Chapter – 9

Findings and Suggestions

9.1 Findings of the Study

9.2 Suggestions
9.1 Findings of the Study

Like a traveler, who after completing his long journey, reaches to destination and looks back at the area covered by him for identifying the important landmarks he came across. Review of the important aspects of the study and summing up of the key observations are presented in this chapter. Working capital is regarded as the life-line of every concern. Without adequate working capital no progress is possible. Inadequate working capital means shortage of raw materials and other inputs, resulting in under utilization of fixed assets and ultimately leading to failure of the business. On the other hand excess working capital might mean less control over worker’s performance, dumped stocks, inefficient store keeping, excessive debtors, surplus cash and lack of coordination. So, the amount of working capital in a business should be neither more nor less that what is required. Further, the profitability and liquidity of the companies are directly linked to the efficient management of working capital. The main objective of the working capital management is to arrange sufficient funds needed for it from the best available cost effective source, so that the proper trade off between liquidity and profitability is achieved.

The main findings of the study are listed below:

- It has been observed that there are two concepts of working capital prevailing in the industry; the study of current assets i.e. gross working capital and study of net working capital. Both are of immense importance. If we look at the magnitude or size of the working capital, the investment in current assets or gross working capital is ranging from Rs. 50 crores to Rs. 11000 crores during the study period depending on the scale of operation and diversity of their business. Century Textiles & Inds. Ltd and India Cements Ltd are some of the companies having investment of more than 300 crore.
Similarly, A C C Ltd, Birla Corporation Ltd, Gujarat Sidhee Cement Ltd, Heidelberg Cement India Ltd., K C P Ltd, Mangalam Cement Ltd and Prism Cement Ltd. are the companies having investment of less than 100 crores. Rests of all companies are having current asset investment between 100 crores to 400 crores.

○ The mean net working capital of 1 companies are negative over a study period while mean net working capital of rests of 8 companies are positive showing higher current assets than current liabilities. A C C Ltd., Ambuja Cements Ltd, Birla, Century Textiles & Inds. Ltd, India Cements Ltd, Heidelberg Cement India Ltd, J K Lakshmi Cement Ltd, Madras and OCL are few companies showing positive mean net working capital while ACC, Ambuja group companies, Mehta group companies, CCI and Andhra Cement are few companies showing little mean working capital position.

○ Century Textiles & Inds. Ltd., India Cements Ltd and Ambuja Cements Ltd have shown mean current liabilities of more than 300 crores. Among them Century Textiles & Inds. Ltd current liabilities are ranging from 422.35 to 589.32 crores during study period with 12.61322% of coefficient of variation which is lower to industry average of 13.88%. The compounded growth rate in current assets of cement industry on aggregate basis is near to 50.63% while in current liabilities it is 48.30% during study period. The resultant effect is the overall net working capital of industry has declining trend during study period.

○ The proportion of Current Assets in the total assets of the company shows the relative asset liquidity of company. Cement Industry has an average 33.55% investment in current assets and 65.45% investment in fixed assets. Few companies have very conservative policy and they have higher level of investment in current assets. Birla Corporation Ltd and Century Textiles & Inds. Ltd. Heidelberg Cement India Ltd and K
C P Ltd. are the companies having CA to FA ratio of more than 40% on an average during the study period. A C C Ltd. has current assets investment ranges from 27.22 to 35.50% with mean investment of 31.17% with 13.00% of coefficient of variation. Gujarat Sidhee Cement Ltd has 43.88 to 55.67% of current assets investment with mean value of 51.83% with 9.28% of coefficient of variation. Thus they have less volatility in the proportion of current assets investment. These two companies are highly conservative in current assets policy.

- Shree Digvijay Cement Co. Ltd and Heidelberg Cement India Ltd have current assets to fixed assets ratio of 45.94% to 45.09% which is more than industry aggregate but less than K C P Ltd. They are also considered to be conservative in current assets policy. These companies have enough liquidity to pay their obligations. They are more cautious towards their solvency rather than profitability. There are few companies like Ultratech Cement Ltd, India Cements Ltd, Ambuja Cements Ltd and Binani Cement Ltd. maintain their current assets around 20% in total assets. They are little aggressive in relative assets liquidity position.

- Companies like Binani Cement Ltd, Ultratech Cement Ltd., India Cements Ltd, Madras Cements Ltd., and Prisam Cements are very aggressive. They have current assets proportion of around only 20% to 25% in the total assets.

- The mean values of current ratio and quick ratio are not much high in the cement industry as its average current ratio is 1.28 and its average quick ratio is 0.54. Ranking of liquidity among the companies indicate that Birla Corporation Ltd, Heidelberg Cement India Ltd, and J K Lakshmi Cement Ltd are leading and they are at the top in terms of current and quick ratio.
Andhra Cements Ltd, a public sector enterprise has shown very poor performance in working capital management in comparison to other private companies. It has very low level of current ratio and it also has declining trend. In 2003-04 its current ratio was 0.26 that declines to 1.71 in 2008-09. Its quick ratio is negligible and that shows the high level of accumulation of inventories. Andhra Cements Ltd is very poor in managing their liquidity position.

The proportion of Current Assets in the total assets of the company shows the relative asset liquidity of company. Cement Industry has an average 25% investment in current assets and 75% investment in fixed assets. Few companies have very conservative policy and they have higher level of investment in current assets. the two like Gujarat Sidhee Cement Ltd. and K C P Ltd. companies having CA to TA ratio of more than 50% on an average during the study period.

The overall cement industry aggregates shows 3.6 times of gross working capital turnover with 9.85% of coefficient of variation. Shree Digvijay Cement Co. Ltd, O C L India Ltd, K C P Ltd., Dalmia Cement (Bharat) Ltd, Andhra Cements Ltd., A C C Ltd, Madras Cements L and Dalmia Cement (Bharat) Ltd. has mean working capital turnover of less than industry average. While A C C Ltd. and Madras Cements Ltd. have working capital turnover near to industry average.

The highest mean working capital turnover ratio is reported by Binani Cement Ltd. Its mean working capital turnover ratio is 5.6 times that mean it has utilized its current assets very efficiently. Its coefficient of variation is 50.61 which is very high as its working capital turnover ratio ranges from the lowest figure of 2.7 times in the year 2007-08 to highest figure of 10.1 times in the year 2004-05. The most consistent ratio and lowest coefficient of variation is reported by Century Textiles & Inds. Ltd. Its
The coefficient of variation is only 7.04% and the working capital turnover ratio ranges from 2.7 times to 3.4 times during the study period.

- The Inventory turnover ratio reflects the efficient inventory management. The overall industry aggregate figure shows the 9.86 times of inventory turnover ratio. Shree Digvijay Cement Co. Ltd, O C L India Ltd., N C L Industries Ltd., Dalmia Cement (Bharat) Ltd., Century Textiles & Inds. Ltd. and India Cements Ltd. have inventory turnover of less than industry average. Rests of 13 companies has outperformed industry and reported higher inventory turnover ratio. Companies like A C C Ltd, Ambuja Cements Ltd, Binani Cement Ltd. J K Lakshmi Cement Ltd. Mangalam Cement Ltd. Prism Cement Ltd. and Birla Corporation Ltd have reported inventory turnover of more than 10 times.

- K C P Ltd., a public sector enterprise, has reported all time low inventory turnover of 4.41 times in the year 2003-04. Even its mean inventory turnover is 5.27 times which very low compare to other companies. This company has very higher level of inventory and it is not utilizing its inventory to generate sales revenue in an efficient manner. On the contrary, J K Lakshmi Cement Ltd.a Company has highest mean inventory turnover ratio of 18.90 times. In the first operating year i.e. 2003-04 only, it has reported 10.67 times of very low inventory turnover after that it has reported 17.85 to 20.18 times of said ratio in subsequent years.

- Debtors’ turnover ratio refers to efficient management of receivables. Industry aggregate shows 10.98 times of debtors’ turnover. Out of 19 companies, 3 companies have less than 5 times of debtors’ turnover ratio. These companies are India Cements Ltd., N C L Industries Ltd., O C L India Ltd. Out of these three companies, N C L Industries Ltd. has lowest mean debtors’ turnover ratio of 4.52. Six companies named
A C C Ltd, Binani Cement Ltd, Gujarat Sidhee Cement Ltd, J K Lakshmi Cement Ltd, Mangalam Cement Ltd., and Prism Cement Ltd, has shown very more than 10 times of debtors’ turnover ratio. Rests of 10 companies have their mean debtors’ turnover ratio between 5 to 10 times.

Cash turnover refers to effective and efficient utilization of cash in the revenue generation of company. Cement industry aggregate shows the average 60.81 times of cash turnover ratio. Out of 19 companies, 3 companies named Dalmia Cement (Bharat) Ltd, Gujarat Sidhee Cement Ltd and., Madras Cements Ltd, has reported cash turnover of less than 20 times that show the poor utilization of cash. 4 companies named O C L India Ltd., N C L Industries Ltd., and Mangalam Cement Ltd., have cash turnover in the interval of 40 times to 50 times. Companies like A C C Ltd., Ambuja Cements Ltd, Binani Cement Ltd, and Century Textiles & Inds. Ltd, Heidelberg Cement India Ltd., J K Lakshmi Cement Ltd, Prism Cement Ltd, Shree Digvijay Cement Co. Ltd, and Ultratech Cement Ltd have even more than 50 times of cash turnover ratio. They all have outperformed industry. Rests of 3 companies have the said ratio in the interval of 10 times to 40 times.

Cement Industry aggregate figure shows that it has raw material holding period of 27 days. Out of 19 sample companies, 5 companies have mean raw material holding period lower than industry figure while 6 companies named Century Textiles & Inds. Ltd, Dalmia Cement (Bharat) Ltd, K C P Ltd. and O C L India Ltd has average Raw material holding period (RMHP) more than industry average.

Work-in-process holding period is on an average 8 days. N C L Industries Ltd., N C L Industries Ltd., Shree Digvijay Cement Co. Ltd and K C P Ltd have work-in-process
conversion period of more than 8 days. K C P Ltd has the highest level of WIPCP of 37 days.

- Finished Goods Holding Period (FGHP) is 11 days for the industry aggregates with 45% of coefficient of variation. Dalmia Cement (Bharat) Ltd is not performing well as its FGHP is of 65 days and N C L Industries Ltd and Century Textiles & Inds. Ltd are next to Dalmia Cement (Bharat) Ltd with 28 days of FGHP. A C C Ltd., Ambuja Cements Ltd., Andhra Cements Ltd., Birla Corporation Ltd., Gujarat Sidhee Cement Ltd., Heidelberg Cement India Ltd., India Cements Ltd. J K Lakshmi Cement Ltd., Prism Cement Ltd., Shree Digvijay Cement Co. Ltd. and Ultratech Cement Ltd. is performing well as its FGHP is only 5 days.

- Cement Industry aggregates shows an average 13 days of debtors’ collection period. K C P Ltd India has the highest debtors’ collection period of 33 days. Next to it, N C L Industries Ltd., O C L India Ltd., A C C Ltd., has DCP of around 15 days. On the other hand Birla Corporation Ltd. and Century Textiles & Inds. Ltd. has only 7 days of debtors’ collection period.

- Total Gross Operating Cycle of Cement Industry average is 119 days. Dalmia Cement (Bharat) Ltd is the only public sector company not capable of reducing its operating cycle. Dalmia Cement (Bharat) Ltd. has mean operating cycle of 206 days. Next to it K C P Ltd. has mean operating cycle of 200 days. Otherwise all the companies have mean operating cycle period near to 90 days of industry aggregate.

- Creditors Deferral Period is 44 days for industry on average basis. Only Andhra cement is able to get mean creditors deferral period of 126 days which is very higher than industry average. Dalmia Cement (Bharat) Ltd. has 89 days, Shree Digvijay Cement Co. Ltd. has 65 days, N C L Industries Ltd and N C L Industries Ltd have 73 days and O C
India Ltd has 72 days of creditors’ deferral period. Mangalam Cement Ltd has only 17 days of creditors’ deferral period.

The Net Operating Cycle or Cash Cycle is 29 days on average basis for cement industry. Birla Corporation Ltd. has outperformed industry and achieved Net operating cycle of 4 days while O C L India Ltd. has 89 days of net operating cycle.

The mean value of Short term bank borrowings of Cement industry is 62.48 crores with 17.88% of coefficient of variation during the study period. There are six companies like Century Textiles & Inds. Ltd, and India Cements Ltd, having more than 200 crores of short term bank borrowings. Seven companies named O C L India Ltd., Binani Cement Ltd., Birla Corporation Ltd., Madras Cements Ltd., O C L India Ltd. and Ultratech Cement Ltd. have short term bank borrowings in the range of 50 crores to 200 crores. Andhra Cements Ltd., A C C Ltd., Heidelberg Cement India Ltd., and Dalmia Bharat Sugar & Inds. Ltd. and N C L Industries Ltd. has short term bank borrowings in the ranges of 20 crores to 40 crores.

Century Textiles & Inds. Ltd. has a maximum level of short term bank finance and its bank borrowings range from 464.09 crores to 168.39 crores during the study period. It has mean bank borrowings of 333.68 crores.

Cement Industry as an aggregate has bank borrowings equals 62.48% of its total current assets. Out of 19 companies, four companies has maintained mean bank borrowings of more than 62.48% of its current assets while rest of all companies has bank borrowings less than 62.48% of current assets.

Relative finance liquidity is measured by short term borrowings to total borrowings ratio. Cement Industry on aggregate basis has on an average 9.71% of short term borrowings in their total borrowings while its short term assets (current assets) are on
an average 4.78% in their total assets. This shows that its short term assets are finance
by long term borrowings stating conservative working capital financing policy.

- The mean short term borrowings to total borrowings ratio range from 7.15% to 11.07%
  for all the companies. There are nine companies having their mean said ratio in the
  range of 5% to 15%. Andhra Cements Ltd. (12.20%), India Cements Ltd. (14.64%),
  Binani Cement Ltd (9.40%), Dalmia Cement (Bharat) Ltd (5.73), Prism Cement Ltd.
  (7.36%), and Madras Cements Ltd. (5.82%), are the companies having very low level
  of short term finance in their total finance, stating very conservative working capital
  financing policy.

- There are three companies having their short term borrowings to total borrowings ratio
  in the interval of 25% to 35%. Birla Corporation Ltd. (26.22) Century Textiles & Inds.
  Ltd (29.17%) and K C P Ltd. (29.33%) are the companies having very high level of
  short term finance in their total finance, stating very aggressive working capital
  financing policy.

- To study the relative finance liquidity and profitability, the short term borrowings (SB)
  to total borrowings (TB) ratio and Return (PAT) on total assets ratios are tabulated in
  Table 5.14.1. Companies like A C C Ltd., Ambuja Cements Ltd, and Birla Corporation
  Ltd.and Gujarat Sidhee Cement Ltd. Mangalam Cement Ltd.and Prism Cement Ltd
  with very high SB to TB ratio have comparatively very high Return (PAT) on total
  assets. This is because of use of short term finance which is flexible and less costly. On
  the contrary companies like Binani Cement Ltd., Birla Corporation Ltd, K C P Ltd., O
  C L India Ltd, and Mangalam Cement have very high SB to TB ratio means high level
  of long term borrowings which is less flexible and more costly results into low
  profitability in terms of low Return (PAT) on total assets.
Cement industry is the capital intensive industry that would require huge investment in the projects and in the current assets investment due to continuous production. The investment in the inventory in the year of 2003-04 was 114.52 crores and reached to 285.31 crores in the year 2008-09 that shows the growth rate of 36.92%. In the industry Binani Cement Ltd., has 91.20% of the total investments of 19 cement companies. Average growth rate in the inventory investments is 36.92%.

Out of 19 companies, six companies named A C C Ltd, Ambuja Cements Ltd., and Century Textiles & Inds. Ltd Dalmia Cement (Bharat) Ltd., Dalmia Cement (Bharat) Ltd. India Cements Ltd.and Madras Cements Ltd. has average raw material inventory investment of more than 100 crores during the study period and the cement industry on aggregate basis has shown very steady trend in the investment of raw-material.

Finished goods inventory has shown upward trend for overall industry during the study period and A C C Ltd. has grown highest during the said period.

Raw-material turnover ratio is very poor for companies like O C L India Ltd, Dalmia Cement (Bharat) Ltd, and Century Textiles & Inds. Ltd. and K C P Ltd which has less than 10 times of said turnover as against 15.4 times of industry aggregate turnover.

Cement Industry aggregate has 81.4 times of finished goods turnover ratio but companies like Ambuja Cements Ltd, Andhra Cements Ltd, India Cements Ltd., J K Lakshmi Cement Ltd., J K Lakshmi Cement Ltd., K C P Ltd. and Mangalam Cement Ltd. has outperformed industry and reported very high finished goods turnover ratio.

Inventory constitutes 39.59% of total current assets in the overall cement industry while Binani Cement Ltd. has 49.2% of its current assets as inventory while Century Textiles & Inds. Ltd (48%) and Mangalam Cement Ltd. (43.7) has more than 45% of their current assets as inventory on average basis.
In cement industry, the major components of inventory include stores and spares, raw-material, semi-finished goods and finished goods. It has been found that industry on aggregate basis has highest proportion of its inventory in Raw Material followed by Semi-finished Goods and Finished Goods. Raw Material has 64.59% of its total inventory value investment while 16.66% in finished goods and 18.75% in semi-finished goods.

During the course of investigation, it has been disclosed by the companies that they are putting into practice all the modern techniques of inventory control such as ABC analysis and EOQ system along with customized computer programmes.

Cement industry on aggregate basis has shown downward trend in the level of receivables. A C C Ltd., Ambuja Cements Ltd, Andhra Cements Ltd. Gujarat Sidhee Cement Ltd., Madras Cements Ltd., Shree Digvijay Cement Co. Ltd., and Ultratech Cement Ltd. are the companies having very high level of receivable turnover. Century Textiles & Inds. Ltd., N C L Industries Ltd., and Madras Cements Ltd. are the companies with very steady behaviour in terms of investment in receivables as their coefficient of variations are very low compare to A C C Ltd., Heidelberg Cement India Ltd., India Cements and Shree Digvijay Cement Co. Ltd.

Cement industry on aggregate basis has receivables turnover ratio in the range of 28.66 to 50.46 times during the study period. The mean or average receivables turnover ratio is 39.29 times with 23.17% of coefficient of variation. Most of the companies show their receivables turnover ratio around 28.66 to 50.46 times which is near or equal to industry average.

Three companies named Birla Corporation Ltd, Andhra Cements Ltd, and Gujarat Sidhee Cement Ltd. has reported their mean receivables turnover ratio of 36 to 25.8
times which is in range of industry average. These companies have outperformed because they have fastened their collections and have comparatively high level of sales volume and lower level of receivable investment.

- The mean receivable to current ratio for industry aggregate is 39.29% with 23.17% of co-efficient of variation. India Cements Ltd, Ultratech Cement Ltd., Shree Digvijay Cement Co. Ltd., Gujarat Sidhee Cement Ltd., Century Textiles & Inds. Ltd., Andhra Cements Ltd., Madras Cements Ltd., and N C L Industries Ltd. are the companies have their receivable to current assets ratio more than industry aggregate of 39.29%.

- Cement Industry on aggregate basis has 12.69% of its total debtors as debtors exceeding six month. It ranges from 6.39% to 22.49% during the study period. Their dues are more than six month. Out of 19 companies under study, there are 6 companies who have this ratio of more than industry average. There are 13 companies who have the said ratio lower than 10%. These companies are very good at their collection policy and managing their debtors efficiently.

- There are two companies named Madras Cements Ltd. and A C C Ltd. with the mean level of cash more than 50 crores. There are three companies named Ambuja Cements Ltd, Century Textiles & Inds. Ltd. and Century Textiles & Inds. Ltd. in the range of 30 crores to 40 crores of cash balance. Companies like Andhra Cements Ltd., Binani Cement Ltd., Gujarat Sidhee Cement Ltd, Heidelberg Cement India Ltd., India Cements Ltd., J K Lakshmi Cement Ltd. and K C P Ltd. have cash balance in the range of 5 crores to 25 crores. Rest of 7 companies has mean cash balance below 25 crores.

- Out of 19 companies, seven companies have not invested significant amount in marketable securities. Major companies who have invested their excess cash in marketable securities are A C C Ltd., Birla Corporation Ltd., Birla Corporation Ltd.,

- Cement industry aggregate figure shows 28.95 times of cash turnover ratio on an average during the study period. During 2003-04 to 2008-09, it fluctuates in the range of 12.08 times to 50.16 times. Out of 19 companies, 4 companies mean cash turnover ratio is near to industry aggregate of 28.95 times. 12 companies have cash turnover ratio which is far exceeding the industry aggregate. While rest of the companies have cash turnover ratio is lower than industry aggregate.

- Cement Industry on aggregate basis has 16.36% of its total current assets as cash investment with 52.75% of coefficient of variation. It ranges from 7.41% to 25.86% over a period of six years. Out of 19 companies 8 companies has cash to current assets ratio which is less than industry average. 5 companies mean cash to current assets ratio is in the interval of 10% to 15% which is near to industry average. While five companies like A C C Ltd., Ambuja cement ltd., Binani Cement Ltd Heidelberg Cement India Ltd., and J K Lakshmi Cement Ltd. have more than 15% of cash to current assets ratio.
9.2 Suggestions:

Keeping in view the above observations relating to the study, the following measures are suggested which would go a long way to improve the management of working capital in the cement manufacturing companies in India.

- During the course of investigation it has been found that 8 companies are giving more attention to the only liquidity aspects of working capital management and taking more conservative decisions leading to the decline in profitability of the company. There is an urgent need to bring about the change in the attitude of the management. They should be more aggressive in working capital management by giving equal weightage to both liquidity and profitability aspects of working capital management.

- Many of the companies do not have proper computer programme for the handling of inventory resulting in lack of coordination. For the improvement in coordination, strong and effective management information system is required to be implemented. The frequency of reporting of inventory, receivables and cash must be increased so that timely action becomes possible to overcome the problems.

- As the management of working capital involves frequent decision making, it is proposed that every company should have separate function and responsible authority to constantly monitor each component of working capital.

- Ultratech Cement Ltd. has very poor performance compare to other private companies so there is an urgent need to look in to the problems and tone up its efficiency.
Madras Cements Ltd has shown good performance in very short span as it has been able to maintain its aggressive approach towards the working capital management. Other companies are also required to adopt more aggressiveness in maintaining their current ratio 2:1 and improving their profitability.

A C C Ltd., India Cements Ltd., and Ultratech Cement Ltd. are having very huge funds blocked in inventory and receivables. This is because of their size of operation up to some extent but they need to take care of it otherwise they may face the problems of diseconomies of scale.

Companies are advised to review their working capital frequently with the tools like funds flow and cash flow statement and cash control reports.

To deal with the over-stocking in stores and spares component of inventory, all the units are advised to promote import substitution programmes. Further, ancillary units should be developed and internal repair facilities should be created. Stores and spares inventory must be classified according to FSN analysis for better control over them. The same way efforts should be done for the reduction in semi finished goods inventory with the help of some technological up-gradation suggested by technical experts.

Allocation of authority, pertaining to credit and collections to some specific department, selection of proper credit terms and use of factoring services would go a long way to improve collections. This will lead to the reduction in debtors of more than six months.

Cash management in the selected units can be streamline by proper planning and control of cash. The companies must adopt the objective methods rather than intuitive methods of cash forecasting. Moreover cash inflows and outflows must be assiduously regularized. Quick disposal of documents and letters relating to sales would surely speed up the inflow of money.
❖ Out of 19 companies, seven companies have not invested their surplus cash in marketable securities. For efficient performance of this function it is suggested that cash section should be placed under the charge of finance experts.

❖ To conclude the study, it can be said that the adoption of above measures will doubtlessly help the selected companies to improve their overall performance in the management of working capital. With the efficient management of working capital, selected companies can utilized their capacity optimally and accelerate economic growth of India by increasing the production of cement at reasonable cost.