A STUDY ON FINANCIAL PERFORMANCE OF SELECT CEMENT COMPANIES IN INDIA

R. RAMACHANDRAN[1], Dr. G.KUMAR M.Com., M.Phil., Ph.D[2].,

[1]*Ph.D. Research Scholar (P/T), PG & Research Department of Commerce*
Annamalai University, Annamalai Nagar-608 002
[2]*Assistant Professor, PG Department of Commerce*
(Deputation from Annamalai University), Thiru. A. Govindasamy Govt. Arts college, Tindivanam

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ABSTRACT

Cement industry in India is one of the booming sectors of economic development in the country. The industry is in the process of driving sustained growth, driven primarily by the construction industry and major infrastructure projects announced by the government from time to time. The objective of the study is working capital management of selected cement companies in India andthe researcher has taken six cement companies as sample of the study (3 mid-cap and 3 small-cap), namely, Ramco Cements, JK Lakshmi Cements, Star Cement, India Cements, Orient Cement and Heidelberg Cements were selected and using multistage sampling method. The study analysis to highlighted that Indian cementhas the lowest liquidity ratio and Heidelberg cement has the highest liquidity ratio.

Introduction

Indian economy is one of the fastest growing economies in the world. Many industries are contributing to Gross Domestic Products (GDP) of economy of India. Manufacturing sector is one of the major contributors to GDP of the country, this sector is also the leading sector in providing employment opportunities to the labour force of the country. There are many industries in manufacturing sector such as automobile, infrastructure, metal, cement and so on. Cement industry is the backbone for any manufacturing sectors in an economy. Especially it is the base industry for infrastructure development of the country. Cement is one of the most important building materials for any construction and is an essential infrastructure input. India is the second largest cement manufacturers in the world[1]. During the year 2022 Indian cement industry produced 3,70,000 metric tons of cement. This industry provides employment directly and indirectly to a considerable portion of people of the country and this industry has a bright scope for development in future, since many government projects towards development infrastructural facilities in the country such as development of smart cities. Development of this industry will help overall development of the nation and negative development will give adverse effect of the economy and affect employment of the people also. Hence study of cement industry is an important area.

There are many areas to study an industry such as finance, marketing, production, human resource management and so on. Among them finance is backbone of any activities of an industry. Efficient financial management will lead the company to get success in all aspects and poor financial management may lead to bankruptcy, eventhough it manages other aspects efficiently. Hence study of financial management of an industry is very important. Generally financial management is studied three aspects namely short term funds management, long term funds management and profitability of a company. Hence the researcher has selected this topic and studied financial performance of selected cement companies in India. The successive part of this chapter gives theoretical background of cement industry in India and its significance.

Statement of the Problem

India is the second largest cement manufacturers in the world next to China. Cement industry is one of the largest industries in India. It provides employment opportunities to a considerable number of people both directly and indirectly. It also brings foreign exchanges through export of cement to other companies. It is the basic industry for any other industrial development especially for infrastructural development, since infrastructural development is very important for economic development of a country. Most of the large cement manufacturers are joint-stock companies; they are invested by industrialists, public and also government. Successful running of a business will increase profit of the company, it will increase return on shareholders' investment and it leads increase of shareholders' wealth also. Adverse growth of a company will lead to lower return on investment. Growth of a company is depended on various operational performance of the management. Financial management is one of the important components of management of a company and it is backbone of any business activities of a company. Efficient financial management of a company will give success for any business activity.

In financial management analysis of short term funds management is very important. Working capital is an important aspect of any business organization, maintenance of liquidity is essential. Lack of liquidity will lead even for bankruptcy. Hence the study has included study of working capital management of selected cement companies. Long term solvency is very important for any business organization. Study of capital structure, efficiency of financial management in the aspects of shareholders fund, fixed assets and so on. Hence the study included this aspect also in the study. All activities related to a business are aimed to profit. So, study of profitability will exhibit overall performance of a company. Hence the study has analysed profitability of the selected cement companies.

Objectives of the Study

The study has been undertaken with the following specific objectives.

1. To assess the trend and current scenario of both short and long-term funds of selected cement companies in India.
2. To study the liquidity position of selected cement companies in India.
3. To analyse the long-term solvency of selected cement companies in India.
4. To study the profitability of selected cement companies in India.

Methodology

The study is empirical in nature. The study purely based on secondary data. Data were collected, they were arranged for analysis. The study applied ratio analysis as financial tool. The researcher has used ratios related to liquidity, solvency, profitability and other ratios for analysis. The study also used mean, standard deviation, co-efficient of variation and compounded annual growth rate (CAGR) as statistical tools.

Sample of the Study

Infrastructure development is essential for the development of an economy. Without adequate infrastructure, an economy cannot grow. Cement is the primary raw material for infrastructure development. Hence the researcher has chosen cement industry for the study. Indian cement industry is the second largest in the world. This industry provides raw material for construction industry, which is highly helping for infrastructure development of the nation. Cement industry is also provides considerable number of employment both directly and indirectly to people. In BSE, a total of 43 cement companies are listed. Among them first five companies (Ultratech Cement, ACC, Ambuja Cements, Shree Cements and JK Cements) are coming under large cap category. As far as the researcher reviewed, majority of the researchers had taken these top five companies all together or few of them for the study to analyse their financial performance. Other than these five companies, other 38 cement companies are categorized under mid cap or small cap. Very few studies were done on these companies to analyse their financial performance. The researcher selected five companies under the category of mid cap and small cap cement companies listed in BSE using Multilevel Random Sampling Method. The top ten companies under these categories are presented below. A total of three cement companies are listed under the category of mid-cap (Ramco Cements, JK Lakshmi Cements and Star Cement), these companies are selected as sample under mid-cap category and the researcher selected the same number of companies (three) under small cap category (India Cements, Orient Cement and Heidelberg Cements), the researcher wanted to top three small cap companies in terms of turnover, but secondary data for Nuvoco Vistas company was available only from the financial year 2016-17, since eventhough the company was doing cement business, it was incorporated in the year 2016 in the name of Nuvoco Vistas Corp. Ltd. hence the company is not selected. Among the top ten companies, all the companies are doing exclusively cement manufacturing only, but Jaiprakash Association is doing not only Cement manufacturing and also doing other type of business. Hence, it is not suitable for the study. Hence it is rejected. Finally the researcher has taken six cement companies as sample of the study (3 mid-cap and 3 small-cap), namely, Ramco Cements, JK Lakshmi Cements, Star Cement, India Cements, Orient Cement and Heidelberg Cements.

Data Collection and Analysis

The present study is purely based on secondary data for analysis. As it is a financial statement analysis, the study required various accounting data for analysis. Required accounting data were collected from financial reports such as profit and loss account and balance sheet of the concerned companies for the study period. These financial reports were collected from annual reports of the companies. Annual reports of the selected companies were collected from official websites of the concerned companies and internet sources such as reportjunctions and data base called ‘prowess’ provided by Centre for Monitoring Indian Economy (CMIE). The study also

collected other data related to net sales of top cement companies, installed capacity of cement in India, cement production in India and so on, these data were collected from various reports of Cement Manufacturers Association (CMA) and other websites of government and non-government..

Tools of Analysis

The study is empirical in nature. The study purely based on secondary data. Data were collected, they were arranged for analysis. The study applied ratio analysis as financial tool. The researcher has used ratios related to liquidity, solvency, profitability and other ratios for analysis. The study also used mean, standard deviation, co-efficient of variation and compounded annual growth rate (CAGR) as statistical tools.

Scope of the Study

The present study has been made in order to analyse financial performance of selected cement companies in India. The study selected only six cement companies in India. These companies were selected on the basis ofthe companies listed in the small caps and mid caps in the stock exchange of BSE and also considered data availability for the study period among top cement manufacturers in India listed in small and mid cap. The study used possible ratios as explained earlier, some ratios were not considered for the analysis due to inadequacy of data availed in financial reports of the respective companies. The study also restricted to financial performance analysis in terms of working capital management, long term solvency and profitability of the selected companies and other aspects of financial management are not considered for the study and they are considered out of scope.

Working Capital and Its Trend

Working capital is the capital utilized in the business for the purpose of day to dayexpenses of the business. Numerically, working capital of a business is calculated by subtracting current liabilities from current assets. In other words, working capital is the difference between current assets and current liabilities. Efficient management of working capital is essential for successful run of a business. The following table presents the results regarding working capital, its mean, standard deviation, coefficient of variation and compounded annual growth rate (CAGR) and the trend of working capital of the selected cement companies for the period of study from 2013-14 to 2022-23.

Table 1
Working Capital and Its Trend of Select Cement Companies

Year	Ramco		JK		India		Orient		Star		Heidel	
	WC	Trend %	WC	Trend %	WC	Trend %	WC	Trend %	WC	Trend %	WC	Trend %
2013-14	-455.14		-20.99		-880.07		-214.04		19.86		-33.17	

2014-15	-243.55	46.49	-346.14	-1549.07	-599.80	31.85	56.22	-126.27	73.01	267.62	-193.87	484.47
2015-16	-696.28	-185.89	-433.70	-25.30	-1206.14	-101.09	-23.44	-141.69	197.92	171.09	-410.50	111.74
2016-17	-601.94	13.55	-174.92	59.67	-612.74	-49.20	-131.01	458.92	319.42	61.39	-285.90	-30.35
2017-18	-517.18	14.08	-320.62	-83.30	-144.07	76.49	-186.11	42.06	505.45	58.24	-196.71	-31.20
2018-19	-671.88	-29.91	-371.59	-15.90	-297.66	-106.61	-52.12	-72.00	528.03	4.47	-25.91	-86.83
2019-20	-765.98	-14.01	-204.54	44.96	-661.45	-122.22	1.87	-103.59	414.75	-21.45	95.09	-467.00
2020-21	-966.07	-26.12	3.02	101.48	-886.82	-34.07	1.37	-26.74	467.22	12.65	78.19	-17.77
2021-22	-1073.86	-11.16	386.41	12,695.03	-355.53	59.91	-239.81	-17604.38	236.74	-49.33	347.57	344.52
2022-23	-1196.30	-11.40	532.99	37.93	422.86	218.94	-134.52	-43.91	141.66	-40.16	262.78	-24.40
Mean	-718.82		-95.01		-522.14		-92.16		290.41		-36.24	
SD	292.47		327.41		456.64		102.59		183.88		240.41	
CV	-40.69		-344.62		-87.46		-111.32		63.32		-663.33	
CAGR	10.15		NA		NA		4.54		21.71		NA	

Source: Secondary Data

It could be known from table 1 that working capital of Ramco Cements was negative during entire period of the study, it indicated that current liabilities of the company was more than their current assets during the study period. It ranged from -₹243.55 crore to -₹1,196.30 crore. The mean value of working capital of Ramco was also negative -₹718.82 crore, the results of SD (₹292.47 crore) and CV (40.69 per cent), they show that there was little moderate level of

deviation in working capital from its mean value. The calculated CAGR (10.15 per cent) show that negative trend of working capital of the company increased at high rate.The amount of working capital of JK Cements was negative upto 2019-20 and later on it turned into positive, it showed that current liabilities of the company was more than their current assets for the first seven years of the study period and during last three years the amount of current assets went up than current liabilities. Working capital ranged from -₹433.70 crore to ₹532.99 crore. The mean value of working capital of JK Cements was also negative -₹95.01 crore, the results of SD (₹327.41 crore) and CV (344.62 per cent), they showed that there was very high level of deviation in working capital from its mean value.

Working capital of India Cements was negative during entire period of the study except last period, it indicated that current liabilities of the company was more than their current assets during the study period. It ranged from -₹1206.14 crore to ₹422.86 crore. The mean value of working capital of India Cements was also negative -₹522.14 crore, the results of SD (₹456.64 crore) and CV (87.46 per cent), they revealed that there was high level of deviation in working capital of India Cements from its mean value. Working capital of Orient Cements was highly fluctuating during the study period. It was negative during seven years of the study, it indicated that current liabilities of the company was more than their current assets during such years. It ranged from -₹239.81 crore to ₹56.22 crore. The mean value of working capital of Orient Cements was also negative -₹92.16 crore, the results of SD (₹102.59 crore) and CV (111.32 per cent), they show that there was high level of deviation in working capital from its mean value. The calculated CAGR (4.54 per cent) show that working capital of the company increased at lower rate.

It was also observed that working capital of Star Cements was positive during entire period of the study, it indicated that current assets of the company was more than their current liabilities during the study period. It ranged from ₹19.86 crore to ₹528.03 crore. The mean value of working capital of Star Cements was also positive at ₹290.41 crore, the results of SD (₹183.88 crore) and CV (63.32 per cent), they show that there was moderate level of deviation in working capital of Star Cements from its mean value. The calculated CAGR (21.71 per cent) showed high rate of increase in working capital of the company.Working capital of Heidelberg Cements was negative during first six years of the study and during the last four years it was positive. It ranged from -₹410.50 crore to ₹347.57 crore. The mean value of working capital of Heidelberg Cements was negative -₹36.24 crore, the results of SD (₹240.41 crore) and CV (663.33 per cent), they indicated that there was very high level of deviation in working capital from its mean value.

Table 2
Cash Ratio of Select Cement Companies

Year	Ramco	JK	India	Orient	Star	Heidel
2013-14	0.03	0.05	0.00	0.16	0.02	0.19
2014-15	0.04	0.01	0.00	0.13	0.03	0.16
2015-16	0.04	0.01	0.00	0.08	0.01	0.01
2016-17	0.06	0.01	0.00	0.14	0.03	0.02
2017-18	0.07	0.01	0.00	0.05	0.02	0.25
2018-19	0.05	0.01	0.00	0.06	0.80	0.37
2019-20	0.04	0.02	0.00	0.07	1.07	0.51

2020-21	0.06	0.28	0.00	0.07	1.03	0.47
2021-22	0.06	0.30	0.00	0.07	0.63	0.46
2022-23	0.05	0.25	0.01	0.09	0.45	0.58
Mean	0.05	0.09	0.00	0.09	0.41	0.30
SD	0.01	0.12	0.00	0.04	0.44	0.21
CV	24.80	131.94	52.98	40.89	108.75	68.38

Source: Secondary Data

Table 3.33 shows that the cash ratio of Ramco Cements was found to be very low. It ranged between 0.03 and 0.07, its calculated mean value stood at 0.05, it is considered very low and therefore liquidity position in terms of cash ratio of Ramco cements was not good during the study period. A lower level of deviation was found in cash ratio of Ramco cements from its mean value as shown by the results of SD (0.01) and CV (24.80 per cent).Cash ratio of JK Cements was also found to be low. It ranged between 0.01 and 0.30, its calculated mean value stood at 0.09, it is considered very low and therefore liquidity position in terms of cash ratio of JKcements was not good during first seven years and it was at satisfactory level during last three years. Very high level of deviation was found in cash ratio of JK cements from its mean value as shown by the results of SD (0.12) and CV (131.94 per cent).India cements held very low level of cash balance during all the years of the study period as shown by the results. It shows that the cash management of India cements was very poor during the study period. It is very difficult for the company even to mange their day to day financial obligations.

Cash ratio of Orient Cements was also found to be low. It ranged between 0.5 and 0.16, its calculated mean value stood low at 0.09, it is considered very low and therefore liquidity position in terms of cash ratio of Orient cements was not good during the study period. A moderate level of deviation was found in cash ratio of Orient cements from its mean value as shown by the results of SD (0.0.04) and CV (40.89 per cent).Cash ratio of Star Cements was also found to be near the standard. It ranged between 0.01 and 1.07, its calculated mean value stood at 0.41, it is near the standard, therefore liquidity position in terms of cash ratio of Orient cements was good during the last six years of the study period and not so during the first four years.A very high level of deviation was found in cash ratio of Orient cements from its mean value as shown by the results of SD (0.44) and CV (108.75 per cent).Cash ratio of Heidelberg Cements was found to be moderate. It ranged from 0.01 and 0.58, its calculated mean value stood at 0.30, it is considered moderate and therefore liquidity position in terms of cash ratio of Heidelberg cements was good during the last six years of the study period and it was not so during the first four years. Little high level of deviation was found in cash ratio of Heidelberg cements from its mean value as shown by the results of SD (0.21) and CV (63.38 per cent).

In summary, liquidity position in terms of cash ratio of Star Cements and Heidelberg Cements was good during the last six years of the study period, it was not so during the first four years of these companies. Cash ratio was not good for India Cements during entire period of the study period. It was not satisfactory for Ramco Cements and Orient Cements.

Cash Conversion Period

Cash conversion period or cash conversion cycle is the ratio how the management of a company managed its cash, i.e., their conversion of inventories, collection management and payment managements efficiently. The ratio is the outcome of sum of inventory conversion period and average collection period less average payments period. Lower ratio represents good cash management and higher ratio represents poor cash management. Table 3.34 brings out the results of cash conversion cycle of the sample cement companies.

Table 3
Cash Conversion Period of Select Cement Companies

Year	Ramco	JK	India	Orient	Star	Heidel
2013-14	17	-68	-434	-112	23	-173
2014-15	-16	-92	-386	-133	10	-118
2015-16	-37	-62	-453	-283	28	-152
2016-17	-41	-79	-444	-281	53	-182
2017-18	-38	-88	-372	-215	-19	-200
2018-19	-31	-208	-347	-166	6	-220
2019-20	-47	-129	-400	-115	4	-212
2020-21	-87	-102	-458	-173	-31	-229
2021-22	-116	-35	-450	-184	-35	-174
2022-23	-103	-55	-372	-123	-31	-192
Mean	-50	-92	-412	-179	1	-185
SD	40.70	48.71	40.86	63.87	29.33	33.27
CV	-81.67	-53.13	-9.93	-35.77	3309.35	-17.99

Source: Secondary Data

It could be observed from table 3.34 that cash conversion cycle (CCC) of Ramco cements ranged from -116 to 17 days, its mean value stood negative at -50 days. Which means their average payments period was higher than the sum of inventory conversion period (ICP) and average collection period (ACP). Which means the company managed its cash efficiently. In other words, its efficient and combined management of ICP, ACP and APP. Wide deviation was found in CCC as shown by the results of SD (40.70 days) and CV (81.67 per cent).The CCC of JK cements ranged from -208 to -35 days, its mean value stood negative at -92 days. Which means their average payments period was higher than the sum of inventory conversion period (ICP) and average collection period (ACP). A moderate level of deviation was found in CCC as shown by the results of SD (48.71 days) and CV (53.13 per cent).The CCC of India cements ranged from -458 to -347 days, its mean value stood negative at -412 days. Which means their average payments period was higher than the sum of inventory conversion period (ICP) and average collection period (ACP). A very low level of deviation was found in CCC as shown by the results of SD (40.86 days) and CV (9.93 per cent).

The CCC of Orient cements ranged from -283 to -112 days, its mean value stood negative at -179 days. Which means their average payments period was higher than the sum of inventory conversion period (ICP) and average collection period (ACP). A moderate level of deviation was

found in CCC as shown by the results of SD (63.87 days) and CV (35.77 per cent).The CCC of Star cements ranged from -35 to 53 days, its mean value stood at 1 day. A very high level of deviation was found in CCC as shown by the results of SD and CV.The CCC of Heidelberg cements ranged from -229 to -152 days, its mean value stood negative at -185 days. Which means their average payments period was higher than the sum of inventory conversion period (ICP) and average collection period (ACP). A low level of deviation was found in CCC as shown by the results of SD (33.27 days) and CV (17.99 per cent). These results show that the above companies managed its cash efficiently. In other words, its efficient and combined management of ICP, ACP and APP.

In summary, all the sample cement companies i.e., Ramco, JK, India, Orient, Star and Heidelberg Cements managed their cash efficiently in terms of cash conversion cycle. Their average payments period was higher than the sum of inventory conversion period (ICP) and average collection period (ACP).

Cash to Short-term Borrowing Ratio

Short-term borrowings are the financial obligationmay be paid any time, it is possible to payoff by maintaining sufficient cash balance. In this context, the researcher calculated cash to short-term borrowings ratio for the sample cement companies for the study period of ten years from 2013-14 to 2022-23. The below mentioned table presents the above results.

Table 4
Cash to Short-term Borrowing Ratio of Select Cement Companies

Year	Ramco	JK	India	Orient	Star	Heidel
2013-14	0.06	0.83	0.01	0.29	0.06	1.78
2014-15	0.11	0.07	0.01	1.06	0.08	NA
2015-16	0.14	0.04	0.01	0.83	0.04	0.11
2016-17	0.19	0.02	0.02	0.83	0.06	NA
2017-18	0.20	0.03	0.05	0.27	0.07	NA
2018-19	0.13	0.31	0.02	6.34	37.13	NA
2019-20	0.08	0.30	0.01	138.54	51.11	NA
2020-21	0.15	25.69	0.01	NA	55.40	NA
2021-22	0.16	1.80	0.00	0.27	58.35	11.38
2022-23	0.19	1.31	0.01	0.24	24.50	7.82
Mean	0.14	3.04	0.02	16.52	22.68	5.27
SD	0.05	7.98	0.01	45.80	25.65	5.25
CV	33.94	262.57	91.48	277.29	113.10	99.56

Source: Secondary Data

Table 3.35 reveals that the calculated cash to short-term borrowings ratio of Ramco cements ranged from 0.06 to 0.20, its mean value stood at 0.14, it is considered low and therefore the liquidity position in terms of cash to short-term borrowings ratio of Ramco cements was not good.Little moderate level of deviation was found in the ratio as shown by the results of SD and

CV.The computed cash to short-term borrowings ratio of JK cements ranged from 0.02 to 25.69, its mean value stood at 3.04, Eventhoughit is high, the ratio was not uniform during all the years. Hence its liquidity position in terms of cash to short-term borrowings was good during the years 2013-14, and from 2018-19 to 2022-23. A very high level of deviation was found in the ratio as shown by the results of SD and CV.The calculated cash to short-term borrowings ratio of India Cements was very low during all the years of the study period, hence liquidity position of the company in terms of cash to short term borrowings ratio was not good for India cements.

The computed cash to short-term borrowings ratio of Orient cements ranged from 0.24 to 138.54, its mean value stood at 16.52, The results show that liquidity position in terms of cash to short-term borrowings was good during the study period.Very high level of deviation was found in the ratio as shown by the results of SD and CV.Cash to short-term borrowings ratio of Star cements ranged from 0.06 to 58.35, its mean value stood at 22.68.The results show that liquidity position in terms of cash to short-term borrowings of Star cements was good during the study period. Very high level of deviation was found in the ratio as shown by the results of SD and CV.

In summary, liquidity position of Star Cements, Orient Cements was good during the study period in terms of cash to short-term borrowings ratio. It was not good for India cements and Ramco cements.

Conclusion:

In order to carry on the business successfully, it is mandatory to have a good liquidity and solvency position that is to have good short -term financial position and long - term financial position. It must be noted that a business having good solvency position does not mean that its liquidity position will also be good and vice versa. Government of India has been giving immense boost to various infrastructure projects, housing facilities and road networks, the cement industry in India is currently growing at an enviable pace. In the coming years more growth in the Indian cement industry is expected to come. The Indian Cement industry plays a major role in the growth of the nation. The study highlighted the financial performance of Indian cements companies particularly about the five cement companies such as Birla Corporation, Dalmia Bharat, Ramco Cements, Shree Cements and Ultratech Cements. After considering all the factors, we can still safely conclude that the growth story of cement industry is still not over and it can be expected to pick up in the coming future on various positive signals from market such as rise in construction, picking up of global demand, introduction of fuel efficient technology as well as government initiatives.

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