

PROFITABILITY ANALYSIS OF SELECTED CEMENT COMPANIES IN INDIA

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ABSTRACT

The cement industry is the key industry for ecological growth and development of any country specially developing country like India. It can be deliberated the strength for development. Profitability analysis is the instrument used to decide the constraint of a company's profit in relation to the size of the business. Profitability is a dimension of productivity and finally its success or failure. Profitability is a business's ability to crop a return on an investment based on its assets and various resources in comparison with an alternative investment. Here Profitability analysis is done with reference to Gross profit Ratio, Net profit Ratio, Return on Investment Ratio and Return on Capital Employed Ratio. The study analyzed profitability analysis of Saurashtra cement, Ultratech cement and ACC cement for five year i.e. 2016 to 2020.

Keywords: Profitability, Production Capacity, Efficiency and Capital Employed.

Introduction

Every company wants to earn a **profit** to be successful throughout its life. A positive extremity line on a company's income statement is assign that the business is doing well. The net profit is crucial for the company's continued growth and wealth. In this research paper, we cover the profitability analysis with reference to various financial ratios of cement industry in India. Profit is the income remaining after all expenses are paid. These costs include materials cost, labor cost, interest on borrowed fund and various taxes. Profit is usually used when unfolding business activity. But everyone with an income has profit. It's what's left over after paying the all bills of business. Profit is the compensation to business owners for investing capital. In small companies, it's paid directly as income. In firms, it's frequently rewarded in the form of dividends to shareholders. Profit also called net income. It is the amount of incomes that exceed expenses for the financial year.

Profitability is closely related to profit, but there is clear difference between profit and profitability. Profit is a complete amount while profitability is a relative. Profitability is the ability of the company to exploit their resources in such a way that they can make more profit than costs. Financial statements and the overall performance of a company are analyzed using Profitability, efficiency, solvency and market prospects.

India is the second largest cement manufacturer in the world after china and accounted for over 9% of the global capacity. India's overall cement production capacity was nearly 550 million tonnes in 2020. Out of the total capacity, 98% deceptions with the private sector and the respite with public sector. The top 20 companies account for around 75% of the total cement production in India. As India has a great quantity and quality of mineral through-out the country, the cement industry capacities huge potential for growth. The demand of cement industry is likely to reach 600 MT every year up to 2025 because of the increasing demand of different sectors, i.e., housing, commercial building and industrial construction. According to expert Indian cement sector is countersigning enriched demand. Key performers reported by the company are ACC, Dalmia and Ultratech Cement. The Government of India is intensely focused on structure development to improvement economic growth and is directing for more than 100 smart cities.

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The Government also expects to develop the capacity of railways and the facilities for handling and storage to comfort the transportation of cement and decrease transportation cost. These events would clue to an increased construction activity, thereby boosting cement demand. As per Union Budget, the Government expected to upgrading 130000 kms of road length over the next few years, which would enhancement the demand for cement.

The Cement Industry internationally has huge forward and backward linkages with a Nation's economy. For a developing and transitioning economy such as India, the value proposal of the Cement Industry is even greater given the massive infrastructure requirements of a growing and urbanizing country, as well as its contributions by way of direct and indirect occupation. The Government of India has lay emphasis on its focus on infrastructure development with the declaration of several schemes that cut across manufacturing, housing and education. At the heart of all the planned infrastructure development is the cement sector and as part of the Country's garland of eight core industries, the Cement sector's value offer for placing the bases of a new India is unique.

Review of Literature

Arora and Sarkar sought to analyze the good performance of the cement industry over the past few years for collusive behavior. The research discussed characteristics of an ideal cartel detection policy and structural and behavioral cartel detection methods. Parameters that were studied included the firm concentration index, region-wise production & consumption, capacity utilization and cost to sales ratio amongst a few. Their analysis on these metrics appeared to demonstration that the sudden surge in the price of the cement over the past few years was neither due to a demand-supply mismatch nor an increment in the cost of producing cement. 1.

Sujit concluded that market power and efficiency enhances profitability of Indian cement industry. He pointed out that efficiency through innovation reduces the cost and increases the profitability.2.

Corrado Di Guilmi examined a relationship between financial structure and profits. He concluded that relative proportions of debt and equity financing appeared to influence the profitability with a different degree for each nation.3.

Darko Tipuric examined the relationship between firm size and profitability, size is measured in terms of either total revenue or number of employees. He found that there was strong correlation between profit and size in terms of total revenue, whereas a weak correlation existed between profit and size in terms of number of employees. He concluded that profit was directly related to the fir size. That is, the larger the firm, the larger the profits and vice versa. 4.

Research Methodology

Problem Identification

The cement industry is one of the leading industries required for viable development. It can be considered the backbone for development. The role of cement industry increase day- by-day. This is one of the important industry to increase standard of living of people. So here researcher has to decide to make profitability analysis of cement industry with reference to Saurashtra cement, Ultratech cement and ACC cement.

Objectives of the Study

- Measure and make statement on the Profitability of cement Industry in India.
- To evaluate the profitability of the firm from cement industry.
- To find the reasons for variation in profitability and financial position of the various firm.
- To mark inter-firm comparison of various companies under study.
- To make predictions about future visions of the firm.
- To judge the growth of the firm over a period of time during study period.

Period of Study, Sampling and Data Collection

The Period of the research was five years i.e. from 2016 to 2020 and 3 companies are taken as sample. These are as below:

- Saurashtra cement ltd.
- Ultratech cement ltd.
- ACC ltd.

Necessary data is collected from money control.com as well as from annual reports of particular companies. This research paper is decently based on secondary data.

Hypothesis of the Study

- H₀:** There is no significant difference in Gross profit Ratio of selected cement companies during the study period.
- H₀:** There is no significant difference in Net profit Ratio of selected cement companies during the study period.
- H₀:** There is no significant difference in Return on Investment Ratio of selected cement companies during the study period.
- H₀:** There is no significant difference in Return on Capital Employed Ratio of selected cement companies during the study period.

Data Analysis and Interpretation

Profitability Analysis has done based on Gross profit Ratio, Net profit Ratio, Return on Investment Ratio and Return on Capital Employed Ratio of selected sample are as under.

Analysis of Gross Profit Ratio

Gross profit ratio is a commercial ratio that deal with the performance and proficiency of a business by dividing its gross profit figure by the total net sales. The gross profit ratio can also be expressed in percentage form, multiplying the result by 100. It is then called gross profit margin. This will give the organization's management and future investors a view of how well the company manages to improve its processes, keep the costs to a minimum and produce the highest possible profit.

$$\text{Gross Profit Ratio} = \frac{\text{GROSS PROFIT}}{\text{NET SALES}} \times 100$$

Table 1: Gross Profit Ratio of Selected Sample

Year	Saurashtra Cement	Ultratech Cement	ACC
2016	14.32	21.32	13.68
2017	08.54	23.09	15.36
2018	11.78	21.78	14.80
2019	02.10	18.77	17.44
2020	19.31	23.57	18.65
Average	11.21	21.71	15.99
Maximum	19.31	23.57	18.65
Minimum	02.10	18.77	13.68

Source: money control.com

ANOVA Table						
Source of Variation	SS	DF	MS	F	P-Value	F- CRIT
Rows	91.927	4	22.9818	1.76287	0.22936	3.83785
Columns	276.158	2	138.079	10.5916	0.00565	4.45897
Error	104.293	8	13.0366			
Total	472.3773	14				

F cal. (Rows) = 1.76 < F crit. = 3.83

F cal. (Columns) = 10.59 > F crit. = 4.45 and $\alpha = 0.05$

Result

From the above testing it has clear that there is no significant difference in Gross profit ratio among rows because F calculated value is 1.76 which is lower than F table value 3.83 and there is significant difference in Gross profit ratio among columns because F calculated value is 10.59 which is more than F table value 4.45 during the study period. Hence H₀ is accepted among rows and rejected among columns where level of significance 0.05. D.O.F. was in rows 4 and in columns were 2.

Analysis of Net Profit Ratio

Net profit ratio is a popular profitability ratio that shows association between net profit after tax and net sales. The ratio point out what portion of the net sales is left for the owners after all expenses have been met. For investors, net profit ratio helps them to decide whether or not they should invest in a company or not.

$$\text{Net Profit Ratio} = \frac{\text{NET PROFIT}}{\text{NET SALES}} \times 100$$

Table 2: Net Profit Ratio of Selected Sample

Year	Saurashtra Cement	Ultratech Cement	ACC
2016	08.26	09.85	05.33
2017	02.95	10.69	06.77
2018	10.88	07.18	10.20
2019	00.79	05.16	08.70
2020	09.29	13.79	10.30
Average	06.43	09.33	08.26
Maximum	10.88	13.79	10.30
Minimum	00.79	05.16	05.33

Source: money control.com

ANOVA Table						
Source of Variation	SS	DF	MS	F	P-Value	F- CRIT
Rows	68.9174	4	17.2294	1.98953	0.18915	3.83785
Columns	21.4963	2	10.7481	1.24112	0.33927	4.45897
Error	69.2802	8	8.66003			
Total	159.694	14				

F cal. (Rows) = 1.99 < F crit. = 3.83

F cal. (Columns) = 1.24 < F crit. = 4.45 and $\alpha = 0.05$ **Result**

From the above testing it has clear that there is no significant difference in Net profit ratio among rows because F calculated value is 1.99 which is lower than F table value 3.83 and there is also not significant difference in Net profit ratio among columns because F calculated value is 1.24 which is less than F table value 4.45 during the study period. Hence H_0 is accepted among rows and among columns where level of significance 0.05. D.O.F. was in rows 4 and in columns were 2.

Analysis of Return on Investment Ratio

The return on investment ratio (ROI) is a tool that evaluates the performance or potential return from a business or investment. The ROI formula looks at the benefit gain from an investment divided by the investment's original cost / shareholders fund. It allows a business owner to calculate how efficiently the company uses funds base to generate return.

$$\text{Return on Investment Ratio} = \frac{\text{NET PROFIT AFTER TAX}}{\text{SHAREHOLDERS FUNDS}} \times 100$$

Table 3: Return on Investment Ratio of Selected Sample

Year	Saurashtra Cement	Ultratech Cement	ACC
2016	16.67	11.29	06.99
2017	03.85	11.13	09.88
2018	15.03	08.42	14.43
2019	01.20	08.47	11.93
2020	12.53	14.86	11.26
Average	09.86	10.83	10.90
Maximum	16.67	14.86	14.43
Minimum	01.20	08.42	06.99

Source: money control.com

ANOVA Table						
Source of Variation	SS	DF	MS	F	P-Value	F- CRIT
Rows	81.9301	4	20.4825	0.97933	0.47007	3.83785
Columns	3.41057	2	1.70529	0.08153	0.92246	4.45897
Error	167.319	8	20.9149			
Total	252.66	14				

F cal. (Rows) = 0.97 < F crit. = 3.83

F cal. (Columns) = 0.08 < F crit. = 4.45 and $\alpha = 0.05$

Result

From the above testing it has clear that there is no significant difference in Return on Investment ratio among rows because F calculated value is 0.97 which is lower than F table value 3.83 and there is also not significant difference in Return on Investment ratio among columns because F calculated value is 0.08 which is less than F table value 4.45 during the study period. Hence H_0 is accepted among rows and among columns where level of significance 0.05. D.O.F. was in rows 4 and in columns were 2.

Analysis of Return on Capital Employed Ratio

Return on capital employed (ROCE) is a financial ratio that can be used in measuring a company's effectiveness and capital proficiency. In other words, this ratio can help to understand how well a company is generating profits from its capital as it is put to use.

The ROCE ratio is useful to several stakeholders like financial managers, stakeholders and potential investors it may use when analyzing a company for investment.

$$\text{Return on capital employed Ratio} = \frac{\text{NET OPERATING PROFIT}}{\text{EMPLOYED CAPITAL}} \times 100$$

Table 4: Return on Capital Employed Ratio of Selected Sample

Year	Saurashtra Cement	Ultratech Cement	ACC
2016	15.34	08.37	09.77
2017	03.47	13.31	13.90
2018	14.50	10.70	13.98
2019	01.23	08.78	17.08
2020	20.52	11.52	14.42
Average	11.01	10.54	13.83
Maximum	20.52	13.31	17.08
Minimum	01.23	08.37	09.77

Source: money control.com

ANOVA Table						
Source of Variation	SS	DF	MS	F	P-Value	F- CRIT
Rows	77.2102	4	19.3025	0.64196	0.64761	3.83785
Columns	31.6969	2	15.8484	0.52708	0.60949	4.45897
Error	240.546	8	30.0682			
Total	349.453	14				

F cal. (Rows) = 0.64 < F crit. = 3.83

F cal. (Columns) = 0.52 < F crit. = 4.45 and $\alpha = 0.05$

Result

From the above testing it has clear that there is no significant difference in Return on Capital Employed ratio among rows because F calculated value is 0.64 which is lower than F table value 3.83 and there is also not significant difference in Return on Capital Employed ratio among columns because F calculated value is 0.52 which is less than F table value 4.45 during the study period. Hence H_0 is accepted among rows and among columns where level of significance 0.05. D.O.F. was in rows 4 and in columns were 2.

Findings and Suggestions

- **Gross Profit Ratio:** It was in the range of 2.10% to 23.57% in the selected sample during study period. 2.10% was in Saurashtra cement which indicates very low Gross profit ratio, 23.57% was in the Ultratech cement which shows higher Gross profit ratio compare to other companies.
- **Net Profit Ratio:** It was in the range of 0.79% to 13.79% in the selected sample during study period. 0.79% was in Saurashtra cement which indicates very low Net profit ratio, 13.79% was in the Ultratech cement which shows higher Net profit ratio compare to other companies.
- **Return on Investment Ratio:** It was in the range of 1.20% to 16.67% in the selected sample during study period. 1.20% was in Saurashtra cement which indicates very low Return on Investment ratio in year 2019, 16.67% was also in the Saurashtra cement which shows higher Return on Investment ratio in the year 2016 compare to other companies, which show more fluctuation and mixed trend in Saurashtra cement net profit ratio.

- **Return on Capital Employed Ratio:** It was in the range of 1.23% to 20.52% in the selected sample during study period. 1.23% was in Saurashtra cement which indicates very low Return on Capital Employed ratio in year 2019, 20.52% was also in the Saurashtra cement which shows higher Return on Capital Employed ratio in the year 2020 compare to other companies, which show more fluctuation and mixed trend in Saurashtra cement Return on Capital Employed Ratio.

Suggestions

Under Gross profit ratio performance of Ultratech cement was very good compare to other companies under study. So it is suggested that the management of other companies should increase their sales by adopting appropriate policy for sales. By that they can increase their gross profit.

Under Net profit ratio performance of Ultratech cement was very good compare to other companies under study. So it is suggested that the management of other companies should decrease their administrative, financial and sales related expenditure by adopting appropriate policy of cost reduction. By that they can decrease their expenditure and increase their net profit.

Under Return on Investment ratio performance of Ultratech and ACC cement was very good compare to Saurashtra cement company under study. So it is suggested that the management of Saurashtra Cement Company should increase their return by adopting appropriate policy for sales and optimum utilization of their resources. By that they can increase their performance with reference to return.

Under Return on Capital Employed ratio Average performance of ACC cement was very good compare to Saurashtra cement company and Ultratech cement under study. So it is suggested that the management of Saurashtra cement and Ultratech cement Company should increase their return on capital invest by adopting appropriate policy for it by maximum use of their financial resources, human resources, material resources and physical resources.

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