



## LIQUIDITY AND PROFITABILITY ANALYSIS OF INDIA CEMENTS LIMITED

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### **Abstract**

Liquidity management is a concept that is getting serious attention all over the world because of the current financial turn oil and the state of the world economy. The concern of business owners and managers all over the world is to advise a strategy which will help in maintaining liquidity as well as to increase profitability and shareholder's wealth. Liquidity and Profitability are the pre-requisite for the survival of every firm or company. The Finance Manager is always faced with the dilemma of liquidity Vs. profitability as these two concepts conflict in most of the financial decisions. So the Finance Manager has to watch the relationship between operating risk and profitability of a company also. India Cements is one of the well known cement companies in India. It has a big market base in the infrastructure as well as the real estate segment. The high quality products and services at affordable cost make it one of the most preferred cement companies in the country. Hence in this article an attempt has been made to study the relationship between liquidity and profitability of India Cements Limited. The study has been carried out for ten years from 2006 to 2015.

**Key Words: Liquidity, Profitability, Efficiency, Operating profit margin, ROCE.**

### **INTRODUCTION**

Liquidity is pre-requisite for the survival of every firm or company. In context of corporate business finance liquidity refers to the length of time until assets are converted into cash. Profitability refers to the firm's ability to generate earnings and earnings are must for its survival and growth. The profitability ratios show the combined effect of liquidity, asset management and debt management policies on operating results. There are two types of ratios i.e. profit margin ratios and rate of return ratios. The most popular profit ratios are gross profit margin ratio, operating profit margin ratio and net profit margin ratio. Rate of return ratios reflect the relationship between profit and investment. The important ratios are return on assets, earning power ratio, return on capital employed and return on equity, etc. The **cement industry** has played a significant role in the growth of the Indian economy during the post-independence period. The Government of India has identified cement as a core industry, and therefore, its development has been an integral part of the national economic plans. The Indian cement industry is the fifth largest in the world with production of over 150 million tonnes per year next to China, Russia, Japan, and U.S.A. Though it is quite large in terms of total capacity, the industry is fragmented in its structure. The cement industry in India is poised to scale new heights thanks to liberalization policies of the Government of India and with the adoption of state-of-the art technology and a massive investment of Rs.100 billion.

**India Cements Limited** is largest manufacturer of cement in South India. India Cements owns 28% of the market share and is leader in south India. The cement manufacturer aims 35% market share. It has distribution network of 10,000 stockists. India Cements Limited has seven manufacturing plants in India with an annual capacity of 9 million tons. Sankar, Coramandel and Raasi Gold are the brands owned by India Cements. India Cements owned Indian Premier League franchise Chennai Super Kings from 2008 to 2014. The franchisee was transferred to a separate entity named Chennai Super Kings Cricket Ltd., after the Supreme Court of India struck down the controversial amendment to the BCCI constitution's clause 6.2.4 that allowed board officials to have a commercial interest in the IPL and the Champions League T20 on January 22, 2015.

### **LITERATURE REVIEW**

**Glosh and Maji (2004)** examined the efficiency of WCM in ICC from 1992-1993 to 2001-2002 instead of using the common method of analysing different WCM ratios, 3 index values representing the average performance of the components of current assets, the degree of utilization of the total current assets relation to sales & efficient in managing the WC have been computed for the selected firms over the 10 year study period.

**Sharma (2002)** studied the financial performance of cement industry in India. Ten cement companies were selected for the purpose of analysis. Financial analysis of the selected companies was done through various ratios such as profit margin ratio, return on capital employed, earning power ratio, capital gearing ratios and asset turnover ratio. It was recommended that cement companies should tighten their debt. To find collection efforts and should reduce the funds tied up in receivables.

**Nand Kishore sharma (2002)**, in his study on financial appraisal of cement industry in India, has found that the current ratio



and quick ratio showed a decreasing trend and also these ratios varied from time to time. On comparing the comparing the current ratio and quick ratio of cement industry six companies were found higher than the average and four rewarded lower than the average of industry. The debt equity ratio has showed a decreasing trend in the first four years of study, after that it registered an increasing trend. The ratio of fixed assets to total debts always showed more than 100 percent which indicated that the claims of outsiders were covered by the fixed assets of the cement companies.

**Padmaja manoharan's (2002)** analytical study on “ profitability of cement industry in India” revealed the variation in profitability of Indian cement companies depending on age size and region. The study identified that quality of earning depends on management and leverage management. Further, the analysis concludes that the profitability and quality of earnings is influenced by the liquidity factors.

#### **OBJECTIVES OF THE STUDY**

1. To assess the liquidity and profitability level of India Cements Limited.
2. To assess the performance of India Cements Limited based on performance indicators.
3. To find out the relationship between liquidity and profitability of India Cements Limited.

#### **SCOPE OF THE STUDY**

Cement Industry is a seasonal industry. So liquidity, profitability and operating risk are very volatile in such an industry. The most common financial ratios that are widely used to measure liquidity, long-term solvency, activity and profitability positions only were employed to study the financial performance. As the study is confined to the assessment of financial performance, issues like technology, pricing, export and distribution have not been dealt with. The scope of the study includes two liquidity ratios i.e. Current ratio and Quick ratio to calculate the liquidity of companies and two efficiency ratios used i.e. Debtors turnover ratio and Inventory turnover ratio to analyse the performance of the company. In order to calculate the profitability of company, Operating profit margin and Return on capital employed have been used.

#### **SOURCES OF DATA**

For the purpose of investigation purely secondary data is used. The data of India Cements Limited for the period from 2006 to 2015 used in this study have been taken from the selected sources i.e. published annual reports of company

#### **INDIA CEMENTS LIMITED**

India Cements is one of the well known cement companies in India. It has a big market base in the infrastructure as well as the real estate segment. The high quality products and services at affordable cost make it one of the most preferred cement companies in the country. More and more industry segments are opting for the products of India cement.

India Cements, also known as India Cements Ltd was set up in the year 1946 and since then, it has gradually grown itself into one of the well known organizations in the cement and industrial segment in the country. The first plant of India Cements was built in the year 1949 in the province of Sankarnagar in the state of Tamil Nadu. Over the years, to cater to the high demand in a number of industrial segments, the number of plants has been increased to seven. Most of the plants are located in various provinces of Andhra Pradesh and Tamil Nadu. The India Cements Limited was established in 1946 and the first plant was set up at Sankarnagar in Tamil Nadu in 1949. The company is the largest producer in cement in South India. The company has access to huge limestone resources and plans to expand capacity by de-bottlenecking and optimisation of existing plants as well as by acquisitions.

India Cements Ltd has posted a net profit of Rs 41.04 core for the quarter ended September 30, 2015 as compared to 7.49 core for the quarter ended September 30, 2014.

N Srinivasan, vice chairman and managing director, said the performance backed by improved operating parameters and financial discipline. Prices are holding, company managed to save cost. Variable cost reduced to Rs 2,022 per tonne during the quarter ended September 2015 from Rs 2,190 per tonne during the quarter ended June 2015. Total Income was Rs 1,082.3 core for the quarter ended September 30, 2015 whereas the same was at Rs 1,135.8 core for the quarter ended September 30, 2014.

Improved earnings helped to reduce debts and thus interest cost. Reduction in term-loans brought down interest charges to Rs 89 core as against Rs 101 core depreciation too was lower at Rs 55 core as compared to Rs 66 core for the same quarter last year. Debt level reduced by Rs 200 core to Rs 3,005 core, said Srinivasan. Net plant realisation for the company during the second quarter was Rs 3,887 per tonne as compared to Rs 3,506, a year ago. However it was slightly lower than first quarter,

which was at Rs 3,930 a tonne. While sales volume is a function of demand, company could maintain better realisation over the last three quarters. On the outlook, Srinivasan said, stability in macro economic conditions and Government effort to increase public spending should help investment in real estate and infrastructure. RBI initiative to further cut interest rates for easing finance cost too should help boost economic activity in turn consumption of cement. On South demand, he said, company expect pick up in construction activity, driven by more investments envisaged on infrastructure development, industrial growth in Tamil Nadu and building of a new capital in Andhra Pradesh.

**Table 1. PERFORMANCE INDICATORS OF THE INDIA CEMENTS LIMITED**

YEAR	C.R.	Q.R.	D.T.R.	I.T.R.	O.P.M	ROCE
2006	3.20	2.11	7.24	24.35	16.99	8.27
2007	3.51	-2.76	8.94	28.68	32.90	18.72
2008	1.78	2.16	10.45	27.26	35.63	23.09
2009	1.51	-0.23	9.95	26.39	27.18	17.26
2010	1.85	0.09	8.61	26.01	20.17	10.74
2011	1.82	1.57	9.49	6.80	12.04	4.15
2012	1.63	1.36	18.14	8.23	20.34	11.33
2013	1.72	1.46	13.97	10.51	18.14	9.69
2014	1.59	1.36	10.67	9.55	11.63	4.75
2015	1.50	1.20	10.35	8.44	15.07	7.96
AVG.	2.011	0.832	10.781	17.622	21.009	11.596
S.D.	0.722318	1.476096	3.120375	9.504647	16.632846	6.200125
CV(%)	35.92	56.36	28.94	53.94	83.80	53.47

Source: Published Annual Reports of India Cements Limited

(C.R.-Current Ratio, Q.R.-Quick Ratio, D.T.R.-Debtors Turnover Ratio, I.T.R.-Inventory Turnover Ratio, O.P.M.-Operating Profit Margin, ROCE- Return on Capital Employed)

### INTERPRETATION OF DATA

The above table shows that the liquidity and profitability position of the company is satisfactory in the study period.

**Current ratio** is an important ratio used for judging the short term financial position of a business enterprise. Current liabilities and provisions are those liabilities that are payable within an accounting year. The generally accepted norm for current ratio is 2:1 which indicates a better liquidity position of the business. The current ratio of India Cements Limited during the period of the study is satisfactory as its average is 2.011 .Coefficient of variation of current ratio of the company during the study period is 35.92. During the study period the co-efficient of variation of current ratio is higher which indicates that less efficient management of working capital.

**Quick ratio** is a commonly used device to judge the short term financial position of a firm. The generally accepted norm for quick ratio is 1:1 which indicates a better liquidity position of the business. During the period of study the quick ratio of India Cements Limited is satisfactory as its average are 0.832. Coefficient of variation of quick ratio of the company during the period of study is 56.36%. The high coefficient of variation of the company during the period of study implies that there is high variation in the quick ratio of the company which indicates that liquidity management policy is not stable.

The Efficiency or activity ratios help to measure how efficiently the assets are employed by the firm. The efficiency with which the assets are used would be reflected in the speed and rapidity with which assets are converted into sales. The liquidity position of a firm to a great extent depends upon the quality of its debtors and inventory. To judge the performance of the company, two ratios are usually calculated: Debtors turnover ratio and Inventory turnover ratio.

When the firm extends credits to its customers, book debts are created in the firm's account and debtors expected to be converted into cash over short period and thus included in current assets. The average **Debtors turnover ratio** of India Cements Limited amounted to 10.781 times in a year. Thus high turnover ratio and short collection period imply prompt payment on the part of debtors. Coefficient of variation of India Cements Limited is 28.94. The low coefficient of variation of the company implies high efficient management of debtors.

**Inventory turnover ratio** is a measure which indicates the efficiency at which the inventory of the firm is managed and the number of times the inventory has been converted into sales during one accounting year. Higher inventory turnover ratios are

considered a positive indicator of effective inventory management. However, a very high inventory turnover ratio does not always mean an efficient management of stock. It sometimes may indicate inadequate inventory level, which may result in continuous production stoppages and a major decline in sales figure. The average inventory turnover ratio of India Cements Limited during the period of study is 17.622 in a year. The coefficient of variation of is 53.94 %. It indicates that inventory management system of India Cements Limited is better during the period of study.

The **Operating profit margin** is used to discuss the general profitability of the concern. A business concern is said to be efficient if it is able to keep up the cost of goods sold and other operating expenses as low as possible in relation to the net sales affected. This ratio shows the operational efficiency of the firm. A higher operating profit margin means that a company is more efficient at converting sales into actual profit. The operating profit margin ratio is calculated by dividing profit after tax by sales. During the period of study the net profit margin of India Cements Limited fluctuates every year. During the period of study the coefficient of variation in operating profit margin is 83.80% which indicates the high efficient performance of the company.

The **Return on capital employed** is also called return on investment. The prime objective of making investments in any business is to obtain satisfactory return on capital invested. It indicates the percentage of return on the capital employed in the business and it can be used to show the efficiency of the business as a whole. The higher the ratio, the more efficient use of the capital employed. The return on capital employed of India Cements Limited in the period fluctuates every year. It increased to 18.72% in 2007 and again increased in 2008 as 23.09% but it went down to 17.26 in the next year. During the period of study the return on net capital employed decreased and it shows 7.96% in the year 2015. This shows that India Cement Limited is not more efficient while using capital employed. The coefficient of variation of the company is 53.47 %. It indicates that net capital employed of India Cements Limited is better during the period of study.

## HYPOTHESIS

1. There is no significant difference between liquidity and profitability.
2. There is no significant difference between efficiency and profitability.

## RELATIONSHIP BETWEEN LIQUIDITY AND PROFITABILITY

In case of two samples paired t-test is used for judging the significance of the mean of difference between the two related samples. The relationship between liquidity and profitability of India Cements Limited is determined by applying t-test between Current ratio and Operating profit margin and between Quick ratio and Return on capital employed.

**Table:3- Coefficient of Correlation between Current ratio and Operation profit margin and between Quick ratio and Return on capital employed**

Sl. No.	Ratios	Statistical inference t-test
1	Correlation between Current ratio and Operating profit margin	4.12989 (NS)
2	Correlation between Quick ratio and Return on capital employed	0.00081(S)

(d.f. 9, NS=Not Significant, S=Significant) (Significant at 5% level of significance)

The above table shows that there was any significant difference in the means of liquidity and profitability position of India Cements Limited in the study period of ten years. Thus the result of t-test depict that there is a significant difference between current ratio and operating profit margin. Hence hypothesis is rejected. Whereas hypothesis is accepted in case of quick ratio and return on capital employed which shows that there is no significant difference between these two ratios. The observed result of t-test at 5% level of significance led to a conclusion that liquidity and profitability are related each other.

## RELATIONSHIP BETWEEN EFFICIENCY AND PROFITABILITY

The relationship between efficiency and profitability of India Cements Limited is determined by applying t-test between Operating profit margin and Debtors turnover ratio and between Return on capital employed and Inventory turnover ratio.

**Table:3- Coefficient of Correlation between Operating profit margin and Debtors turnover ratio and between Return on capital employed and Inventory turnover ratio**

Sl. No.	Ratios	Statistical inference t-test
1	Correlation between Operating profit margin and Debtors turnover ratio	0.00790 (S)
2	Correlation between Return on capital employed and Inventory turnover ratio	0.01743 (S)

(d.f. 9, NS=Not Significant, S=Significant) (Significant at 5% level of significance)



The observed result of t-test reveals that there was any significant difference in the means of efficiency and profitability position of India Cements Limited in the study period of ten years. Thus the result of t-test depict that there is no significant difference between operating profit margin and debtors turnover ratio and between return on capital employed and inventory turnover ratio. Hence hypothesis is accepted and the observed result of t-test at 5% level of significance led to a conclusion that efficiency is positively affecting the profitability of the company.

### **CONCLUSION**

The efficient working capital management is most crucial factor in maintaining survival, liquidity, solvency and profitability of any business organization. Liquidity management is of crucial importance in the overall financial management decision of a business unit. The profitability position of India Cements Limited has been showing improvement over the previous years. It has been possible due to a considerable increase in sales revenue of the company. Liquidity position of the company was best since both the liquidity ratio used were above their respective standards. The correlation between efficiency and profitability was the highest in this company which shows a high degree of positive correlation. Study shows that the overall performance of India Cements Limited has been quite satisfactory during the study period with certain variations like adverse economic conditions and competition.

### **REFERENCES**

1. Nand Kishore Sharma (2002) Financial Appraisal of Cement Industry in India, the Management Account, 36(9), Pp, 622-625
2. Padmaja Manoharan (2002).” An Analytical Study On Profitability of Cement Industry in India”, Unpublished Thesis, Bharathiar University.
3. Glesh and Maji (2004) ,” Efficiency of Working Capital Indian Cement Industries “ Journal of Financial Economics”, Vol. 60, No.2& 3, PP 187-243.
4. Dr.Ashok Kumar (2013),”Liquidity Management of Indian Cement Companies- A Comparative Study”, ISOR Journal of Business and Management, Vol.14, Issue 5, pp 49-61.
5. Rajni Sofat (2010), “A Study of Liquidity, Profitability and Risk analysis of Cement Industry in India”, International Journal of Research in Commerce and Management, Vol.No.1, Issue 4.
6. Srinivasan(2007), “ A Review of the Indian Cement Industry”, Advanced edge.
7. Luther, C.T.(2007), “ Liquidity, Risk and Profitability Analysis: A Case Study of Madras Cements Limited”, Management Accountant.