CHAPTER II

REVIEW OF LITERATURE

2.1 INTRODUCTION

The review of literature guides the researcher for getting better understanding of methodology used, limitations of various available estimation procedures and database, and lucid interpretation and reconciliation of the conflicting results. Besides this, the review of empirical studies explores the avenue for future and present research efforts related to the subject matter. In case of conflicting and unexpected results, the research can take the advantages of knowledge of their researchers simply through the medium of their published works. A number of research studies have been carried out on different aspects of financial appraisal by the researchers, economists and academicians in India and abroad. Different authors have analysed working capital and financial performance in different perspectives. A review of these analyses is important in order to develop an approach that can be employed in the context of the study of textiles industry.

2.2 FOREIGN STUDIES AND INDIAN STUDIES

NCEAR (1966)\(^1\) The first and foremost formal study conducted and compiled on working capital management in India was by National Council of Applied Economic Research (NCEAR) in 1966. The council published a report on “Structure of Working Capital” which confined to the analysis of the composition of working capital with special reference to fertilizers, Cement and Sugar industries. The prime objective of the study was to examine as to what extent these three industries controlled and utilized the components of working capital. The study revealed that working capital management practices were highly unplanned and hence the establishment of suitable accounting policies, costing system and inventory controlling techniques in the above-mentioned industries. This study highlights the significance of suitable and appropriate working capital management policies in the success of the business.

Misra (1975)\(^2\) has studied the problem of working capital in a selected six public enterprises for a period of 1960-61 to 1967 – 68. The importance and findings of the study are:

1) Selected enterprises are not able to utilize working capital efficiently.
2) In all enterprises excess inventory is noticed which is due to lack of inventory
control, defective inventory management and also due to a congenial organization. Inordinate delays in the releases of foreign exchange and issue of import licenses are also some reasons for overstock of inventory. It is found that receivable turnover ratio is very low due to generous credit granting and inadequate collection policy. In all the selected enterprises, the size of cash is found to be very much high on account of improper planning and control of cash.

**Vijaya (1977)** study conducted on working capital management in six co-operative and seven private sector companies in the sugar industry of Tamilnadu found that the growth in current assets had registered more than that of sale indicating poor working capital management. The application of correlation analysis revealed that there was negative correlation between return on investment and working capital. The study revealed that majority of the investment was in inventory (63.16%) followed by receivables (22.53%). On overall basis the working capital management in private sector was found to be better than that of public sector.

**Gangadhar (1981)** study examined the statistical trends in working capital position among medium, large and small public private limited companies in the Indian corporate sector during 1961 – 76. The application of second parabola revealed that the current assets formed relatively higher proportion of total net assets in private limited companies than that of public limited companies. This study also revealed that in case of medium and large scale publics limited companies there appeared to be a lead – lag relationship between gross fixed assets and current assets over the study period.

**Ghosh (1983)** study proves in to the existing practice of working capital in crane manufacturing industry in India. The study findings indicate that the management of individual components of working capital was erratic. The collection mechanism followed by the sample companies was very unplanned and the companies took more time that allowed in collecting the cash from the customers. The study also revealed that payable to the suppliers were equally delayed keeping highest portion of payable pending for more than allowed period. The study recommended the immediate need for streamlining the working capital management practices.
Akkihal (1984)\textsuperscript{6} study of 94 small scale industries in Hubli Dharwad Municipal Corporation (HDMC) in the state of Karnataka revealed that the management of working capital in sample industries was found to be highly unplanned. The study concentrated on the ratios like current ratio, inventory turnover ratio, fixed assets turnover ratio, total assets turnover ratio, earnings power and gross profit margin. The application of ratio analysis has revealed that the mismanagement of working capital had adverse effect on the performance of the industries.

Khandelwal (1985)\textsuperscript{7} carried on half – complete empirical research initiated by late N.M Agarwal, among forty small scale industries in Jodhpur industrial estate. The study attempted to investigate into working capital management process and practices among the selected units between the years 1975 – 1980. The study revealed that the sample firms held more investments in inventories than required and management of receivables constituted as much as 50% of total current assets. Highlighting the sickness in Jodhpur Industrial estate the study attributed the main reason to inefficient management of working capital. Based on findings the study suggested that the entrepreneurs need to be educated about the basic concepts and efficient way of working capital management.

Rajeshwar (1985)\textsuperscript{8} in his study among a few selected public enterprises in India, tried to examine the working capital policies adopted by the sample units. He attempted to assess the degree of effective management of working capital components with a special emphasis on inventories. The study revealed that no samples company clearly defined working capital policies and hence majority of them could not achieve efficiency in working capital management. The study also revealed that the investment in inventories in sample units soared up from 63% in 1971 -72 to 66% in 1976-77. It was further found out that majority of such investment was made in finished goods inventory which indicated that the units did not manage the working goods inventory which indicated that the units did not manage the working capital in a planned way. The study recommended to recognize prudent management of working capital as a vital part of financial management.
Mukerjee (1986)\textsuperscript{9} in his study on “management of working capital in public Enterprises” in respect of central government industrial undertakings, and covering a period from 1974 – 75 to 1978-79 has found that, the current assets increased due to the accumulation of inventories and current liabilities increased due to increase in financing through payables, the Overall Size of the workings capital had been significantly influenced by the overall size of sales and output, the working capital requirement of the units were not ascertained based on the considerations as suggested for prudent financial management, there was a significant negative correlations between overall profitability and size of working capital, there was an over investment in structural determinants and huge size of working capital and due to faulty financial policies adopted by the units, the liquidity and profitability has a very significant negative correlations.

Panda (1986)\textsuperscript{10} study of small scale units in the state of Orissa, examines the issues like optimum investment of funds in current assets, relationship between sales growth and working capital needs, the role of banks in meeting working capital requirements. The study revealed that management of working capital was neglected by majority of sample units, which lead to incurrence of loss. It was found that long – term funds were highly limited to the firms and hence majority of small scale industries depended on short – term credit in meeting working capital requirements.

Jain (1988)\textsuperscript{11} in his study among ten manufacturing trading and services industries in the state of Rajasthan, brought out various working capital management practices followed by the selected companies. The study found out that the companies had both over investment and under investment problems. The study strongly recommended for the release of excess funds in working capital and to invest the same in short – term or long term assets. On he other hand, the study recommended that the companies should avoid under investment in working capital if they wanted higher profit margins

Sinha & et.al (1988)\textsuperscript{12} study on analysis of working capital management in fertilizers Corporation of India and Gujarath state Fertilizers Corporation. The analysis revealed that a portion of funds was tied up as working capital especially in inventories and receivables. The study revealed that the sample companies failed to
manage working capital efficiently by the usage of latest techniques and hence the funds were locked up at various levels during the course of business operations. The study recommended for urgent need for streamlining working capital management practices failing which the firms would get affected

Oppendahl and Richard (1990)\(^\text{13}\) essay expressed capital budgeting projects consumes much of the time of a firm’s management group to the detriment of the quality of the working capital decision. It emphasized determinant of the quality of the working capital decision. It emphasized that the business executives must become more cognizant of the working capital decision that their firms face every day. The stress in this essay has been laid on two most important components of working capital called accounts receivables and marketable securities. The essay revealed that the managers have to be very cautious in accounts receivables and marketable securities decision.

Mohan (1991)\(^\text{14}\) study examines various issues related to working capital management among selected (six companies) private large – scale companies in the state of Andhra Pradesh during the period from 1977 – 1986. The study revealed that investments in current assets in sample companies was more than that of fixed assets and inventories constituted highest percentage of total current assets in the sample companies. Analysis revealed that the liquidity and solvency position of sample units was found to be highly unsatisfactory because the companies carried with lesser balance sheet working capital than cash working capital. He based on his findings, suggested the dire need for improvement of liquidity and solvency position of sample companies failing which the situation would lead to serious liquidity crunch.

Rao and Rao (1991)\(^\text{15}\) in their study among a few public enterprises belonging to manufacture sector in the state of Karnataka, have attempted to probe in to the capacity of the various techniques I evaluating working capital efficiency of business enterprises. The study revealed that the investment working capital was considerably high when compared to the total investment. The Tandon Committee norms were found to be yielding better results among the surveyed companies. However, the study also revealed that the working capital planning and control was found to be disorderly and ineffective and hence, the urgent need for full focus on working capital management.
Jain (1993)\textsuperscript{16} studied seven paper companies in Indian to analyze the basic components of working capital. The study revealed that the current ratio in public sector undertakings during the study period was found to be highly erratic while the same in private sector undertakings registered continuous decrease. As far as the inventory was concerned the study revealed that it was highly unplanned in public sector undertakings units when compared to private sector units. The study contributed much in terms of realizing the importance of effective management of working capital.

A survey conducted by the insolvency Practitioners Society CIMA (1994)\textsuperscript{17} in the UK indicated 20\% of firm failures were due to bad debts or poor receivables management. Previous research findings related to working capital management practices, especially working capital management, could be significantly improved in the SME sector, then few firms would fail, and therefore working capital management practices are extremely important for SMEs. Nevertheless, in the emerging countries such as china and Vietnam, almost no previous research has been concerned with working capital management practices. Therefore, the main purpose of this paper is to report findings of a survey of working capital management practices of SMEs conducted in September 2000 in Vietnam. These findings provide deeper insight into working management practices and provide suggestion for future research in the emerging countries like Vietnam.

Concentrating exclusively on borrowing as a source of financing working capital requirement in the corporate sector in India. Manjumdar (1994)\textsuperscript{18} has carried out an empirical analysis among 20 corporate companies in India (10 from private sector and 10 from public sector) for the period from 1981 to 1990. The study revealed that the share of public deposits to total borrowings on an average was only 6\% in public limited companies and this was only 0.08\% in private sector companies. The results indicated that the public deposits were not a significant source of working capital finance among the selected sample companies during the study period. The study revealed that current ratio in private corporate limited companies was 1.38, which indicated aggressive policy. In government companies the current ratio was 4.32 indicating conservative policy.
adopted by them which in turn resulted in higher debt equity ratio. On overall basis, this comparative study indicated that working capital management in public sector companies was better than that of private sector companies.

Siddharth and Das (1994)\(^1\) in his study on “Working capital Turnover in Pharmaceutical Companies” attempted to ascertain efficient or otherwise use of working capital in selected pharmaceutical firms in India. Having studied the data of 10 years has concluded that the overall working capital turnover ratio was 9.03 times. The overall analysis of the data indicated that the selected companies did very well in terms of employment of working capital. The study also revealed the working capital turnover ratio declined gradually over the period from 1981 – 1990.

Noel Capon et al. (1994)\(^2\) recently published a Meta –analysis of the impact of strategic planning on financial performance omitted a major study of corporate planning in fortune five hundred manufacturing firms. This article briefly reviewed that study in the light of the result of the Meta– analysis. Additional analysis examined performance and firms’ survival over a longer time period than in the original book. The over all conclusions were that a small but positive relationship between strategic planning and performance existed and persisted.

Parvathy (2004)\(^3\) examined that gross earnings rate shown an increase in trend, however the net profit ratio has shown a decreasing trend due to a step rise in operating cost. The researcher has highlighted the importance of cost production. It was found that the return of network and the return to total assets were on the decreasing trend. The researcher has analyzed the return on investment to be stable and that the company has profitably invested its funds. The payout ratio was very conservative and it has shown the development state of the company. Finally, the researcher has analyzed that the long term solvency of the company and formed the debt equity ratio; interest coverage ratio and the proprietary ratio were not satisfactory.

Vijayakumar and Venkatachalam (1995)\(^4\) have made an empirical analysis in working capital and profitability. Taking 13 firms from sugar industry, covering a period from 1982- 83 to 1991 – 92 correlation and regression analysis have been applied to measure the impact of working capital ratios on profitability. Liquidity ratio; inventory
turnover ratio; receivable turnover ratio and cash turnover ratio have been considered to measure their impact on profitability (PBT / TA). The study has revealed that liquid ratio and cash turnover ratio have negatively influenced profitability, inventory turnover ratio and receivables turnover ratio have positively influenced the profitability.

Anjan Kumar Ghatak and Rathindra Nath Mukharjee (1996) analysed the inventory financing in Associated Cement Companies Ltd (ACC) for the period 1986-87 to 1990-91 and found the increased proportion of long term finance, which resulted in reduced profitability as the long term sources of financing attracted high cost and concluded that the inventory financing policy was less than optimum as it neither minimized the short term financial risk nor earned profits and suggested a reoriented approach in financing inventory.

Carolyn M. brown, (1996) Budding entrepreneur often launch their enterprises with too little working capital, fail to plan ahead to ensure that money is available when they need it or use it up too quickly on nonessential purchases. The best way to avoid this financial bind is to do a proper need analysis before you even start a business. First, make a list of your hard assets. Estimates your equipments requirements (Furniture, Machinery, Fixtures, etc.,) How soon do you need each item and how do you plan to pay for it? You’ll also need to dao an, express list that includes inventory and base supplies (i.e., stationery). Add up from start –up to expected break – even point – what you expect to spend on base salaries and benefits for you and your employees rent or lease payments, interest on any business loans and advertising expenses. Net, create a cash-flow analysis statement. This spreadsheet is a breakdown of the actual cash income matched against paid – out cash expenses, which will reveal any shortfall in working capital. Keep these three financial lists separate but add them up (include a fudge factor of 10%). This total will give you an idea of what it will take to get started. Now, how do you get the dollars you need for working capital? Over the long haul, internal sources such as retaining earnings and savings achieved through operating efficiencies will provide working capital. But in the short term you will have to look to outside sources.

Rafuse (1996) proposed that enhancing working capital by halting payments to creditors was an effective strategy. The article revealed that the apartment intention of
many UK companies was to defer payments as long as possible well beyond the agreed arrangements. Very astonishingly a report issued in 1994 by the Forum for Private Business (FPB), a UK small-business trade association, stated that on an average the debtors accounts were paid more than 50 days beyond the agreed due date. The article also stressed the need for lean value systems. Close supplier – customer relationship was found to be the core characteristic feature of such value system. The survey warranted the firms to reduce the inventory levels immediately in order to maximize the profit of the firms. The survey also revealed that the responsibility of such control rests with the finance managers.

Rao (1997) conducted a study among six paper mills in the state of Andhra Pradesh to ascertain the working Capital Condition. The study revealed that the sample companies overtraded with insufficient working capital and the system of cash forecasting and planning and control was haphazard. The sample units were compelled to under-stock raw material for want of adequate working capital. It was also found that even though liberal credit policy of the sample companies boosted up the sales, the companies failed to ensure effective collection mechanism. The current ratio and liquidity ratio of sample companies were found to be very low indicating liquidity crunch.

Smith (1997) on the industrial firms on the Johannesburg Stock Exchange (JSE) focused on measuring the association between traditional and alternative method of working capital measures and the return on investment (ROI). The Study revealed some empirical findings on associations between traditional and alternative working capital measures of liquidity and ROI. The application of chi-square test and step – wise forward regression for association indicated that the traditional working capital leverage measure of total current liabilities divided by gross funds flow lead towards an improvement in ROI and vice versa.

Sur (1997) study on management of working capital in Colgate Palmolive (India) Ltd. Attempted to assess the efficiency of working capital management in terms of working capital ratio, acid test ratio, ratio of current assets to total assets, ratio of assets to sales, ratio of inventory to sales, ratio of debtors to sales and composition of working capital. The study revealed that the working capital management was inefficient during the study period. Sur recommended for special attention to the management of inventories which constituted the highest part of current assets.
Swamy (1997)\textsuperscript{29} study of 19 primary agricultural societies in the area of Dakshina Kannada district in Karnataka has revealed that the balancing of liquidity and profitability was the major problems of working capital management in the sample units. Having been safe in terms of liquidity the sample companies were found to be suffering from low profitability due to heavy interest burden. The units were found to be financing their working capital requirement through borrowing in the form of deposits. The study stressed the importance and utmost priority to be given to the effective working capital management in the societies, so that they did well in future.

Hyon – Han Shin an LUC Soemen (1998)\textsuperscript{30} in their study on efficiency on working capital management and corporate profitability of 58.985 firm years covering the period of 1975–1994, on a camp stat sample, have identified that there is a strong negative relationship between the length of the firms; Net Trade Cycle (NTC) and its profitability. In addition, shorter Net trade Cycles are associated with higher risk – adjusted stock returns. They also have found that the NTC is measuring liquidity differently form the more conventional current ratio, which is positively related to profitability.

Khan (1999)\textsuperscript{31} conducted a study on working capital management at Escorts limited with a thrust on analyzing financing of working capital, management of cash, management of accounts receivables and management of inventory. The study revealed that the company did not use real professionals assistance and expertise, which in turn impaired the overall performance of the company. Financial decision taken were found to be short –term perspective ignoring the effect in the long run. The cash planning was found to be very ineffective and hence the company found it to be very difficult to procure the cash from operations even though there was enough cash generated from operations. It was also found out that apart from following hedging approach the company depended on ordinary share capital, preference share – capital and debentures as the long –term sources of working capital. The management of inventory in the company was found to be very effective and hence no stock was found to be lying idle.

A very comprehensive survey conducted by Nabil, Smith and MacKay (1999)\textsuperscript{32} among 57 Smaller firms in Canada (in 1994), 105 largest firms in U.S (in 1998) and 39
largest firms in Australia (in 1998) revealed very interesting relationship among various working capital practices. The author attempted to make international comparison of working capital practices among three nations. The major aspects of the study were working capital policy, cash and equivalents, account receivables, inventory, accounts and notes payable and managing working capital itself. The study revealed that 7% of the Canadian firms have a formal working capital policies, which is found to be very negligible. This is attributed to the fact that the surveyed firms are smaller ones. It was found that 28.5% of Canada firms had a Caution working capital policy. The study revealed that as far as the criterion for evaluating changes in credit – terms was concerned the Canadian firms were found to learn more on the effect on sales whereas the Australian and U.S companies were found to have focused more on the impact on the effect on firms profit. Very interestingly, the study revealed that the Canadian firms used ad – hoc decision in replenishing the inventory while the Australian and U.S companies used computerized control system.

Sivarama (1999) study on working Capital Management in Indian paper industry laying emphasis on individual current assets like cash, receivables and inventory. The study revealed that the working capital formed 47.2% of the total net assets during 1984 – 93. The rate of return on current assets was negative or insignificant in all selected mills indicating inefficient management of working capital. The results of correlation analysis indicated a close relationship between profitability and working capital efficiency emphasizing the need to exercise better control over working capital. The study also attempted to assess the perception of chief executives favoured budgetary method as the tool to plan working capital. Even though majority of the executives felt that the funds meant for working capital should not be diverted to any other applications. It was found in majority of the cases that funds were diverted to other uses. The survey revealed that collection of receivables and inadequate working capital were serious problems in running the business.

Sharma and Chary (1999) study VST industries revealed that working capital Management in the sample units was inefficient. A disproportionate investment in current asset in relation to sale resulted in declining working capital turnover ratio. The company did not follow any consistent policy with respect to investment and financing of working
capital. Though there existed many opportunities to make use of trading on equity and hedging for appropriate management of working capital, the company never made use of the same. Having analyzed working capital in terms of current ratio, quick ratio, working capital turnover ratio, inventory turnover ratio, debtor’s turnover ratio and average collection period, the study revealed that the company failed to manage inventory efficiently which in turn has resulted in lower profitability.

Cecilla and Nino (2000)\textsuperscript{35} study among 88 UK based companies addressed the gap between academic research and practitioners views with respects to working capital management practices. The study revealed that though factoring services was the prime method in UK, the same was not used prominently in the sample companies. The study also revealed that 50 percent of the respondents were using letter credit major source of working capital financing.

Dutta (2000)\textsuperscript{36} study on “Working Capital Management of Horticulture Industry in Himachal Pradesh” – a case study of Himachal Pradesh Horticulture Produce Marketing and Processing Corporation (HPMC) for the period from 1990 – 1991 to 1997 – 1998. It also attempted to anlayse and evaluate working capital management by throwing light on financing pattern of working capital. The study revealed that the working capital position worsened drastically during the study period. It was also found out that despite suffering huge losses, the firm was holding huge idle inventories and hence miserably failed to trade off between liquidity and profitability. The regression results of the study have revealed that there was no significant correlation between gross working capital and sales.

Harinath (2000)\textsuperscript{37} in his working capital management in small scale industries – a study of Cuddapah district, Andhra Pradesh in 2000 S.Harinath Reddy attempted to examine the working capital structure in 30 small scale industries. The study revealed that 50% of the sample industries did have very close watch on working capital and one third of sample units controlled working capital by preparing production and sales budget. Excess investment was noticed in debtors and it was due to ineffective collection mechanism. In all sample industries the cash working capital need was in excess of the average balance sheet working capital. The existence of wide gap between cash working
capital and balance sheet working capital led to insufficient working finance. The overall profitability of all sample units was found to be satisfactory during the observed period. He suggested the industries to enhance the profitability by adopting effective working capital management practice envisaged in the study.

Joginder Singh Dutta (2001)\(^{38}\), Working Capital is regarded as the lifeblood of a business. It plays a pivotal role in keeping the wheels of a business enterprises running. However, the management of working capital is a delicate area in the field of financial, involving frequent decision making concerned with all those acts that influence the size and effectiveness of working a capital. A business firm size must maintain a satisfactory level of working capital. The inadequacy or mismanagement of working capital is one of the leading causes of business failure. Inadequacy of working capital is one of the symptoms of sickness of a business and if timely and corrective action is not taken, that may become a major threat to financial liability and hence, to its survival. On the other hand, more working capital might mean dumped stocks, inefficient storekeeping, excessive receivables, surplus cash and less coordination and control over overall performance. Further, the profitability and liquidity of a firm are directly influenced by the way its working capital is managed. Therefore, the by the way its working capital management is to arrange sufficient funds from the best sources, at the right time and maintain it consistently can be achieved.

While Speaking on the importance of integrating information technology and working capital management. Harczak (2001)\(^{39}\) said that it benefits a lot, if organization integrate information technology with decision making and working capital management.

The Optimisation of working capital management even in difficult times is highly important. In an article published in treasury and risk management in 2001 the need for optimum utilization of working capital during turbulent times has been emphasized. The article revealed that establishment of proper relationship between safety and liquidity in assets management would yield high return. This is possible only through optimum utilization of working capital.

Mukhopadhyay (2001)\(^{40}\) study attempts to an exposure on working capital management and working capital forecast with particular reference to working capital
cycle. The study reveals that the conclusions drawn from the ratios can be no better than the yardstick or standard against which they are compared. Moreover, inflationary influence on ratio analysis should be taken into account while it is adopted for ascertaining symptoms of the diseases or soundness of financial health of a business, a balance sheet may not be able to reflect the average financial position was it is prepared on a particular even date. Generally it does not take into view short-term fluctuations in current assets that may occur within two balance sheet dates.

Sivarama Prasad.R (March 2001) the study reveals a sub-optimum utilization of working capital. Another indicator of efficiency, the rate of return on current assets was negative or insignificant in many years of the study period. The debt servicing capacity was also found to be sick and the firms were not able to service their debts properly, resulting in cash shortage working capital. The result of correlation analysis indicated a close relationship between profitability and working efficiency emphasizing the need to exercise better control on working capital.

Shanmugam and Poornima (2001) study of 28 medium and large scale spinning mills in Coimbatore industrial area (Tamilnadu) revealed that effective working Capital Management is still most crucial in organization’s successes. The study reveals that most of the industries (10 mills) depended on production plans in Working Capital Planning leaving all norms aside. The budgetary control was found to be the widely applied criterion of working capital control. When the researcher interviewed the CEO of the sample companies, it has come out that every CEO spent majority of the time on working capital management, which in turn highlights the importance of working capital management.

Colina and Juna (2002) study on working capital optimization at Georgia pacific corporation, a paper industry, Colina and Juan discussed the advantages of optimizing working capital for pulp and paper industry. The study revealed that when there exist credit crunch, relying on outside sources of working capital requirements would results in further hazards. Speaking on the occasion, Jim Terrell, the Vice President of the corporation has stressed the need and importance of tuning the working capital in any business.
Discussion among bankers, vendors and owners managers on European cash management in 2002 -2003 revealed that the banks have a key role to play in improving the effectiveness working capital management. It also came out that the change in focus of the business to working capital management was key ingredients factor in enhancing the effective working capital management. Speaking on this occasion, the members have stressed the need for value chain analysis in order to benefit in terms of infrastructure with efficiencies and massive opportunities of integrated working capital management. The members in the panel included Jack Large, Ed Krawitt from Memec, John Gorrie from Hitachi, Richard Martin from ABN Amro, Michael cannon From JP Morgan, Peter Hazou From HSBC, Michael Mueller from Deutsche Bank and cludia colic from Citi group.

**Lord Richard and McIntyre James (2003)** explored the relationship between capital structure and import competition for the textile and apparel industries from 1974–1987. The level of import penetration should have an important effect on business risk and hence on financial leverage. It also examined the response of leverage to the interrelationships that may exist between import competition and three other factors: firm profitability, strength of the dollar, and investment in capital equipment. The evidence suggested that leverage for the textile firms increases with rising imports but that the effect is less marked if the imports are the result of a strengthening dollar. The textile firms also seem to have inaugurated a capital investment campaign in reaction to the import competition. For apparel firms, the interrelationship between profitability and import penetration seems to have been the primary determinant of leverage.

**Chandder and Kumar (2004)** study on small scale textile industry in Punjab found that the selected units by and large had used percentage method, need based method and sales percentage method of working capital determination. However, among all the three methods, need based method was the most popular method in determining the working capital requirements. The study also revealed that bank finance was the most widely used method next to own funds. The study also brought out that while financing working capital requirements the banks heavily depended on periodical financial performance statements.
Parasuraman (2004)\textsuperscript{46} study attempts to understand the relationship between credit period given by companies and their actual performance in terms of sales and profitability. He has also attempted to find average level of other key financial parameters connected to working capital management. Having laid the emphasis on Indian Pharmaceutical companies, he found out that leading companies have employed greater working capital for enhancing profitability. The study also revealed the days sales outstanding had gone up in the sample companies. Though the rise was marginal, it played an important role in the management of working capital. The study inferred that the top pharmacy companies strategies on their working capital policy to relax the credit policy to achieve greater sales and greater profits.

D.Raghunatha Reddy and P.Kameshwari (2004)\textsuperscript{47} study on Working Capital Management practice in Pharma industry – A case study on Cipla Ltd., in this it was found that a company invests its fund both for long term purpose and for short term operations. The concepts of gross and net working capital are different in this article. The fixed and variable entities of the working capital are highlighted. A careful decision by the management on the relative proportions of equity capital and borrowed capital to finance the current assets has been emphasized. An efficient working capital management is necessary for achieving both liquidity and profitability of the firm. A poor and inefficient management leading to a tie up of funds in idle assets reduces the liquidity and profitability of a company. The different analytical tools employed to monitor, review, and control the working capital, i.e., the length the operating cycle, the working capital ratios, and the liquidity position are discussed. The current ratio, quick ratio, net working capital position, and the working capital turnover ratio of the company have been found to be within or slightly fluctuating around the Indian Pharmaceutical industry standards, indicating an overall efficiency in the management of the company’s working capital.

Singh (2004)\textsuperscript{48} study on Working capital in Lupin Laboratories Ltd. attempted to assess the significance of management of working capital through working capital ratio and operating cycle. Having analyzed seven years data (1995 – 2002), he concluded that the liquidity position of the company was good, mean percentage of current assets was very high when compared to the percentage of net fixed assets and the operating cycle showed declining trend. The element wise analysis of working capital also revealed that
Trade debtors constituted the highest percentage of current assets followed by loan and advances, inventories and cash and bank balances. The study brought out the need for efficient management of debtors, the percentage of which was the highest.

Srinivatsava Sanjay (2004) Working Capital is the fuel that powers global business operations, but too often an unnecessarily high percentage of this fuel is continuously stuck in the pump: Locked up in aging invoices and lengthy DSO (Days sales Outstanding) cycles. Companies looking to improve cash flow have typically focused on collections. But traditionally, Collection has always been a reactive process—picking up on aging invoices after they are already late in payment, and then resolving the underlying issues in an effort to collect. Because it’s difficult to go up-stream and systematically uncover and resolve the root causes of issues that actually drive the delayed payments, most of the collections effort ends up squarely focusing on dealing with symptoms, instead of addressing the real issues. Approaching this problem after the fact, as always, exacts its cost in penalty—in time, effort, customer satisfaction and even employee morale. Meanwhile, corporate performance and shareholder value added suffer.

Nancy Nelson Hodges and Elena Karpova (2006) examine the impact of changes in the US textile and apparel industries on employment patterns at the state level compared with the nation as a whole during the period of 1997-2003. Secondary data sources were analyzed to develop an overall picture of changes happening in the North Carolina industries compared with the USA overall. A focus on North Carolina, a primary location of the industries within the USA, permitted a micro-level examination of changes in employment trends for one state in comparison with those of the industries nation-wide. Three industries formed the bulk of the data examined: Textile Mills (NAICS-313), Textile Product Mills (NAICS-314), and Apparel Manufacturing (NAICS-315). An overall decrease in employment and number of units for all three industries were found. The number of establishments in the North Carolina textile complex decreased by 25 percent and employment by almost 50 percent. The state losses resembled those of the nation as a whole. For the majority of the industrial groups, the trend in value of shipments mirrored the downward direction of employment from 1997 to 2001.
Arindam Ghosh (2007)\(^{51}\) “Working Capital Management Practice in some selected industries in India – A case study of impact of working capital ratios on profitability in Cement Industry”. The study which attempted to examine the efficiency of working capital management of the Indian cement companies during 92-93 to 2001–02. The study is based on 20 large cement companies operating in India. These companies constitute a large part of the cement industry in terms within the country.

Burange and Shruti Yamini (2008)\(^{52}\) deal with the Performance of Indian Cement Industry - The Competitive Landscape. The Cement Industry is experiencing a boom on account of the overall growth of the Indian Economy primarily because of increased industrial activity, and expanding investment in the cement sector. The industry experienced a complete shift in the technology of production. The competitiveness among the firms in Indian Cement Industry has also been evaluated for the year 2006-2007, out of seventeen firms (90.21 per cent of the total market share); about 47 per cent have recorded, above industry average performance in the overall competitiveness index.

Ghosh Santanu Kumar and Mondal Amitava (2009)\(^{53}\) analyzed the relationship between intellectual capital and financial performances of 70 Indian banks for a period of ten years from 1999 to 2008. Value Added Intellectual Coefficient method was applied for measuring the value based performance of the companies. Financial performance measures used in this analysis were return on assets, return on equity (profitability) and assets turnover ratio (productivity) of Indian Banks. The intellectual capital (human capital and structural capital) and physical capital of selected banks have been analyzed and their impact on corporate performance has been measured using multiple regression technique. The analysis indicated that the relationships between the performance of a bank's Intellectual Capital, and financial performance indicators namely, profitability, productivity were varied. The study results suggested that the intellectual capital of the banks was vital for their competitive advantage.

Kushwah, Mathur & Ball (2009)\(^{54}\) The study thereof was an modest attempt in this direction by undertaking a study of working capital management. The paper has tried to examine the source used by the companies to finance their working requirements and to analyse and evaluate the working capital management. The paper has also examined
the liquidity position of the companies. In order to examine and analyse, secondary data of five companies was collected in cement sector i.e. ACC, Grasim, Ambuja, Prism and Ultra-Tech. Financial Statement of these companies were collected for the period of two years from 1st April, 2007 to 31st March 2009 and Ratio analysis was conducted. Liquidity and activity ratios were calculated and analysed to check the working capital condition of these cement companies. The study shows that out of five cement companies, overall ACC has got the best working capital management.

**Sumathi (2009)** stated that the Indian Textile industry occupied an important place in the economy of the country because of its contribution to the industrial output, employment generation and foreign exchange earnings. One of the earliest to come into existence in India, it accounts for 14 per cent of the total industrial production, contributes to nearly 30 per cent of the total exports and is the second largest employment generator after agriculture. Profit earning is the aim of this business. In the course of analysis of this study various Statistical techniques have been made. The Statistical techniques used were correlation, t-test, and Multiple Regression analysis to find out the relationship between the variable and to identify the factor influencing the profitability. Based on the analysis, it was found that net sales and net profit had some relationship and that working capital management was a highly influencing factor to find out profitability of selected textile companies in Coimbatore district. It reiterated that Companies must concentrate with other influencing factor for better profit of the company.

**Algorithms for business education and research in the 21st century (2010)**. This article highlights the Importance of Information Technology in the telecommunications industry after the AT&T breakup and the NTT divestiture Decision Support Systems New concepts, methodologies and algorithms for business education and research in the 21st century. This study investigates the financial performance of the world telecommunications industry by DEA–DA (Data Envelopment Analysis–Discriminant Analysis). The proposed use of DEA–DA has a linkage with Altman's Z score that has long served as a methodological and conceptual basis in finance. Based upon the Z score of telecommunications companies, it ranks them for financial assessment. After evaluating the financial performance of the firms, this study pays attention to the financial performance of AT&T (American Telephone & Telegraph) and NTT (Nippon Telegraph and Telephone) after their divestiture. This study
finds that AT&T outperformed NTT because AT&T changed itself to an IT (Information Technology) company that provides wireless communications services and other IT services, but NTT separated IT and wireless services into the other companies after the breakup.

Amalendu Bhunia (2010)\textsuperscript{57} has undertaken an analysis of financial performance of pharmaceutical companies to understand how management of finance plays a crucial role in the growth. The present study covers two public sector drug & pharmaceutical enterprises listed on BSE. The study has been undertaken for the period of twelve years from 1997-98 to 2008-09. In order to analyze financial performance in terms of liquidity, solvency, profitability and financial efficiency, various accounting ratios have been used. Statistical measures namely Linear Multiple Regression Analysis and Test of Hypothesis – t test has been used.

Gaur Jighyasu (2010)\textsuperscript{58} focuses on the financial performance measures of business group companies of Indian non-metallic mineral products industries. The study uses financial data of 57 business group companies of Indian non-metallic mineral products industries namely cement, glass, gems & jewellery, refractories, ceramic tiles, abrasives and granite) over a period of 10 years (1999-2008) and examines the firm's financial performance using performance measures through Operating Profit (OP) and Return On Net Worth (RONW). The Size (SIZE), Leverage (LEV), Working Capital Ratio (WCR) and Age (AGE) of the firm are included as determinants of firm performance. Non-metallic mineral product category consists of important industries of the manufacturing sector (which contributes almost 15 per cent to the GDP) and 3-4 per cent to the GDP.

Jasmine Kaur (2010)\textsuperscript{59} This is a two-dimensional study which examines the policy and practices of cash management, evaluate the principles, procedures and techniques of Investment Management, Receivable and Payable Management deals with analyzing the trend of working capital management and also to suggest an audit program to facilitate proper working capital management in Indian Tyre Industry. The study covers a production of 8 year viz, 1999-2007. For the purpose of investigation both primary and secondary data is used. The collected data is analyzed by applying research tool which include accounting tools like Analysis, Cash Flow Analysis, Common Size and Trend Analysis. They reveal that there is a standoff between liquidity and profitability and the
selected corporate has been achieving a tradeoff between risk and return. Efficient management of working Capital and its components have a direct effect on the profitability levels of tyre industry.

The present study reflects that the proper management does affect positively on the profitability levels of the sample companies. The companies over the years have realized the importance of efficient working capital management and have worked in bringing about a productive change in WCM techniques. The results reveal that there is a standoff between liquidity and profitability and the selected corporate has been achieving a tradeoff between risk and return.

**Rao and Rao & Ramachandran (2010)** This study is aimed at analyzing the trends and parameters of efficiency of WC(WC) utilization in respect of size of firms of cotton textiles sector in Indian on the application of three indices viz., Performance Index(PI), utilization Index(UI) and efficiency Index(EI). For the purpose of anlysis the selected firms are classified in to three size categories viz “Small”, “Medium” and “Large” based on average assets size over the study period. The study reveals that Linear Growth Rate(LGR) of PI, UI and EI in respect of WC efficiency for small size firms is significant while that of for medium size firms, the trend of UI alone is significant. The trend of PI, UI and EI for large size firms is significant. On the whole, despite the positive growth in PI, the WCM efficiency of overall firms is found to be not encouraging because the constant factors are declining, which shows that the fixed components of WC are more than the varying components of the WC.

**Ried Edwardj and Srinivasan Suraj (2010)** have made an investigation as to whether the managers’ presentation of special items within the financial statements reflects the economic performance or opportunism. Specifically, special items were presented as a separate line item on the income statement (income statement presentation) to those aggregated within another line item with disclosure only in the footnotes (footnote presentation). The study was motivated by an interest to setting standards in performance reporting and financial statement presentation, as well as prior research investigating managers’ presentation choices in other contexts. Empirical results reveal that special items receiving income statement presentation are less persistent, relative to
those receiving footnote presentations. These results are consistent across numerous alternative specifications. The overall findings are consistent with managers using the income statement versus footnote presentation to assist users in identifying those special items that are most likely to differ from other components of earnings - that is, for informational, as opposed to opportunistic and motivations.

Niranjana Devi.K (Oct 2010) The overall findings are consistent with managers using the income statement versus footnote presentation to assist users in identifying those special items that are most likely to differ from other components of earnings - that is, for informational, as opposed to opportunistic and motivations.

Yimin Zhang and Tianmu Wang (2010) have considered the cost structure, profitability and productivity of the Chinese textile industry and estimated the impacts of RMB appreciation on this industry for 1999–2006. It was found that the industry had suffered from very low profit margins and returns on capital. Because input prices have been increasing, particularly since 2001, generating profits had become more difficult for the industry. Nevertheless, the industry achieved substantial productivity growth during the period examined. Although at an inadequate level, the profitability of the industry did show some signs of improvement. As long as this trend continued, the industry could have obtained a decent level of profitability. Since 2005, however, the industry has faced a new challenge: the appreciation of the RMB. Based on 2006 data, it estimated the maximum rate of RMB appreciation that the industry would be able to sustain to be approximately 5 percent a year.

Mine Aysen Doyran and Juan Delacruz (2011) suggested that Latin America, should take the presence from the Asian textile industry experience. This paper examines recent statistics in US textile and clothing trade with selected Latin American and Asian economies, comparing data on textile exports from the top 10 suppliers between 1995 and 2003. It evaluates the initial effects of the Agreement on Textiles and Clothing (ATC) of 1995, which provided for a 10-year quota phase-out process for WTO member countries. Since its accession into WTO, China has replaced Mexico as the top supplier of goods to the US. In addition, a brief comparison with other international experience of emerging
economies is provided in order to elucidate the relevance of the textile industry in the region and world economy. This empirical work can be the starting point for policy makers to design long-term policies that are needed for Latin America to compete successfully in the US market and promote the restructuring of clothing and textile production at the country level.

Sheela Christina (2011) carried out the study on Financial Performance of Wheels India Limited-Chennai. The study had an Analytical type of research design supplemented by secondary data collection method. For this purpose the researcher took the past five years’ data and also checked out for the validity and reliability before conducting the study. The researcher used the financial tools namely ratio analysis, comparative balance sheet and DuPont analysis and also statistical tools such as trend analysis and correlation. Profitability ratios indicated that there was a decrease in the profit level, utilization of fixed assets and working capital in the last financial year. Thus the company could take necessary steps to improve sales and profit. Finally, the study revealed that the financial performance was satisfactory.

Prasanta Paul (2011) reported that Financial Performance Evaluation - A Comparative Study of Some Selected NBFCs. In this study, five listed NBFCs have been considered for analyzing comparative financial performance. Different statistical tools like, Arithmetic mean, Standard Deviation, Coefficient of Variance, Correlation and Analysis of Variance have been used extensively. Arithmetic Mean (AM) is an ideal measure of central tendency, which is rigidly defined, easy to calculate, based on all observations and affected least by fluctuations of sampling, has been applied in this study. It has been used to get a stable average and it is easy to understand the results of the study.

2.3 CONCLUSION

The researcher has made an attempt on previous study based on financial performance of Indian textile Industry. Most of the existing studies reveal with different measurement technique to analyse the financial performance is yet to develop. With this view the present study has been analysed.
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