOVA               |          |    |          |          |          |          |
|---------------------|----------|----|----------|----------|----------|----------|
| Source of Variation | SS       | df | MS       | F        | P-value  | F crit   |
| Between Groups      | 272.4144 | 1  | 272.4144 | 123.5469 | 3.83E-06 | 5.317655 |
| Within Groups       | 17.63958 | 8  | 2.204947 |          |          |          |
| Total               | 290.054  | 9  |          |          |          |          |

# Relation between Debt Equity Ratio and Net Profit Margin (%)

| ANOVA               |          |    |          |          |          |          |
|---------------------|----------|----|----------|----------|----------|----------|
| Source of Variation | SS       | df | MS       | F        | P-value  | F crit   |
| Between Groups      | 52.42573 | 1  | 52.42573 | 30.17241 | 0.000579 | 5.317655 |
| Within Groups       | 13.90031 | 8  | 1.737539 |          |          |          |
| Total               | 66.32605 | 9  |          |          |          |          |

# Relation between Debt Equity Ratio and Operating Profit Margin (%)

| ANOVA               |          |    |          |          |          |          |
|---------------------|----------|----|----------|----------|----------|----------|
| Source of Variation | SS       | df | MS       | F        | P-value  | F crit   |
| Between Groups      | 643.4714 | 1  | 643.4714 | 260.3827 | 2.18E-07 | 5.317655 |
| Within Groups       | 19.77002 | 8  | 2.471252 |          |          |          |
| Total               | 663.2414 | 9  |          |          |          |          |

#### Conclusion

From the data analysis it can be seen that there is association with the debt equity ratio with the Gross Profit Margin ratio, debt equity ratio with the Net Profit Margin ratio and debt equity ratio with the Operating Profit Margin ratio. So, it can be concluded that there is significant association and effect of financial leverage on profitability of selected cement companies of India.

# References

- 1. Asif, A., Rasool, W., & Kamal, Y. (2011, February). Impact of Financial Leverage on Dividend Policy: Empirical evidence from Karachi Stock Exchange-listed Companies. African Journal of Business Management, 5(4).
- 2. Bebczuk, R., & Galino, A. J. (2010). Corporate Leverage, Cost of Capital and Financial Crisis in America. Research Department of the InterAmerican Development Bank.
- 3. Frank, M. Z., & Goyal, V. K. (2009). Profits and Capital Structure. AFA San Francisco Meetings Papers Series.
- 4. Pachori, S., & Totala, N. (2012). Influence of Financial Leverage on Shareholders Return and Market Capitalization: A Study of Automotive Cluster Companies of Pithampur. National University of Singapore's Business Journal.

