



A Study On Working Capital Management With Special Reference To Cement Industries In India

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Abstract

Effective management of working capital is one of the most essential elements of corporate governance, as it pertains to overseeing a company's short-term financial requirements. This entails achieving an optimal equilibrium among the various components of working capital namely, payments, inventory, and credits—while ensuring cash is utilized efficiently for daily operations. Short-term capital is often likened to the lifeblood of an economic entity. This article intends to explore and assess the practices of working capital management within the cement industry, with a particular emphasis on inventory management, liquidity status, and credit oversight. Additionally, it aims to analyze the relationship between the efficiency of working capital and overall profitability. The primary concepts discussed in this article include working capital, profitability, and inventory.

Key word: working capital, liquidity, profitability inventory

Introduction

The proficient management of working capital is essential for the seamless operation of all sectors, including the cement industry. In this regard, working capital refers to the financial resources required to manage day-to-day activities, such as procuring raw materials, disbursing salaries, addressing maintenance expenses, and handling operational costs. It plays a critical role in maintaining consistent customer demand and optimizing production processes. Considering that materials such as limestone, clay, and gypsum are fundamental to cement manufacturing, the industry frequently faces substantial expenditures related to these inputs. Maintaining a steady supply of raw materials through effective management of working capital can help reduce production delays. Additionally, given the significant expenses associated with wages, energy, and transportation within the industry, sufficient working capital is crucial for sustaining operations. It is also vital to optimize inventory levels to achieve a balance between production requirements and cost efficiency.

Cement industry in India :

The cement sector in India is pivotal in promoting economic growth, generating employment opportunities, and enhancing infrastructure development. Through ongoing investments aimed at increasing production capacity, embracing innovative technologies, and implementing sustainable practices, this industry is integral to the country's goal of achieving developed nation status. In this dynamic environment, the effective management of working capital is crucial for maintaining operational efficiency and financial stability. Working capital refers to the funds a business utilizes for its everyday operations, which encompasses the management of inventory, accounts receivable, and accounts payable. The cement industry's contribution to the GDP is both substantial and multifaceted, stemming from its direct production value and its indirect economic effects through linkages with other industries, job creation, infrastructure initiatives, and tax revenues. As a key construction material, it acts as an essential driver of economic progress and development throughout the country.

Review of literature

Effective management of working capital is an essential element of financial management for businesses, as it has a direct influence on profitability, firm valuation, and overall risk. This literature review aims to consolidate and interpret findings from diverse studies to deliver a thorough understanding of the connection between working capital management and company performance. For instance, a study conducted by Nguyen, Pham, and Nguyen (2020) analyzed the effects of working capital management on the profitability of firms, utilizing empirical evidence from Vietnam. Their results enrich the existing body of literature by shedding light on the specific effects of working capital management within the framework of an emerging market economy. Conversely, Wu, Al-Khateeb, Teng, and Cárdenas-Barrón (2016) explored inventory models for perishable items that have a defined maximum lifespan, emphasizing partial trade credits offered to clients with credit risks through a discounted cash-flow analysis. Their research offers valuable perspectives on practical applications in this field.

Statement of problems

Managing working capital involves the challenge of making strategic decisions regarding investments in various current assets, aimed at ensuring the company maintains liquidity to meet its obligations promptly and efficiently. The motivation for analyzing working capital management stems from this inherent complexity.

Objectives of the study

The significance of working capital is undeniably critical for businesses. Every organization needs a suitable level of working capital to sustain its operations.

- To examine the company's current assets and liabilities.

Research Methodology

This study spans a five-year period from 2019-2020 to 2023-2024. It utilizes secondary data obtained from the company's annual reports as well as various research accessed through library resources. The gathered data has been organized, analyzed, and interpreted using various financial ratios, standard deviation, coefficient of variation and compounded annual growth rate .

Current Ratio

The current ratio is a financial metric used to evaluate a company's ability to meet its short-term liabilities with its short-term assets. It's calculated by dividing a company's current assets by its current liabilities.

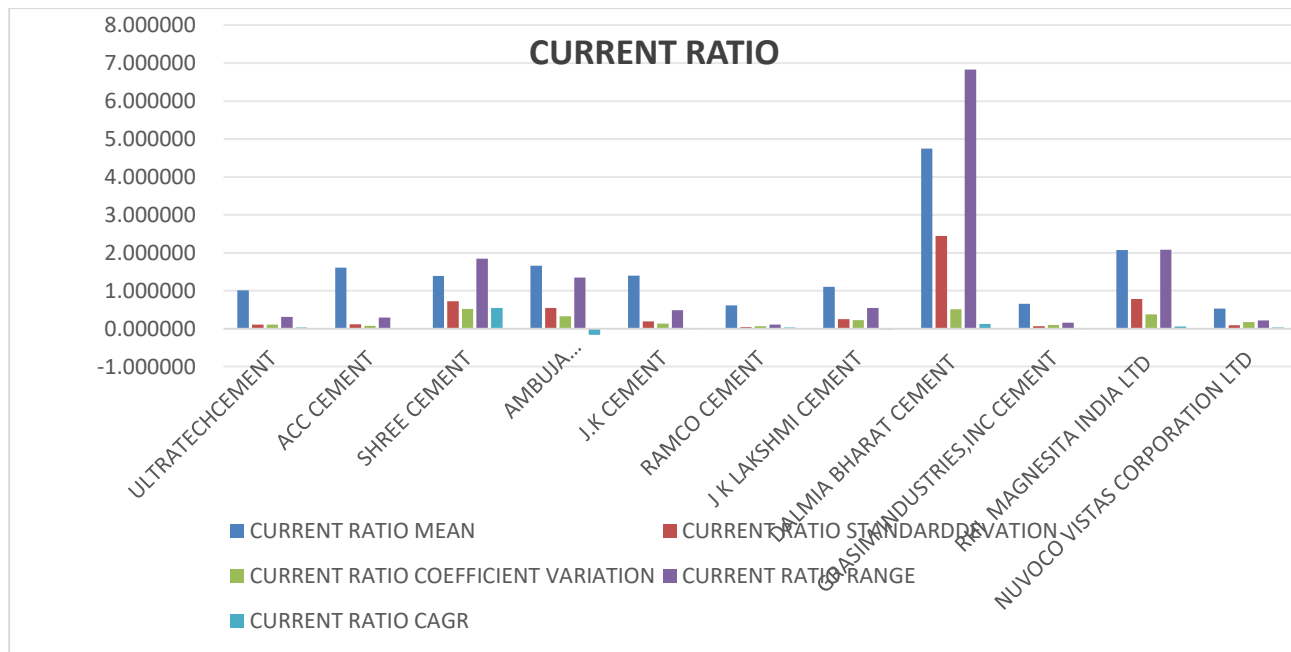
The formula is:

$$\text{Current Ratio} = \text{Current Liabilities} / \text{Current Assets}$$

TABLE :1 CURRENT RATIO OF CEMENT COMPANIES

NAME OF THE COMPANY	CURRENT RATIO				
	MEAN	STANDARD DEVATION	COEFFICIENT VARIATION (%)	RANGE	CAGR (%)
Ultra tech cement	1.01	0.11	11.04	0.31	3.65
Acc Cement	1.61	0.12	7.38	0.30	0.17
Shree Cement	1.39	0.73	52.16	1.84	54.31
Ambuja Cement	1.66	0.54	32.77	1.35	-15.92
J.K Cement	1.40	0.19	13.61	0.49	-0.54
Ramco Cement	0.61	0.04	6.22	0.11	3.48
J K Lakshmi Cement	1.10	0.25	22.67	0.55	-1.68
Dalmia Bharat Cement	4.75	2.45	51.53	6.83	12.22
Grasim Industries,Inc Cement	0.65	0.07	10.06	0.16	-0.63
Rhi Magnesita India Ltd	2.08	0.78	37.56	2.08	5.95
Nuvoco Vistas Corporation Ltd	0.53	0.09	17.40	0.22	3.55

Computed



From the above table:1 shows that mean value of current ratio varies between 0.53 to 4.7. Dalmia Bharath Cement recorded the highest means core(4.7) followed by Rhi Magnesita India Ltd(2.07) whereas Nuvoco Vistas Corporation Ltd has record lowest (0.53) mean score followed By Ramco Cement(.61). Further it has been inferred that Shree cement has recorded the highest variation with CV(52%) followed by Dalmia Bharat Cement(51%). On the contrary Ramco Cement have recorded the lowest variation 6% and followed by ACC cement 7%. It also inferred that the CAGR of current ratio shows that seven companies have registered positive growth rate and remaining companies have registered negative growth rate.

Quick Ratio

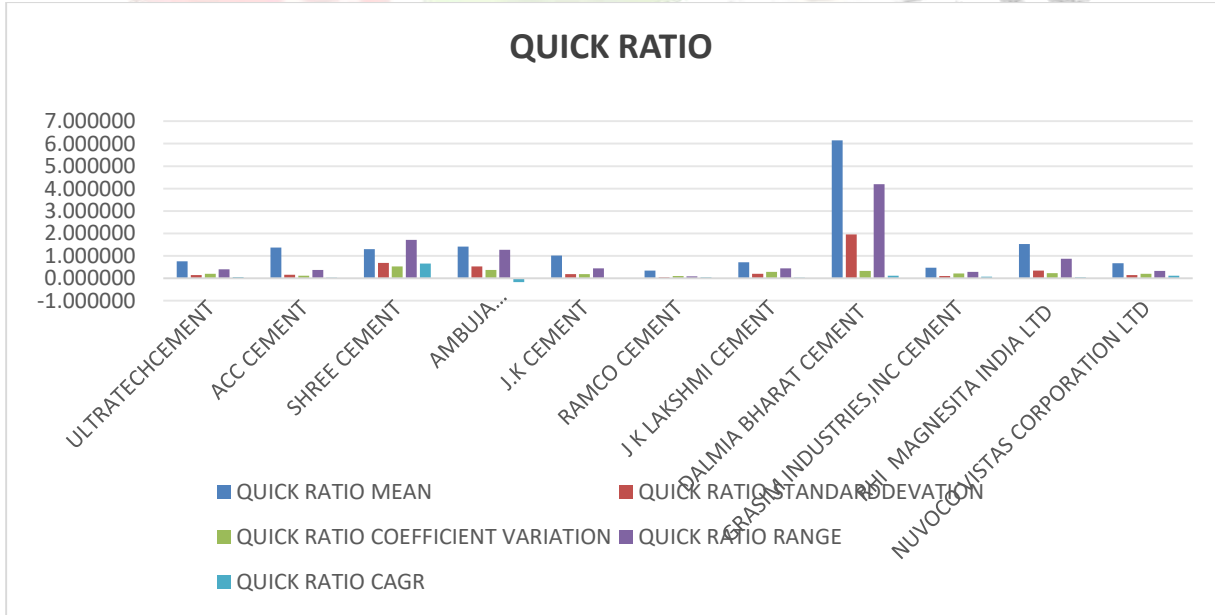
The quick ratio, also known as the acid-test ratio, is a financial metric that measures a company's ability to meet its short-term obligations using its most liquid assets. Unlike the current ratio, which includes all current assets, the quick ratio excludes inventory and other less liquid assets.

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventory} - \text{Prepaid Expenses}}{\text{Current Liabilities}}$$

TABLE :2 QUICK RATIO OF CEMENT COMPANIES

NAME OF THE COMPANY	QUICK RATIO				
	MEAN	STANDARD DEVIATION	COEFFICIENT VARIATION	RANGE	CAGR
Ultratechcement	0.75	0.15	19.26	0.40	5.48
Acc Cement	1.36	0.15	11.02	0.36	1.91
Shree Cement	1.29	0.69	53.17	1.71	64.68
Ambuja Cement	1.42	0.52	36.56	1.26	-17.13
J.K Cement	1.00	0.18	18.42	0.44	-1.48
Ramco Cement	0.34	0.03	9.92	0.08	4.42
J K Lakshmi Cement	0.71	0.20	27.71	0.43	2.48
Dalmia Bharat Cement	6.15	1.95	31.79	4.19	11.72
Grasim Industries,Inc Cement	0.47	0.10	21.39	0.28	7.10
Rhi Magnesita India Ltd	1.53	0.34	22.59	0.87	3.78
Nuvoco Vistas Corporation Ltd	0.67	0.13	20.18	0.33	10.86

Computed



From the above table:2 shows that mean value of quick ratio varies between 0.34 to 6.15.Dalmia Bharath Cement recorded the highest means core(6.15) followed by Rhi Magnesita India Ltd(1.53) whereas Ramco cement has record lowest (0.34) mean score followed By Grasim Industries,Inc Cement

(0.47).Further it has been inferred that Shree cement has recorded the highest variation with CV(53%) followed by Ambuja Cement (36%).On the contrary Ramco Cement have recorded the lowest variation 9% and followed by ACC cement 11%.It also inferred that the CAGR of current ratio shows that nine companies have registered positive growth rate and remaining 2 companies ie Ambuja Cement ,J.K Cement have registered negative growth rate .

Findings and Suggestion

The positive growth in the current ratio for nine companies suggests an improvement in their liquidity over time. This could indicate better financial health and enhanced ability to cover short-term liabilities." The positive CAGR in the current ratio for seven companies implies an improving liquidity trend, potentially indicating better management practices or increased asset efficiency".

Conversely, the negative CAGR for Ambuja Cement and J.K. Cement indicates a decline in liquidity, which could be a concern for investors and stakeholders as it reflects decreasing efficiency in managing current assets and liabilities. There may be concerns about declining liquidity. These companies should assess their financial strategies and consider measures to enhance their liquidity position."

Recommendations:

Overall, while some companies demonstrate strong and stable liquidity positions, others face challenges with low liquidity or high variability. The positive growth trend in the current ratio for most companies is promising, but those with negative growth rates should prioritize improving their liquidity management strategies. The variance in liquidity and growth rates among the companies indicates differing financial strategies and potential areas for improvement

Reference

- 1.Nguyen, A. H., Pham, H., & Nguyen, H.. (2020). Impact of Working Capital Management on Firm's Profitability: Empirical Evidence from Vietnam. The Journal of Asian Finance, Economics and Business . <http://doi.org/10.13106/jafeb.2020.vol7.no3.115>
- 2.Wu, Jiang., Al-Khateeb, Faisal B., Teng, J., & Cárdenas-Barrón, L.. (2016). Inventory models for deteriorating items with maximum lifetime under downstream partial trade credits to credit-risk customers by discounted cash-flow analysis. International Journal of Production Economics , 171 , 105-115 . <http://doi.org/10.1016/J.IJPE.2015.10.020>
- 3.Deloof, M. (2003). " Does Working Capital Management affects Profitability of Belgian Firms?",". Journal of Business Finance & Accounting, 30(3 & 4), 573-587. 6. Gupta Shashi K. and Sharma R.K.(11th Ed.-2008), " Management Accounting", Kalyani Publishers, New Delhi, ISBN-978-81-272-4790-4.
- 4.[1] Bapat, J. D., Sabnis, S. S., Joshi, S. V. and Hazaree, C. V. (2007), History of Cement and Concrete in India - A Paradigm Shift, Conference Paper, (<https://www.researchgate.net/publication/274953585>)
5. <http://www.tradechakra.com/indian-economy/industries/cement-industry.html>
- 6.Manoharan, Padmaja (2002), An Analytical study on profitability of Cement Industry in India, Bharathiar University, Coimbatore, Tamil Nadu.
- 7.Bavaria, Rasik N. (2004), A Comparative Analysis of Profitability Vis-à-vis Liquidity Performance in Cement Industry of India, Saurashtra University, Rajkot, Gujarat.
- 8.Haq, Ikram Ul, Sohail, Muhammad, Zaman, Khalid and Alam, Zaheer (2011), Working Capital Management and Profitability: A Case Study of Cement Industry in Pakistan, Mediterranean Journal of Social Sciences, Vol. 2(2), p. 365-372.

9. Yadav Pankaj (2017), An Analysis of Indian Cement Industry based on Profitability performance, International Journal of Trade and Commerce, Vol. 6(2), p. 419-432.
- 10.]<https://indiancompanies.in/top-10-companies-in-cement-industry-in-india>
- 11.<https://eaindustry.nic.in/cement/report1.asp>
- 12 www.ibef.org/industry/cement-presentation
- 13 Indian cement industry Report, January, 2020.

