
Profitability Analysis of Cement Industries

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Abstract

In the growth and development of a country the cement industry plays a significant role. It provides required infrastructure for economic development of the country. More than 60 percent population of our country lives in village. Roads, Buildings and other infrastructures provide means for the upliftment of the economic level of vast rural population. There are many cement industry they provide better quality cement product. But whichever is to be providing better performance in the market is not clear in everybody. Therefore, there is need of comparing in the cement industry.

To study the profitability analysis of the cement industry gives the clear picture about the capability to earning the profit and its management of the company. This paper of “profitability Analysis” includes the many things like Gross Profit, Net Profit, ROI and ROCE etc.

Keywords: Comparative, Profitability, Analysis, Cement Industries, Trends.

1. Introduction

Telecommunication, petroleum, coal, fertilizer, iron, steel and cement etc. are the key infrastructure sectors of India. Cement industry is also plays a significant role, in the rapid growth and development of a country because cement is a fundamental requirement of all constructions activities. Cement is used in housing, dams, bridges, industrial construction, roads etc, so cement is basic material which is used in all types of constructions. Earlier, government sector used to consume over 50% of the total cement sold in India, but in the last decade, its share has come down to 35%. Rural areas consume less than 23% of the total cement. An increased outflow in infrastructure sector, by the government as well as private builders, has raised a significant demand of cement in India. It is the key raw material in construction industry. Also, it has highly influenced those bigger companies to participate in the growing sector. At least 125 plants set up by the big companies in India with about 300 other small scale cement manufacturers, to fulfill the growing demand of cement. Being one of the vital industries, the cement industry contributes to the nation's socioeconomic development. The sum total utilization of cement in a year indicates the country's economic growth.

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The demand of cement in year 2009-2010 is expected to increase by 50 million tons despite of the recession and decline in demand of housing sector. Against India's GDP growth of 7%, the experts have estimated the cement sector to grow by 9 to 10 % in the current financial year. Major Indian cement manufacturers and exporters have all made huge investments in the last few months to increase their production capability. This heralds an optimistic outlook for cement industry. The housing sector in India accounts for 50 % of the cement's demand. And the demand is expected to continue. With the constant effort made by cement manufacturers and exporters, India has become the second largest cement producer in the world.

2. Period of the study

The period of the study is of 5 years. The study period cover the period from year 2006-07 to year 2010-11.

3. Review of Literature

Rao and Chandra have made attempt to assess the financial efficiency of cement companies for the period from 1970-71 to 1977-78 which covers 70% of entire industry. They found out that the profitability of selected companies had decreased continuously from 1970-71 to 1974-75 owing to causes such as inflationary pressure in the country, continuous fall in capacity utilization due to drastic power-cuts and shortage of coal, oil and wagon. The profitability increased in 1975-76 because of appreciable increase in the sales.

Dr. Rasik N. Bavaria has completed his research on "A comparative analysis of profitability vis-à-vis Liquidity performance in cement industry of India" in the year 2004.

He has given importance of profitability and liquidity; by the term 'Liquidity' is meant the debt-repaying capacity of an undertaking. It refers to the firm's ability to meet the claims of suppliers of goods services and capital.

Kaura and Subramanian published an article on the financial performance of 10 units relating to the period from 1972 to 1979 which mainly observed liquidity, profitability, financial structure and overall performance. For this study they used conventional ratio analysis and merit rating approach. They found that the financial strength of the units have declined over the years.

4. Objectives and Scope of the Study

1. To understand the various ways to measure the profitability and thereby the Financial performance.
2. To calculate different measures of profit for different cement companies under study for the study period [From 2006-07 to 2010-11].

3. To identify any relationship in-between companies in the various measures of Profit.
4. To identify any trend in the profit in the study period and to evaluate which industry is performing the best.
5. To compare the Profitability Ratios of the selected cement industry during period of the study.

5. Hypotheses of the Study

H₀: There is no significance difference in Gross Profit Ratio / Net Profit Ratio/ cash profit ratio/ Operating Profit Ratio/ Material cost Ratio/ Selling Distribution cost Ratio/ Return on Capital Employed/ Return on Net Worth/ Earnings per Share/ Cash Earnings per Share/ Return on Asset/ proprietary ratio/ Return on Long Term Funds/ Total Assets Turnover Ratio/ Fixed Assets Turnover Ratio/ Current Assets Turnover Ratio, ULTRATECH Cement, BINANI Cement & SIDHEE Cement during the Study period.

6. Research Methodology

Source of data

Secondary sources like magazines, journals, newspapers, reference books and websites taken for the purpose of study.

Tools and Techniques for the analysis

For the present study following tools and techniques have been used for analyzing. Tools: ⇒ Ratio Analysis, and Statistical Tools ⇒ ANOVA test.

7. Significance of Research

This study gives a clear picture about the statement provided by the Ultratech cement, Binani cement and Sidhee cement. It's also helpful in comparison of these three cement industries. It throws light on what are the criteria which affect the financial aspects, making decision regarding performance structure, growth development, financial efficiency through analysis and interpretation of financial performance and profitability of the Ultratech cement, Binani cement and Sidhee cement.

8. Limitations of the study

1. The study is limited to only five financial years analysis i.e. from the year 2006-07 to 2010 - 11.
2. This study was limited only to the ULTRATECH cement, BINANI cement and SIDHEE cement. As a result it has a narrow outlook.

3. The study is based on the secondary data collected from the published annual report of the company and website like moneycontrol.com. So limitation of the secondary data will remain with the study.

9. Findings of Hypotheses

In this study, the researcher had formulated hypothesis to know the significance of ratios of the of three cement industries during study period. Under two-way ANOVA technique at 5% level of significance, the hypotheses were tested. The major findings of the formulated hypothesis resulted from ANOVA techniques are as follows:

No.	Hypotheses	Rows		Columns	
		accepted	rejected	accepted	rejected
1	H₀ : There is no significance difference in Gross Profit Ratio in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	✓	-	-
	H₁ : There is significance difference in Gross Profit Ratio in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	-	✓	-
2	H₀ : There is no significance difference in Net Profit Ratio in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	✓	-	-
	H₁ : There is significance difference in Net Profit Ratio in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period	-	-	✓	-
3	H₀ : There is no significance difference in cash profit ratio in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	✓	-	-
	H₁ : There is significance difference in cash profit ratio in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	-	✓	-
4	H₀ : There is no significance difference in Operating profit Ratio in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	✓	-	-
	H₁ : There is significance difference in Operating profit Ratio in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	-	✓	-

5	H₀ : There is no significance difference in Material cost Ratio ULTRATECH Cement, BINANI Cement & SIDHEE Cement during the Study period.	✓	-	-	-
	H₁ : There is significance difference in Material cost Ratio ULTRATECH Cement, BINANI Cement & SIDHEE Cement during the study Period.	-	-	✓	-
6	H₀ : There is no significance difference in Selling Distribution cost Ratio ULTRATECH Cement, BINANI Cement & SIDHEE Cement during the Study period.	✓	-	-	-
	H₁ : There is significance difference in Selling Distribution cost Ratio ULTRATECH Cement, BINANI Cement & SIDHEE Cement during the study Period.	-	-	-	✓
7	H₀ : There is no significance difference in Return on Capital Employed in ULTRATECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	✓	-	-	-
	H₁ : There is significance difference in Return on Capital Employed in ULTRATECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	-	-	✓
8	H₀ : There is no significance difference in Return on Net Worth in ULTRATECH Cement, BINANI Cement, & SIDHEE Cement during the study Period.	✓	-	-	-
	H₁ : There is significance difference in Return on Net Worth in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	-	-	✓
9	H₀ : There is no significance difference in Earnings per Share in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	✓	-	-
	H₁ : There is significance difference in Earnings per Share in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period	-	-	-	-
10	H₀ : There is no significance difference in Cash Earnings per Share in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	-	-	-
	H₁ : There is significance difference in Cash Earnings per Share in ULTRATECH Cement, BINANI Cement, & SIDHEE Cement during the study Period.	-	-	✓	-

11	H₀: There is no significance difference in Return on Asset ULTRATECH Cement, BINANI Cement & SIDHEE Cement during the Study period.		-	-	-
	H₁: There is significance difference in Return on Assets ULTRA TECH Cement, BINANI Cement & SIDHEE Cement during the study Period	-	-	✓	-
12	H₀: There is no significance difference in proprietary ratio in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.		-	-	-
	H₁: There is significance difference in proprietary ratio in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.	-	-	✓	-
13	H₀: There is no significance difference in Return on Long Term Funds in ULTRATECH Cement, BINANI Cement, & SIDHEE Cement during the Study period.		-	-	-
	H₁: There is significance difference in Return on Long Term Funds in ULTRATECH Cement, BINANI Cement, & SIDHEE Cement during the study Period.	-	-	✓	-
14	H₀: There is no significance difference in Total Assets Turnover Ratio ULTRATECH Cement, BINANI Cement & SIDHEE Cement during the Study period.		-	-	-
	H₁: There is significance difference in Total Assets Turnover Ratio ULTRATECH Cement, BINANI Cement & SIDHEE Cement during the study Period.	-	-		-
15	H₀: There is no significance difference in Fixed Assets Turnover Ratio ULTRATECH Cement, BINANI Cement & SIDHEE Cement during the Study period.		-	-	-
	H₁: There is significance difference in Fixed Assets Turnover Ratio ULTRA TECH Cement, BINANI Cement & SIDHEE Cement during the study Period.	-	-	✓	-
16	H₀: There is no significance difference in Current Assets Turnover Ratio ULTRATECH Cement, BINANI Cement & SIDHEE Cement during the Study period.	✓	-	-	-
	H₁: There is significance difference in Current Assets Turnover Ratio ULTRA TECH Cement, BINANI Cement & SIDHEE Cement during the study Period.	-	-	-	

1. For **Rows**: $F_{cal} (16.26336) > F_{tab} (3.84)$, therefore Hypothesis H_0 is rejected and H_1 is accepted so there is significant difference in **Gross Profit Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (30.24762) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted So, there is significant difference in **Gross Profit Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

2. For **Rows**: $F_{cal} (8.747295) > F_{tab} (3.84)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. so there is significant difference in **Net Profit Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (13.9351) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. So, there is significant difference in **Net Profit Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

3. For **Rows**: $F_{cal} (12.57993) > F_{tab} (3.84)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. so there is significant difference in **cash profit ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (42.62954) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. So, there is significant difference in **cash profit ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

4. For **Rows**: $F_{cal} (15.9127) > F_{tab} (3.84)$, therefore Hypothesis H_0 is rejected and H_1 is accepted so there is significant difference in **Operating profit Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (47.88) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted So, there is significant difference in **Operating profit Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

5. For **Rows**: $F_{cal} (0.473256) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Material cost Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (4.563232) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. So, there is significant difference in **Material cost Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

6. For **Rows**: $F_{cal} (2.408911) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Selling Distribution cost Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (6.916534) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. So, there is significant difference in **Selling Distribution cost Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

7. For **Rows**: $F_{cal} (2.129272) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Return on Capital Employed** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (1.1028192) < F_{tab} (4.46)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Return on Capital Employed** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

8. For **Rows**: $F_{cal} (0.961273) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Return on Net Worth** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (0.960764) < F_{tab} (4.46)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Return on Net Worth** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

9. For **Rows**: $F_{cal} (4.997619) > F_{tab} (3.84)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. so there is significant difference in **Earnings per Share** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (160.3913) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. So, there is significant difference in **Earnings per Share** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

10. For **Rows**: $F_{cal} (2.35557) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. so there is no significant difference in **Cash Earnings per Share** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (197.9487) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. So, there is significant difference in **Cash Earnings per Share** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

11. For **Rows**: $F_{cal} (1.283919) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Return on Assets** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (35.98639) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. So, there is significant difference in **Return on Assets** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

12. For **Rows**: $F_{cal} (1.283919) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **proprietary ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (35.98639) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. So, there is significant difference in **proprietary ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

13. For **Rows**: $F_{cal} (2.318335) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Return on Long Term Funds** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (0.97443) < F_{tab} (4.46)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Return on Long Term Funds** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

14. For **Rows**: $F_{cal} (1.018123) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Total Assets Turnover Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (10.63649) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. So, there is significant difference **Total Assets Turnover Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

15. For **Rows**: $F_{cal} (1.953874) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Fixed Assets Turnover Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (11.8836) > F_{tab} (4.46)$, therefore Hypothesis H_0 is rejected and H_1 is accepted. So, there is significant difference **Fixed Assets Turnover Ratio** in ULTRATECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

16. For **Rows**: $F_{cal} (1.931474) < F_{tab} (3.84)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is no significant difference in **Current Assets Turnover Ratio** in ULTRA TECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

For **Columns**: $F_{cal} (0.43899) < F_{tab} (4.46)$, therefore Hypothesis H_1 is rejected and H_0 is accepted. So, there is significant difference **Current Assets Turnover Ratio** in ULTRATECH Cement, BINANI Cement, & SIDHEE Cement during the study period.

10. Suggestions

As a research based on analysis has found the following suggestions for the betterment of the selected cement group of companies.

1. In order to increase the profitability of the companies, it is suggested to control operating expenses in selected companies.
2. The company should try to increase the production so as to get economies of large-scale production. It will assist in raising the rate of return of capital employed.
3. The management should try to utilize their production capacity fully in order to reduce factory overheads and to utilize their fixed assets properly.
4. The burden of interest has produced a deteriorating effect and reduced the percentage of net profit. It is suggested that the companies should try to reduce the interest burden gradually by increasing the owner's fund.
5. The selected Cement companies should reduce power and fuel consumption by using low as content Car (imported coal), lignite, agro waste product especially ground not husk, and beggars should be used as coal substitute.
6. To regularize and optimize the use of cash balance proper techniques may be adopted for planning and control of cash. The investments in inventories should be reduced and need to introduce a system of prompt collection of debts.
7. Selected Cement companies should try to use properly their operating assets and should try to minimize their non-operating expenses.
8. Improper planning and delays in implementation of projects lead to rise in their cost. So properly planning should be made.
9. There is no incentive to the employees to perform better. Also there is no accountability because no one is held responsible for a future in achieving targets for this kind of problem responsibility centre should be create.
10. For regular supply of raw materials and the final product infrastructure facilities are required further improvement.
11. The quantum of sales generated should be improved impressively in order better to enjoy better per of the assets and capital employed.

11 . Conclusion

In the end to conclude about this whole journey, I would say that this project report of ultratech cement, Binani Cement and Sidhee cement helped me a lot in learning many activities of profitability and financial measurement which helped in portraying the profitability and financial image of the company. I have tried to relate my theoretical learning in the company by practical application of it. There were many theories which were in line of practical implications but some

theories totally differ in real life situation. Hence the project on ultratech cement, Binani cement and Sidhee cement was interesting and excellent and hopes this will help me to excel in my journey ahead.

References

1. Khan M. Y. and Jain P. K 1993, *Financial Management*, Tata McGraw Hill Publishing Company Ltd., New Delhi.
2. Mittal S. N. 1986, *Management Accounting and Financial Management* (New Delhi:- Shree Mahavir Book Depo).
3. Pandey I. M. 2003, *Financial Management*, Vikas Publishing House Pvt. Ltd., New Delhi,
4. Anthony N. Robert 1964, *Management Accounting Text and Cases*, Homewood, Richard D. Irwin, Inc.
5. Laweance D. Sehalf and Haley Charles 1973, *Financial Management* , Mc Graw Hill Book Co. New York, 3rd Ed.
6. Dr. Jain S. C. and Mathur N. D. 1994, *Readings in Performance Appraisal* , R.B.S.A. Publisher, 1st Ed.
7. Kulkarni P. V. 1981, *Financial Management - A Conceptual Approach* , Himalaya Publishing House, Bombay.
8. Kuchhal S. C. 1992, *Financial Management* (An analytical and conceptual approach) Allahabad, chaitanya Publishing House.
9. N. K. Kulshrestha 1996, *Management Accounting Concept & Cases*, Tata McGraw Hill Publishing Company Ltd.
10. <http://www.hathi-sidheecements.com>
11. <http://binaniindustries.com/group-companies/binani-cement/profile.asp>
12. <http://www.ultratechcement.com>
13. <http://www.moneycontrol.com/company->
14. India Infoline Sector Reports.
15. India Brand Equity Foundation.
16. Annual Reports of ultratech cement Ltd., Binani Cement Ltd. And Gujaraat Sidhee Cement Ltd year 2006-07 to 2010-11.