Chapter – 2

Review of Literature

2.0 INTRODUCTION

The introductory background of the research along with scope, objectives, hypotheses, methodology and its significance has been discussed in the first chapter. The present chapter provides an extensive review of available literature in chronological order which helps to find out the research gap, if any, and to suggest the required research needed in the field of performance of Cement Corporation of India Limited.

The Cement Industry is a core sector for a nation. Its importance becomes vital especially in present running industrial era where most of the development depends on infrastructural facilities. It plays a significant role in economic and social development of the country. The researcher would like to conduct a study on the financial aspects of Cement Industry with special reference to Cement Corporation of India Limited. The main purpose of this study is to look into the operational activities, business practices and financial efficiency of this corporation through its financial statements. In recent times, a number of financial problems faced by the corporations require analytical studies related to financial performance. The present effort is a research agenda on ‘An Appraisal of Financial Performance of Cement Corporation of India Limited, Since 2005’. Analytical study of financial performance turns out to be very significant and important for the financial managers to analyze various financial aspects. The corporation uses various indicators for measuring its financial performance. It indicates the importance of financial health status of the corporation.

There are a number of studies that have been conducted in the field of Cement Industry and Financial Performance Evaluation. It is an emerging issue in current national economic scenario, where Cement Industry and their performance play significant role in economic development. Cement Companies which are engaged in trade of cement and other allied products have been playing significant role in accelerating the economy. But there are various issues and challenges in their trade practices and other related operational activities. Financial performance of an enterprise gives the overall view regarding its business operations, earning capacity and its contribution for the development of the nation. There are various researches
that have been carried out on different aspects of Indian Cement Industry and Financial Performance. Available literature is being reviewed below in four parts separately viz. 2.2 Specific Review of literature, which discusses past studies that have been conducted on financial appraisal of Indian Cement Industry and CCI Ltd. and 2.3 General Review of literature, which discusses the past studies based on financial appraisal of firms in other industries.

2.1 STATEMENT OF PROBLEM

Most of the public sector units are overwhelmed by inefficiency caused by heavy investment on social overheads, poor labour relations, inefficient management, underutilization of capacity, etc. This hinders proper functioning of the steel plants especially with increasing competition and limited resources in the present world of liberalized economy. The survival, growth and organizational success greatly depend on the efficient management of its finance. The cement industry is very important sector for a country. Its importance becomes vital especially in present running industrial era. It plays a significant role in economic and social development of the country. The researcher would like to conduct a study on the financial aspects of Cement Industry. The researcher would conduct a study on financial aspects of Cement manufacturing and trading sector of the economy with special reference to Cement Corporation of India Limited. The main purpose of this study is to look into the operational activities, business practices and financial efficiency of this corporation through its financial statements. In recent times, a number of financial problems faced by the corporations require analytical studies related to financial performance. The present effort is a research agenda on ‘An Appraisal of Financial Performance of Cement Corporation of India Limited, Since 2005’. Analytical study of financial performance turns out to be very significant and important for the financial managers to analyze various financial aspects. The corporation uses various indicators for measuring its financial performance. It indicates the importance of financial health status of the corporation. Analysis of financial statement can highlight the strength and weaknesses of the company. This information can be used by management to improve performances and to predict future results.
2.2 SPECIFIC REVIEW OF LITERATURE

Rajeswari (2000) studied the liquidity position of Tamil Nadu Cement Corporation Ltd. from 1990 to 2000. The study concluded that the liquidity position of TANCEM was not up to the mark. Whereas the short term solvency ratios indicated that there was too much of liquidity in the first two years of the study. A very high degree of liquidity is unfavourable as idle assets earn nothing and affects the profitability. The study concluded that the liquidity management of TANCEM was poor and was not upto the mark.

Selvam et al. (2004) measured the financial position of India Cements Ltd. by using Z score analysis for a period of four years from 1998 to 2001. The study exhibited that the financial performance of India Cements was never in excessively healthy zone during the study period except in 2002. They also suggested that the problem of below trading should be attended and the company must set reachable sales target. Further, the capital structure should be reformed in such a manner that standard debt-equity ratio is achieved to avoid any future disappointment.

Muslumov (2005) studied the financial and operating performance of privatized companies of Turkish cement industry. The study analysed the post-privatization performance of privatized companies. The findings indicated that when the performance criteria for both the state and private enterprises were considered, privatization in the cement industry resulted in significant performance decline. Total value added and the return on investment were also declined significantly after the privatization. Further, the decline in asset productivity was not caused due to an increase in capital investment as post privatization, capital investment did not changed significantly. Contraction in total employment and increase in financial leverage after privatization were among the key research findings.

Chakraborty (2008) in a study on “Working Capital and Profitability: An Empirical Analysis of Their Relationship with Reference to Selected Companies in the Indian Pharmaceutical Industry” evaluated the relationship between working capital and profitability of Indian pharmaceutical companies. Researcher pointed out two distinct schools of thought on this issue. According to one school of thought, working capital is not a factor of improving profitability and established a negative relationship between them while according to the other school of thought, investment in working capital plays a vital role to improve corporate profitability and states that unless there
is a minimum level of investment of working capital, output and sales cannot be maintained. In fact, the inadequacy of working capital would keep fixed asset inoperative.

**Srinivasan et al. (2011)** attempted an empirical study on Dimension of Financial Performance of Cement Units in South India by applying Z score analysis from 2005 to 2009. The study was based on the secondary data of fourteen south Indian cement companies. The study aimed to examine the corporate financial performance, accounting profitability measures and shareholders’ value based measures. For the analysis of accounting profitability measures, Return on Investment (ROI), Return on Equity (ROE), Earning per Share (EPS), Return on Capital Employed (ROCE) and Dividend per Share (DPS) were calculated. For the analysis of shareholders’ value, the Economic Value Added (EVA) and Market Value Added (MVA) tools were employed. 'Fiscal-Fitness' of the company has been checked by the three modes of Z score analysis i.e. Altman Model, spring ate Model and Fulmer Model. Z-score analysis concluded that two companies, Rain Commodities Ltd. and Zuari Cement Ltd. were rated as failure out of fourteen south Indian companies because of the excess debt and excess working capital that deteriorate the financial health.

**De et al. (2011)** conducted an Empirical Study on the Indian Cement Industry. Factor Analysis was applied over the audited financial data of selected cement companies of India for a period of the ten years i.e. from 1999-2000 to 2008-2009. There were 44 variables (financial ratios) grouped in 7 categories. Multiple regression analysis employed by taking the factor scores as the dependent variable and constituent variables as independent variables. The study shows that the profitability and return of investment was good while the liquidity, dividend and working capital of the industry was not satisfactory. The author also emphasized on eight financial ratios for analyzing the financial position of the cement industry of India

**Mukhopadhya et al. (2012)** evaluated the effect of deregulation on the performance and structure of Indian cement industry from 1989 to 2006. The study indicated that there was shriller movement in the measure of inter sequential mobility for the firms in the top most two quartiles which made a significant gains in market share and the companies which were below the second quartile, lost the market share during the study period. The study also revealed that there was a structural break in the market share pattern of many companies and a substantial change in the market
shares and ranks of some other companies. The distribution of market shares took place in favour of the larger companies. Concentration of four firms was more than fifty percent and two dominant groups accounted for more than forty percent market share.

**VenkataRamana et al. (2012)** analysed the financial performance and predict the risk of bankruptcy for selected cement companies from 2001 to 2010 with the help of Z score model and financial ratios. The study revealed that liquidity, working capital turnover, efficiency and solvency position of the selected cement companies were not adequate. Further, it was also found from the Z-Score analysis that financial performance of KCP Ltd and Kesoram Industries Ltd was poor and Dalmia Bharat Ltd was at the verge of bankruptcy.

**Samuel (2012)** conducted a study on Financial Performance of India Cements Limited for the period of ten years i.e. from 1998-99 to 2007-08. The study was mainly based on secondary data collected from the annual reports of the company. The Comparative financial statements, Common size financial statements, Trend percentage and Ratio analysis were the tools and techniques used for analysing the financial performance. In his study, the financial performance of the company was analyzed on various fronts such as profitability, liquidity and turnover. In fact the effects of all business transactions were clearly visible in the value of various assets, liabilities and capital fund where changes were studied by comparing the opening and closing balance sheets of the enterprise. It was also found that the net profit ratio in the last three years was satisfactory and main reason for increasing the net profit. The high sales revealed in more return to shareholders fund. Finally, the study concluded that the overall performance of India Cements Ltd was good and the study helped the company to identify its inefficiency areas.

**Shandhar and Janglani (2013)** attempted a study on liquidity and profitability of selected Indian cement companies by applying regression modelling approach. The objective of the study was to analyse the working capital management in terms of profitability and liquidity and to find out their impact on the firm’s financial aspects. The random sampling was used for the selection of sample on the basis of profitability of the companies listed on NSE. Secondary data was collected from the journals and internet for the period of six years from 2008 to 2012. The data was analysed by applying the regression and correlation analysis to find out the impact of liquidity on
profitability and the relationship between liquidity with profitability, respectively. It was revealed that the liquidity ratios measure by current ratio (CR), liquid ratio (LR) and Cash Turnover Ratio, CATAR, CLTAR had a modest relationship with profitability on capital employed. The Current ratio, Liquidity ratio and Cash Turnover Ratio of selected companies were negatively associated with Return on Asset and Return on investment. Further, it was also found that the relation of Liquidity ratios with profitability ratios was according to the theoretical foundation of liquidity profitability trade off theory.

Panigrahi (2013) carried out a comparative study on Liquidity Management of Indian Cement Companies for the period of ten years from 2001 to 2010. The samples selected for the study comprises of top five BSE listed cement companies of Indian Cement Industry namely, Abuja Cements, ACC Cements, India Cements, Madras Cements and Shree Cements. Secondary data was collected from the published annual reports of the selected companies. The objective was to assess and to compare the liquidity management of five leading Cement companies and to measure the management of working capital and its adequacy. For analyses, various tools and techniques such as mean, standard deviation, coefficient of variation, ratio analysis, and Metal’s ultimate rank test was applied and it was found that the liquidity position of small companies were satisfactory as compared to bigger ones. The growth rate of current ratio, quick ratio and working capital to current assets of all the companies were found negative indicating an unstable liquidity position. Furthermore, low or negative working capital indicated the aggressive working capital management policy of the firms which in turn implies minimum investment in current assets to gain higher rate of return. The liquidity position of Shree Cements was sound as compared to other companies.

Panigrahi (2013) investigated the Relationship between Inventory Management and profitability of Indian Cement companies. A sample of five Indian cement companies listed in BSE was decisively selected for the study. Secondary data was collected from the annual reports of the selected companies over a period of ten years from 2001-2010. Relationship of Gross operating profit, used to measure the profitability, was found with measures of inventory management. Regression analysis was applied to determine the impact of inventory conversion period on gross operating profit while taking into account current ratio, size of the firm, financial debt ratio as control
variables. It was found that there exist a negative linear relationship between inventory conversion period and profitability i.e. when the Inventory Conversion Period days increase the profitability of firm decreases and vice versa. It was also found that, the firms’ profitability, measured by GOP, has a negative relationship with financial debt ratio which implied that the profitability increases with decrease in financial debt ratio. Furthermore, the study found a positive relationship between the firm size and GOP indicating that the profitability increases with an increase in firm size while negative relationship was found between current ratio and GOP.

Kumar et al. (2013) examined the progress of Indian cement industry (ICI) since 1991, related to growth in installed capacity, exports, productions and value additions for a period of fifteen years (1991-92 to 2005-06). While focusing on the past, present and the future performance of Indian Cement Industry (ICI) at the macro level and the Chettinadu Cement Corporation Limited (CCCL) at the micro level. All the six parameters of the Indian cement industry (ICI) taken into consideration showed good growth during study period. The policy of total decontrol of the Indian cement industry and liberalization of the Indian economy helped the industry to grow in terms of physical and financial variables. The results also revealed that the Indian Cement Industry (ICI) recorded momentous growth marking virtually a fivefold increase in its net worth during the period of study.

Kaur and Singh (2013) studied the Impact of Liberalization on Cost of Capital of Associated Cement Companies Limited to analyse the impact of Liberalization on cost of capital of ACC Limited for a period of thirty one years from 1979-80 to 2009-10. The period was divided into two parts i.e. pre liberalization period (1979-80 to 1989-90) and post liberalization period (1990-91 to 2009-10). The Overall cost of capital was used as dependent variable whereas size, leverage, non-debt tax shields, reserves and retained earnings to total assets, liquidity, growth, profitability, collaterals and age were used as independent variables. The findings revealed that there was a declining trend in cost of debt whereas an increasing trend was found in cost of equity capital and overall cost of capital during post-liberalization period. Result of multiple regression analysis revealed that leverage, non-debt tax shields (NDTS), growth and profitability were significant determinants of overall cost of capital. The regression coefficient of dummy variables appeared with negative signs in both the cases were significant at 5 percent level of significance with overall cost of
capital as dependent variable which was healthy sign as it indicates decline in overall cost of capital of the company during post-liberalization period as compared to pre-liberalization period.

Swaminathan, et al. (2013) examined the working capital management of selected cement companies of India from 2001-02 to 2010-11. Financial ratio, regression analysis and ANOVA were used for the analyses. Findings indicated a mix result of working capital management of selected cement companies. Finally, the Researchers emphasized that the listed cement companies should improve their financial performance.

Franklin & Uma (2013) studied the impact of marginal costing and leverages for cement industries with the objective to analyse the financial performance of selected cement companies and to find out the performance of cement units in terms of marginal cost statement and leverages for a period of five years from 2007 - 08 to 2011 – 12. It was found that the Operating Leverages of the company has been in fluctuation trend. The higher operating profit showed an optimistic movement of the concern whereas the financial leverage and composite leverage of the company have been in a mixed trend. Profit of the concern showed a fluctuating trend but was at higher level for the year 2012. The Profit Volume Ratio of TANCEM was 11 per cent in 2010 and 62 per cent in 2011 which was considered good for the company. The Breakeven Point was found at the peak in 2011. However, sales increased the breakeven point which showed ups and downs whereas the Margin of Safety of the company showed a mixed trend. Thus, it was concluded that the company position was satisfactory during study period.

Ningsih & Djuaeriah (2013) examined the Capital Structure and Firm’s Financial Leverage of Indonesian Publicly Listed Cement Industry. In this study relationship of seven independent variables i.e. ROA, ROE, QR, SER, EPS, BMR and TG was found with financial leverage, used as dependent variable. From the analysis it was found that ROE, SER, and BMR that were used as measures of capital structure, made a positive effect on financial leverage. It was also found that all the seven ratios, ROA, ROE, QR, TG, EPS, SER and BMR, had significantly affected financial leverage.

Another study was conducted by Tiwari (2013) to conduct a study on Working Capital Management Efficiency In Indian Cement Industry and to study the effectiveness of the working capital management of the Indian cement companies
from 2002-03 to 2009-2010. A sample of 20 large cement companies operating in India was selected. The secondary data was collected from the 'Capitaline' database for a period of 10 years from 2000 to 2010. The findings showed that the Indian Cement industry did not perform extraordinarily well during this period. Industry average for efficiency index was greater than one in 6 years out of 10 years study period. Though some of the sample firms had successfully improved efficiency during these years, the existence of a very high degree of inconsistency in this matter clearly pointed out the need for adopting sound working capital management policies by these firms. In the matter of achieving the target level (industry norm) of efficiency by the firms, Associated Cement and Dalmia, were the most successful firms followed by Deccan, Kanoria and Madras. It was suggested that the firms under study should have taken necessary steps in order to improve their efficiency. The study also suggested that another study may be helpful for identifying the forces that governed the chronic nature of inefficiencies of Indian cement companies in the matter of working capital management.

Ray, S. (2013) investigated the Capital Structure Determinants of Listed Cement Companies in India. The author examined the impact of nine determinants i.e. asset collateral, asset composition, age of firm, size of firm, business risk, growth rate, flexibility, profitability, non-tax shield as independent variables on capital structure (Debt-Equity ratio) as dependent variable with the help of two Stage Least Square method by running multiple regression analysis for a study period from 1991-92 to 2011-12. The analysis revealed that the asset composition, size and non-debt tax shields had statistically positive relationship with debt-equity ratio while the profitability and asset collateral had significant negative relations with leverage. Further, it was found that the other factors such as business risk, flexibility and growth opportunities had insignificantly impacted on capital structure.

Vaijayanthimala and Vijayakumar (2014) analyzed liquidity management and trade-off between risk and profitability in Indian cement industry during the study period. The analysis of correlation between liquidity and profitability showed positive correlation in Associated Cement Companies Limited, Chettinad Cement Corporation Limited, Dalmia Cement Limited, Madras Cements Limited and Shree Cement Limited. However, there was negative correlation between liquidity and profitability in the case of Birla Corporation Limited, Grasim Industries Limited and India
Cements Limited. Further, the analysis of correlation between risk and profitability depicted a positive correlation in all the selected companies. However, there was a negative correlation in the case of Associated Cement Companies Limited, Chettinad Cement Corporation Limited and Dalmia Cement Limited. The result of the study showed mixed trend with respect to liquidity, risk and profitability.

Mahmoudi (2014) focused on empirical vision into the relationship between leverage and firm profitability of 28 cement firms selected from the Tehran Stock Exchange during the time period of 3 years i.e. 2008 to 2011. Leverage was measured by Short term debt to equity (STD/E) and long term debt to equity (LTD/E) and Firm profitability was measured by calculating the return on equity (ROE) and return on assets (ROA). The regression model was used to test the hypotheses. With the help of the results, it was concluded that there exist significant and negative relationship between leverage and firm profitability. The result from the descriptive statistics also revealed that the cement companies were highly levered and the performance of listed cement companies measured by returns on equity (ROE) and return on assets (ROA) were 39%, 19% respectively. The performance of the listed cement companies in Tehran throughout the study period was found to be average.

2.3 GENERAL REVIEW OF LITERATURE

Capon, et al. (1990) conducted a study of meta-analysis to find the determinants of financial performance. The author analyzed 320 published studies relating environmental, strategic and organizational factors with financial performance. Some factors have been studied widely and it was found that there was a relatively consistent positive impact of some factors (e.g. concentration and growth) on performance while other widely-studied factors (e.g., size) had lesser consistent effects.

Kantawala (2001) examined the financial performance of different groups of NBFCs from 1985-86 to 1994-95 in terms of profitability, leverage and liquidity. An attempt was made to find out the groups for which majority of the ratios were same. For the purpose of analysis, profitability ratios like gross profit to total income, PBT to total income, PAT to net worth, PAT to total assets and dividend to PAT were used. For leverage, ratios like Debt Equity and Loan to current assets etc. were used while liquidity ratio like current ratio was computed. The study examined whether these
ratios were differed significantly between different categories of NBFCs. One way Analysis of Variance (ANOVA) was employed to test the hypothesis. The study concluded that there was a significant difference in profitability, leverage and liquidity ratios of various categories of NBFCs.

Singh (2003) made an attempt to evaluate the financial performance of IDBI Bank Ltd. in his paper entitled ‘Financial Appraisal of IDBI Bank Ltd.’ for a period of five years from 1997 to 2001. The author evaluated the liquidity position and capital adequacy as well as effectiveness of various financial indicators which reflected the performance of Industrial Development Bank of India (IDBI). Statistical tools like t-test and correlation were applied to test the hypothesis. In order to judge the performance of IDBI bank capital adequacy ratio, Non-performing assets (NPA) and credit deposit ratio were used. The study concluded that IDBI bank was a progressive, technology driven, professionally managed entity, well geared to meet competition from existing as well as new banks effectively. The analysis and interpretation indicated that the financial position of the bank was quite satisfactory.

Eljelly (2004) examined the relation between profitability and liquidity of selected joint stock companies of Saudi Arabia by applying Correlation and regression analyses. While evaluating the liquidity of the companies, cash conversion cycle and current ratio were used as measures of liquidity. Significant negative relation was found between the firms’ profitability and liquidity (measured by current ratio), whereas at the industry level, the relation was found more significant when liquidity was measured by cash conversion cycle. It was also found that the cash conversion cycle was a more important measure of liquidity than the current ratio that upsets profitability.

Falk (2005) analyzed sickness in Indian manufacturing industry. The theoretical model was tested to address the political economy of industrial sickness in India. The findings of the study revealed that the politicians’ benefit has been responsible for sickness of the industry. Researcher also concluded that sickness law provides several ways to the firm/stake holders to take advantages of sickness of the firm to get rid of their financial liabilities.

Rakshit (2006) studied the EVA Based Performance Measurement of Dabur India Limited to examine whether Dabur India Limited (DIL) were able to generate value for its shareholders and to analyse the financial performance of the company by
applying the traditional performance indicator like ROI and the new corporate performance measure EVA. The financial data was secondary in nature and was collected from the published Annual Reports, BSE Sensex and DIL Share Price data for a period of 5 years from 1998-99 to 2002-03. To analyze the financial data of the DIL, various accounting ratios i.e. Net Profit Margin, Operating Profit Margin, Return on Investment (ROI), Return on Net worth (RONW), and Earning Per Share (EPS) were used. Findings showed that the EVA based performance measurement system gave the clear idea about the shareholders’ value addition or value destruction. Further, it was also observed that the Company have successfully created value for its shareholders. Finally, it was suggested that EVA based performance measurement system was the basis on which the company can take appropriate decisions related to the choice of strategy, capital allocation, divesting business, goal setting and merger & acquisitions.

Bhunia (2007) examined the Liquidity Management of Public Sector Iron and Steel Enterprises in India covering a period of 12 years from 1991-92 to 2002-03 to make an assessment on the efficiency of the management of short-term liquidity, to examine the adequacy of the working capital and to observe the liquidity position of selected public sector Iron and Steel enterprises in India. A sample of 2 companies i.e. Steel Authority of India Limited (SAIL) and Indian Iron and Steel Company Ltd. (IISCO), out of nine Central Public Sector Iron and Steel Enterprises operating in India, was selected for the study. With the help of standard deviation analysis, financial ratios were used to categorise the companies in terms of their effective or ineffective working capital management and liquidity. The researcher found that the actual values of working capital were lower than the estimated values of working capital for both the companies which indicated inadequate level of working capital. This inadequate position may be accredited to low raw materials inventory in the case of SAIL and low level of receivables in the case of IISCO. It was found that the liquidity position of both, SAIL and IISCO, was poor while there was inefficient inventory management in case of SAIL.

Huang et al. (2008) attempted to develop a predictive hybrid financial analysis model for business failure in which the financial ratios were one of the main inputs to develop the prediction model. The hybrid financial analysis model also included static and trend analysis models (i.e. financial structure, credit standing, operating standing,
profitability, and short-term credit standing) to construct and instruct a back-propagation neural network (BPN) model. The study focused on business failure prediction of Taiwan companies. Annual financial statement of each listed company was collected from Taiwan Economic Journal database (TEJ). Furthermore, the experiments employed four datasets of Taiwan enterprises. The researcher concluded that the proposed model using a back-propagation neural network makes a good performance of prediction accuracy and outperforms other models including decision trees, discriminate analysis and the back-propagation neural network.

Chakraborty (2008) in a study on “Working Capital and Profitability: An Empirical Analysis of Their Relationship with Reference to Selected Companies in the Indian Pharmaceutical Industry” evaluated the relationship between working capital and profitability of Indian pharmaceutical companies. Researcher pointed out two distinct schools of thought on this issue. According to one school of thought, working capital is not a factor of improving profitability and established a negative relationship between them while according to the other school of thought, investment in working capital plays a vital role to improve corporate profitability and states that unless there is a minimum level of investment of working capital, output and sales cannot be maintained. In fact, the inadequacy of working capital would keep fixed asset inoperative.

Zoysa et al. (2009) conducted an empirical study on Profitability of Listed Manufacturing Companies in Sri Lanka and Malaysia for a period of three years from 2006 to 2008. The objective of the research was to undertake the comparative analysis of the companies on the basis of two key indicators, namely Return on Assets (ROA) and Return on Equity (ROE). The study analyzed the financial data of 161 manufacturing companies consisting of 62 Sri Lankan companies and 99 Malaysian companies selected from the OSIRIS Database. The results indicated that during this period Sri Lankan manufacturing companies were considerably more profitable and positive than their counterparts in Malaysia in terms of ROA but the overall performance of Malaysian companies was slightly better than that of Sri Lankan companies in terms of ROE. They also identified a comparatively weaker position of equity investments in the manufacturing sector of Sri Lankan companies, including a relatively poor equity market, high interest rates, and excessive fear of high-risk
investment. A similar trend was observed when the profitability and equity of companies were analysed by industry.

Bhanawat (2010) in his paper entitled ‘An Analysis of Raw Material Cost in Indian Manufacturing Industry’ evaluated the share of raw material cost in the cost structure of the manufacturing industry. A sample of 58 companies engaged in manufacturing activities was selected covering pharmaceutical, textile, cement, metal, oil, automobile, consumer goods and electrical industries. The study concluded that there was no significant difference among different sectors of the Indian manufacturing industry regarding raw material cost as percentage of gross sales. Chi square test was administered on different ratios to test the hypothesis. The results revealed that, on an average, raw material cost as a percentage of gross sales was 46.46 per cent for Indian manufacturing industries.

Sangmi and Nazir (2010) in their paper entitled ‘Analysing Financial Performance of Commercial Banks in India: Application of CAMEL Model, aimed to analyze the financial performance of two major banks operating in northern India one representing the biggest nationalized bank (i.e. Punjab National Bank, PNB) and the other biggest private sector bank (i.e. Jammu and Kashmir Bank, JKB). The viability of the 2 banks has been analyzed on the basis of CAMEL parameters (C for capital adequacy, A for Asset quality, E for Earnings and L for Liquidity) for the period of 5 years (2001-2005). The study was mainly based on secondary data collected from the annual reports of the banks. For the analysis, two important statistical tools viz. Mean and standard deviation were used to arrive at conclusions in a scientific way. The findings of the study showed that both the banks were financially viable as both adopted prudent policies of financial management and managed their capital adequacy ratio well above the minimum standard of 10% fixed by RBI. The average leverage ratio in case of PNB was found higher (1.746) as compare to JKB (0.828) while the Asset quality of both the banks have shown significant performance. The PNB had maintained the ratio of Net NPAs to Net advances at 3.42 per cent, whereas the JKB bank maintained the average ratio of Net NPAs to Net advances at 1.760 per cent. Finally, it was concluded that the position of the banks under study was sound and satisfactory so far as their capital adequacy, asset quality, Management capability and liquidity was concerned.
Bhunia et al. (2011) analysed the financial performance selected public sector drug & pharmaceutical enterprises in India by establishing relationships between the items of the balance sheet and profit and loss account. The two public sector drug & pharmaceutical enterprises, Karnataka Antibiotics and Pharmaceuticals Ltd. (KAPL) and Rajasthan Drugs and Pharmaceuticals Ltd. (RDPL) listed on BSE, were selected as a sample from year 1997-98 to 2008-09. To analyse the financial performance of the companies in terms of liquidity, solvency, profitability and financial efficiency, various accounting ratios were used. Various statistical tools i.e., A.M., S.D., C.V., linear multiple regression analysis and t-test were applied for the analysis. It was concluded that the liquidity position of KAPL was strong and the position of RDPL was poor which reflected the ability of the companies to pay short-term obligations on due dates while the Long-term solvency in case of KAPL was lower indicating that the companies relied more on external funds in terms of long-term borrowings thereby providing a lower degree of protection to the creditors. The study also revealed that the financial stability ratios (debt to net worth ratio) in case of RDPL showed a downward trend and consequently, the financial stability was decreasing at an intense rate.

Majumdar et al. (2011) conducted a study on financial Analysis of Selected Pharmaceutical Companies in Bangladesh for the period of three years from 2005-06 to 2007-08. Financial ratios, Multivariate Discriminate Analysis and various statistical tools like mean, coefficient of variance, standard deviation and T-test were used for the analysis. From the financial statement of the Pharmaceutical industry, it was revealed that the profit earning capacity, liquidity position and the overall financial position of most of the Pharmaceutical companies was poor and most of the Pharmaceuticals companies stood at lower level position of bankruptcy because of the inefficiency of financial management, strict government regulation and increased cost of raw-materials, labour and overhead. It was recommended that the financial performance of the industry should be improved immediately and authorities should take necessary actions.

Goswami & Sarkar (2011) measured and analysed the financial performance of Tata steel by computing the Degree of Operating Leverage (DOL), Degree of Financial Leverage (DFL) and Degree of Total Leverage (DTL) of the selected company for the study period from 2000-01 to 2009-10. The author found that the company was in a
very risky position during the first three years of the study as compared to the entire study period.

Burja (2011) highlighted the Factors which can influence the profitability of companies. These factors can lead to increase the company’s competitiveness and would satisfy shareholders’ interests. The study was based on the company performance analysis models which highlights the influencing factors of profitability. The multifactor regression analysis was used to analyse the performance models. The results showed a strong relationship between the profitability and the management of available resources.

Saleem & Rehman (2011) in their research paper analyzed the Impacts of liquidity ratios on profitability and found a significant impact of liquid ratio on ROA while there was an insignificant impact of liquid ratio on ROE and ROI. The results also revealed that ROE was not affected by three ratios i.e. current ratio, quick ratio and liquid ratio while ROI was significantly affected by current ratios, quick ratios and liquid ratio. Further, it was found that each ratio (variable) has an important effect on the financial positions of the firms with divergent amounts along with the liquidity ratios in the first place. Profitability ratios also played a vital role in the financial positions of firms.

Rahman (2011) conducted a study on working capital management and profitability of nine textile companies in Bangladesh for a period of three years from 2005-06 to 2007-08. The findings of the study revealed that both, profitability performance as well as the working capital position of the selected textiles companies, were not satisfactory during the study period. The study also revealed that the nature of working capital policy (CA to Sales), financing of working capital (CL to TA), inventory holding period (Inventory Turnover in Days), Accounts Receivable Collection Period (Accounts Receivable Turnover in Days), Accounts Payable Period (Accounts Payable Turnover in Days) and Cash Conversion Cycle in Days of the selected companies had played an important role in determining their overall profitability (Return on Total Assets) during the period under study. It was concluded that poor management of working capital was one of the important causes for poor performance and poor profitability position of the selected textile companies.

Jani (2012) attempted an empirical study on Financial Position of BHEL Ltd by applying the modern tool EVA and the other financial indicators like EPS, EVA,
ROCE, and RONW for a period of 8 years from 2003-04 to 2010-11. The objective of the study was to find out the measures to improve EVA of the company. The result of the study indicated strong correlation between EVA & EPS. The author concluded that company had a strong position in case of capital structure and had a strong financial position during study period. EVA position of company became stronger in the following years when the company made strategy for improvement in EVA, which improved EVA of the company. The author concluded that the financial position of BHEL was sound during the study period.

Parikh (2012) studied financial restructuring and its impact on corporate performance in India. Financial statements of 146 firms, both large as well as medium scale firms, were analyzed and parameters such as sales, gross profits, net profits, gross assets, current ratio and taxes paid by them to the government, were compared before and after the restructuring with the help of Paired t-test. The empirical results indicated that financial restructuring had a significant impact on gross profit of large and medium sized firms in the long run.

Nandi (2012) in his research paper made an attempt to assess the trends in liquidity management and their impact on Profitability of Bharat Heavy Electrical Ltd. (BHEL) for a period of 11 years (i.e. from 1999-2000 to 2009-10). Attempt was made to observe the trend values of liquidity position of the company, to study the correlation between liquidity and profitability and to establish linear relationship between liquidity and profitability with the help of multiple linear regression model. The available secondary data were analysed by using various statistical tests viz. t-test, F-test and chi square test, to test the significance of the results. On the basis of overall analysis, it was inferred that the selected company always tried to maintain adequate amount of net working capital in relation to current liabilities as to keep a good amount of liquidity throughout the study period.

Hossain et al. (2012) examined the Financial Performance of NCBS in Bangladesh. The main objective of their study was to analyse the financial performance of Janata Bank Limited for the period of 10 years from 2001 to 2010. The variables namely Net profit, total deposit, total advances, total investment, reserve fund, employee & branch spread ratios, burden ratios, profitability ratios and productivity ratios were selected and examined by applying various statistical tools & techniques and selected accounting ratios to measure the financial performance of the bank. Findings of the
study revealed that the maximum number of calculated ratios profitability ratios, productivity ratio, spread ratio etc. were positive while burden ratio, (non interest expenditure as percentage of working fund) in some years, were not satisfactory. The study also revealed that the main weakness of the bank was the decreasing trend in net profit and Profitability ratios. However, apart from these flaws, few results showed good sign for the bank. It was suggested that if bank tries to recuperate some of its limitations, it would have enhanced performance in future.

Singh & Tandon (2012) conducted a study to measure, evaluate and compare the financial performance of SBI and ICICI Bank for a period of 5 years i.e. from year 2007-08 to year 2011-12 with the help of ratio analysis. For the purpose of the study, secondary data was collected. Mean and Compound Growth Rate (CGR) were calculated to compare the profitability of the selected banks. Findings of the study revealed that the performance of both the banks was good but in terms of deposits and expenditure, ICICI bank had better managing efficiency than SBI. It was also revealed that the customer had more trust on the public sector banks as compared to private sector banks.

Azhagaiah & Gejalaksh (2012) investigated the financial performance of banking sector in India by categorizing the banks based on their financial characteristics. A sample of 36 banks (17 private sector and 19 public sector banks) was taken for the analysis. Simple regression analysis was used to check the impact of asset management, operational efficiency and bank size on the financial performance of selected banks. It was found that the Private sector banks were positively influenced by asset utilization and operational efficiency and interest income while the public sector banks were strongly and positively influenced by asset management, return on assets, operational efficiency and interest income. It was also revealed that public sector banks performed extraordinarily well compared to the private sector banks during the study period of study i.e. from 2008 to 2012. The overall regression analysis showed that the financial performance of the banking industry was strongly and positively influenced by the operational efficiency, asset management and interest income size.

Tehrani et al. (2012) conducted a study to develop a model for the evaluation of companies’ performance by using financial information and Data Envelopment Analysis technique. Primary as well as secondary data were used for the study. A
questionnaire was used to determine input and output variables in the DEA model while for collecting the financial data, the financial statements were used in the study. Mean values of financial performance ratios measuring liquidity, activities, leverage, and economic added value were employed as input indices of Data Envelopment Analysis (DEA) Model while profitability ratios were employed as output indices of the model. BCC input oriented covering model was used to rank the companies under study. The findings revealed that out of 36 companies only 9 companies were efficient and were further ranked by Anderson Peterson Model, whereas, the remaining 27 companies were regarded as inefficient.

Joshi (2013) examined the profitability of the selected public sector FMCG companies in India by using secondary data taken from the financial statements of HUL, COLGATE and ITC from prowess database. To measure the profitability, Net Operating Profit Ratio (PBT to Sales), Net Profit Margin Ratio, Profit after Tax (PAT) to Net Worth Ratio, Cash Profit to Net Worth Ratio, were calculated. Simple statistical measures like mean and ANOVA Test were applied for hypothesis testing. Findings of the study revealed that there was a vast difference in net operating profit ratio, net profit ratio, PAT to net worth ratio and cash profit to net worth ratio of selected companies.

Katchova and Enlow (2013) in their study entitled “Financial performance of publicly-traded agribusinesses” aimed to compare the financial performance of food producing agribusinesses with all publicly traded companies with low, median, and high performance for a period of 50 years from 1961 to 2011. For the analysis, five different financial ratios were selected to measure the profitability, liquidity, firm activity, solvency and market performance for a total of 12 specific ratios and the various items of the balance sheet and income statement. Du Pont analysis was performed to compare the return on equity components of agribusinesses with all firms. The analysis showed that the higher return on equity of agribusinesses was mostly due to higher asset turnover ratios, indicating higher operating efficiency of agribusinesses. It was also found that agribusinesses outperform the median sample of all firms in terms of financial ratios related to profitability, liquidity, and market ratios, but had slightly lower than liquidity and debt ratios.

In another study, Hofmann and Lampe (2013) analysed the financial statement of logistics service providers (LSP). The objective of the study was to analyse the
balance sheet structure of LSPs in order to find out the differences between single provider and defined LSP groups (clusters) and to point out the dependency of asset, capital and liquidity structures on LSPs specific characteristics. Furthermore, the author also explained which financial indicators were positively influenced by profitability. A sample of total 150 quoted LSPs from all over the world, allocated to six different clusters depending on scope of service, were examined. Study of detailed balance sheet analysis using contingency theory, complemented by a correlation analysis, provides information about the financial structure, similarities and differences within and in-between the LSP clusters. The financial information data was collected from the Bloomberg and Factiva web database and the information publicized by the company’s annual balance sheets serve as an additional data source. It was concluded that there were many differences regarding the financial structures of LSPs. The asset and liquidity structure of LSPs showed significant differences, while the capital structure was found mostly homogeneous. It was also found that Profitability was achieved in various ways i.e. focusing on high net profit margin or asset turnover rates. Further, the authors observed that the financial analysis yields information for making strategic decisions including organic growth, outsourcing, mergers and acquisitions or cooperation between LSPs, are the practical implications of the study.

Makkar and Singh (2013) attempted a comparative analysis of the financial performance of 37 Indian commercial banks (22 public sector banks and 15 private sector banks). The capability of selected banks was analysed on the basis of CAMEL parameters (C for capital adequacy, A for Asset quality, E for Earnings and L for Liquidity) for a period of 5 years from 2006-07 to 2010-11. It was found that the IDBI Bank was the best performing bank followed by Kotak Mahindra Bank and ICICI Bank whereas Dhanalaxmi Bank showed the worst performance followed by J & K Bank and Karnataka Bank Ltd. It was observed that the result of t-test disclosed a significant difference in the Asset Quality, Earning Capacity and Capital Adequacy of public and private sector banks in India, whereas there was no significant difference in the Liquidity Position, Management and Sensitivity to market risk of the two different banks groups. Finally, it was concluded that, on an average, there was no statistically significant difference in the financial performance of the public and private sector banks in India. It was suggested that there was a need of overall
improvement in the public sector banks for making their position stronger in the competitive market.

Alfan and Zakaria (2013) attempted to review financial performance and distress of Malaysian Construction Companies. The study was based on secondary data collected from the annual reports of five large companies for a period of six years from 2004 to 2009. A sample of 5 companies out of 49 companies listed on Bursa Malaysia in the construction sector was selected for the study. Financial ratios namely Operating Profit Margin, Return on Equity, Return on Assets, Total Assets Turnover, Quick Ratio and Debt Ratio was used for analysing the financial performance of the companies. Altman Z score model was applied to predict the future performance of selected companies, corporate defaults and to calculate the control measure for the financial distress status of companies in Malaysia before, during and after the financial crisis. Findings of the study concluded that the financial performance of the selected 5 companies in Hong Kong declined very fast in the past few years. Form the financial analysis it was revealed that the construction industry in Malaysia has reached the state of grim struggle. It was concluded that the existing situation of overcompetition, increased construction costs and reduced collective demand in Malaysia had caused extreme difficulty of reversing the financial performance in the coming years.

Akotey, et al (2013) assessed the financial performance of life insurance industry of Ghana. The study explored the key determinants of the profitability of the life insurance industry of Ghana and analyzed the relationship between the three measures of insurers’ profitability, i.e. underwriting profit, investment income and the net profit of ten life insurance companies for a period of 11 years (2000-2010) through panel regression. The findings of the study revealed that the life insurers companies were incurring underwriting losses due to overtrading, high claims payments and high managerial expenses. It was also found that gross written premiums and total assets were having negative effect on investment income due to the management of their investment portfolios. Further, they recommended that life insurance companies should have separate departments with requisite personnel for investment operations and underwriting activities and the activities of these departments must be managed closely together in a complementary manner.
Patel (2013) conducted a study to examine the impact of global financial crises on the profitability of Indian Scheduled Commercial banks for a period of 4 years from 2006-07 to 2010-11. Ratio Analysis technique and Descriptive statistical method has been used for the data analysis. The study revealed that after global crises, cost of deposits, return on Investments and return on funds had increased during the study period whereas Cost of borrowings, cost of funds and return on advances had decreased during the study period. Profitability ratios of FBs had also decreased after global financial crises. It was suggested that Central bank and government should concentrate on banking development for the development of economy.

Nedunchezian (2013) investigated the Impact of Financial Performance of commercial Banks to find outperformance and effectiveness of banks during the post-merger period in the areas of Capital Adequacy Ratio, Management Efficiency Ratio, Earnings and Profitability Ratio, Leverage Ratio. The former Ged banks i.e. BOB With IOB, Sangli Bank with ICICI, Centurion Bank of Punjab with HDFC, United Western bank with IDBI were selected for the study during the period from 2006 to 2010. For analysis the ratios were used to compare the performance of local banks during the pre-merger period (2003-2006) and post-merger period (2008-2011) while paired sample t-test was used to determine the significance differences in financial performance of banks before and after the merger activity. It was found that the growth of Debt Equity ratio, Growth rate of Total Advances to Total Assets Ratio and Dividend pay-out ratio of all selected banks except Indian Overseas Bank showed lesser improvement after mergers. Finally, it was concluded that the Overall performance of the selected Banks after merger showed better progress in most of the areas.

Rehman (2013) investigated the relationship between the financial leverage and Financial Performance of listed sugar companies in Pakistan for a period of 5 years from 2006 to 2011. Descriptive statistics and Correlation analysis were used to analyse the data. The findings of the study showed a mix result and revealed that there was positive relationship of debt equity ratio with return on asset and sales growth and there was a negative relationship of debt equity ratio with earning per share, net profit margin and return on equity during the study period.
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**Taqi (2014)** comparatively analyzed financial performance of two major trading companies of India, State Trading Corporation and Minerals and Metals Trading Corporation, with the help of accounting ratios such as current ratio, liquid ratio, gross profit ratio, net profit ratio, inventory turnover ratio and earnings per share. Business practices of both the companies were also studied comparatively. Independent sample t-test and correlation matrix were used in the analysis of both companies. The study concluded that the financial performance of MMTC Ltd was comparatively better than STC.

**Borhan, Mohamed & Azmi (2014)** studied the impact of financial ratios on the financial performance of a chemical company, Lyondell Basel Industries, for a period of nine years from 2004 to 2011. The objective of the study was to analyze the financial performance of a merged company LYB and to examine the impact of liquidity, profitability and leverage ratios on the company’s financial performance with the help of Multiple regression analysis. Lyondell Basel financial performance (LYBP) was taken as the dependent variable and the current ratio (CR) (liquidity ratio), debt ratio (DR) (leverage ratio) and net profit margin (NPM) (profitability ratios) were the independent variables. It was concluded that all the independent variables (liquidity ratio, leverage ratio and profitability ratio) had a positive impact on LYBP, except DTER and OPM which showed a negative relationship with the company’s financial performance. Among the six ratios, CR, DR and NPM showed the highest significant impact on the company’s performance. Finally, it was suggested that to increase the profitability margin, the company should reduce its expenses portion, increase the total revenue and maintain total cash fixed costs.

**Rahaman & Sur (2014)** attempted to examine the Profitability of 22 selected companies of Indian textile industry from 2002-03 to 2011-12 with the help of ratio analysis. For the purpose of study, secondary data was collected from Capitaline Corporate Database. Simple statistical tools like arithmetic mean, Pearson’s simple correlation analysis, Kendall’s correlation analysis, Spearman’s rank correlation
analysis, multiple regression analysis and statistical tests such as t-test, Chi-square and F-test were used for analysis. Findings of the study showed that the composite profitability scores of SRF, Vardhman, Bombay rayon, Himatsingka and Welspun were the top five amongst the selected firms while Eskay, Alps, Spentex, Abhishek and Bombay Dyeing were placed in the last five positions, respectively. A significant positive correlation between overall profitability (ROCE) and efficiency (FATR) was observed in 54.55 percent cases whereas in only 1.52 percent cases the impact of fixed assets management on profitability was significantly negative. The findings of the pooled correlation analysis also showed that the association between profitability and fixed assets management was positive and significant. The result derived from the multiple regression of ROCE on FATR and WCTR showed that there was a significant positive influence of fixed assets management and working capital management of the selected companies on their profitability. The analysis of correlation between efficiency in working capital management and overall profitability revealed that the relationship was positive in 77.27 percent cases while the same was negative in 22.73 percent cases. However, a significant positive relationship was found only in 12.12 percent cases while no significant negative association was found.

*Shah and Jan (2014)* analyzed the financial performance of top ten Private commercials banks in Pakistan to find the impact of variables on financial performance of the selected banks with the help of Regression and correlation technique. The results revealed that the Bank size and Operational Efficiency were negatively related with ROA whereas positive relationship was found with Assets management ratio. Furthermore, Bank size had positive relationship with Interest Income and Asset Management. On the other hand, Operational Efficiency showed a negative relationship with Interest Income.

*Desai and Joshi (2015)* studied impact of financial restructuring on corporate performance of Steel Industry in India. Secondary sources of data were considered for the study. Financial statements of steel sector firms, both large and medium scale firms, were analysed by taking sales, gross profits, net profits, gross assets, taxes paid and current ratio as parameters, before and after the restructuring. Paired t-test was used to compare the performance of these firms before and after the restructuring.
Results of the study indicated that financial restructuring had a significant impact on the financial performance of large and medium sized firms in the long run.

2.4 RESEARCH GAP
Researcher reviewed a number of studies on Cement Industry and financial performance which showed that very little work had been conducted in evaluating the financial performance of Cement based Trading Companies, especially in India. Most of the studies had been done in other sectors of economy especially regarding their financial performance. But No particular study had been made on Cement Corporation of India Limited. A number of studies have been made on human resource, marketing and production management of public enterprises. A number of studies have been made about the causes of poor performance of majority of public enterprises but no study has been made on the financial performance of a public sector cement company. Hence, in the present study, the Researcher has made an attempt to evaluate the financial performance of one of the major Cement Company in India. The study is related to the appraisal of financial performance of Cement Company which has not been explored till now. Through this study, the Researcher has attempted to fill the gap of research in this specific area.

The extensive literature has been reviewed on financial performance of Cement Industry and financial appraisal of firms in other industries separately in the present chapter. The next chapter will provide the overview of Indian cement Industry.
REFERENCES


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Chapter 2

Review of Literature


