



ISSN: 2454-9940



**INTERNATIONAL JOURNAL OF APPLIED
SCIENCE ENGINEERING AND MANAGEMENT**

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www.ijasem.org

A STUDY ON RATIO ANALYSIS IN ZUARI CEMENT LIMITED

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ABSTRACT

The project explains about the **RATIO ANALYSIS OF ZUARI CEMENT LIMITED AT YERRAGUNTLA**, focusing on key financial indicators to assess the company's performance and financial health. utilizing financial statements and strengths and weaknesses by establishing correlations between balance sheet items and profit and loss account .In various ratios including liquidity, profitability ,efficiency and solvency are calculated an analysed .The findings provide valuable insights into Zuari cement's financial position, aiding shareholders informed decision making. Information about the company was gathered from secondary sources, provided by company officials, and is based on the annual reports from 2019 to 2023.

Key words; Financial performance, Liquidity, Profitability, Efficiency, solvency.

INTRODUCTION

Ratio analysis is a powerful financial tool used by businesses, investors and analysts to evaluate the performance and financial health of a company. By examine the relationship between various financial figures, such as revenues, expenses, assets, and liabilities, ratio analysis provides valuable insights into areas like profitability liquidity, solvency and efficiency.it enables stakeholders including investors, creditors and management, take informed decisions and formulate strategies to improve financial performance and achieve organisational goals.

REVIEW OF LITERATURE

A writing survey is a piece of scholarly composing showing information and understanding of the scholarly writing on a particular subject put in setting. Here the past explores related with the current review.

1 Smith et al. (2017):

."The Role of Financial Ratios in Performance Evaluation"

This article explores the significance of financial ratios in evaluating organizational performance. It highlights the importance of selecting appropriate ratios based on the industry and business context. The study emphasizes the role of ratio analysis in identifying areas for improvement and guiding strategic decision-making.

2. Jones (2019):

"Comparative Analysis of Liquidity Ratios: A Case Study Approach"

Jones examines the utility of liquidity ratios in assessing the short-term financial health of companies through a case study approach. The article emphasizes the importance of comparative analysis, demonstrating how liquidity ratios can vary across industries and over time. Practical insights are provided for stakeholders in interpreting liquidity ratios effectively.

3 Chen et al. (2020):

"Solvency Ratios and Financial Stability: A Longitudinal Study"

Chen et al. investigate the relationship between solvency ratios and financial stability over time. Through a longitudinal study, the article demonstrates how changes in solvency ratios can signal potential financial distress or resilience. The findings underscore the predictive power of solvency ratios in assessing the long-term viability of businesses.

4. Brown and Williams (2018):

"Profitability Analysis Using DuPont Analysis Framework"

Brown and Williams employ the DuPont analysis framework to delve into the components of profitability ratios. The article provides insights into how firms can improve their profitability by focusing on factors such as asset turnover, profit margins, and financial leverage. Practical applications of DuPont analysis are illustrated through case studies.

5. Garcia et al. (2021):

"Efficiency Ratios and Operational Performance: A Sectoral Analysis" Garcia et al. conduct a sectoral analysis to examine the relationship between efficiency ratios and operational

performance. The article highlights the importance of efficiency ratios in assessing resource utilization and productivity across different industries. Practical implications are discussed for managers seeking to optimize operational efficiency.

6. Patel and Sharma (2023):

"Recent Advances in Ratio Analysis: Integrating Machine Learning Techniques"

Patel and Sharma explore recent advancements in ratio analysis, focusing on the integration of machine learning techniques. The article discusses how machine learning algorithms can enhance the predictive accuracy of ratio analysis models and enable real-time monitoring of financial performance. Practical applications and future directions are outlined.

CATEGORIES OF PROPORTIONS

- 1. LIQUIDITY RATIO**
- 2. PROFITABILITY RATIO**

3. EFFICIENCY RATIO

4. SOLVENCY RATIO

1.Liquidity Ratios:

There are three important liquid ratios.

- a. **Current Ratio:** Measures the company's ability to cover its short-term liabilities with its short-term assets.

Formula: $\text{Current Assets} / \text{Current Liabilities}$.

- b. **Quick Ratio (Acid-Test Ratio):** Assesses the company's ability to meet short-term obligations without relying on the sale of inventory.

Formula: $(\text{Current Assets} - \text{Inventory}) / \text{Current Liabilities}$.

- c. **Cash Ratio:** Evaluates the company's ability to cover short-term liabilities with its cash and cash equivalents.

Formula: $\text{Cash and Cash Equivalents} / \text{Current Liabilities}$.

2.Profitability Ratios:

- a. **Net Profit:** Indicates the percentage of revenue remaining after deducting all expenses, including taxes and interest. Formula: $\text{Net Income} / \text{Revenue}$.

- b. **Return on Assets (ROA):** Measures the company's efficiency in generating profits from its assets.

Formula: $\text{Net Income} / \text{Total Assets}$.

3.Efficiency Ratios:

- a. **Inventory Turnover Ratio:** Indicates how many times a company sells and replaces its inventory within a specific period.

Formula: $\text{Cost of Goods Sold} / \text{Average Inventory}$.

- b. **Accounts Receivable Turnover Ratio:** Measures how efficiently the company collects payments from customers.

Formula: $\text{Net Credit Sales} / \text{Average Accounts Receivable}$.

4.Solvency Ratios:

- a. **Debt-to-Equity Ratio:** Assesses the company's financial leverage by comparing its total debt to its equity.

Formula: $\text{Total Debt} / \text{Shareholder Equity}$.

- b. **Interest Coverage Ratio:** Indicates the company's ability to meet its interest obligations with its earnings.

Formula: $\text{Earnings Before Interest and Taxes (EBIT)} / \text{Interest Expense}$.

OBJECTIVES OF THE STUDY

- To study the liquidity position of the company.
- To study the profitability position of the company.
- To study the operational efficiency of the company.
- To measure over all financial performance of the company.
- To suggest the ways for deviations in the profitability of the company.

PURPOSE OF THE STUDY

- Ratio analysis covers the financial analysis of statements through ratio analysis to interpret the strength and weakness of the company as well as the historical performance and current financial conditions.
- Ratio analysis helps to compare current performance with previous records
- Ratio analysis helps to monitor and identify issues that can be highlighted and resolved.
- Ratio analysis help with future decision making.

RESEARCH METHODOLOGY

RESEARCH

Research is a cycle where the specialist wishes to figure out the outcome for a given issue and consequently the arrangement helps in future strategy.

Data has been collected by two methods

1. Primary data
2. Secondary data

Primary data

Primary data refers to information collected directly from original sources through methods like surveys, interviews, or experiments.

Secondary data

Secondary data refers to information that has been previously collected by someone else for purposes other than the current research, such as from books, articles, reports, or databases.

RESEARCH DESIGN: Analytical study

RESEARCH TOOLS

Research tools - Financial ratios

Period of study - The period of study is 5 financial years i.e.,

Data sources: primary & secondary data (Annual reports)

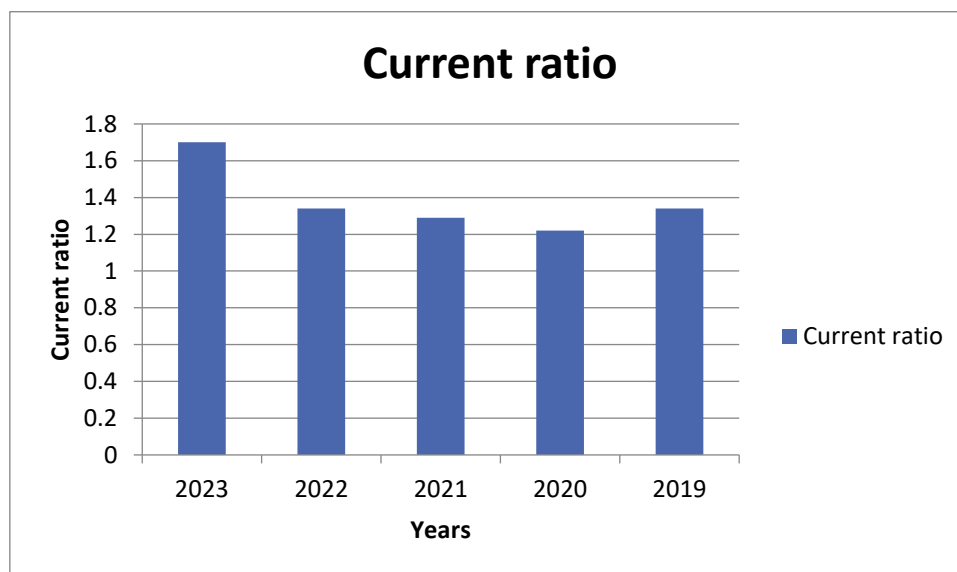
(Balance sheets)

DATA ANALYSIS

1. LIQUIDITY RATIO
 - a. +CURRENT RATIO
Current ratio=current assets/current liabilities

Balance sheets of Zuari cement in the year of 2019 to 2023

Years	Current assets	Current liabilities	Current ratio
2023	2427.33	1600.98	1.70
2022	1919.62	1425.37	1.34
2021	1688.42	1305.90	1.29
2020	1661.93	1360.25	1.22
2019	1548.51	1152.98	1.34



Interpretation:

The above graph represent the 5 years research period on current ratio of the Zuari cement ltd. Above the graph we can observe that current ratio increases from 1.3 to 1.7 over the period from 2019-2023. From this analysis we can say that company growth was increasing slowly

b. QUICK RATIO

Quick ratio= (current assets-investors)/current liabilities

Year	Current asset- investors	Current liabilities	Quick ratio
2023	1316.86	1600.98	0.82
2022	660.76	1425.37	0.46
2021	417.66	1305.90	0.31
2020	391.17	1360.25	0.29
2019	382.67	1152.98	0.33

Interpretation:

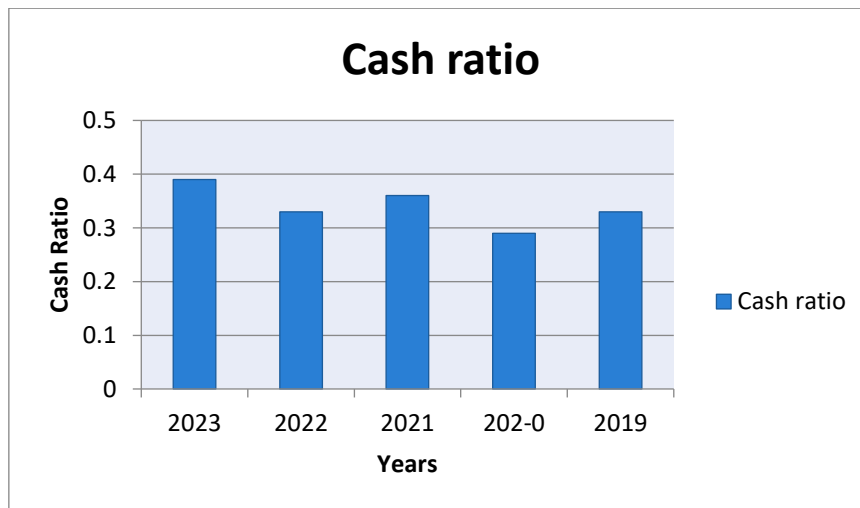
The above graph represent the 5 years research period on Quick ratio of the Zuari cement ltd. Above the graph we can observe that current ratio increases from 0.3 to 0.8 over the period

from 2019-2023. From this analysis we can say that company should focus on rapid increases in quick ratio.

c. CASH RATIO

Cash ratio=absolute liquid asset/current liabilities.

Year	absolute liquid asset	Current liabilities	Cash ratio
2023	626.87	1600.98	0.39
2022	470.88	1425.37	0.33
2021	480.65	1305.90	0.36
202-0	398.78	1360.25	0.29
2019	382.67	1152.98	0.33



Interpretation:

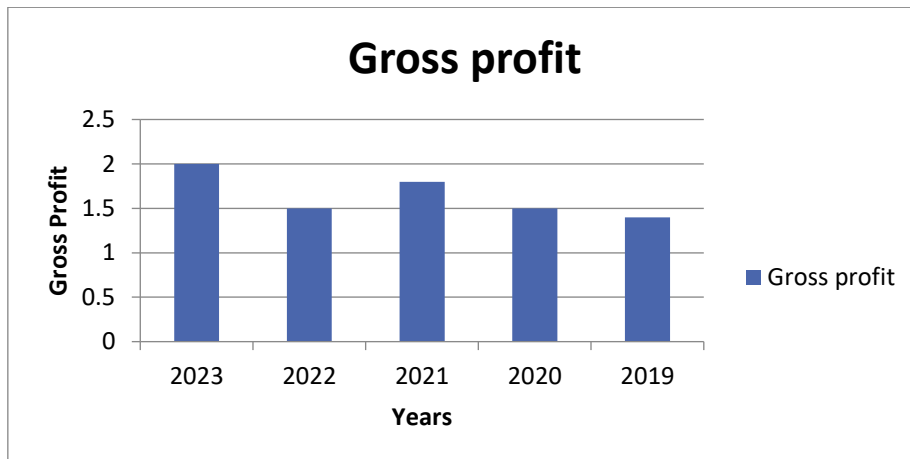
The above graph represent the 5 years research period on current ratio of the Zuari cement ltd. Above the graph we can observe that cash ratio increases from 0.33 to 0.39 over the period from 2019-2023. From this analysis we can say that company growth was increasing slowly.

2.PROFITABILITY RATIO

a. GROSS PROFIT

gross profit= (Gross profit/sales) *100

Year	Gross profit	Sales	Gross profit
2023	955.14	47620.00	2
2022	714.95	45479.50	1.5
2021	800.61	43110.90	1.8
2020	742.27	49039.20	1.5
2019	769.64	54393.00	1.4



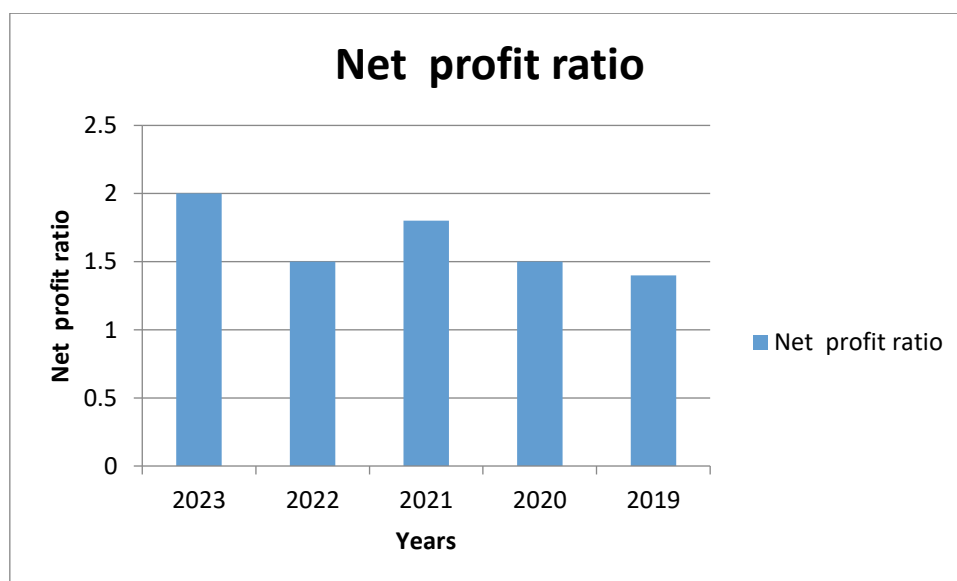
Interpretation:

The above graph represent the 5 years research period on current ratio of the Zuari cement ltd. Above the graph we can observe that Gross profit ratio increases from 1.4 to 2.0 over the period from 2019-2023. From this analysis we can say that company growth was slightly fluctuating yearly.

b. NET PROFIT

Net profit= (net profit/sales) *10

Year	Net profit	Sales	Net profit ratio
2023	955.14	47620.00	2
2022	714.95	45479.50	1.5
2021	800.61	43110.90	1.8
2020	742.27	49039.20	1.5
2019	769.64	54393.00	1.4



Interpretation:

The above graph represent the 5 years research period on current of the Zuari cement ltd. Above the graph we can observe that Net profit ratio increases from 1.4 to 2.0 over the period from 2019-2023. From this analysis we can say that company growth was slightly fluctuating yearly.

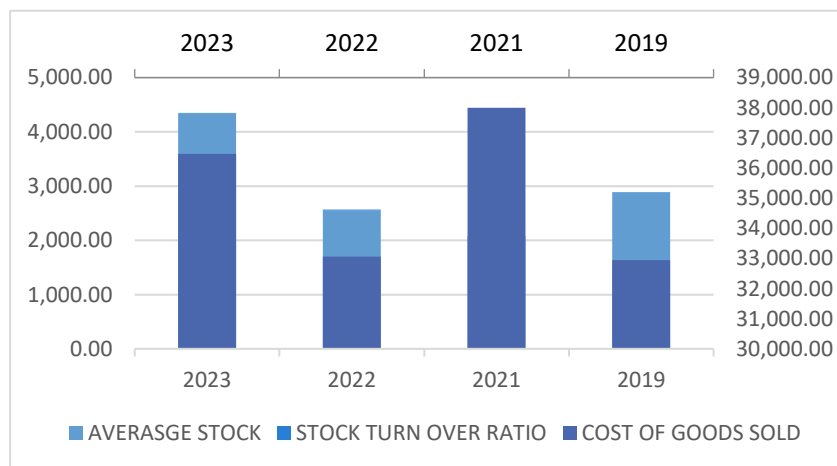
3.EFFICIENCY RATIO

A. STOCK TURN OVER RATIO

Stock turnover ratio=cost of goods sold/average stock

Average stock= opening stock+ closing stock/2

YEAR	COST OF GOODS SOLD	AVERASGE STOCK	STOCK TURN OVER RATIO
2023	36,473.01	4,338.385	8.40704778
2022	33,060.65	2,551.155	12.9590911
2021	37,996.04	2,056.4	18.4769695
2019	32,942.17	2873.225	11.4652246



Interpretation:

The above graph represent the 5 years research period on current of the Zuari cement ltd. Above the graph we can observe that stock turnover ratio increases from 11.4652246 to 8.40704778 over the period from 2019-2023. From this analysis we can say that company growth was slightly fluctuating yearly.

OBSERVATION

1. Current extent increases from 1.3 to 1.7 over the period from (2019-2023). From this investigation we can say that organization development was expanding gradually.

2. Quick extent increases from 0.3 to 0.8 over the period from (2019-2023). From this examination we can say that organization ought to zero in on fast expansion in speedy proportion.
3. Cash extent increases from 0.33 to 0.39 over the period from (2019-2023). From this investigation we can say that organization development was expanding gradually.
4. Gross benefit extent increases from 1.4 to 2.0 over the period from (2019-2023). From this examination we can say that organization development was somewhat fluctuating yearly.
5. Net benefit extent increases from 1.4 to 2.0 over the period from (2019-2023). From this investigation we can say that organization development was marginally fluctuating yearly.

CONCLUSION

Zuari Cement's ratio analysis reveals robust liquidity, profitability, and operational efficiency, coupled with prudent financial management practices. Comparative analysis underscores its competitive edge and potential for sustainable growth, making it an attractive investment opportunity in the industry.

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