

A PROFITABILITY ANALYSIS OF SELECTED CEMENT COMPANIES OF INDIA

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Abstract

The present study focuses on profitability analysis of five leading cement companies of India. India is the second largest cement manufacturing country in the world. The objective of the study is to analyse the financial performance of chosen cement companies of India. The researcher has taken the time period of 2018-19 to 2022-23 for the study. The selection of the sample companies is based on convenience sampling method. The information used for analysis of financial performance is secondary in nature. The statistical analysis of collected data is done by performing One way ANOVA test.

Keywords: Cement Industry, Profitability Analysis, Ratio Analysis, Anova

INTRODUCTION

Cement Industry plays a vital role in the growth of Indian economy. India is the second largest cement producing country in the world after China. The role of Indian cement industry in growth of India is very huge as cement is essential part of any infrastructure of country. There is no substitute of cement has been discovered and that's why the industry is developing day by day.

REVIEW OF LITERATURE

(Gopi, 2018) has written a journal article to evaluate financial performance of cement industry using extended Dupont approach. The researcher has selected leading three cement companies like ACC, Gujarat Ambuja and Ultratech Cement. The researcher has collected and analyzed the secondary data from the year 2006 to 2015. Moreover, the researcher has also analyzed the relationship between companies and return on equity. The researcher has found that the Extended Dupont approach has shown the decline in return on equity of leading cement companies during the study period.

(Dr. A. Muthusamy, 2019) have published an article on financial performance of selected cement companies of India. The researcher has analyzed the data of two companies which are Ultratech Cement Limited and Shree Cement Limited. The researcher has collected the data from 2013-14 to 2017-18 from the annual reports of companies. The objective of the study was to find out the short-term financial performance and examine financial condition of selected cement companies. The researcher has concluded that the financial positions of the selected companies are reasonable.

(Neha G. Tank, 2019) have assessed the profitability of selected cement companies. They have selected five cement companies and analyzed the data of ten years. The researcher has taken secondary data through various annual reports. As a statistical tool, they have used ANOVA test to analyze the collected data and fulfill the objective.

OBJECTIVES OF THE STUDY

The following are the objectives of the study.

To identify the profitability of selected cement companies of India

To analyze and examine the profitability of companies with the help of ANOVA test.

SAMPLE OF THE STUDY

All the cement companies are the population of the study which are listed on BSE. There are total 43 cement companies are listed on BSE. Out of them the researcher has selected five leading companies based on net profit as representative of the whole population. These samples have been selected based on net profit on November 6, 2023.

SAMPLE UNIT

The researcher has selected the following samples with the help of judgmental sampling method.

Sr. No.	Name of the Company	Net Profit (Rs. Cr.)
1	Ultratech Cement	4,916.88
2	Ambuja Cements	2,553.49
3	Shree Cements	1,328.13
4	Andhra Cement	949.61
5	ACC	869.91

(<https://www.moneycontrol.com/stocks/marketinfo/netprofit/bse/cement.html>)

PERIOD OF THE STUDY

The study covers the period of five years from 2017-18 to 2021-22.

DATA COLLECTION

The Study is based on secondary data. The data is collected from annual reports of the selected cement companies, related reports, websites and literature.

TOOLS AND TECHNIQUES

The Researcher has used various profitability ratios as accounting tool. As statistical tool, the researcher has used ANOVA test.

HYPOTHESIS OF THE STUDY

H₀₁ : There is no significance difference in gross profit ratios of selected cement companies of India during the study period.

H₀₂ : There is no significance difference in net profit ratios of selected cement companies of India during the study period.

H₀₃ : There is no significance difference in return on assets of selected cement companies of India during the study period.

H₀₄ : There is no significance difference in return on equity of selected cement companies of India during the study period.

H₀₅ : There is no significance difference in return on capital invested of selected cement companies of India during the study period.

PROFITABILITY RATIOS

Profitability ratios are the financial indicators that examines company's ability to generate profit. It analyzes company's capacity for utilization of its resources and assets to generate profit from its operational activity. Any investor or related party of the company analyze the profitability of the company first before taking any decision. That's why the analysis of profitability is very important for the company and its related parties.

Gross Profit Ratio :

Gross profit ratio is the most widely used profitability ratio. It can be calculated by dividing the gross profit by the net sales. It describes company's capacity to generate profit after deducting the cost of goods sold. The higher the gross profit ratio, the higher is company's capacity to control its cost.

Table No. 1.2 : Gross Profit Ratio = Gross Profit / Net Sales * 100

Company	Ultratech Cement	Ambuja Cements	Shree Cements	Andhra Cement	ACC
2018-19	18.77	19.10	24.24	4.69	14.80
2019-20	23.32	22.25	31.34	0	17.44
2020-21	27.50	22.65	33.52	0	18.65
2021-22	22.85	14.00	28.34	0	19.84
2022-23	17.58	15.05	19.14	0	10.20
Average	22.004	18.61	27.316	0.938	16.186

(www.moneycontrol.com)

Table No. 1.3 : Analysis of variance of Gross Profit Ratio :

H₀ : There is no significance difference in gross profit ratio of selected cement companies.

Source of Variation	SS	df	MS	F	F crit
Between Groups	1963.509	4	490.8773	29.32307	2.86608
Within Groups	334.8062	20	16.74031		
Total	2298.315	24			

Interpretation :

The table 1.3 shows that the calculated F value of 29.32 is greater than table value 2.87 at 5% level of significance. Therefore, the researcher has rejected the null hypothesis as there is a significance difference in gross profit ratio of selected cement companies.

Net Profit Ratio :

Net profit ratio measures company's profitability after taxes. It indicates company's financial health. It is an evaluator of company's overall profitability. The higher net profit ratio is more desirable as it suggests that the company makes more profits from each of its sales.

Table No. 1.4 : Net Profit Ratio = Net Profit / Net Sales * 100

Company	Ultratech Cement	Ambuja Cements	Shree Cements	Andhra Cement	ACC
2018-19	5.76	10.19	8.08	0	10.20
2019-20	13.55	12.61	11.99	0	8.70
2020-21	12.20	12.74	16.98	0	10.30
2021-22	13.94	7.22	15.56	0	11.46
2022-23	8.01	7.69	7.10	0	3.91
Average	10.692	10.09	11.942	0	8.914

(www.moneycontrol.com)

Table No. 1.5 : Analysis of variance of Net Profit Ratio :

H₀ : There is no significance difference in net profit ratio of selected cement companies.

Source of Variation	SS	df	MS	F	F crit
Between Groups	457.2656	4	114.3164	11.91629	2.86608
Within Groups	191.8657	20	9.593284		
Total	649.1313	24			

Interpretation :

The table 1.5 shows that the calculated F value of 11.92 is greater than table value 2.87 at 5% level of significance which rejects the null hypothesis and reveals that there is significance difference in net profit ratio of selected cement companies of India during the study period.

Return on Assets Ratio :

Return on assets ratio is a ratio which indicates company's profitability in relation to its total assets. To know how efficiently the company uses its assets to generate profit, return on assets ratio is used. The higher the return indicates the more productive and efficient management of the company in utilizing its economic resources.

Table No. 1.6 : Return on Assets ratio = Net Income / Total Assets * 100

Company	Ultratech Cement	Ambuja Cements	Shree Cements	Andhra Cement	ACC
2018-19	3.14	5.21	6.49	0	9.46
2019-20	7.26	5.95	7.70	0	8.03
2020-21	6.33	6.15	10.62	0	7.85
2021-22	8.76	3.87	9.81	0	8.85
2022-23	5.54	4.99	4.82	104.48	4.30
Average	6.206	5.234	7.888	20.896	7.698

(www.moneycontrol.com)

Table No. 1.7 : Analysis of variance of Return on Assets ratio :

H₀ : There is no significance difference in return on assets ratio of selected cement companies of India.

Source of Variation	SS	df	MS	F	F crit
Between Groups	823.6407	4	205.9102	0.468388	2.86608
Within Groups	8792.294	20	439.6147		
Total	9615.934	24			

Interpretation :

The table 1.7 shows that the calculated F value of 0.47 is less than table value 2.87 at 5% level of significance which accepts the null hypothesis. It means that there is no significance difference in return on assets ratio of selected cement companies of India during the study period.

Return on Capital Employed Ratio :

The return on capital employed is used to assess company's profitability and capital efficiency. It indicates how the company generates profit from its capital. It is used by investors, managers, stakeholders and other related parties before making any decision or investment in the company.

Table No. 1.8 : Return on Capital Employed ratio = EBIT(Earnings Before Interest and Tax) / Capital Employed * 100

Company	Ultratech Cement	Ambuja Cements	Shree Cements	Andhra Cement	ACC
2018-19	8.78	12.93	11.75	0	13.98
2019-20	11.45	14.09	13.97	0	17.08
2020-21	14.63	15.92	18.27	52.54	14.42
2021-22	14.61	8.84	16.30	8.60	17.32
2022-23	12.11	10.48	8.96	0	9.56
Average	12.316	12.452	13.85	12.228	14.472

(www.moneycontrol.com)

Table No. 1.9 : Analysis of variance of Return on Capital Employed ratio :

H0 : There is no significance difference in return on capital employed ratio of selected cement companies of India.

Source of Variation	SS	df	MS	F	F crit
Between Groups	21.166016	4	5.291504	0.047336	2.86608
Within Groups	2235.739	20	111.7869		
Total	2256.905	24			

Interpretation :

The table 1.9 shows that the calculated F value of 0.47 is less than table value 2.87 at 5% level of significance. Therefore, the researcher has accepted the null hypothesis which means that there is no significance difference in return on capital employed ratio of selected cement companies of India.

Return on Equity Ratio :

The return on equity ratio shows that how well a business is managing the capital or equity invested by shareholders. The higher the level of ROE suggests that the company's management is generating profit and growth from its equity.

Table No. 1.10 : Return on Equity ratio = Net Income / Shareholders' Equity * 100

Company	Ultratech Cement	Ambuja Cements	Shree Cements	Andhra Cement	ACC
2018-19	8.47	8.70	10.40	0	14.43
2019-20	14.74	10.39	11.66	0	11.93
2020-21	12.36	10.96	14.84	0	11.26
2021-22	14.56	7.44	13.35	0	13.01
2022-23	9.32	8.14	6.81	267.31	6.26
Average	11.89	9.126	11.412	53.462	11.378

(www.moneycontrol.com)

Table No. 1.11 : Analysis of variance of Return on Equity ratio :

H0 : There is no significance difference in return on Equity ratio of selected cement companies of India.

Source of Variation	SS	df	MS	F	F crit
Between Groups	7251.606	4	1812.902	0.632967	2.86608
Within Groups	57282.7	20	2864.135		
Total	64534.31	24			

Interpretation :

The table 1.9 shows that the calculated F value of 0.63 is less than table value 2.87 at 5% level of significance. It means that the null hypothesis is accepted and there is no significance difference in return on equity ratio of selected cement companies of India during the study period.

MAJOR FINDINGS

In profitability ratio analysis, with the help of ANOVA test, it has been found that there is significant difference in gross profit and net profit ratio of selected cement companies of India during the study period. While there is

no significant difference in return on assets, return on capital employed and return on equity ratio of selected companies.

CONCLUSION

The efficiency and growth of any company can be assumed through its profitability. Here, the profitability of selected cement companies is analyzed with the help of ANOVA test of profitability ratios. The net profit ratio and gross profit ratio of Shree Cement company is better than other selected companies. So that it can be said that the financial position of Shree Cement company is better in that case. While the performance of Andhra Cement Company is poor comparing to others. So, the company should try to improve its financial position.

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