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COMPARATIVE ANALYSIS BETWEEN ULTRATECH CEMENT LTD AND SHREE CEMENTS LTD OF INDIA

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Abstract

Cement industry play very significant role in Indian economy. Ultratech cement ltd. and Shree cements ltd. are two of the largest cement companies in India. the present study related to comparative analysis between Ultratech cement ltd and Shree cements ltd of India. for the period 2017-2018 to 2021-2022. The secondary data is used for the research. It has been collected from the company's annual report and other sources. The used tools for ratios analysis and statistical analysis (average, minimum, maximum, compound annual growth rate, mean, std. deviation, std. error mean and T-Test.). It is concluded that Shree cements ltd. has a higher quick ratio and net profit margin ratio as compared to Ultratech cement ltd. on average. it means Shree cements ltd is better equipped to meet its short-term obligations and is more efficient in managing its expenses and generating profits. Ultratech cement ltd has a higher inventory turnover ratio as compared to Shree cements ltd on average. This indicates that Ultratech cement ltd is more efficient in managing its inventory and converting it into sales. The t-test for equality of means shows that there is a statistically significant difference between the quick ratio and inventory turnover ratio of both companies. However, there is no statistically significant difference between the net profit margin ratio of both companies.

Keywords: Indian Cement Industry, Comparative Analysis, Ratios Analysis, Statistical Analysis and T-Test.

JEL Classification: M410

1. INTRODUCTION

India is the world's second largest cement producer country. India's cement market accounts for 7% of the global installed capacity. Ultratech cement ltd. and Shree cements ltd. are two of the largest cement companies in India. UltraTech cement limited is the cement flagship company of the Aditya Birla Group. A USD 7.1 billion building solutions powerhouse, it is the largest manufacturer of grey cement and ready-mix concrete (RMC) in India. and third largest cement producer in the world, excluding China. it has a consolidated capacity of 132.35 million tons per annum (MTPA) of grey cement. Shree cement is an Indian cement manufacturer, founded in Beawar, Rajasthan, in 1979. now headquartered in Kolkata, it is one of the biggest cement makers in Northern India. Shree cement has moved in the last two decades from having 2 million tons (MT) production capacity to becoming the country's third largest cement player, with an installed capacity of 43.3 MT in India and 50.4 MT overseas. This study aims to compare the financial performance of these two companies using the financial ratios.

2. REVIEW OF LITERATURE

Ika, S. & Abdullah, N. (2011)

A comparative study of financial performance of Islamic banks and conventional banks in Indonesia. The data was based on selected financial statements of Islamic commercial banks in Indonesia from year 2000 to 2007. financial performance measures were expressed in terms of various financial ratios in which were categorized into profitability, liquidity, risk and solvency and efficiency. To test the hypotheses, Mann-Whitney was employed to compare financial performance of Islamic banks and conventional banks. In general, the study found no major difference in financial performance between Islamic banks and conventional banks, except in terms of its liquidity. This indicated that Islamic banks are generally more liquid as compared to conventional ones.



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Singh, A. & Tandon, P. (2012)

Have study of financial performance: a comparative analysis of SBI and ICICI bank. the data used for the study was entirely secondary in nature. The present study is conducted to compare the financial performance of SBI and ICICI Bank on the basis of ratios such as credit deposit, net profit margin etc. The period of study taken is from the year 2007-08 to 2011-12. The study found that SBI is performing well and financially sound than ICICI Bank. the proportion of interest income to total income was higher in case of SBI as compared to ICICI but in context of deposits and expenditure ICICI bank has better managing efficiency than SBI.

Ally, Z. (2013)

Has study comparative analysis of financial performance of commercial banks in Tanzania. for the period of 7 years from 2006 to 2012. financial ratios were employed to measure the profitability and liquidity of banks; in addition, analysis of variance (ANOVA) was used to test the significance differences of profitability means among peer banks groups. The study found that overall bank financial performance increased considerably in the first two years of the analysis. A significant change in trend is noticed at the onset of the global financial crisis from 2008 to 2009. However, Tanzania banking sector remained stable; banks are adequately capitalized and profitable and remained in a sound position. The study found that, there is no a significant means difference of profitability among of peer banks groups in term of ROA, however, a significance differences among banks group is existed in term of ROE and NIM.

Jamuna, L. (2017)

Undertook a study to analyze relationship between liquidity and profitability of select cement companies in India – an empirical study. during the study period of ten years from 2004-05 to 2013-14. The study found that liquidity performance of Ambuja cements was better than ACC ltd. in terms of current ratio. But both the companies managed their collection and payments very efficiently. These companies collected their dues from customers as quick as possible and they delayed the payments to their creditors as long as possible. It was also found that average payments period, inventory conversion period and cash conversion period had significant relationship with profitability of the company, of which cash conversion period had negative relationship. In case of Ambuja cements no liquidity ratios had significant relationship with profitability

Parmar, H. & Shukla, D. (2021)

Have study comparative financial analysis of cement manufacturing company and relationship between inventory management and profitability ratio. In such a scenario inventory management is one of the important tools to improve the company performance. ratio analysis of financial statements is performed to know the profitability performance of the Indian cement industry by using descriptive statistics. also, this paper analysed and discusses the impact of inventory management practices on profitability performance by correlation analysis. The required data has been collected from the annual reports of the respective cement companies for the period of 2011 to 2020. The result helps the investor in the investment decision. Correlation analysis was used to determine the nature and magnitude of the relationship between inventory turnover ratio and gross profit margin. The results indicate that there exists a positive correlation between the variables.

2.1. Research Gap

The researcher has reviewed 5 research paper before undertaking this study. It is observed that a comparative analysis between Ultratech cement ltd and Shree cements ltd of India. is largely absent. Hence, the researcher has made an attempt to compare the financial ratios of the specified two companies. There exists plethora of study work comprising the financial analysis of top listed cement firms of India, the study being spanned over duration of some period in past. So, there also exists this gap of time over which such studies do not seem to be carried over. Also, the selection and omission of ratios makes this study unique in its own way from other studies creating an altogether different angle giving it a sincere and genuine research gap criterion.

3. RESEARCH METHODOLOGY

Research methodology decides the territory of proposed study and gives information to the readers about adopted process of analysis for the respective study. This includes aims for which the study is undertaken. this also clarify time, scope, data sources, sample size etc. of proposed study. statistical tools and techniques are used for the study.

3.1. Objectives of the Study

- The study has the following objectives:
- 1. To evaluate the comparative analysis between Ultratech cement ltd and Shree cements ltd of India.
- 2. To measure the liquidity situation based on quick ratio of Ultratech cement ltd and Shree cements ltd of India.

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- 3. To measure the profitability situation based on net profit margin ratio of Ultratech cement ltd and Shree cements ltd of India.
- 4. To measure the management efficiency position based on inventory turnover ratio of Ultratech cement ltd and Shree cements ltd of India.

3.2. Hypothesis of the Research Study

The following hypotheses will be formulated to comparative analysis between Ultratech cement ltd and Shree cements ltd of India.

Null Hypothesis (H_0): There is no significant difference between the quick ratio of Ultratech cement ltd and Shree cements ltd of India.

Alternative Hypothesis (H₁): There is significant difference between the quick ratio of Ultratech cement ltd and Shree cements ltd of India.

Null Hypothesis (H₀): There is no significant difference between the net profit margin ratio of Ultratech cement ltd and Shree cements ltd of India.

Alternative Hypothesis (H₁): There is significant difference between the net profit margin ratio of Ultratech cement ltd and Shree cements ltd of India.

Null Hypothesis (H_0) : There is no significant difference between the inventory turnover ratio of Ultratech cement ltd and Shree cements ltd of India.

Alternative Hypothesis (H₁): There is significant difference between the inventory turnover ratio of Ultratech cement ltd and Shree cements ltd of India.

3.3. Sample Design

The companies hereunder are selected on randomly of two cement companies.

(1) Ultratech Cement Ltd.

(2) Shree Cements Ltd.

3.4. Data Collection

Secondary sources of data will be utilized for this proposed research study information regarding financial statements was collected from annual reports of the selected cement companies under study.

3.5. Period of Study

Five years of financial statements will be analysed for selected 2 cement companies taken under study. comparative analysis from 2017-2018 to 2021-2022 will be studied.

3.6. Tools & Techniques

This study has been done by analysing and interpreting data in following ways.

1. Ratios Analysis. (Quick Ratio, Net Profit Margin Ratio and Inventory Turnover Ratio)

2. Statistical Analysis. (Average, Minimum, Maximum, Compound Annual Growth Rate, Mean, Std. Deviation, Std. Error Mean and T-Test)

3.7. Limitations of the Study

- 1. The present study will be largely based on secondary data which would be taken from official websites of respective organization, annual reports selected 2 cement companies of India. as such finding depends entirely on the accuracy of such data.
- 2. The present study will be largely based on ratios analysis which has its inherent limitations. the different views have been applied in the calculation of different ratios.
- 3. There is proper care taken to overcome the limitations of the statistical tools used in the present study but still limitations of the tools applied in the present study.
- 4. The present study has been undertaken comprising only 2 cement companies. the financial data taken has been taken for a duration of 5 years. also, out of the wide range of financial ratios, this study has focused on selected 3 financial ratios.

4. DATA ANALYSIS AND INTERPRETATION

4.1. Ratios Analysis

4.1.1. Liquidity Ratio

Quick Ratio – it measures a company's ability to meet its short-term obligations using its most liquid assets. The higher the quick ratio, the better the company's liquidity position. Quick Ratio = Current Assets – Inventories / Current Liabilities

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4.1.2. Profitability Ratio

Net Profit Margin Ratio - it measures how much profit a company makes per rupee of revenue generated. A higher net profit margin ratio indicates better profitability of the company. Net Profit Margin Ratio = Net Profit (PAT) / Net Revenue from Operation *100

4.1.3. Management Efficiency Ratio

Inventory Turnover Ratio - it is a financial ratio that measures the number of times a company's inventory is sold and replaced over a given period. A higher inventory turnover ratio indicates that a company is selling its inventory more frequently and efficiently.

Inventory Turnover Ratio = Net Revenue from Operation / Total Inventory

Table No 1. Major Financial Ratios						
Year	Vear Quick Ratio (Times)		Net Profit Margin Ratio (%)		Inventory Turnover Ratio (Times)	
	Ultratec	Shree	Ultratech	Shree	Ultratech	Shree
	h	Cemen	Cement Ltd.	Cements	Cement Ltd.	Cements
	Cement	ts Ltd.		Ltd.		Ltd.
	Ltd.					
2017-2018	0.68	1.39	7.49	14.07	9.61	6.27
2018-2019	0.69	1.21	6.88	8.11	10.91	7.38
2019-2020	0.77	1.42	13.42	13.19	10.60	8.34
2020-2021	0.98	1.63	12.36	18.36	11.60	8.52
2021-2022	0.72	1.21	13.94	16.61	9.81	6.62
Average	0.77	1.37	10.82	14.07	10.51	7.43
Minimum	0.68	1.21	6.88	8.11	9.61	6.27
Maximum	0.98	1.63	13.94	18.36	11.60	8.52
Compound Annual Growth Rate (%)	1.15	-2.74	13.23	3.37	0.41	1.09

4.1.4. Interpretation

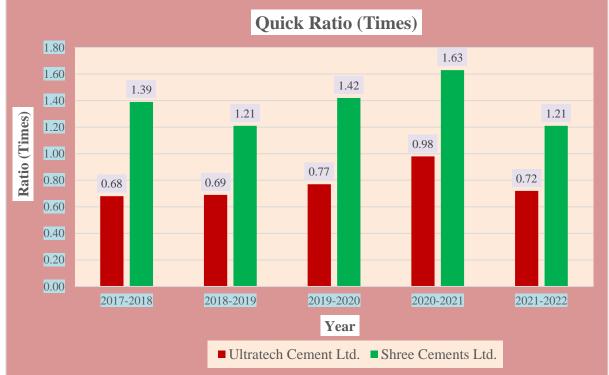


Chart No.1. Quick Ratio (Times)

Chart No.1. represents that Ultratech cement ltd and Shree cements ltd quick ratio trends are fluctuating under this study. We can see that quick ratio for Ultratech cement ltd range between 0.68-0.98 times; while Shree cements ltd quick ratio ranges between 1.21-1.63 times. During the study period highest quick ratio of Ultratech cement ltd is 0.98 times and lowest quick ratio is 0.68 times; while Shree cements ltd highest quick ratio is 1.63 times and lowest quick ratio is 1.21 times.



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The results of the analysis are presented in Table No. 1. The average quick ratio of Ultratech cement ltd and Shree cements ltd over the five-year period was 0.77 and 1.37 times, respectively. This indicates that Shree cements ltd was more liquid than Ultratech cement ltd This indicates that Shree cements ltd has a better ability to pay off its current liabilities with its most liquid assets. Then Ultratech cement ltd.

The compound annual growth rate (CAGR) is used to measure the growth of the financial ratios over the fiveyear period. The compound annual growth rate (CAGR) for Ultratech cement ltd quick ratio was 1.15%, indicating a small increase in the company's liquidity position over the five-year period. On the other hand, Shree cements ltd quick ratio had a negative CAGR of -2.74%, indicating a slight decrease in the company's liquidity position.

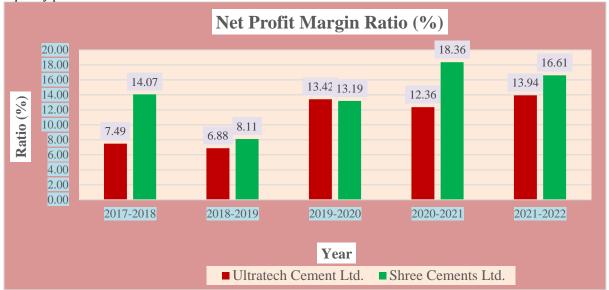


Chart No.2. Net Profit Margin Ratio (%)

Chart No.2. shows that Ultratech cement ltd and Shree cements ltd net profit margin ratio trends are fluctuating under this study. We can see that net profit margin ratio for Ultratech cement ltd range between 6-14%; while Shree cements ltd net profit margin ratio ranges between 8-19%. During the study period highest net profit margin ratio of Ultratech cement ltd is 13.94% and lowest net profit margin ratio is 6.88%; while Shree cements ltd highest net profit margin ratio is 18.36 and lowest net profit margin ratio is 8.11%.

Table No.1. reveals that Ultratech cement ltd has an average net profit margin ratio of 10.82%, while Shree cements ltd has an average net profit margin ratio of 14.07%. This indicates that Shree cements ltd is more profitable than Ultratech cement ltd on average.

The table also shows that the net profit margin ratio CAGR for Ultratech cement ltd is higher compared to Shree cements ltd which means that Ultratech cement ltd is able to operate its assets better for deriving optimum operating profitability as the same time whatever profit it retains it is able to generate better average return over subsequent periods.

Overall, while Shree cements ltd had a higher net profit margin ratio on average over the five-year period, Ultratech cement ltd showed a higher growth rate in net profit margin ratio.



Chart No.3. Inventory Turnover Ratio (Times)

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Chart No.3. highlights that Ultratech cement ltd inventory turnover ratio trends are fluctuating and Shree cements ltd. show an increasing trend in this ratio over the five-year period, except for a slight dip in 2021-2022. We can see that inventory turnover ratio for Ultratech cement ltd range between 9-12 times; while Shree cements ltd inventory turnover ratio ranges between 6-9 times. During the study period highest inventory turnover ratio of Ultratech cement ltd is 11.60 times and lowest inventory turnover ratio is 9.61 times; while Shree cements ltd highest inventory turnover ratio is 8.52 times and lowest inventory turnover ratio is 6.27 times.

Table No.1. discloses that Ultratech cement ltd has a higher average inventory turnover ratio of 10.51 times compared to Shree cements ltd average of 7.43 times. Ultratech cement ltd higher inventory turnover ratio suggests that it is more efficient in managing its inventory compared to Shree cements ltd.

The compound annual growth rate (CAGR) for Ultratech cement ltd inventory turnover ratio over the five-year period is 0.41%, while the CAGR for Shree cements ltd inventory turnover ratio is 1.09%. This indicates that Shree cements ltd has had a higher rate of growth in its inventory turnover ratio over the period.

4.2. Statistical Analysis

4.2.1. T-Test

4.2.1.1. Group	Statistics
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Table No.2. Group Statistics					
Variables	Company Name	Ν	Mean	Std. Deviation	Std. Error Mean
Quick Ratio (Times)	Ultratech Cement Ltd.		0.7680	0.1236	0.0553
	Shree Cements Ltd.	5	1.3720	0.1744	0.0780
Net Profit Margin Ratio (%)	Ultratech Cement Ltd.		10.8180	3.3719	1.5080
	Shree Cements Ltd.	5	14.0680	3.9100	1.7486
Inventory Turnover Ratio (Times)	Ultratech Cement Ltd.		10.5060	0.8149	0.3644
	Shree Cements Ltd.	5	7.4260	1.0025	0.4483

4.2.1.2. Hypothesis

Null Hypothesis (H_0): There is no significant difference between the quick ratio of Ultratech cement ltd and Shree cements ltd of India.

Alternative Hypothesis (H₁): There is significant difference between the quick ratio of Ultratech cement ltd and Shree cements ltd of India.

Null Hypothesis (H₀): There is no significant difference between the net profit margin ratio of Ultratech cement ltd and Shree cements ltd of India.

Alternative Hypothesis (H₁): There is significant difference between the net profit margin ratio of Ultratech cement ltd and Shree cements ltd of India.

Null Hypothesis (H_0): There is no significant difference between the inventory turnover ratio of Ultratech cement ltd and Shree cements ltd of India.

Alternative Hypothesis (H₁): There is significant difference between the inventory turnover ratio of Ultratech cement ltd and Shree cements ltd of India.

4.2.1.3. T-test for Equality of Means

Table No.3. Independent Samples Test

Variables t-test for Equality of Means					
Variables	T	DF	Sig. (2 tailed) p value	Mean Difference	Std. Error Difference
Quick Ratio (Times)	-6.3185	8.0000	0.0002	-0.6040	0.0956
Net Profit Margin Ratio (%)	-1.4075	8.0000	0.1969	-3.2500	2.3090
Inventory Turnover Ratio (Times)	5.3308	8.0000	0.0007	3.0800	0.5778

4.2.1.4. Interpretation

Quick Ratio (Times) - the significant value (p) is 0.0002, which is lower than p-value of table (α) 0.05. hence the null hypothesis is rejected. further it is noted that there is significant difference between the quick ratio of Ultratech cement ltd and Shree cements ltd of India.

Net Profit Margin Ratio (%) - the significant value (p) is 0.1969, which is higher than p-value of table (α) 0.05. hence the null hypothesis is accepted. further it is noted that there is no significant difference between the net profit margin ratio of Ultratech cement ltd and Shree cements ltd of India.

Inventory Turnover Ratio (Times) - the significant value (p) is 0.0007, which is lower than p-value of table (α) 0.05. hence the null hypothesis is rejected. further it is noted that there is significant difference between the inventory turnover ratio of Ultratech cement ltd and Shree cements ltd of India.

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5. FINDINGS

Table No.4. FINDINGS						
Quick Ratio (Times)	Net Profit Margin Ratio (%)	Inventory Turnover Ratio (Times)				
The average quick ratio of Shree cements ltd (1.37 times) is higher as compared to Ultratech cement ltd (0.77 times) this shows that Shree cements ltd ability to pay off short term obligations with liquid assets is higher than in Ultratech cement ltd.	The average net profit margin ratio of Shree cements ltd (14.07%) is higher as compared to Ultratech cement ltd (10.82%) it is indicated that Shree cements ltd net income a make with total sales achieved is higher than in Ultratech cement ltd.	The average inventory turnover ratio of Ultratech cement ltd (10.51times) is higher as compared to Shree cements ltd (7.43 times). Ultratech cement ltd higher inventory turnover ratio suggests that it is more efficient in managing its inventory compared to Shree cements ltd.				
Over the five-year period the compound annual growth rate (CAGR) for Ultratech cement ltd quick ratio was (1.15%) and Shree cements ltd quick ratio had a negative CAGR of (-2.74%).	Net profit margin ratio compound annual growth rate (CAGR) for Ultratech cement ltd (13.23%) is higher compared to Shree cements ltd (3.37%).	The compound annual growth rate (CAGR) for Ultratech cement ltd inventory turnover ratio over the five- year period is (0.41%), while the CAGR for Shree cements ltd inventory turnover ratio is (1.09%).				
T Test						
There is significant difference between the quick ratio of Ultratech cement ltd and Shree cements ltd of India.	There is no significant difference between the net profit margin ratio of Ultratech cement ltd and Shree cements ltd of India.	There is significant difference between the inventory turnover ratio of Ultratech cement ltd and Shree cements ltd of India.				

6. SUGGESTIONS

Average quick ratio value was less than the ideal level of 1:1 in Ultratech cement ltd. 0.77 hence these companies should increase liquid ratio by focus your payment cycle, look into a line of credit and revisit companies short term debt obligations. and also suggest that company have sufficient short-term assets to cover their current liabilities. Shree cements ltd. has had a consistently higher net profit margin ratio than Ultratech cement ltd. over the past five years but average five-year ratio is very low both company so this suggests that both companies are becoming more efficient in generating profits from their sales. Ultratech cement ltd has had a consistently higher inventory turnover ratio than Shree cements ltd. over the past five years but average state both companies are becoming more efficient in generating profits from their sales. Ultratech cement ltd has had a consistently higher inventory turnover ratio than Shree cements ltd. over the past five years but average ratio is very low both company this suggests that both companies are becoming more efficient in managing their inventory levels.

7. CONCLUSION

Cement industry play very significant role in Indian economy. Ultratech cement ltd and Shree cements ltd are two of the largest cement companies in India. the present study related to comparative analysis between Ultratech cement ltd and Shree cements ltd of India. It is concluded that Shree cements ltd. has a higher quick ratio and net profit margin ratio as compared to Ultratech cement ltd. on average. it means Shree cements ltd is better equipped to meet its short-term obligations and is more efficient in managing its expenses and generating profits. Ultratech cement ltd has a higher inventory turnover ratio as compared to Shree cements ltd on average. This indicates that Ultratech cement ltd is more efficient in managing its inventory and converting it into sales. The t-test for equality of means shows that there is a statistically significant difference between the quick ratio and inventory turnover ratio of both companies. This indicates that these companies perform differently in terms of their short-term liquidity and inventory management. However, there is no statistically significant difference between the net profit margin ratio of the two companies. This indicates that these companies perform similar in terms of their profitability.

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