CHAPTER II

RELATED REVIEWS
CHAPTER II
REVIEW OF LITERATURE

INTRODUCTION

This chapter is considered as essential to get better understanding of methodology used, available estimation procedures, lucid interpretation and reconciliation of the conflicting results, besides that the review of empirical studies explores the avenues for future and present research efforts related to the subject matter.

2.1 INDIAN REVIEWS:

I WORKING CAPITAL MANAGEMENT

A significant portion of financial research is concerned with the management of working capital. This issue has been extensively investigated at both conceptual and empirical levels.

Vijayasadaradhi.S.P.(1980) examined the problems of Working Capital Management of Public Enterprises from 1971 to 1977 in the form of a case study of individual units. The researcher observed that the share of inventory in total current asset was 60 per cent. He concluded that a major portion of working capital was blocked in form of inventory and the receivable management was good from the year 1974 onwards.

Pandey, I.M (1981)² analysed the working capital trends of manufacturing units in India from the year 1970-71 to 1975-76. The researcher observed that inventories constitute 53.1 per cent of current assets. Management of Inventories and Debtors were skillfully done in order to bring down their levels without adversely affecting production and sales.

Nargolkar, J.M and Pandit, S.B (1984)³ examined the relationship between Productivity, Growth and Working capital and observed that the working capital position cannot be taken as the single index to determine the health of a company. The companies with growing sales need substantial additional working capital so that all of which could not be found by internal cash generation hence calling for fresh outside long-term funds are necessary.

Yadav (1986)⁴ propounded a parametric approach on working capital management and developed a multivariate model to establish the determinants of effective working capital management for a sample of 78 companies inclusive of 39 sick units. A discriminate model consisting of four variables namely cash flow operation, total assets, net sales, current ratio were employed. It was concluded that net sales

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to total assets was the best discriminating function to determine the effectiveness of working capital management and it was found that the model was correctly classified about 95 per cent of the companies were non-effective in working capital management. The ratio of cash flows to total tangible assets was the most significant variable followed by the ratio of net sales to total tangible assets while classifying the companies into sick and healthy in managing their working capital.

The Reserve Bank of India (1988)\textsuperscript{5} presented a study on finances of Public Ltd Companies during 1987-88 covering 1953 public limited companies organised in 17 industrial groups. The study revealed that the overall current assets to total capital employed was 54.1 per cent, inventories to current assets was 44.18 per cent, the percentage of debtors, loans and advances to total current assets were 44 per cent, investments to current assets was 5.54 per cent, cash and bank balance was 6.28 per cent. It was concluded that inventories and receivables got a significant role in management of working capital.

Chitna Rao.N and Rao.K.V (1995)\textsuperscript{6} analysed about management of working capital perceptions of Chief Executives and observed their views regarding working capital. They concluded that management of working capital was a problematic area since it involves collection of

\textsuperscript{5} Reserve Bank of India Bulletin, 1988, RBI publications, Bombay, India.
debts, accumulation of finished goods, non-availability of working funds and uncertain cash flows.

Debasish Sur, et al. (2001) attempted a study to examine the association between liquidity and profitability of Aluminium producing industry. For the purpose of analysis HINDALCO and INDAL were selected as major aluminium producing units. They observed that there was a high degree of positive correlation between liquidity and profitability exists between the two companies. The other influencing variables were working capital ratio, acid test ratio, working capital to sales, debtors-turnover ratio and current assets to total assets.

Debasishsur (2001) attempted a study on liquidity management of four companies namely Ahmedabad Electricity Co.Ltd., (AEC), Bombay Sub-Urban Electric Supply Ltd.,(BSEC), Calcutta Electric Supply Corporation Ltd.,(CESC) and Surat Electric Co.Ltd.(SEC) in Indian Power Sector by using rank correlation. They examined the relationship between liquidity and profitability of the selected companies. They concluded that there was a significant relationship was observed between liquidity and profitability between BSEC and

CESC. In AEC and SEC the management of liquidity and profitability were inefficient.

Dr. Singh P.K. (2002)\(^9\) examined the working capital management of Lupin Laboratories Ltd from the year 1995-96 to 2001-02. Objectives of the study were (i) to assess the significance of working capital (ii) to identify the elements responsible for changes in working capital and (iii) to study the liquidity position of the company. The researcher observed that the short-term liquidity position was very much satisfactory and the increase in operating cycle indicated that there was a proper utilization of working capital. He concluded that the company's overall working capital position was satisfactory and it was suggested that the debt collection policy was to be improved.

Dr. Khatik S.K. and Pradeep Kumar Singh (2003)\(^10\) have undertaken a case study about the liquidity management of EICHER Ltd., Mandideep Bhopal. The objectives of the study were (i) to assess the significance of current ratio, acid test ratio and absolute liquid ratio (ii) to examine and evaluate the liquidity position during 1994-95 to 1998-99. The researchers observed that the short-term liquidity position was not stable but management of inventory and working capital were satisfactory. The company was suggested to concentrate on

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management of current assets and debtors collection period to improve their liquidity position.

Sankaran.G.L and Krishnaveni.R (2003)\textsuperscript{11} in their study on funds management of spinning mills in Tamil Nadu during 1990-91 to 1999-2000 from a sample of 30 mills examined the consistent and inconsistent performer variables based on the total debt equity ratio and current ratio. The researchers observed that each company adopted their own method of debt management policy since they remained well below the borrowing level of the industry they have been servicing their debts without default. A low negative correlation was found between current ratio and profit before tax due to less amount invested in inventory and receivables and a low interest burden.

Dr. Sudarsana Reddy.G, et al., (2003)\textsuperscript{12} examined the debtors management of Andra Pradesh Paper Industry. The researchers undertook a sample size of six mills during 1989-90 to 1998-99. They observed that the sample mills adopted a liberal credit policy, size of trade debtors as a percentage of current assets shown a declining trend, but the collection period of debtors were slowly increased which revealed the slackness in collection efforts of the mills.

They suggested that the aging schedule of over dues should be prepared at frequent intervals like quarterly, half yearly and monthly to frame appropriate debt policy from the default customers.

Narware.P.C and Vivek Sharma (2004)\textsuperscript{13} in their study on liquidity management of Hindustan Petroleum Corporation Ltd (HPCL) analysed the liquidity management of HPCL during 1995-96 to 2000-01 with the help of selected ratios. They concluded that there was inadequacy of funds due to a high contribution of inventory in current assets.

Dr. Mukhopadhyay.D (2004)\textsuperscript{14} attempted a case study on working capital management of heavy engineering firms located in Eastern India during 1993-94 to 2002-03. The researcher observed that a negative working capital turnover ratio was observed throughout the period so that the firms faced the working capital crisis. Some of the recommendations suggested were (i) locate the ideal assets to get dispose of (ii) value the goodwill at a competitive price (iii) to strengthen the marketing cell by installing management accounting system and adopt SWOT analysis strategy.


Khatik.S.K. and Singh.P.K (2004) examined the working capital management position of Indian Farmers Fertiliser Co-Operative Limited during 1990-91 to 2001-02. Objectives of the study were to assess the significance of working capital and to examine the liquidity position of the company by taking inventory to current assets, debtors to current assets, cash and bank to current assets, loans and advances and other assets to current assets. The researchers observed that the overall working capital position of IFFCO was satisfactory although it was suggested to improve their inventory management. Since liquidity position is mainly depended upon inventory and other components like debtors, loans, advances, bills receivables, cash and bank balance were also to be given more importance.

Reddy.Y.V and Patkar.S.B (2004) presented a comparative study on working capital and liquidity management of SBI and Canbank Factors during 1991-92 to 2000-01. The researchers observed that debtors and creditors were major components of current assets and current liabilities while determining the size of working capital. The working capital ratio of Canbank factors were higher than that of SBI factors. It implied that the ability of Canbank factors to settle the

liabilities was comparatively higher than SBI factors. The working capital turnover of SBI factors was higher than Canbank factors it revealed that to generate a sale of one rupee required a lesser amount in canbank factors than SBI factors. A negative rank correlation between liquidity and profitability implied that there was a negative relationship exists and it was concluded that the Canbank's factors rank correlation was stronger than SBI factors.

Dr. Sanjay and Bhayani, J (2004) examined the relationship between working capital and profitability of Gujarat Ambuja Cements Ltd during the period 1993-94 to 2002-03. Objectives of the study were to examine the impact of working capital on profitability by computing simple correlation coefficients between return on investment, to assess the joint effects of the important ratios relating to working capital management with the help of multiple correlation, multiple regression and to ascertain the working capital leverage by examining the sensitivity of return on investment. They concluded that the interrelation between the selected ratios in the area of working capital management and profitability of the company revealed both negative and positive association. There was no significant association between inventory turnover ratio, debtors turnover ratio to return on investment.

The working capital leverage of the company recorded a fluctuating trend during the period and it was always less than unity, it revealed that increase in the profitability of the company was less than the proportion to decrease in working capital.

Parasuraman.N.R (2004) attempted a case study on working capital practices of leading Pharmaceutical companies with reference to the credit policy and profitability during 2001-02. The objectives were to analyse the relationship between credit period given by the companies and their actual performance in terms of sales and profitability. The researcher observed that there was an increasing trend in average profit, average capital employed and working capital. The top ten companies' average days sales outstanding were increased. A positive correlation was observed between sales and profit after tax.

Dr.Rajendran.P and Ramesh.D (2006) examined the liquidity management of Tamil Nadu Tourism Development Corporation Ltd(TTDC). Objectives of the study were to assess the efficiency of liquidity management, to examine and evaluate the liquidity position of TTDC. The researchers concluded that the short-term liquidity position

was not at all satisfactory. Quick ratio and absolute liquid ratio were always below the normal standards and they observed a declining trend during the period. Cash management of the company was in very poor position. To improve the poor liquidity position, it was suggested that the Government should allot required funds to TTDC.

Arindam Ghosh.(2007)\textsuperscript{20} in his study on working capital management practices of top ten Indian pharmaceutical companies during 2001-02 and top twenty cement companies during 1992-93 to 2001-02. He found that the leading pharmaceutical companies strategically employed greater working capital. From the cement companies it was observed that a lower degree of positive association between the profitability to working capital and current assets to sales ratio. It was concluded that greater the efficiency of working capital, wider the scope of profitability. To improve liquidity position of the company, it was suggested that to utilise its assets in an effective manner to increase cash balances and to reduce its current liabilities.

Ravikumar.G and Rama Krishna.D (2007)\textsuperscript{21} examined the working capital management of Bharat Heavy Electricals Ltd.,(BHEL), (Hyderabad) from 1998-2003. They observed that the working capital management of BHEL had steadily increased during the study period

but the maintenance of cash and bank balances has been fluctuating as debtors constituted about 50 per cent of the total current assets it was difficult to manage the accounts receivable. It was suggested that the company should concentrate on management of current assets and current liabilities. Amount invested in loans and advances should be minimised to the possible extent and there should be a periodic revision of credit policy on sales and liquidity to reduce the debtors to increase the efficiency in collection performance.

Deepa.D and Umaya Salma Shajahan (2007)\textsuperscript{22} presented an empirical study on liquidity management of leading automobile company from 1995 to 2006. The researchers observed that the liquidity position was not good during the study period. In order to improve liquidity position of the company it was suggested that to utilise its assets in an effective manner, increase cash balances and reduce its current liabilities.

II CAPITAL STRUCTURE AND LEVERAGE

Jain S.C (1978)\(^1\) examined borrowings and debt-equity position of selected eight public sector industries during 1970-71 to 1975-76. The researcher observed that a conservative debt-equity ratio of 1:1 was not obtained in the selected industries during the study period.

Bhat (1980)\(^2\) attempted a study on determinants of financial leverage of selected engineering companies. The researcher analysed the impact of size, growth, business risk, dividend policy, profitability, debt service capacity and the degree of operating leverage of selected 62 engineering companies. It was concluded that contribution of each variables such as business risk, profitability, dividend payout ratio and debt service capacity were found to be significant determinants towards leverage ratios.

Chandra Mall.P and Balashamugam (1987)\(^3\) have undertaken a case study on profitability and capital structure of Steel Authority of India Ltd (SAIL) with a view to examine the relationship between debt equity and profitability. They found that the correlation coefficient between the two selected variables revealed a perfect negative

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association and it was suggested to improve its profit margin by framing their own flexible capital structure policy to fit for their present and future needs considering about cost of funds.

Desai B.H (2000)\(^4\) in his study on assessment of capital structure and business failure examined the financial performance of Gujarat Steel Tubes Ltd during 1980-81 to 1996-97 by applying Altman's equation. It was observed that during the study period even one single accounting year does not have the Z score to be equal to or more than the suggested cut off value, which means that the Gujarat Steel Tubes Ltd had been sick and there was a warning from the accounting point of view had not been taken seriously by the management. The low profitability was due to low rate of return on total assets.

Anand Manoj (2002)\(^5\) studied about the corporate finance practices followed by focusing on capital budgeting, cost of capital, capital structure and dividend policy. The study carried over by surveying a large cross section of 474 private sector and 51 public sector top firms. The draft questionnaire was first circulated to prominent academicians and Chief Financial Officers to get feedback and their suggestions were incorporated resulting in ten questions on a Likert Scale of five points.

The questionnaire was administered on Chief Financial Officers; whose response rate was 15.43 percent and for analysis the firms were classified on their size and growth. Economic Value Added has become a popular objective within large firms. Net Present Value was widely used tool for capital budgeting. Firm's size affects the practice of corporate finance. Retained earnings were the most preferred source of finance and firm gives more attention on a specific pay out ratio.

Dr. Gangadhar V and Dr. Yadagiri M (2004)\textsuperscript{6} examined the leverage pattern of selected firms in private corporate sector during the year 1995-96 to 1999-2000. Objectives of the study were to discuss the concepts and theoretical aspects of capital structure, examine their coverage and leverage ratios, to analyse the capital structure pattern at an aggregate level and industry level with a view to bring out the diversities if any. They found that the companies went on adopting trading on thin equity financing policy, the industry-wise analysis of debt-equity indicated that the traditional industries namely cement and sugar were heavily applied debt in their capital structure moreover the cement industry has employed huge amount of debt. As against this, engineering and chemical industries employed a moderate proportion of

\textsuperscript{6} Dr. Gangadhar and Dr. Yadagiri, M . " Diversities in the leverage pattern of private corporate sector"-The Management Accountant, Vol.39, No.11, November 2004, pp.873-879
debt, but the information technology industry employed a least proportion of 16.4 percent of debt during the study period.

Dr. Santanu, Dr. Ghosh, et al. (2006)\(^7\) in their study on impact of operating leverage on profitability of selected Indian Industries examined the empirical relationship between the degree of operating leverage and profitability by taking a sample of 72 companies from four industries namely tea, chemical, paper and pharmaceutical. They observed that the degree of operating leverage was positively associated with operating profitability.

\(^7\) Dr. Santanu Kr. Ghosh and Dr. Santi Gopal Maji, "Impact of Operating Leverage on Profitability: An Empirical Study on Selected Indian Industries", The Management Accountant, Vol. 41, No. 8, August 2006, pp. 660-667
III PROFITABILITY

Agarwal (1978)\(^1\) attempted a study to examine the Size, Profitability and Growth of seven manufacturing industries, viz. cotton spinning and weaving, cotton ginning, jute textiles, paper and pulp, sugar and aluminum from 1962 to 1972 by taking the variables namely profit to net worth, profit to net assets and size to total sales. He observed that a positive relationship exists between size and profitability in cotton spinning industry, jute textile industry, sugar, brewing industry and aluminum industry but from cement, cotton weaving and ginning industry there was no such relationship exist.

Bhabotosh Banerjee (1982)\(^2\) examined the relationship between liquidity and profitability of medium and large public limited companies from the year 1971 to 1978. He observed that the industries of ferrous, non-ferrous metal products and shipbuilding had a good liquidity and profitability other industries like tobacco, silk, rayon and textiles had a declining trend of profitability due to low liquidity.

Agarwal (1987)\(^3\) examined the behaviour and determinants of profit in relation to price control vs profitability of automobile industry during 1959-60 to 1978-79. The researcher observed that profit in car

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industry was influenced by sales, capacity utilization, product pricing and factor pricing. Market share and lagged investments were appeared to be significant at the firm level but not at sector level. However, both the market share and lagged investments were significant for non-car industry, further it was observed that price control had adversely affected the profit of car industry.

Nagarajan and Burthwal (1990)\(^4\) attempted a firm level study to examine the relationship between profitability and structure of the firm. For the purpose of analysis a sample 38 pharmaceutical companies were selected for a period of 12 years from 1970 to 1982. To measure profitability the ratio of net profit to total sales and ratio of net profits to total assets have been calculated. They observed that condition of price control was the most significant factor while determining profitability of firms in the vertical integration. Size and advertising intensity were not the major determinants. The co-efficient of growth rate of sales was positive and significant. Finally the researchers suggested that the factors on demand side of a firm had a greater impact of profitability than the supply side.

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Karuppiah. K. (1998)\(^5\) analysed the origin, growth, problems and profitability of 15 lease financing companies during 1996. It was found that there was 100 per cent variation of share capital and some of the companies had trading on thin equity. Out of twelve companies, three did not have any reserves and six had reserves less than two percent. Finally they concluded that the leasing industry in India was infancy.

George. W. Gallinger (2000)\(^6\) attempted a study on financial analysis and examined the quality of earnings of Salton Incorporation from 1993 to 1997 by preparing cash flow statement under indirect method. He observed that cash from operating activities were very much lower than the accrual profit and concluded that if the difference among adjusted net income were low then the quality of earnings would be high and vice versa.

Dr. Sahu.R.K. (2000)\(^7\) examined the corporate profitability of 100 non-financial and non-government public limited companies in Eastern India during 1984-85 to 1993-94 by applying multivariate approach. Profitability and interest coverage ratios were analysed with the help of cross sectional spearman’s rank correlation and the researcher arrived a single index to measure the composition of profitability.

Dr. Vijayakumar (2002)\(^8\) analysed the determinants of corporate size, growth and profitability of Public Sector Industries during 1980-81 to 1995-96 with a view to examine the relationship of size, profitability and growth of firms by applying mean, correlation coefficient, linear and multiple regression analysis and concluded that the growth rate was found to be significant with profitability.

Chambelain, Trevor (2003)\(^9\) examined the application of long run survival model of investment to determine whether liquidity variables are important while explaining investment or not. The model was examined by using time series data for each of twenty-five large non-financial corporations from 1955 to 1994. The long run survival model performed reasonably well and the constant terms were significant at 5 per cent level. In case of liquidity stock variables had one half of the estimated correct significant coefficient. Test of goodness of fit of the securities value model on an average was fairly better than that of the neo-classical model. It was suggested that the securities value model was relatively short lag and most appropriate.

Dr. Vijayakumar.A and Kadirvelu.S (2003)\textsuperscript{10} analysed the profitability of Minerals and Metals Industry from the year 1981 to 2001. They examined the relationship between corporate size and profitability by using regression analysis. Profitability ratios were calculated in two different ways (i) sales and profit margins. It was evident from the analysis that the size of firms was positively associated with profitability. Larger firms were in a position to earn a higher rate of return on its investments through diversification and moving into higher technology.

Vijayakumar.A and Kadirvelu.S (2004)\textsuperscript{11} have undertaken a case study on determinants of profitability of Public Sector Power Industry from 1981 to 2001. Objective of the study was to examine the determinants of profitability by using simple linear model. They observed that the selected variables in the power industry explained 98 per cent of variation towards profitability. It was concluded that age of the company had been found to be the strongest determinants of profitability followed by size, operating expenses to sales ratio, leverage, fixed assets turnover ratio, inventory turnover ratio, current ratio, growth rate and vertical integration. Further that size, operating


expenses to sales ratio, fixed assets turnover ratio had a negative contribution towards profitability and other variables had a positive contribution. However, current ratio was found to be insignificant while explaining profitability.

Dr.Selvam.M., et.al (2004)\(^{12}\) examined the financial health of India Cements by applying Z score analysis from 1998 to 2001. They observed that the financial health of India Cements was never in too healthy zone during the study period except 2002 and it was recommended that the problem of under trading should be attended immediately, the company should fix achievable sales target and the capital structure should be modified in such a way to have standard debt-equity ratio to avoid future failure.

Dr.Thirumalvalan (2006)\(^{13}\) presented a case study on determinants of earnings before interest and taxes of HINDALCO and INDALCO Aluminium companies. The objectives of the study were to identify the internal variables which determines the earnings before interest and taxes and to find out the extent of influence of such variables, to find out the subset of variables which influences earnings and to ascertain the homogeneity among the variables which determine


earnings from 1986 to 1995. He found that fixed assets and net worth were the most important determinants of HINDALCO's earnings, whereas INDALCO's earnings were significantly influenced by cost of sales and retained profits.

Misra.D.P. and Mishra.P.K(2006)\textsuperscript{14} attempted an empirical study on factors influencing profitability of Orissa State Warehousing Corporation during 1985-86 to 2002-03. The objectives were to examine the influences of independent factors viz., growth in size, growth in volume of business, operating cost ratio, leverage liquidity, receivables turnover, fixed assets turnover and age on profitability by stepwise regression analysis. They concluded that operating cost ratio, liquidity ratio, fixed assets turnover ratio combined around 97 per cent of the variation towards profitability of Orisa State Warehousing Corporation.

IV  FINANCIAL PERFORMANCE

Dr. Gopalan and Minraj.K (1987)¹ analysed the financial performance of Co-operative Sugar Mills in Tamil Nadu and they concluded that most of the selected sugar mills were depending upon their owned funds rather than that of borrowed funds but the surplus was getting reduced due to establishment cost.

Mishra (1988)² analysed the performance evaluation of public enterprises in India. He concluded that the poor performance of public enterprises was due to certain internal factors such as lack of accountability and wrong financing decisions.

Sankar Mishra and Nand Gopal (1990)³ undertook a case study sponsored by Planning Commission, Government of India to highlight the financial Performance of State level public enterprises in India during 1981-82 to 1986-87. The researchers observed that the State level public enterprises had a long way to go in order to earn optimal rate of return on investment, one third of the enterprises were in gross margin level, one third incurred losses at the operating margin level and the remaining one third of the enterprises revealed

minimum amount of surplus due to poor record in respect of finalisation of accounts.

Sanithpal (1990)\(^4\) attempted a study on financial management of sick cotton textile mills in northern region from 1975 to 1984 and analysed the causes of financial sickness. It was suggested that the imbalance in capital structure should be corrected and a high debt equity ratio should be avoided. Financial reconstruction would help to set off the external borrowings.

Jagan Mohan Rao (1993)\(^5\) examined the financial appraisal of Indian Automotive Tyre Industry. A modest attempt has been made to measure the financial performance through inter company and inter sector analysis from the year 1981 to 1988. He observed that in most companies cash management was not in a productive manner but inventory management was fairly well.

Benchamin, K.V., et.al (1995)\(^6\) attempted a case study on financial performance of Government and Private Sector Grainages in Karnataka. He found that the private grainages were financially sound compared to the Government grainages. The current ratio in private

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and public sector grainages was 1.81 and 1.37 respectively, whereas the net profit to sales ratio was 0.45 and 0.23 respectively. The ratio of fixed assets to turnover was 10.32 and the ratio of fixed assets to earned funds in two units were 1.0.

Ratinam.T.V and Indra Doraisamy (1995) examined the financial performance and control measures to increase profit of the selected spinning mills during 1990-95. They observed that the average operating profit was about 11 per cent of sales value, gross profit was about to 6 per cent and profit before tax was above 2 per cent and one sixth of the mills registered a satisfactory net profit over 9 per cent of sales. However one fourth of the mills incurred losses due to provision of depreciation and interest.

Reddy.R.V.S.(1998) studied the financial performance of public transport corporation of Andra Pradesh State Road Transport Corporation. He observed that there was an improvement in physical and operational performance. Profitability was increased due to an efficient cost of operation and capital turnover ratio indicated a general improvement in the rate of utilization of funds employed.

Yahavantha Dongree, et.al (1999) presented a performance evaluation model for Primary Agricultural Credit Societies. The researcher observed that the society was potential enough in a high profitable way but the problem lies with deployment of funds in different assets. Since yield on assets were not sufficient to cover the fixed cost and the situation could be improved by educating the employees as well as the board members.

Shergill, G.S., et al. (2000) examined the market structure and financial controls. They found that there was a negative relationship exists between concentration to profitability, profitability to capital intensity due to ideal capacity and a positive relationship observed between risk and profitability due to efficient management. An Ideal manager seeks to achieve high profitability with low variation of earnings.

Navdeep Aggarwal and Singla.S.K (2001) developed a single index model for analysing the financial performance by using Multi-Discriminant analysis(MDA). The MDA analysis brings the light of most important indicators of financial performance namely inventory

turnover ratio, interest coverage ratio, net profit to total assets and earnings per share. These factors were inter-related with inventory turnover, interest coverage, net profit and earnings per share. The discriminant score of net profit to total assets, interest coverage ratio, earnings per share and inventory turnover ratios were 13.1146, 0.2323, 0.0156 and 0.2183 respectively.

Reserve Bank of India (2003)\textsuperscript{12} examined the financial performance of private corporate business sector from engineering, chemicals, cement, electricity generation and supply, construction, textiles, information technology and diversified groups during the first two quarters of 2002-03 based on abridged financial results of companies' published in the financial database, news dailies and from the major Stock Exchanges of India. It was observed that engineering, cement, textiles, information technology and diversified industries recorded a high growth in sales in the second quarter. Particularly sales revenue of engineering industry rose by 15.3 per cent in the second quarter during 2002-03 compared with rise of 11.4 per cent in the first quarter. Cement companies registered 7.0 per cent growth in sales in contrast to a fall of 3.6 per cent in the first quarter of 2002-03. Chemical industries witnessed a lower growth rate of sales from 4.5 per

\textsuperscript{12} "Performance of the Private Corporate Business Sector during the First half of 2002-03", Reserve Bank of India Bulletin, Vol.LVII, No.3, March 2003,pp.84-95
cent in quarter one to 0.8 per cent in the second quarter 2002-03. Engineering industry registered a steep rise in their post tax profits in the first two quarters. Return on sales of chemical companies decreased from 7.4 per cent in quarter one to 7.1 per cent in quarter two of 2002-03. Engineering companies witnessed return on sales from 2.0 per cent in first quarter to 4.2 per cent in the second quarter of 2002-03. Return on sales of information technology companies came down from 19.2 per cent in quarter one to 18.7 per cent in quarter two.

Reserve Bank of India (2003)\textsuperscript{13} analysed the performance of 920 non-government financial and investment companies other than banking, insurance and chit fund companies during the year 2001-02. The companies were classified into six major groups according to their activity viz., share trading and investment holding, loan finance, hire purchase finance, leasing diversified and miscellaneous. It was observed that the companies' performance was improved in terms of profits despite a marginal decline in their main income. Growth in profit was due low depreciation provision and other operating expenses compared to the previous year. The profit margin and the return on shareholders funds were higher in 2001-02 than the year 2000-01. The

dividend rate was fractionally higher during the period. Profit margin was highest in case of diversified companies followed by share trading and investment holding. External sources like debenture issue, bank borrowings and public deposits were continued to be the major source of finance. Investment in securities of other Indian companies and mutual funds, loans and advances against hire purchases and other receivables were the important uses of funds during the year.

Dr.T.Satyanarayana chary and Prasad.T (2006)\textsuperscript{14} analysed the performance of MC Semiconductor Technology Limited- a venture capital unit. They analysed the performance for a period of 5 years from 2000 to 2004 through liquidity, leverage, activity and profitability ratios. They observed that the overall financial performance of the company is not good over the study period as it combating with the new technologies of IT industry it take 5 to 10 years to prove themselves commercially viable in the market. They suggested that financing of fixed sources through working capital to be avoided, proper capital mechanism should be developed and implemented to control the expenditure of the organization and the main objective of shareholders wealth maximization is to be achieved by providing at least the minimum rate of return.

\textsuperscript{14}Dr.Satyanarayana Chary and Prasad.T, "Performance of Venture Capital Undertakings-A case study", Udyog Pragathi, Vol.30, No.4, Oct-Dec2006, pp.5-20
Dr. Sangeetha Arora and Shubpreet Kaur (2006) attempted an empirical study on financial performance of Indian Banking Sector in post reforms era. For the purpose of analysis banks have been categorized into private, foreign sector banks, nationalized and State Bank of India and its associates. A comparative analysis has been undertaken on the basis of seven key indicators namely return on assets, capital asset risk weighted ratio, non-performing assets to net advances, business per employee, net profitability ratio, non-performing assets level and off-balance sheet operations of scheduled commercial banks from the time period of 1994 to 2005. They concluded that although the performance of public sector banks have improved considerably when compared with other sectors they are lagging in thrust areas viz., business per employee, profitability and asset quality.

Ramachandra Reddy and Yuvaraja Reddy (2007) examined the financial performance of the selected cement companies in Andhra Pradesh by Market Value Added approach. Objectives of the study was to examine the effect of return on net worth, capital productivity, labour productivity, earnings per share, economic value added, return on

sales, return on total assets and cash profit on market value added. It was inferred that except earnings per share all other factors were found to be insignificant impact on market value added. It was concluded that the market value added of cement companies were not only affected by the selected independent variables but also influenced by other factors.

Singh. S. P (2007) examined the performance of sugar mills in Uttar Pradesh on the basis of their size, location and ownership. Data envelopment analysis models have been applied on the input output data of 36 sugar mills for the period 1996-97 to 2002-03. During the period average overall technical efficiency in the sugar mills of the state has been 93 per cent. Performance of the mills was found to vary significantly across sector, plant, size and region. The private sector mills achieved highest efficiency scores followed by the co-operative sector. It has also been observed that the mills with bigger plant size attained relatively higher efficiency scores, labour and energy inputs were found highly under utilised in almost all the inefficient mills. For the inefficient mills he suggested that the mills could adjust their operations to the associated target point determined by the efficient mills that define their reference set.

V OTHER REVIEWS

Goel.V.K and Navi.N.K. (1976)\(^1\) attempted a study on the productivity trends of Cement Industry in India during 1951-52 to 1974-75 and they examined their healthy picture. They observed that profit margin in the industry was to the tune of 20 per cent during the period and there had been a sharp decline in both the ratios of net worth to total liabilities and acid test ratio. After 1974-75 the industry faced losses due to its inherent technological and non-viability factors.

Asha Jain (1981)\(^2\) attempted an econometric approach on the price-cost margin of Indian Manufacturing Industries to measure their profitability. He found that the cost factors emerged as significant determinants of profitability while the structural variables like concentration ratio, capacity utilization, growth and capital intensity showed a mixed pattern.

George Paul(1985)\(^3\) examined the financial performance of diversified companies in India. The comparative study consisted a sample of 34 relatively matched pairs of diversifying and non-diversifying companies from five Indian Industries and he concluded that the

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performance of growth, profitability were highly satisfied from the diversifiers than the non-diversifiers.

Randolph A. Pohlman et. al. (1988)\(^4\) analysed the cash flow estimation practices of large firms. They observed that the large firms generated their cash flows with their firms' business and financial risks. The overall accuracy of cash flows estimate was influenced by two independent factors. (i) Companies that were following a systematic approach in generating cash flow information achieved a high level of accuracy. (ii) Firms that were required cash flow forecasts far most, if not at all, of their capital expenditures experienced a smaller estimation errors. They concluded that a proper information system that generates necessary cash flow data enables a firm to obtain more accurate forecasts, which in turn could enhances a firms overall capital investment and decision making process.

Kallu Rao(1991)\(^5\) attempted an inter-company financial analysis of Tea Industry's retrospect and prospects. He examined the projected trends regarding sales and profit for the next ten years, with a view to heap the policy makers and to take appropriate decisions by various

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financial ratios. He concluded that the Indian Tea Industry has bright prospects with respect to changes in the economic policies would boost up the foreign exchange earnings in particular to the exporting companies.

Das (1998) made an attempt to study the determinants of return on equity of Indian Public Sector Banks by applying cross-sectional data. The researcher divided the 26 public sector banks into two groups, viz., larger banks and smaller banks on the basis of their assets. The banks followed the differential policy measures for the two sets of banks instead of the usual straight - jacket approach.

Ramcharan (2000) attempted a case study on top line growth, bottom line factors and their velocity to find the improvement of return on investment and he concluded that a firm can raise its return on investment by increasing sales relative to assets or by reducing assets in relation to sales other than that both velocity and quality of earnings per share had a major impact on price earnings ratio.

Gopal Krishna Swami (2000)8 framed a forecasting model for sustainable corporate growth and observed that the companies liquidity levels would drastically affect their performance. The idle funds, if not

used for expansion purpose or if they were not used for the purpose of dividend payments it could lead to a fall in return on assets and return on equity finally the firms' stock price cause a decline. He concluded that the sustainable growth model helped a management to increase their sales growth rate.

Chawla, Deepak and Amit Sharma (2002)\textsuperscript{9} presented a model to predict bond ratings in India. For the purpose of analysis, a sample of 44 companies comprises of 22 companies with good bond rating and 18 companies with poor bond rating were selected. A linear regression model was estimated using nine variables viz., profit before interest and taxes, return on net worth, current ratio, debt equity ratio, interest coverage ratio, net sales to total assets, profit after tax to earnings before interest, taxes and amortization, profit after taxes and equity capital. He concluded that two variables namely interest coverage ratio and net sales to total assets were significant variables. The model correctly classified about ninety five percent of the sample companies.

Yarram Subba Reddy (2002)\textsuperscript{10} examined the cross-sectional linkages between liquidity and volatility by undertaking a large samples of stocks traded in the Bombay Stock Exchange during the calendar

\textsuperscript{9}Chawla, Deepak and Amit Sharma, "A Logit Model to Predict Bond Ratings in India," Paradigm. Vo.6, No.1, June 2002, pp.90-103.
year 2001 and found that the dividend per share, debt to market equity ratio and standard deviation of stock price returns had a significant influence on liquidity. Age of the company, dividend per share, debt equity ratio, earnings per share and annual turnover had significant influence on volatility. He concluded that the liquidity position had a positive association with systematic risk, which was in contrast to the earliest studies.

Dr. Chakraborty P.K. (2004)\textsuperscript{11} framed a new approach to identify the growth rate with corporate liquidity and financial flexibility. The theory backed on Net Liquid Balance of Shulman and Cox and sustainable growth model developed by Robert C. Higgins.

Sarma and Panda (2005)\textsuperscript{12} examined the factors determines dividend behaviour of the corporate sector. For the purpose of analysis the researchers constructed an optimal dividend equation in the form of exponential function. The optimal dividend function was then combined with a dynamic adjustment function to allow the partial adjustment of actual dividends to 'desired' or 'optimal' dividend in a given year. They concluded that among the financial variables profit, capital structure, sales and dividend showed a significant result, whereas investment

demand doesn't due to presence of the lagged dependent variables as one of the explanatory variables.

Dr. Das. P. K., (2006) examined the dividend practices followed by the Associated cement companies Ltd during 1985-86 to 2004-05. He found that the company followed a conservative dividend policy during the study period. There was a significant increase in profitability due to earnings per share and capital employed current ratio was in declining trend.

Dr. Sudarsana Reddy., et.al (2006) made an attempt to examine the financing pattern and utilisation of fixed assets in large scale Paper Industry in Andhra Pradesh. Objectives of the study were to evaluate the financing pattern of assets, to test the efficiency of fixed assets utilization, to assess the impact of fixed assets on sales and operating profits and to examine the adequacy of depreciation provision. The researchers observed that owners' funds were insufficient to finance fixed assets requirement, long term funds were adequate to finance the entire fixed assets and a part of current assets too. The declining trend on turnover rate of fixed assets indicated that the fixed assets were utilized inefficiently due to shortage of raw materials, power cuts and equipment.

bottlenecks. They concluded that the growth rate of fixed assets block was more than that of sales growth and the industry revealed that the indices of gross block and depreciation were in upward direction.

Rekha Pai, Annapoorani and Vijayalakshmi Pai (2006)\textsuperscript{15} attempted to develop a predictive model based on principal component analysis and multiple discriminant analysis. The data consisted of 21 financial ratios of 34 sick unit and 38 non-sick unit during the year 2000-01 were taken. The predictive accuracy rate was about 86 per cent, 82 per cent and 69 per cent. They concluded that a highest degree of predictive power was observed regarding to predict the chances of survival or falling in the trap of sickness of industrial units.

2.2 FOREIGN REVIEWS:

Neumann, Bobel and Haid (1979)\(^1\) examined the profitability, risk and market structure of 334 West German joint-stock companies by their mean rate of return from the year 1965 to 1973. They observed that the investors were risk averse and their risk bearing were compensated by a higher rate of return. The degree of concentration and product differentiation were positively related to profitability, while export and import ratio exerted an adverse impact on profitability. As regards size and profitability, smaller firms were tending to be more flexible to take chances of growth more easily than the bigger ones and there was an inverse relationship found between growth and profitability.

Hartley and Watt (1981)\(^2\) analysed the profit regulation of U.K. Aerospace Industry and government procurement policy on profitability. The aerospace industry consisted of air firms, engine electronics and equipment, development, production of military and civil aircraft, helicopters and missiles. As a monopolists U.K. government used procurement policy to determine projects regarding technical progress as well as the size, structure of the industry, entry, exit, price.

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profit and export performance. They concluded that the average profit rates in aerospace were lower than other industry due to variation in profitability of specialist and diversified companies.

Gerald T. Garvey and Gordon Hanka (1980-93)\textsuperscript{3} analysed the management of corporate capital structure where a corporate manager controls the firm's dynamic capital structure in his own interest by increasing leverage to fend off takeovers and decreasing leverage to avoid financial distress. They undertook the study with a view to emphasis that the position of capital structure which is not entirely at odds with the standard assumption of shareholder wealth-maximization, but which recognizes the potentially important role of dynamics and managerial discretion. They observed that for profitable firms managers would gladly accept the resulting "sub optimal" capital structure, but the tax shields and other benefits of leverage still exist and managers who ignore these benefits would eventually invite a hostile takeover bid. Their managerial model predicts that firms in which managers are shielded from the threat of takeover are less likely to exhibit increase in leverage, and more likely to decrease leverage. They concluded that the state anti takeover laws had an effect on actual debt-asset ratios. Takeover protection induces a firm to reduce their overall leverage since takeover threats are driven by

shareholders wealth consideration; all the standard comparative static based on the assumption that managers maximize shareholder wealth continues to hold in their model.

Bothwell Cooley and Hall (1982)\textsuperscript{4} presented a new view of market structure performance debate while analysing a sample of 156 large U.S. manufacturing firms from 1960-67 to determine the relationship between profit rate and other variables viz., size, growth, market share, sellers' concentration, advertising intensity, economies of scale, absolute capital requirements, leverage and profit variability. They concluded that sellers' concentration, market stock and growth of demand were positively correlated and business risk, advertisement expenses, profit rate were negatively correlated with the extent of economies and capital requirements.

Jahirul Hoque, Md (1985)\textsuperscript{5} examined the impact of poor working capital management of Jute Industry in Bangladesh and observed that working capital investment had produced an adverse impact on their performance in terms of sales, output, productivity and profitability. The reason for poor working capital was due to inaccurate estimation of

working capital policy, shortage of current assets, unsound inventory planning and inaccurate planning on credit terms, credit risks and excess of overhead.

Abdul Hafeez Shaikh (1988)\textsuperscript{6} studied the public enterprises performance of the selected industry from Pakistan under alternative control structures. The hydrogenated vegetable oil (ghee) industry of Pakistan was nationalized in 1973 which was the largest single (variable) industry under public ownership in Pakistan. For the first three years after nationalization the industry was under the control of respective provincial government and in 1977 the control was transferred to an autonomous corporation under the federal government. Over a period of seven years data collected from 18 firms he concluded that a wide range of performance were found from the autonomous corporations.

Clifford Thies (1992)\textsuperscript{7} examined a sample of ten US manufacturing firms from the year 1935-41 and from 1977-83. He observed a high positive correlation between profitability and common stock, a negative correlation between profitability and long-term non-convertible debt, short-term non-convertible debt, convertible debt and inventory, operating leverage were positively correlated with short-term debt.

\begin{thebibliography}{9}
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Chittenden (1996)\textsuperscript{8} studied the relationship between financial structure with size, age, profitability, asset structure, stock market flotation and growth of 3480 small and medium sized enterprises in U.K for a period of 5 years. The researcher found that there was a significant relationship exists between financial structure with size, age, asset structure, profitability and stock market flotation while growth did not affect with the financial structure.

Juliet D'Souza., et.al (2000)\textsuperscript{9} presented a study on the determinants and performance improvements of privatised firms from the year 1961 to 1995. They examined a sample of 118 firms out of 28 industries from 29 countries and observed that due to privatization the firms significantly had increased profitability, productivity and sales. The results added to the growing empirical evidence that, after privatization, firms became more profitable and efficient. The newly privatised firms achieved their improvements without reducing average total employment, given this strong empirical evidence of the financial and operational benefits of privatization. The study provided some answers regarding the sources of financial and operating improvements of newly privatised firms viz., (i) the firms subject to greater capital market discipline should


\textsuperscript{9}Juliet D'Souza, William Megginson, Rober Nash, "Determinants of Performance Improvements in Privatized Firms: The Role of Restructuring and Corporate Governance" (2000), web page.wwww. http:/ssrn.id243186(1)
exhibit stronger post-privatization performance. The results confirmed a positive relationship between the level of capital market development and the amount of post-privatization efficiency improvements. (ii) changes in ownership by privatization also contributed to the pervasive performance improvements as expected and the, higher amount of foreign ownership lead to larger gains in post-privatization efficiency,(iii) firms would become more productive as state ownership decreases. It confirms that real output significantly increases as state ownership declines. (iv) impact of employee ownership on the performance of the newly-privatized firm was consistent from earlier empirical studies and the profitability decreases as employee ownership increases. (iv) proportional post-privatization ownership by the state, by foreign investors, and by employees was an important indicator of the firm's success following privatization. (v) since government frequently want to restructure through acquisitions, divestitures, and/or financial restructuring (i.e., debt write-offs) they examined whether such restructurings contributed to the increased improvements in post-privatizations operating performance. The results confirmed that restructurings were important determinants of post-privatization performance evidenced that restructuring leads to stronger efficient improvements.

Ralph.I.Vegbunam (2001)\textsuperscript{10} examined the financial distress and performance differences among commercial banks in Nigeria in early 1990's. Specific factors of ten financial ratios were used in the study.

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Only four were identified as the major determinants viz., total expenses to total assets ratio, asset utilization, total revenue and total assets ratio. Capital adequacy was measured by equity capital to total assets ratio, credit risk was measured by loans to total deposits ratio and banks financial distress indicator was represented by zero-one dummy variable.

Joanne Loundes (2001) examined the financial performance of Australian Government Trading Enterprises during pre and post reform period. In 1990 there were several measures introduced to improve the efficiency and financial performance of government trading enterprises. The objective was to find out the changes in financial performance of government enterprises like electricity, gas, water, railways and ports. He concluded that there was no remarkable improvement except railways.

Antonios Antoniou., et al. (2002) studied the determinants of leverage ratio of French, German and British firms using panel data. It was observed that the leverage ratios were positively affected by the size of the firm but inversely affected by market value of share and structure of interest rates.

They concluded that capital structure decision of a firm was also influenced by environment and tradition in which a firm operates.

Zuobao Wei, Oscar Varela, et al. (2003)\(^\text{13}\) examined the financial and operating performance of newly setup 280 private firms during pre and post privatization in China from the year 1990-97. The researchers observed that a significant improvement was found in real output, real assets and sales efficiency but there was no remarkable changes in profitability. In private enterprises profitability was improved when compared to fully state-owned enterprises during the same period.

Rabiul Alam.S.M. and Syed Zabid Hossain (2004)\(^\text{14}\) analysed the management of working finance on the ship building Industry in Bangladesh with a view to examine the strengths and weaknesses of working capital management of Khulna Shipyard Ltd. (KSL) Bangladesh. They observed that KSL was not following any working capital policy and it had not prepared any working capital requirement budget so it had a negative working capital due to excess of current liabilities over the current assets. Composition of current liabilities and cash credit ratios revealed that KSL mainly depended on short-term bank credit and they


suggested to consider both the financial risk and cost of financing before choosing any particular source of working finance and the company should try to increase working capital from the sources like trade credit to reduce their interest burden.

Mallik.U.K and Dr.Debasish Mukherjee (2006)\textsuperscript{15} analysed the performance of 14 lease-financing companies in West Bengal to examine their profitability, return on lease by a comparative study. They observed that the small companies had higher profitability when compared to medium and big companies over the period of study. More over high lease income group companies enjoyed higher profitability in terms of net profit. They concluded that the general upswing in the leasing business resulted in a remarkable growth rate of lease income and leased assets.

Adolphus Toby (2006)\textsuperscript{16} presented an empirical study on the liquidity management practices of Nigerian Banks. Objectives of the study were to evaluate the relevance of treasury in bank portfolio management, to examine the causes of assets-liability mismatch in banks, causes of liquidity crisis, incidence of treasury risk, adequacy of liquidity risk management techniques and extent of liquidity exposure in banks. He selected a sample of 16 banks for a period of five years from

\textsuperscript{15} Prof.U.K.Mallik and Dr.Debasish Mukherjee, "Performance of Leasing Industry in West Bengal", The Management Accountant, Vol.41, No.5, May 2006, pp.393-398
1996 to 2000. Eighty copies of semi-structured questionnaire were administered on bankers charged with liquidity and risk management with a response rate of 57.5 per cent complemented by an analysis of the liquidity ratio of the selected bank. Most of the banks fall somewhere between purchased liquidity plans and stored liquidity strategies while managing their liquidity risk. He concluded that to survive the turbulence that follows the emerging reforms in the banking industry, bankers need contingency liquidity plans to meet their contingency needs.

Kanel Ghazouani (2006) examined the cost of capital and investment behaviour of Tunisian non-financial companies by using national accounting data. The study focused about the difference between public and private investment rates within the framework of neo-classic investment model. He observed that cost of capital was generally higher for the private non-financial companies than the public non-financial companies due to higher level of financing rate.

Mohammad Farnad Hossain., et. al (2006) attempted a study on the stock market reaction and dividend announcement in the emerging stock market of Bangladesh. A sample of 50 listed companies

from different sectors of the Daka Stock Exchange was examined for a period of four years from 2001-04. They observed that the average abnormal return increased prior to dividend announcement and after the dividend announcement it has fallen sharply. The study revealed that the cumulative abnormal return for all the companies during the study period increased just prior to the date of the dividend announcement and did not sustain during ex-dividend period. A significant regression analysis explained a very strongly evidences on sensitivity of dividend declaration on the market. The sensitivity was prominent factor during prior and post dividend declaration days and they justified that information leakage carries a significant information context. They concluded that during the study period dividend had a strong impact about signaling the future prospects of the companies.

CONCLUSION

From the above review of empirical studies it is clear that different authors have attempted a study on the financial analysis of an enterprise in different ways. The approaches undertaken by the different researchers presents the different methodology over the subject and it gives an idea on extensive and diversified works on various aspects of financial management. Most of the reviews have come from the studies relating to banking sector, private and public sector industries. Studies from the Indian IT sector in particular Software Industry is very rare since the industry contributes a major portion of country's economy and
the cross-country study done by Gartner analysis to understand India's competitiveness in IT said that India was the clear winner on all parameters in the software development, studies done by other consulting firms arrived at similar conclusions as to the high levels of global competitiveness of Indian companies the current research work is highly important for to-day's financial executives to raise money, locate funds at the right valuations, integrate major acquisitions, adopt necessary technology and to increase their capital investments to get better operational synergies among the organisation.