

# Valuation of Select Companies in Cement Industry Listed In National Stock Exchange Limited Based on Market Capitalisation

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*Abstract: The economic progress and productive efficiency of an economy is governed to a large extent by the effective mobilization and distribution of savings into productive channels of investment. The company is not a single entity which is supported by the economy as well as the industry in which the company operates. The ability of the corporate sector to mobilize funds through capital markets depends on efficient functioning of the stock exchanges. The extent, to which security prices reflect the real worth of companies, reflects the efficiency of the market. The main objective of doing corporate valuation is to take part in company's equity capital as a shareholder of a company. Before investing in any company, the company's financials through its income statement and balance sheet, market share, competition, competitive advantage, scalability of business etc., has to be studied well apart from general economic conditions of a nation. The end result for performing the valuation analysis is to give suggestion to the investor whether the company stocks are worth for investing and identifying the possibility of expected yield out of it. Here select scrips in the cement industry have been taken for valuation analysis.*

*Keywords: Before investing in any company, the company's financials through its income statement and balance sheet, market share, competition, competitive advantage, scalability of business etc.,*

## I. INTRODUCTION

Foreign Institutional Investors and Private equity investors are influencing the Indian capital market for the past several years. Despite the flow of money towards mutual funds are mounting year on year, still the stock market is influenced by the foreign institutional investors. They find Indian market is better placed in terms of yielding return compared to other countries as the economic growth rate of India is relatively better than other countries. But the strategy adopted by the foreign investors for getting remarkable return is purely based on their right and perfect valuation research. They used to invest in the Indian corporate at right value and exiting from the Indian market when they find stock market is overvalued. Hence in the long run those who are able to evaluate the corporate by doing proper research are getting better return than others, who do not do proper analysis. Hence there is a need to do proper valuation analysis so that right entry and exit from the stock market is possible.

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## II. OBJECTIVES

The Primary objective is to do corporate valuation of select cement Companies listed on NSE India Ltd., for investment purpose. Besides, the following are the secondary objectives.

- To predict the compound annual growth rate for Market Price of select companies and EPS for period.
- To rank the selected CEMENT companies on the basis of the select financial ratios.
- To ascertain the Altman Z-Score to unveil their solvency status of the selected companies.
- Valuation of select cement companies selected based on the market capitalization

## III. SCOPE OF THE STUDY

The various research studies on the impact of various factors on share price and stock returns on various stock indices in India and across the world over a period of time have clearly exhibited many contradictory results, with some researchers pointing out some critical variables greatly influencing the share prices while others have found these same set of variables as minor elements having little impact on the share prices. This work attempts to explore the role of corporate valuation in influencing the share price of the CEMENT sector stocks listed on NSE India Ltd.

Thus the research work extends the valuation of securities listed in the Indian capital market by providing a thorough understanding of the factors affecting stock prices of select CEMENT companies listed on NSE India Ltd.

## IV. RESEARCH METHODOLOGY

Research methodology generally referred as the systematic course of action carried out in research. Analytical Research design is used to for this research. The cement sector is selected for the research. Five companies listed on the National Stock Exchange are selected on the basis of various market capitalizations. The companies are UltraTech, Shree cements, Ramco Cements, J.K. Cements and Heidelberg cement. The data collected for the valuation is from the financial year 2009-10 to 2017-18. The following tools are used in this study. CAGR, Ratio ranking, Altman z score, Grahams number, Relative ratio through Market capitalization, PEG ratio, Promoter holding and pledge ratio.

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### V. DATA ANALYSIS AND INTERPRETATION

**Table 1. Compound Annual Growth Rate of EPS and Market price from 2008-09 to 2017-18**

Name of the Company	EPS	Market Price
UltraTechCement	0.34	17.53
Shree Cements	9.11	32.01
Ramco Cements	4.36	18.70
J. K. Cement	9.15	21.05
HeidelbergCement	-0.03	17.96

#### Interpretation

During the research period J.K cement is having the highest EPS growth of 9.15% followed by Shree cement of 9.11%

and Heidelberg cement is having the least EPS growth of -0.03%. During the research period Shree cement is having the highest Market Price growth of 32.01% followed by J.K cement of 21.05% and Ultratech cement is having the least Market Price growth of 17.53%.

### VI. RATIO RANKING

Scores are given for each ratio and sum of the scores of all the ratios are used for ranking the companies. The company which is having the highest score is ranked first and so on. The following is the average ratios of the companies during the study period.

**Table 2. Average ratios from 2008-09 to 2017-18**

Ratios	Company Name				
	UltraTech	Shree	Ramco	J. K.	Heidelberg
<b>Profitability Ratios</b>					
Operating Profit Margin (%)	21.77	29.43	24.43	18.27	13.25
Profit Before Interest And Tax Margin (%)	13.78	11.88	16.33	10.69	8.39
Gross Profit Margin (%)	14.06	12.47	16.11	10.92	8.48
Net Profit Margin (%)	11.57	14.51	9.86	6.77	5.12
Return On Capital Employed (%)	13.59	15.62	14.58	11.46	10.65
Return On Net Worth (%)	15.43	21.72	16.33	11.75	7.82
Return on Long Term Funds (%)	14.39	16.90	16.77	11.97	10.74
<b>Liquidity and Solvency Ratios</b>					
Current Ratio	1.02	1.72	0.84	1.41	1.43
Quick Ratio	0.65	1.16	0.54	0.93	1.17
Debt Equity Ratio	0.12	0.41	0.91	1.87	1.46
Long Term Debt Equity Ratio	0.34	0.41	0.64	1.00	0.72
<b>Debt Coverage Ratios</b>					
Interest Cover	8.94	14.68	7.44	3.65	14.58
Total Debt to Owners Fund	0.344	0.20	0.58	1.34	0.92
Financial Charges Coverage Ratio	9.32	19.06	9.02	2.75	2.86
<b>Management Efficiency Ratios</b>					
Inventory Turnover Ratio	10.62	7.46	7.41	7.84	12.03
Debtors Turnover Ratio	18.38	20.06	9.56	25.18	82.41
Investments Turnover Ratio	10.62	7.46	7.41	7.84	12.03
Fixed Assets Turnover Ratio	0.85	1.28	0.53	0.83	0.78
Total Assets Turnover Ratio	0.86	0.92	0.81	0.88	1.02
Asset Turnover Ratio	0.91	0.998	0.81	0.89	0.98
<b>Cash Flow Indicator Ratios</b>					
Dividend Pay-out Ratio Net Profit	11.67	16.43	11.52	19.25	34.02
Earning Retention Ratio	88.57	83.69	88.48	81.12	93.20
Cash Earning Retention Ratio	92.65	91.77	94.08	90.70	96.13

**Table 3. Ranking of ratios for the study period**

Ratios	Company Name				
	UltraTech	Shree	Ramco	J. K	Heidelberg
<b>Profitability Ratios</b>					
Operating Profit Margin (%)	3	5	4	2	1
Profit Before Interest And Tax Margin (%)	4	3	5	2	1
Gross Profit Margin (%)	4	3	5	2	1
Net Profit Margin (%)	4	5	3	2	1
Return On Capital Employed (%)	3	5	4	2	1
Return On Net Worth (%)	3	5	4	2	1
Return on Long Term Funds (%)	3	5	4	2	1
<b>Liquidity and Solvency Ratios</b>					
Current Ratio	2	5	1	3	4
Quick Ratio	2	4	1	3	5
Debt Equity Ratio	5	4	3	1	2
Long Term Debt Equity Ratio	5	4	3	1	2
<b>Debt Coverage Ratios</b>					
Interest Cover	3	5	2	1	4
Total Debt to Owners Fund	4	5	3	1	2
Financial Charges Coverage Ratio	4	5	3	1	2
<b>Management Efficiency Ratios</b>					
Inventory Turnover Ratio	4	2	1	3	5
Debtors Turnover Ratio	2	3	1	4	5
Investments Turnover Ratio	4	2	1	3	5
Fixed Assets Turnover Ratio	4	5	1	3	2
Total Assets Turnover Ratio	2	4	1	3	5
Asset Turnover Ratio	3	5	1	2	4
<b>Cash Flow Indicator Ratios</b>					
Dividend Pay-out Ratio Net Profit	2	3	1	4	5
Earning Retention Ratio	4	2	3	1	5
Cash Earning Retention Ratio	3	2	4	1	5
Total	77	91	59	49	69
Rank	2	1	4	5	3

**Interpretation**

Based on the ratio analysis, Shree cement is having the highest average ratio score of 91 which is ranked as first followed by Ultratech cement, Heidelberg cement, Ramco cement, J.K cement

**VII. ALTMAN Z SCORE**

Altman Z Score is used to find out the solvency ratio of the company. The score is calculated by using the formula:  $Z\text{-Score} = 1.2A + 1.4B + 3.3C + 0.6D + 1.0E$  where  $A = \text{Working capital} / \text{Total Asset}$ ,  $B = \text{Retained Earnings} / \text{Total Asset}$ ,  $C = \text{EBIT} / \text{Total Asset}$ ,  $D = \text{Market Value of equity} / \text{Total Liabilities}$ ,  $E = \text{Sales} / \text{Total Assets}$

**Table 4. Altman Zscore**

Company	Altman Z Score
UltraTechCement	2.25
Shree Cements	4.39
Ramco Cements	2.68
J. K. Cement	2.15
HeidelbergCement	2.17

**Interpretation**

If the company's Z-score is less than 1.8, in future company may become insolvent. If the Z-score value is greater than 3 then the company has no chance to become insolvent in future. If the Score is from 1.8 to 3 then the company is in Stable position. In this research, none of the company has Z-score less than 1.8, so all the companies in the study is in stable position according to Altman Z-Score.



# Valuation of Select Companies in Cement Industry Listed In National Stock Exchange Limited Based on Market Capitalisation

## VIII. GRAHAMS NUMBER

The Graham number is a figure that measures a stock's fundamental value by taking into account the company's earnings per share and book value per share. The formula is as follows

$$\sqrt{22.5 \times (\text{earnings per share}) \times (\text{book value per share})}$$

**Table 5. Grahams Number - Valuation**

Company	Grahams number	Market price
UltraTechCement	1313.84	4250
Shree Cements	4778.10	19630
Ramco Cements	306.42	786.25
J. K. Cement	581.20	887
HeidelbergCement	78.30	72.52

### Interpretation

The Graham number is the upper bound of the price range that a defensive investor should pay for the stock. According to the theory, any stock price below the Graham number is considered undervalued and thus worth investing in. In this

study Heidelberg cement is undervalued according to grahams number and is worth investing in it. All the other companies are trading above the grahams upper bound price. It is evident that due to graham indicator the Heidelberg cement price more than doubled after this study period.

## IX. MARKET CAPITALIZATION RATIO

**Table 6. Relative Ratios by Market Cap as on 31-03-2018**

Company	Market cap to net worth	Market cap to total asset	Market cap to net profit	Market cap to operating profit	Market cap to sales
UltraTechCement	4.51	2.15	52.35	19.85	3.86
Shree Cements	7.67	4.51	49.34	23.86	6.94
Ramco Cements	4.58	2.61	33.32	16.30	4.05
J. K. Cement	3.19	1.15	17.89	8.19	1.51
HeidelbergCement	3.91	1.61	30.69	10.66	2.14

## X. LIMITATIONS OF THE STUDY

- The study focused only on quantitative factors through its income statement and balance sheet and qualitative factors are not taken in to account for valuation.
- As we have used secondary data, all the limitations of secondary data is applicable.
- Data is considered only for the past years and past may not reflect or guarantee the future performance.

## XI. CONCLUSION

Present performance reflects the price of any scrip than past performance. When present performance is not meeting out previous performance or meeting out expectation of the market participants then price of the scrip will come down. If the price the scrip comes down, that does not mean valuation looks attractive. Valuation of the corporate looks attractive if certain financial metrics are good. In this corporate valuation analysis, J.K cement stands first in

relative valuation by comparing market capitalization to various financial metrics. Promoter is also holding remarkably major stake above 65 percentage. J.K. Cement also stands first in Graham number. As per graham number, one should be ready to invest in the equity of J.K cement as it looks undervalued as per graham number. But if we consider the Altman Z score which determines the solvency position of the company, Shree cements has the highest degree of solvency during the study period. Further, ratio analysis also convey Shree cement has the highest average ratio score of 91 which is ranked first followed by Ultratech cement, Heidelberg cement, Ramco cement and J.K cement. Besides Shree Cement has the highest annual growth, which makes the market participants attractive towards this scrip.

## REFERENCES

1. R. Amsaveni, and S. Gomathi, "Fundamental analysis of selected FMCG Companies in India". Asia Pacific Finance & Accounting Review, Vol. 1, No. 3, PP.No.37-55, ISSN 2278-1838, April-June 2013.
2. Ranjit Kumar Paswan, "Analysis of Solvency of Selected FMCG Companies in India". Global Journal of Management & Business Studies, ISSN 2248-9878, Vol. 3, No. 4, PP. 401-406, 2013.
3. J. Hema, and V. Ariram, "Fundamental Analysis with special reference to Pharmaceutical Companies listed in NSE". International Journal of Management, ISSN 0976-6502 (Print), 0976-6510 (Online), ol.7, Issue 2, Feb 2016, PP 123-133, 2016
4. Malakar, B. and Gupta, R. (2002) conducted a study on "Determinants of Share Price-A System Approach: The Modified Model".
5. Prakash Tiwari & Hemraj Verma (2009) conducted a study on "A Fundamental Analysis of Public sector Banks in India"
6. Corporate Valuation and Value creation by Prasanna Chandra- Tata McGraw Hill Education Pvt. Ltd., New Delhi.
7. Respective websites of the corporate and moneycontrol.com, nseindia.com and bseindia.com

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