

## Working Capital Management and its Impact on Profitability: A Case of ACC Cement Companies of Coimbatore, Tamilnadu

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### ABSTRACT

“In the present competitive environment all organisation are trying to cut the cost of product and also trying the improve the profitability of organisation, If working capital is sound then there will be minimum idle capital and ultimately it reduces the interest burden of organisation and it will help to improve the profitability of organisation”.

Key words; working capital, Liquidity, Finance, Profitability

### Introduction

The most important component of corporate finance is working capital management because its directly affects the liquidity and profitability of the company. The task of the financial manager in managing working capital efficiently is to ensure sufficient liquidity in the operations of the enterprise. The liquidity of a business firms is measured by its ability to satisfy short –term obligations as they become due. The three basic measures of a firm overall liquidity are the current ratio, the acid test ratio, the net working capital. In brief, they are very useful in inter firm comparisons of liquidity,

### Objectives of the study

- 1.To examine the sources used by cement companies to finance their working capital requirements
- 2.To analyse and evaluate the working capital management of ACC Cement Companies.
- 3.To examine the liquidity position of these cement companies.
4. To study the relationship between the liquidity and profitability of the ACC Cement Companies.

## Review of Literature

Narware (2000) developed a study on the relationship between working capital and profitability. The study examined the interrelationship between working capital and profitability with the help of some selected and the important measure (ROI) of profitability. His study established a significant impact of the measures of working capital on the profitability of the National Fertiliser Ltd.

Bhayani (2004) conducted a study to make an empirical study on Gujarat Ambuja Cements Ltd for assessing the impact working capital on its profitability during 1993-94 to 2002-2003. His study also highlighted a significant association between the working capital and profitability.

Elijelly(2013) elucidated that efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk of inability to meet short-term obligations and avoids excessive investment in these assets.

**Mr. Mohan Kumar M S and Mr. Safer Pasha M (2015)** in their paper “Profitability analysis of select cement companies in India” the main objective of this research paper is to analyze the profitability position of the selected cement companies for 10 years (2005-2014). The study based on the secondary data, the tools used for analysis are Mean, Standard deviation, co-efficient of variation and compound annual growth. The study ascertains the Ambuja cement Company shows satisfactory performance in concern with profitability.

**Dr. M. Thyigarajan and Mr J. Uday Kumar (2015)** in their paper “Profitability analysis of select aluminium companies in India” the main objective of this research paper is to analyse the profitability position of the selected aluminium companies for 10 years (2005-2014). The study based on the secondary data, the tools used for analysis are Mean, Standard deviation, co-efficient of variation and compound annual growth. The study ascertains the National Aluminium Company Limited shows satisfactory performance in concern with profitability.

### **About ACC Limited**

ACC Limited or ACC is the oldest cement and concrete maker in India. The company was established in 1936. ACC Ltd was previously known in the name of the Associated Cement Companies Limited. Currently, it ranks as the biggest cement producer in the country.

The headquarters of the company are located in Mumbai. Ten cement manufacturers owned by the Khataus, Tatas, F E Dinshaw, and Killick Nixon amalgamated in 1936 to create this company.

#### **Manufacturing Plants of ACC in India -**

- Bargarh - Orissa
- Chaibasa - Jharkhand
- Chanda - Maharashtra
- Damodhar – West Bengal
- Gagal – Himachal Pradesh
- Jamul - Chhattisgarh
- Kymore – Madhya Pradesh
- Kudithini – Karnataka
- Lakheri - Rajasthan
- Madukkarai – Tamil Nadu
- Sindri - Jharkhand
- Wadi - Karnataka
- Thondebhavi - Karnataka
- Tikaria – Uttar Pradesh

#### **Data and Methodology**

The data required for the study, ie, balance sheet, statement of profit and loss account, etc., was collected from the annual report of ACC Cement Companies for the period of 2010-11 to -2014-2015. The data was also collected from various sources like intranet of IOCL, Internet, journals and various magazines.

For the measuring the degree of relationship between the working capital management and profitability, Pearson's simple correlation coefficient has been applied. In order to assess the joint effect to the selected measures of working capital management on the profitability multiple regression has been used.

**TABLE 1**

A Simple Correlation Analysis between Selected Ratios relating to Working Capital Management and Return on Investment of ACC Cement Companies

| Particulars | 2010-2011 | 2011-2012 | 2012-2013 | 2013-2014 | 2014-2015 | Percentage |
|-------------|-----------|-----------|-----------|-----------|-----------|------------|
| CR          | 1.31      | 1.53      | 1.25      | 0.30      | 1.32      | 0.306      |
| QR          | 0.47      | 0.48      | 0.64      | 0.530     | 0.51      | -0.31      |
| WCTR        | 17.09     | 23.82     | 13.24     | 32.24     | 18.52     | 0.62       |
| CATAT       | 0.66      | 0.63      | 0.69      | 0.50      | 0.62      | 0.76       |
| CASR        | 0.21      | 0.18      | 0.22      | 0.14      | 0.23      | 0.69       |
| CTR         | 248.32    | 241       | 302       | 361       | 206       | 0.88*      |
| ITR         | 14        | 14        | 15        | 18.64     | 14.83     | -0.81*     |
| DTR         | 27.34     | 37080     | 36.64     | 48.56     | 46.57     | -0.49      |
| ROI(%)      | 17        | 22        | 17        | 7         | 20        |            |

NOTE indicates significance at 5 % level

From the above table reveals that study period of 2014-2015 correlation coefficient ROI and CR is 0.306, which indicates that there is a positive association between the profitability and CR of the company, and the correlation coefficient is found to be statistically significant at 1% level. This implies that there is a significant association between ROI and CR of the company during the study period.

The correlation coefficient between ROI and QR is negative (-0.316) which is found to be statistically significant at 1% level. It also reveals that there is a negative relationship between ROI and QR.

The correlation coefficient between ROI and CATAR is 0.76. It implies that there is a positive correlation between profitability and the ratio of current assets to total assets. The coefficient is found to be statistically significant at 1% level. It is evident from these two ratios that the greater the CATAR, the higher the profitability of the company.

The coefficient of correlation between ROI and CASR is 0.695, which is also found to be statistically significant at 1% level. Indicates a higher degree of positive association between the two variables.

The correlation coefficient between ROI and WCTR is -0.624, which implies that there is a negative relationship between these two variables. The calculated value for correlation coefficient is found to be statistically significant at 1% level. The correlation coefficient between ROI and DTR is negative (0.49) and is found to be statistically significant at 5% level.

The higher the DTR, the lower would be the profitability, the study of correlation coefficient between ROI and DTR reveals that the computed value of correlation does not conform to this acceptable principle.

The correlation coefficient between ROI and CTR shows a positive association (0.887) which is found to be statistically significant at 5% level. The more acceptable is that the higher the CTR. The more will be the efficiency of the cash management and larger will be the scope for improving capital productivity and the CTR under the study conforms to the accepted principle.

In order to select independent variables in the analysis of multiple correlations and multiple regressions, the correlation matrix is constructed

TABLE 2

Correlation Matrix of ACC Cement companies for the period of 2010-2011 to 2014-2015

| Ration | ROI    | CR     | QR     | CATAR   | CASR    | WCTR  | ITR   | DTR    | CTR |
|--------|--------|--------|--------|---------|---------|-------|-------|--------|-----|
| ROI    | 1      |        |        |         |         |       |       |        |     |
| CR     | 0.306  | 1      |        |         |         |       |       |        |     |
| QR     | -0.31  | 0.544  | 1      |         |         |       |       |        |     |
| CATAR  | 0.62   | 0.847* | 0.148  | 1       |         |       |       |        |     |
| CASR   | 0.76   | 0.68   | 0.068  | 0.86*   | 1       |       |       |        |     |
| WCTR   | 0.69   | -0.88  | -0.883 | -0.096  | -0.945* | 1     |       |        |     |
| ITR    | 0.88*  | -0.48  | 0.472  | -0.806* | -0.763  | 0.732 | 1     |        |     |
| DTR    | -0.81* | -0.53  | -0.529 | 0.066   | -0.348  | 0.502 | 0.782 | 1      |     |
| CTR    | -0.49  | -0.078 | -0.079 | -0.565  | -0.711  | 0.518 | 0.518 | 0.817* | 1   |

Note\* indicates significance at 5% level.

From the table observed that there is a very high degree of correlation between ITR and CTR (0.817), between ITR and CATAR (-0.806), between CR and WCTR(-0.8833), CATAR and WCTR(-.952) CASR and WCTR (-0.945), and CR and CATAR (0.847). The high degree of correlation indicates that there is an existence of multicollinearity because multicollinearity refers to the existence of high correlation between the independent variables.

## Conclusion

The working capital management of the selected eight ratios relating to the working capital management, four ratios, viz, CR, CATAR, CASR, and CTR, registered positive association with the selected profitability ratio (ROI) and remaining ratios like DTR, ITR, WCTR and QR witnessed negative association with the selected profitability ratio. Out of these eight selected ratios, only ITR and CTR have significant association with profitability ratio. The profitability of the company is highly influenced by the selected indicators of working capital management.

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