CHAPTER-IX

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9.1 INTRODUCTION

The aim of the present study is to review, analyse and present a comparative picture of the working capital and profitability of the two selected cement companies in Tamil Nadu during the period 1993-94 to 2007-08. As a consequence of the analysis of working capital and profitability, the study has examined the impact of working capital on profitability in the selected cement companies during the same period.

Having identified the factors which are likely to influence the working capital as well as profitability of the selected cement companies, the significance of the factors so identified has been statistically tested. The study is based mainly on secondary data. Besides, information collected through personal discussions with executives and dealers of the selected cement companies have been incorporated in this study. The data collected is subdued into suitable tabular forms for drawing inferences. Quantitative techniques like averages, percentages compound growth rate, index numbers and multiple regression analysis are applied wherever found necessary.

The concluding chapter is an attempt to recapitulate the main findings and conclusions emerged from the entire study. Moreover, suitable suggestions have been made for the improvement in the
performance of the selected cement companies viz., ICL and MCL. In order to maintain a sequence and continuity, chapter wise conclusions are presented. As the first chapter is introductory in nature, conclusions are drawn from the second chapter onwards.

9.2 REVIEW OF LITERATURE

This chapter reviews the literature for the relevant theoretical and empirical work on working capital management and profitability as well as the impact of working capital on profitability. Many researchers have studied working capital and profitability from different voice and different environment.

The reviews of those studies provide a solid base and give us ideas regarding working capital and its components as well as profitability and its variables. They also give us the results and conclusions of those researches already conducted on the same area for different countries and environment from different aspects. On the basis of those researches done in different countries, we have developed our own methodology for research.

9.3 PROFILE OF SELECTED CEMENT COMPANIES

This chapter deals with the origin, growth and general performance of selected cement companies in Tamil Nadu. The general performance of ICL and MCL during the period 1993/94-2007/08 has been analyzed in terms of their equity, capital employed, current liabilities, current assets, working capital, fixed assets, total
assets, sales revenue, total revenue, total cost, EBDIT and EAT. It is concluded that the mean values of all those variables specified above are high in ICL and low in MCL during the period of study.

9.4 TRENDS IN WORKING CAPITAL:

The findings on the trends in working capital of the selected cement companies viz., ICL and MCL during the period 1993-94 to 2007/08 are summarized as follows:

* TRENDS IN CURRENT ASSETS:

An increasing trend in current assets has been noticed in MCL, whereas a declining trend has been recorded in ICL. The data is inconsistent in both firms. High growth rate of current assets (14 percent) has been noticed in MCL, whereas it has declined by 7 percent per annum in ICL during the period.

*TRENDS IN CURRENT LIABILITIES:

The current liabilities is characterized by an increasing trend in both the selected companies. The data is inconsistent in both firms. Growth rate of current liabilities in comparatively high in MCL (14 percent) and less in ICL (3 percent).
*TRENDS IN LIQUID ASSETS:

An increasing trend in liquid assets has been noticed in MCL, whereas a declining trend is seen in ICL. The data is comparatively more inconsistent in MCL than in ICL. The growth rate of liquid assets in quite high in case of MCL (15 percent), whereas it has declined by nearly 6 percent per annum in ICL.

* TRENDS IN TOTAL ASSETS:

An increasing trend in total assets has been noticed in both the selected cement companies. Inconsistency in data has been noticed in both cases. The growth rate of total assets came to 19 percent in MCL and 17 percent in ICL.

*TRENDS IN DEBTORS:

An increasing trend in debtors in both the companies is observed. Consistency of data is less in both firms. The annual rate of growth in debtors is higher in MCL (19 percent) than in ICL (12 percent).

*TRENDS IN CASH:

An upward trend in cash has been registered in both the companies. More volatile nature of data has been seen in ICL. The average annual rate of growth in cash is more in ICL (12 percent) and less in MCL (4 percent).
*TRENDS IN OTHER CURRENT ASSETS:

An upward trend in 'other current assets has been noticed both in MCL and ICL. More volatile nature of data is seen in MCL. The annual rate of growth in other current assets, accounted for 19 percent in MCL and 10 percent in ICL.

*TRENDS IN NET WORKING CAPITAL:

The Net working capital is characterised by an increasing trend in both the cement companies. The data is more volatile in MCL. The rate of growth in net working capital is high in MCL (13 percent) and low in ICL (4 percent)

*TRNDS IN INVENTORY:

The inventory is characterized by an increasing trend in MCL and a decreasing trend in ICL. The data is comparatively less consistent in MCL and more consistent in ICL. The annual rate of growth in inventory has come to nearly 11 percent in MCL whereas the annual rate of decline in inventory came to 12 percent in ICL.

*TRENDS IN COST OF GOODS SOLD:

An increasing trend in cost of goods sold has been seen in MCL and ICL. Inconsistency of data is comparatively high in MCL than in ICL. The average annual growth rate of cost of goods sold came to 15 percent in ICL and 13 percent in MCL.
*TRENDS IN SALES:

An upward trend in sales has been registered in ICL and MCL. Data inconsistency exists in both firms. The rate of growth of sales is more or less same in both companies (13 percent per annum).

*TRENDS IN CURRENT RATIO (CR):

While an upward trend in current ratio has been noticed in ICL, a downward trend is marked in MCL. The mean value of this ratio is high in ICL. The data in comparatively more consistent in MCL than in ICL. The annual rate of growth in current ratio has come to nearly 11 percent in ICL, whereas the rate of decline in current ratio is less than 1 percent per annum in MCL.

*TRENDS IN LIQUID RATIO (LR):

While an upward trend in liquid ratio has been registered in MCL, a declining trend has been occurred in ICL comparatively, the data is more consistent in MCL. The rate of growth in liquid ratio came to nearly 1 percent per year in MCL, whereas the rate of decline in this ratio accounted for less than 1 percent per annum in ICL.

*TRENDS IN CURRENT ASSETS TO TOTAL ASSETS RATIO (CATAR):

A downward trend in the proportion of current assets to total assets has been noticed in both sample firms. The data is comparatively
more consistent in the case of ICL and less volatile in MCL. The annual rate of decline in this ratio has been slightly more than 1 percent in MCL and slightly less than 1 percent in ICL.

* TRENDS IN CURRENT ASSETS TO SALES RATIO (CAS):

While a declining trend in this ratio has been noticed in ICL, an increasing trend has been seen in MCL. Comparatively more volatility of this data is prevalent in ICL than in MCL. This ratio has declined by 2 percent per annum in ICL, whereas it increased by 1 percent per annum in MCL.

* TRENDS IN WORKING CAPITAL TURN OVER RATIO (WCTR):

A downward trend in working capital turnover ratio is witnessed in both the sample units. This data is more consistent in MCL and more volatile in ICL. This ratio has declined in both the companies by less than one percent in MCL and one percent in ICL.

* TRENDS IN INVENTORY TURNOVER RATIO (ITR):

An increasing trend in inventory turnover ratio has been noticed in both ICL and MCL. The variability of the data is more or less the same in both the companies. More consistency of this data exists in both firms. The rate of growth of ITR is high in ICL (4 percent) and low in MCL (1.7 percent).
*TRENDS IN DEBTORS TURNOVER RATIO (DTR):

A downward trend has been observed both in ICL and MCL. More variability of this data is found in both the companies. This ratio has declined by nearly 5 percent per year in each of the selected firms.

*TRENDS IN CASH TURNOVER RATIO (CTR):

An upward trend in CTR is noticed in both firms under study. More variability in this data is found in both companies. The variability of data is higher in ICL and low in MCL. The annual growth rate of this ratio is high in MCL (9 percent) and less in ICL (7 percent). The annual growth rate of this variable is significant in MCL whereas, it is insignificant in ICL.

*TRENDS IN OTHER CURRENT ASSETS TRUNOVER RATIO (OCATR)

While an increasing trend in this ratio is noticed in ICL, a declining trend has been seen in MCL. The data is highly consistent in both the selected companies. The rate of decline in this ratio has come to nearly 5 percent per annum in MCL, whereas the rate of growth came to 3 percent per annum in ICL.
9.5 DETERMINANTS OF WORKING CAPITAL

The determinants of working capital in ICL and MCL have been explained with the help of two regression functions. For this purpose the working capital in trends of GWCTR and NWCTR have been regressed separately on profit margin, LR, TATR, ITR and DTR. The results of two working capital functions have been summarised as under:

* It is evident that the estimated regression function for working capital under two models in chapter 5, are found to be statistically good fit and with reasonably high explanatory power in both firms under study.

* In Model 1, TATR and DTR influenced the working capital (GWCTR) in ICL, whereas LR and DTR influenced the working capital (GWCTR) in MCL.

* In Model 2, TATR, ITR, DTR and LR influenced the working capital (both GWCTR and NWCTR) in ICL, whereas DTR alone influenced the working capital (GWCTR) in MCL.

9.6 TRENDS IN PROFITABILITY:

The findings on the trends in profitability of the selected cement companies viz., ICL and MCL during the period 1993-94 to 2007/08 are summarized as under:
*TRENDS IN GROSS PROFIT:

An increasing trend in gross profit has been observed in ICL and MCL during the study period. The co-efficient of variation reveals that this data is more volatile in both the units under study. Further, the annual growth rate of GP margin is comparatively high in MCL (18 percent) and low in ICL (10 percent).

* TRENDS IN EBIT:

An upward trend in EBIT has been noticed in ICL and MCL during the period of study. This data is more volatile both in ICL and MCL. The rate of growth in EBIT is comparatively more in MCL (15 percent) than in ICL (10 percent).

*TRENDS IN EAT:

An increasing trend in EAT is has been noticed in ICL and MCL. This data is extremely inconsistent in both firms. The annual growth rate of EAT is high in MCL (20 percent) and low in ICL (9 percent) during the period of study.

*TRENDS IN TOTAL ASSETS:

An upward trend in total assets has been noticed in both the selected firms. It is has been observed that high variability in the data of Total assets exists in both ICL and MCL during the period of study.
Comparatively, the rate of growth in total assets is high in MCL (14 percent) and low in ICL (12 percent).

*TRENDS IN CAPITAL EMPLOYED:

An increasing trend in capital employed has been noticed in both firms. The data is more inconsistent in both cases. The growth rate of capital employed is comparatively high in ICL (17 percent) and low in MCL (7 percent) during the period of study.

*TRENDS IN EQUITY:

The equity is characterised by an increasing trend in both the companies under study. The data is more volatile in both firms. A growth rate of equity is the same (17 percent) in both companies.

*TRENDS IN GP RATIO:

While an increasing trend in GP ratio is noticed in MCL, a declining trend in this ratio is found in ICL. The data is more consistent in MCL and inconsistent in ICL. This ratio has declined by less than one percent in ICL, whereas it increased by 6 percent per year in MCL.

*TRENDS IN OPERATING PROFIT RATIO:

An increasing trend in this ratio has been occurred in MCL, whereas a declining trend has been noted in ICL. The data is
comparatively less variable in MCL and inconsistent in ICL. The rate of
growth in this ratio is accounted for 26 percent in MCL, whereas if has
deprecated by less than one percent in ICL.

*TRENDS IN NET PROFIT RATIO:

While an increasing trend in this ratio has been noticed in MCL a
deprecated trend is found in ICL. Though this data is more volatile in
both firms, the volatility is very high in ICL. The rate of growth in this
ratio is accounted for 10 percent in MCL, whereas it has deprecated by 3
percent in ICL.

*TRENDS IN ROTA:

A deprecated trend in ROTA has been noticed in both the
companies under study. A high fluctuation in ROTA is found in both
the companies during the period of study. It is also observed that the
efficiency of ICL is not fairly good in many years during the period of
study so that the firm has not fetched a reasonable rate of return of total
assets. On comparing with ICL, the performance of MCL related to
this concept is better as there is no loss to be found during any year of
the study period.

*TRENDS IN ROCE:

An increasing trend in ROCE has been noticed in MCL, whereas
a downward trend is seen in ICL. Though the data is inconsistent in
both firms, its inconsistency is very high in ICL. The growth rate of
ROCE came to 10 percent per year in MCL, whereas it has declined by 7 percent in ICL.

*TRENDS IN ROE:

The ROE is characterised by a highly fluctuating trend in both ICL and MCL. The mean value of ICL is comparatively high in MCL and low in ICL. The co-efficient of variation reveals that the ROE data is more volatile in ICL and highly insignificant in MCL. The growth rate of ROE is highly significant in ICL whereas in MCL it is insignificant.

9.7. DETERMINANTS OF PROFITABILITY

The variations in profitability in ICL and MCL under ROCE, ROE and ROTA measures have been explained with the help of six regression functions. The ROCE, ROE and ROTA have been regressed separately on cost factors (TC, MC, FC, PC, MFC, SC and DC) and size of firm to find out the determinants of profitability. The results of six profitability functions have been summarised as under.

It is evident that the estimated regression function for profitability under six models in chapter 7, are found to be statistically good fit and with reasonably high explanatory power in both firms under study.

* As per the model I, the TC ratio and size of firm have significant negative impact with all measures of profitability in both the selected cement companies. As such, the TC ratio appears to be the determinant of profitability in ICL and MCL during the period of study. It strongly proves that the increase in TC decreases the profitability of these two
companies under study, whereas the increase in size (sales) does not increase the profitability as per the first model.

*As per the profitability model 2, the MC and size of firms are found to be the most significant determinant of profitability in MCL, whereas the FC is an important determinant of profitability in ICL. The FC did not influence the profitability in MCL, whereas the size of firm and MC did not influence the profitability in ICL.

*According to third regression model, out of four independent variables TC is the most important determinant of profitability in ICL, whereas the PC and MC are the significant determinants of profitability in MCL. The size of firm and MC did not influence the profitability in ICL, whereas FC and size of firm did not influence the profitability in MCL.

*It is found out from Model 4 that FC and PC are the most important determinants of profitability in ICL, whereas MC and PC are the significant determinant of profitability in MCL. The size of firm and MFC did not influence the profitability in both firms. The MC did not influence the profitability in ICL, whereas FC did not influence the profitability in MCL.

* In model 5 the PC, SC and FC are found to be the significant determinants of profitability in ICL, whereas the MC and PC influenced the profitability in MCL. The size MFC, FC and SC did not influence the profitability in MCL, whereas the size, MFC and MC did not influence the profitability in ICL.
It has been observed from the model-6 that the MC and DC are the significant determinants of profitability in MCL. It is a surprise to note that none of the variable has influenced the profitability of ICL under this model.

9.8. IMPACT OF WORKING CAPITAL ON PROFITABILITY

Two regression analysis are carried out to determine the impact of working capital on profitability of selected firms during the period 1993-94 to 2007-08. The results of the regression are discussed as under:

It is evident that the estimated regression function for profitability under two models in chapter 8 are found statistically good fit with reasonably high explanatory power in both firms under study.

In Model 1, the ITR and DTR influenced the profitability in ICL, whereas the ITR alone influenced the profitability in MCL. The NWCTR, CR, LR did not influence the profitability in ICL, whereas the NWCTR, CR, LR and DTR did not influence the profitability in MCL.

In Model 2, the ITR and DTR influenced the profitability in both firms under study. However, the other variables viz., GWCTR, CR and LR did not influence the profitability in ICL and MCL during the period of study.
9.9. SUGGESTIONS:

In view of these findings and conclusion, the following suggestions are offered to improve the working capital management and profitability management in the selected cement companies under this study.

1. It is seen from the analysis that the investment in current assets constitute more than one-third of total assets during the period of study. It is better to reduce the investment in current assets at least to one-fourth of total assets to improve the working capital management. Consequently, the profitability will improve to that extent.

2. It is seen that the inventory turnover ratio, debtors turnover ratio and total assets turnover ratio influenced the working capital of the sample firms under the study. Hence, it is advisable to speed up the debt collection if there are any long outstanding bills exists in the firm. Besides, much care should be taken in maintaining and streamlining the inventory management in cement companies to avoid excessive investment in inventory.

3. It is of great interest to mention here that out of working capital variables, the inventory turnover ratio and debtors turnover ratio alone influenced the profitability of the sample firms under study. Hence, there is a need for more efficient management of inventory and receivable in the sample firms. Consequently it will improve the profitability.

4. Generally, profit is a function of cost and price. As the price is beyond the control of the management of the firm (influenced mostly
by outside factors), the costs in most cases are under the control of management with exception of certain costs. If the controllable costs are managed efficiently and effectively, the profit will increase to that extent.

5. In this study, the total cost of production and sale significantly influenced the profitability of the sample firms. More specifically, the material cost, fuel cost, personnel cost and selling cost reduced the profitability under this study. Hence, the management may take constructive measures to control those costs within its perview.

6. As the size of firm increases, the management of all resources both human and non-human resources may sometimes be difficult. In such a situation, the application of modern management techniques may help the firm to utilise the resources more effectively and efficiently. Consequently, the best practices of operational and financial management techniques will improve the profitability of the firm.

7. Further, this research concludes that there is a pressing need for further empirical studies to be undertaken on corporate financial management, in particular their working capital practices by extending the sample size so that an industry wise analysis can help to uncover the factors that explain the better performance for some industries and how these best practices could be extended to the other industries. This would also assist the policy-makers to identify the specific problems faced by small or big firms and to find out solutions for such problems.
8. This study has been constrained sample size and the nature of the data which would have well affected the results. Further studies will aim at increasing the sample size for still better and consistent panel estimates.