Chapter – I

BACKGROUND OF THE STUDY

INTRODUCTION

Indian paper industry is the 15\textsuperscript{th} largest in the world and provides employment to 1.3 million people in the country contributing Rs 25bn to the government. India’s first machine made paper was manufactured in 1812. During this time there were 15 mills with a total production of about one lakh tone paper. The Indian paper industry has made steady progress since independence and presently, it has an installed capacity of 9.18 million tonnes from mere 0.1 million in 1950. The paper industry has a crucial role to play for economic growth of the country as paper consumption is considered as one of the most important indices of educational and cultural growth of a nation. The Indian paper industry accounts for about 1.6 per cent of the world production of paper and paperboard. As per Associated Chambers of Commerce and Industry of India, Indian paper industry is poised to grow and touch 11.5 million tonnes from 9.18 million tonnes to 2011-2012 from 2009-2010 at the rate of 8 per cent per annum.

The paper industry has a vital role to play in socio economic development of a country. The per capital consumption of paper is generally considered as a benchmark of a country’s modernization. The paper industry is ranked among country’s 35 high priority economic sectors. The industry was delicensed effective from July 1997 by the government of India and foreign participation is permissible. The paper industry is the second industry to be liberalized in India after the cement industry. Indian paper industry has created sustainable livelihood in rural areas and has helped generating employment for the local population especially for women to earn their livelihood. Indian paper industry provides employment to more than 0.12 million people directly and 0.34 million people indirectly. The Indian paper industry has emerged as a diversified and specialized industry that produces numerous types of papers that comes in various use such as watermark, filter paper, drawing sheets etc. other products including paper bags, paper diaries, paper photo frames, greeting cards,
handmade paper boxes, paper albums etc. are manufactured and exported across the world. Paper in India is made from 40 per cent of hardwood and bamboo fibre, 30 per cent from agro based, and 30 per cent from recycled fibre. Newsprint and publication paper account for 2 million tonnes, of which 1.2 million tonnes of newsprint paper is manufactured in India and the remaining 0.8 million tone is imported. There are approximately 600 paper mills in India, of which twelve are major players.

Indian paper industry has a huge potentials and prospects of growth in coming future. The industry looks extremely positive as the demand for upstream market of paper products, like, tissue paper, tea bags filter paper, light weight online coated paper, medical grade coated paper, etc. is growing up with country’s economy growing robustly, the paper consumption in India is bound to expand, and the existing gap is a good indicator of the industry’s growth potential. The futuristic view is that the growth in paper consumption would be in multiples of GDP and hence an increase in consumption by one kg per capita would lead to an increase in demand of 1 million tons. Paper industry is hoping for better days ahead. The robust economic and strong corporate performance would boost the domestic demand in the near term. It is against this backdrop that the present study on performance appraisal of paper industry in India has been undertaken in order to assess and to analyze the performance of some select paper mills in India.

REVIEW OF LITERATURE

Oral and Yolalan (1990), in their research paper “An Empirical Study on Measuring Operating Efficiency and Profitability of Bank Branches” discussed the methodology of an empirical study that was employed to measure the operating efficiencies of a set of 20 bank branches of a major Turkish Commercial Bank offering relatively homogeneous products in a multi-market business environment. The methodology was based on the concepts and principles of Data Envelopment Analysis (DEA). The results of the study indicated that this kind of approach was not only complementary to traditionally used financial ratios but also a useful bank management tool in reallocating resources between the branches in order to achieve
higher efficiencies. It had been also observed that the service-efficient bank branches were also the most profitable ones, suggesting the existence of a relationship between service efficiency and profitability.

Ahuja and Mujamdar (1998), in their paper “An Assessment of the Performance of Indian State-Owned Enterprises” tried to examine the determinants of performance of 68 Indian state-owned enterprises in the manufacturing sector for a five-year period: 1987 to 1991. Relative performance was determined using data envelopment analysis, with variations in performance patterns subsequently explained using regression analysis. ‘T’ test is also used to test the hypothesis. The study gave the conclusion that there exists significant variation in the efficiency performance of the firms. They also found that, as posited, firm-specific characteristics: age, size, and market status, generic environmental factors: increasing competitive intensity, as well as institutional characteristics all affects the performance of state-owned enterprises.

Boubakri and Cosset (1998), in their paper “The Financial and Operating Performance of Newly Privatized Firms: Evidence From Developing Countries” tried to examined the change in financial and operating performance of 79 companies from 21 developing countries that experience full or partial privatization over the period 1980 to 1992. To take account of the possibility that some of the differences between pre privatization and post privatization performance could be due to economy wide factors performance measures adjusted for market effects in addition to unadjusted performance measures is used. For both unadjusted and market-adjusted performance measures, they document significant increases in profitability, operating efficiency, capital investment spending, output (adjusted for inflation), total employment and dividend. It was also found a decline in leverage following privatization but this change was significant only for unadjusted leverage ratios. The evidence suggests that privatization yields greater benefits for companies operating in developing countries with high income per capita and for companies whose governments surrender voting control. Z test statistic which, for samples of at least ten observations, approximates a standard normal distribution was used.

Majumdar (1998), in his research paper “Assessing Comparative Efficiency of the State-Owned Mixed and Private Sectors in Indian Industry” endeavored to
evaluate the performance differences between government owned, mixed sector and private sector enterprises in India for the period 1973–1974 to 1988–1989. Data Envelopment Analysis (DEA) was used for estimation. The results established that enterprises owned by the central government and state governments were less efficient than mixed or private sector enterprises, while mixed sector enterprises were less efficient than those in the private sector. The results contradict extant evidence finding no performance differences between government-owned and private firms in India. There have, however, been inter-temporal efficiency gains for the sector as a whole, perhaps resulting from reforms undertaken towards improving government-owned enterprises’ performance.

Rej and Sur (2001), in their joint publication captioned, “Profitability Analysis of Indian Food Products Industry: A Case Study of Cadbury India Ltd.” tried to measure the profitability scenario of Cadbury India Ltd. The study also aimed to assess the degree of relationship between the selected profitability ratio and some important parameters of the company’s position and performance and to test the statistical significance of the relationship by using correlation coefficient and multiple regression equation. The study covers the period of 10 years i.e. from 1987-88 to 1996-97.

Kantawala (2001), in her paper entitled, “Financial Performance of Non Banking Finance Companies in India” attempted to examined the relative financial performance of different groups of NBFCs for the period 1985-86 to 1994-95 in terms of profitability, leverage and liquidity. An attempted was made to find out the groups for which majority of the ratios were same. For the purpose of analysis, following ratios were calculated. These are: Profitability ratios: i) Total income/Total assets; ii) GP+Dep/Total income; iii) GP/Total income; iv) PBT/Total income; v) PAT/Net worth; vi) PAT/Total Assets; vii) Divided/PAT; viii) Tax/PBT; ix) Retained Profit/PAT; x) Interest coverage Leverage Ratio: xi) Borrowing/Total assets; xii) Bank Borrowing/Total assets; xiii) Net worth/Total assets; xiv) Bank borrowing/borrowings; xv) Debt/Total assets; xvi) Debt/Net worth; xvi) Debt equity; xvii) Loan to current assets Liquidity Ratios: xviii) Current ratio. To examine whether these ratios differ significantly between different categories of NBFCs, One way Analysis of Variance (ANOVA) was applied to test the hypothesis. Krushkal Wallies
test was also applied in order to overcome the precondition of normal distribution in case of ANOVA. The author concluded that there exists a significant difference in the profitability ratios, leverage ratios and liquidity ratios of various categories of NBFCs.

Mukherjee and Bhar (2002), in their research paper titled, “Performance Analysis of Opencast Mines-A Heuristics based Approach” attempted to establish a methodology integrating a set of conflicting performance criteria for the opencast mines of a PSU. Heuristics is used to resolve the conflict among the parameters of and to develop a single and consensual rank list of the coal mines. Financial efficiency, cost efficiency, operating efficiency has been identified as the major parameters for assessing their performance.

Kakani and Kaul (2002), in their paper “Firm Performance and Size in Liberalized Era: The Indian Case” focused on two sectors, one high performing and another low performing, and conducts sector specific empirical analysis to determine the firm characteristics and performance nexus in varying financial, socio-economic conditions. It was found that firm size was the most important factor influencing its financial performance. To this effect industry level analysis is performed looking into the nexus of firm characteristics and their performance numbers in a high performing (transportation equipment) and a low performing (textile mill) industry. An analysis of 40-42 firms’ textile mill and transportation equipment industry respectively over time span of eight years, 1992-2000 is performed. This eight year period was divided into two sub-periods of four years each, the first period being a period of economic growth and the second one being a period of relative recession. The study led to conclude that in an industry level analysis it was size of the firm that comes out as the most significant factor influencing its shareholder value in the liberalized era.

Sharma (2003), in his research publication “Break Even Analysis of Paper Industry” has adopted the sampling covering the units on the basis of size, area and raw material aspects in the research area, Coastal Andhra. 11 paper mills were selected for the study. Out of these, there was one large-scale paper mill and 10 small scale mills on the basis of size. The study was based on wood, agro residue, and waste paper units and also represented rural and urban regions in the coastal Andhra Pradesh.
Singh (2003), in his paper “Financial Appraisal of IDBI Bank Ltd.” tried to examined the soundness or otherwise the liquidity position and capital adequacy as well as effectiveness of various financial indicators to reflect the performance of IDBI Bank. Various statistical techniques like t-test and correlation were applied to test the validity of hypothesis. The study covers the period of 5 years i.e., from 1997 to 2001. To judge the performance of the IDBI bank Capital Adequacy ratio, Priority Sector Advances, Statutory Liquidity Ratio, Cash Reserve Ratio, Non performing Assets and Credit Deposit Ratio was used. The study gave the conclusion that IDBI Bank is a progressive, technology driven, professionally managed entity well geared to meet competition from existing as well as new banks effectively. Its financial position for the last five years was quite satisfactory.

Sapar and Madava (2003), in their research paper captioned, “Performance Evaluation of Indian Mutual Funds” endeavored to evaluate the performance of Indian mutual funds through relative performance index, risk-return analysis, Treynor's ratio, Sharp's ratio, Sharp's measure, Jensen's measure, and Fama's measure. The data used was monthly closing NAVs. It was started with a sample of 269 open ended schemes (out of total schemes of 433) for computing relative performance index. Then after excluding the funds whose returns were less than risk-free returns, 58 schemes were used for further analysis. The results of performance measures suggest that most of the mutual fund schemes in the sample of 58 were able to satisfy investor's expectations by giving excess returns over expected returns based on both premium for systematic risk and total risk.

Galagedera and Edirisuriya (2004), in their paper “Performance of Indian Commercial Banks (1995-2002): An Application of Data Envelopment Analysis and Malmquist Productivity Index” tried to investigate efficiency using Data Envelopment Analysis (DEA) and productivity growth using Malmquist index in a sample of Indian commercial banks. The sample periods consider was 1995-2002. The sample consists of 17 public and 23 private banks. The technical efficiency score was computed with the CRS specification Model and ‘pure’ technical efficiency with the VRS output orientation BCC model and VRS input orientation specification.
The results gave the conclusion that using total deposits and operating expenses as input and loans and other earning assets as output in the DEA analysis observed no significant growth in productivity during the sampled period. The rate of increase in technical efficiency though small was likely to be due to scale efficiency compared to managerial efficiency. Smaller banks were less efficient and highly DEA-efficient banks had a high equity to assets and high return to average equity ratios. There had been no growth in productivity in private sector banks where as the public sector banks appears to demonstrate a modest positive change through 1995-2002. Technological change in the public sector banks reveals a growth while the private sector banks experienced a negative growth of almost the same magnitude.

Selvam, et.al. (2004) in their research paper “A Study on Financial Health of Cement Industry- "Z" Score Analysis” tried to examined the overall performance of Indian Cements Ltd. "Z" score analysis was applied to evaluate the general trend in the financial health of India Cements Ltd by using ratio analysis. The study covers the period of 5 year i.e. from 1998-2002. The study gave the conclusion the cement company under the study period was just on the range of financial collapse. The financial health of the company was never in the too health zone during the study period. However Z score in 2002 rose to healthy zone while the score for first four of study period (1998-2001) had fallen in bankruptcy zone. In total the financial performance of India Cements was very unviable.

Saranga and Phani (2004), in their paper “The Indian Pharmaceutical Industry: An Overview of Internal Efficiencies Using Data Envelopment Analysis” tried to examined whether there were any common firm level factors which aid in the survival and growth of a firm. Data Envelopment Analysis (DEA) was used on a sample of 44 companies that had survived at least the past one-decade, to determine the best practices in the Indian Pharmaceutical Industry. The results of DEA had been analyzed along with their Compound Annual Growth Rate (CAGR) to see if internal efficiencies and growth rate are related in the Indian Pharmaceutical Industry. They had also used regression analysis to see the correlations between various inputs/outputs and the growth rates. Various models of DEA like Constant Returns to Scale (CCR), Variable Returns to Scale (BCC) and Assurance Region (AR) were used to substantiate the results obtained.
Ajmera (2005), in his thesis “A Study Of Liquidity, Productivity Viz. – A-Viz. Financial Efficiency of Birla Group of Companies” attempted to study the Liquidity, Productivity viz a viz. Financial Efficiency of Birla Group of Companies, which were mainly engaged in production of Cement, Textiles, Automobile, Aluminum Products, Engineering, Tea, Agro Products and Paper etc. The study aimed at exploring the liquidity, productivity viz a viz-financial efficiency of Birla Group of Companies. For the purpose of ascertaining liquidity, productivity viz a viz financial efficiency of Birla Group of Companies, sixteen (16) leading companies of Birla Group’s having a large plant had been selected. The period covered under the study extends over six years from 1997-98 to 2002-03. Adopting various techniques such as ratio analysis trend analysis had made analysis of selected units.

Sensarma (2005), in his paper “Cost and Profit Efficiency of Indian Bank During 1986-2003: A Stochastic Frontier Analysis” endeavored to examined of all scheduled commercial banks in India. The study covers the period from 1986 to 2003. Stochastic frontier analysis technique was employed to estimate bank-specific cost and profit efficiency. The study gave the conclusion that while cost efficiency of the banking industry increased during the period, profit efficiency underwent a decline. This was expected in an emerging economy undergoing a process of deregulation. In terms of bank group, domestic banks appear to be more efficient than foreign banks.

Tyagi et.al. (2005) in their project “Financial Analysis on HLL” studied the financial health of Hindustan Lever Limited. The main purpose of the project was to analyze the Environment in which HLL is operating. EIC - Environment Industry and Company analysis was done thoroughly to understand the external factors influencing the company. All various ratios were calculated and analyzed in length to appreciate their impact on company’s performance. DuPont analysis was done to check the credibility of company as per shareholders, financial analysts and other mutual funds. The three financial statements of last three years are identified, studied and interpreted in light of company’s performance. Critical decisions of distributing dividends, Issue of bonus Debentures and other current news were analyzed and their impact on the bottom line of the company was assessed. Accounting policy of the company was also studied with respect to valuation of Fixed Assets, Inventory, Investments and Employee related liabilities. The results gave the conclusion that the company has
managed its cash position very efficiently and utilized cash to generate future returns and as well as reward the shareholders.

Yeshwant (2005), in his dissertation titled, “Analysis of the Risk and the Required Return on Equity” aimed to identify capitalization rate or required return on equity and its relation to various types of investment risks. This empirical research intends to arrive at the required rate of return based on the five variables which are divided into two parts; viz: The distribution variables: standard deviation, skewness and covariance and; the financial risk variables: debt-equity ratio and dividend payout ratio. The research was based on the sample of 31 stocks listed on the National Stock Exchange and the historical data was collected for each of the stocks for the 10 years (April 1995 – March 2005). To test the suitability of the model of ‘The Risk And The Required Return’ on equity proposed by Fred D Arditti was used and to test the relationship between each of the independent variables viz; the Variance of the Returns, the Skewness of the Returns, the Covariance between the Returns of the Equity and the Market Returns, the Debt-Equity Ratio and the Dividend Payout Ratio and the Required Rate of Return on equity, by keeping the other independent variables constant in a multiple regression analysis was used.

Atkotiya (2005), in his thesis entitled “Analysis of Financial Performance of Tea Industry in India” had endeavored to analyze and evaluate the financial performance of the tea industry in India. The study covers ten reputed tea companies of India. The study obtains an insight into the financial position of the selected companies of tea industry in India, and to judge, their financial performance and financial strength. The financial performance of selected companies during the years from 1997-1998 to 2002-2003 was thoroughly examined. The study includes the following ten companies of Tea Industry, namely AFT Ind. Ltd., Dhunseri V Tea & Ind. Ltd., Goodricke Group Ltd., Greenline Tea & Exports Ltd., Jay Shree Tea & Ind. Ltd., Parry Agro Ind. Ltd., Rossell Ind. Ltd., Tata Tea Ltd., Warren Tea Ltd., and Williamson Tea Assam Ltd. Statistical techniques used for the purpose of financial appraisal involve, among others, regression and correlation analysis. To test the hypothesis Kruskal Wallis one-way analysis of variance test was also used.
Debasish (2006), in his paper “Efficiency Performance in Indian Banking—Use of Data Envelopment Analysis” attempted to measure the relative performance of Indian banks over the period 1997–2004 using the output-oriented CRR, DEA model. The analysis used nine input variables and seven output variables. The analysis supports the conclusion that foreign owned banks were on average most efficient and that new banks were more efficient than old ones, which were often burdened with old debts. In terms of size, the smaller banks are globally efficient, but large banks are locally efficient. Moreover, the study finds out the evidence of concentration of efficiency parameters among peer bank groups.

Bardia (2006), in his paper “Liquidity Trends in the Indian Iron and Steel Industry: A Comparative Study of SAIL and TISCO” endeavored to present a comparative study of liquidity trends of SAIL and TISCO. The statistical methods such as index number, time series analysis, regression and chi-square test had been employed to examine the liquidity position of both the companies. The working capital and sales relationship based on working capital turnover ratio was also analyzed and a statistical technique of regression was also used. The statistical technique of hypothesis testing had further been used to analyze the significance of differences between actual and estimated values of working capital, current assets and current liabilities of both the companies. On the whole, the liquidity policies pursued by SAIL and TISCO had been precisely and effectively presented.

Varadi et.al. (2006), in their paper “Measurement of Efficiency of Banks in India” focused on to estimate the efficiency of commercial banks including public, private and foreign banks operating in India for the period 1999-2000 to 2002-2003 with four indicators i.e., productivity, profitability, financial management and asset quality. Non-parametric approach i.e., Data Envelopment Analysis for measuring the efficiency of banks in India was used. The analysis gave the conclusion that public sector banks were having high efficiency in terms of productivity, profitability, financial management and asset quality, whereas the private banks were having a very high inefficiency levels during the sample period in the different indicators but foreign banks were seemed to more efficient than the private banks. Thus it can conclude that public sector banks were in the forefront of beneficiaries list of reforms in the banking field.
Raheman and Nasr (2007), in their research paper “Working Capital Management and Profitability – Case of Pakistani Firms” a sample of 94 Pakistani firms listed on Karachi Stock Exchange for a period of 6 years from 1999 – 2004 were selected. They studied the effect of different variables of working capital management including the Average collection period, Inventory turnover in days, Average payment period, Cash conversion cycle and Current ratio on the Net operating profitability of Pakistani firms. Debt ratio, size of the firm (measured in terms of natural logarithm of sales) and financial assets to total assets ratio have been used as control variables. Pearson’s correlation, and regression analysis (Pooled least square and general least square with cross section weight models) were used for analysis. The results showed that there were a strong negative relationship between variables of the working capital management and profitability of the firm. It means that as the cash conversion cycle increases it will lead to decreasing profitability of the firm, and managers can create a positive value for the shareholders by reducing the cash conversion cycle to a possible minimum level. It was found that there was a significant negative relationship between liquidity and profitability. It was also found that there is a positive relationship between size of the firm and its profitability. There was also a significant negative relationship between debt used by the firm and its profitability.

Mathur (2007), in his paper “Indian IT Industry: A Performance Analysis and a Model for Possible Adoption” described the major parameters of the Indian Information Technology (IT) Industry in India today and in the immediate past. DEA was applied to benchmark the performance of the 92 Indian Software Companies for 2005- 2006. The impact of various determinants on technical efficiency of the Indian Software companies was worked out using tobit regression. The impact of the explanatory factors on net exports of 92 software firms in 2005-06 was also worked out using simple regression. Malmquist index was also used to estimate total factor productivity changes decomposed into efficiency change and technical change for the common software firms existing between 1996 and 2006.

The study gave an account of the position of the Indian Information Technology (IT) Industry and the Indian Information and Communication Technology (ICT) Industry in the global context and analyzes the strengths and
weaknesses of ICT Infrastructure across some countries. Technical Efficiency of the Indian ICT sector was worked out using the mathematical model of Data Envelopment Analysis. The study also worked out technical efficiency of 36 telecommunication firms in India and examined the determinants for new technology adoption by such industries. The study describes why and how the Indian IT industry can act as a catalyst of growth and development. An account of an effective electronic governance model for Agriculture Sector was also given. It was found that the size of the Software Company (in terms of sales of the software company), number of employees and total costs do matter for net exports.

Irala (2007), in his paper “Corporate Performance Measures in India: An Empirical Analysis” attempted to examine whether Economic Value Added has got a better predictive power relative to the traditional accounting measures such as EPS, ROCE, RONW, Capital Productivity (Kp) and Labor Productivity (Lp). Analysis of 1000 companies across 6 years (6000 company years) was computed. ‘T’ test was used to examine the significance of the regression models. Analysis very much supports the claim that the EVA was the better predictor of market value compared to other accounting measures.

Mantravadi and Reddy (2007), in their paper “Relative Size in Mergers and Operating Performance: Indian Experience” studied the impact of mergers on the operating performance of acquiring corporate by examining some pre- and post-merger financial ratios with a sample of firms chosen from all mergers involving public limited and traded companies in India between 1991 and 2003. The results suggest that there were minor variations in terms of the impact on operating performance following mergers, when the acquiring and acquired firms were of different relative sizes, as measured by market value of equity.

Vanitha and Selvam (2007), in their paper “Financial Performance of Indian Manufacturing Companies during Pre and Post Merger” aimed to evaluate the financial performance of the manufacturing companies before and after mergers and acquisitions. The study was mainly intended to examine the financial performance of merged companies three years before merger and three years after merger. The study has analyzed the financial performance of sample manufacturing company. In order to
evaluate the financial performance, tools like ratio analysis, mean, standard deviation and ‘T’ test had been used. The financial performances of the 17 sample acquiring firms before and after the announcement of M & A had been analyzed with the help of various financial ratios. The study found that in India merging companies were taken over by companies with reputed and good management.

Deb et.al. (2007), in their paper “Performance of Indian Equity Mutual Funds vis-a vis Their Style Benchmarks: An Empirical Exploration” applied a return based style analysis of equity mutual funds in India using quadratic optimization of an asset class factor model proposed by William Sharpe. It was found that the 'style benchmarks' of each of the sample of equity funds as optimum exposure to eleven passive asset class indexes. It also analyzed the relative performance of the funds with respect to their style benchmarks. Results showed that the funds had not been able to beat their style benchmarks on the average.

Iyer and Agarwal (2007), in their project “Analysis of Capital Structure in Indian Companies: (A Study Of 150 Listed Companies)” aimed at analyzing the capital structure prevailing in the Indian Industry. The paper aimed at establishing a relationship between leverage ratio and prices of the stock so as to understand whether the investors are sensitive or not, while pricing the stock. The study focuses on analyzing and understanding the capital structure in Indian Industry through the long term Debt and Equity ratios. At the first stage relevant data for 50 stocks were collected for the past 5 years and analyzed. It was found that although prices were moving to discount the bankruptcy cost of all companies whose mean leverage ratio was higher than the industry mean, leverage among industries were not significantly different. The sample size was then enlarged by including CNX 100 stocks in the appropriate representation of the difference in the mean leverage that existed among the industry over the past five years. Since the corporate also fund their needs from other debt the sources so it was also important to see another leverage ratio, i.e. total debt to equity ratio. This ratio together with the long term debt to equity ratio was used for 77 stocks identified from NSE 50 and CNX 100. As it is evident that NSE 50 and CNX100 give a total of 150 stocks, but there were some common stock which were taken only once for the study.
Besides banking and financial institution stocks, primarily being of service sector do not have equity these stocks were also dropped from the study. Effectively thus a total of 77 stocks remained for study. To our surprise no difference could be observed between result of large sample and the small sample considered earlier. The study were however led to conclude that the investors were leverage sensitive and were discounting the prices to high leverage ratio; and the leverage in the industry was a more time determined factor as against industry dynamics factor.

Balasubramanian (2007), in his paper “Indian Banking Industry- Evaluation of Financial Performance” compared the financial performance of public, private and foreign banks in India. To make a comparison of financial performance of different sectors of bank following factors were taken for analysis: i) Gross NPA ii) Percentage of Gross NPA to Gross Advance iii) Net NPA iv) Percentage of Net NPA to Net Advance (v) Percentage of Gross NPA to Gross Advance (vi) Percentage of Net NPA to total assets. (vii) Deposit (viii) Percentage of Deposit to Total Liabilities (ix) Loans and Advances (x) Percentage of Loans and Advances to total assets (xi)Operating Profit (xii) Percentage of Operating Profit to Total Assets (xiii) Net Profit (xiv) Percentage of Net profit to Total Assets. The study covered the period of two years i.e. 2005 and 2006. The analysis gave the conclusion that performance of private sector banks and foreign banks were highly appreciable than that of public sectors banks.

Reddy and Rani (2007), in their paper “The Performance Evaluation of Non Banking Financial Companies” evaluated the performance of non banking financial companies for a period of 6 years i.e. from March 2000 to March 2005. The study also aimed to identify the reasons for the prevailing trend in the sector and also to identify the possible strategic options for NBFCs to survive and grow. Various parameters like business profile, distribution of public deposits, distribution of total assets, distribution of net owned funds, maturity patterns, CRAR ranges, sources of borrowing, NPAs, financial performance and other monetary aggregates etc. were studied. A statistical tool two way ANOVA had been applied to test whether there was any significant difference in the amount of borrowings with the differing years and different types of sources of borrowing. The study gave conclusion that if NBFCs were able to deliver superior value to customers through unique positioning and value
chain configuration, then it could attain a sustainable competitive advantage against other players in its chosen product market segment.

Balasubramanian (2007), in his paper “Financial Performance of Private Sector Banks in India – An Evaluation” tried to evaluate the financial performance of Indian private sector banks and rank them based on each variable. A consolidate ranking was also calculated. To analyze the financial performance variables like business per employee, return on assets, profit per employee, capital adequacy, credit deposit ratio, operating profit and percentage of net non performing asset to net advance are used. Data were collected for a period of three years (2003-2004, 2004-2005, and 2005-2006) from all Indian private sector banks. The ratio return on assets was used to measure the profitability of the banks. To measure the efficiency of the employee working in bank profit per employee as a tool was used. Business per employee was also a tool to measure the efficiency of the employee of the banks, credit deposit ratio was a tool used to study the liquidity position of the bank. Net NPA as a percentage of Net advances was used to study the quality of the assets of the bank. The results gave the conclusion that the new generation private sector bank had best used the technology; utilize the manpower in an effective manner.

Das and Senapati (2007), in their paper “Profitability of Indian Corporate Sector: Productivity, Price, Growth?” examined the major sources of strong profitability of Indian manufacturing companies during recent years. They applied a new index-number theory to data of Indian manufacturing companies over a period of seven years from 2000-2006, allowing changes in the company's profit to be broken down into separate effects due to productivity change, price changes and growth in input quantities used. Results concluded that the productivity of Indian manufacturing companies was found to be 24 per cent higher in 2006 as compared to that in 2000. Results further indicated that the actual increase in companies' profit has outpaced the growth in the size of the input quantities on an average. The empirical results indicate that the companies had not passed the benefit from productivity improvement to consumers.

Chaudhuri (2008), in his paper “Analysis of the Profitability Ratios of HCL” tried to evaluate the performance of HCL through profitability ratio. A study period of
3 years is taken from 2005-2007. To judge the performance, the profitability ratio used are: (i) gross profit margin (ii) operating profit ratio (iii) net profit ratio (iv) return on assets (v) return on capital employed (vi) return on shareholder’s equity (vii) earnings per share (viii) dividend per share and (ix) price earnings ratio. The study gave the conclusion that HCL Info Systems were in the recovery stage after going through a recessionary phase in 2006.

Kumar (2008), in his paper “An Analysis of Efficiency–Profitability Relationship in Indian Public Sector Banks” had endeavored to explore the relationship between Technical Efficiency (TE) and profitability in the Indian public sector banking industry. The technique of Data Envelopment Analysis (DEA) had been utilized to compute the TE score for each bank in the year 2005. Based on cross-sectional data for 27 banks had been used. An analysis of efficiency–profitability matrix based on the efficiency scores and Return on Assets (ROA) reveals that 13 banks that fall in the ‘lucky’ and ‘underdog’ quadrants have the TE score below the industry average.

Sudershan et.al. (2008), in their paper “Financial Performance of Domestic and Foreign Owned Companies in India” examined whether foreign ownership had any impact on financial performance of firms in India over a period of time. A pooled cross section time series analysis of 102 Indian pharmaceutical firms for the period 1998-2005 was conducted. For the analysis, a novel, robust method of handling missing data was used. The result gave the conclusion that the foreign ownership was found to have a positive and statistically significant impact on the financial performance of pharmaceutical companies in India.

Ghosh (2008), in her paper “Liquidity Management: A Case Study of TISCO Ltd.” examined the liquidity position of TISCO Ltd. on the basis of some important parameters of liquidity management such a current ratio, quick ratio, current assets to total assets ratio, current assets to total assets ratio, inventory turnover ratio and debtors turnover ratio. Spearman’s rank correlation was used to measure the closeness of association between liquidity and profitability. Students’t’ had also been employed. The technique of least square had been used in order to assess the behavior of ratio. Apart from few statistical analyses, the study had been carried out mainly by
employing ratio technique. The study had been undertaken for the period of five years i.e. from the year 1996-97 to 2000-01. The study gave conclusion that although the degree of association between liquidity and profitability of the company was positive, the degree of influence of liquidity on its profitability was low and insignificant.

George and Rangaraj (2008), in their paper “A Performance Benchmarking Study of Indian Railway Zones” aimed to carry out a performance benchmarking study of the zones of Indian Railways (IR) to develop an alternate approach for measurement of aggregate operational performance of the railway zones and to envisage its operations in a supply chain perspective, so as to gain academic and practical insights. Data Envelopment Analysis (DEA) method was used in the study. Within the set of inputs and outputs considered, they identified the best performing railway zones over the years and the efficiency trends. Some weaknesses of the conventional DEA were addressed by including the concept of cross-efficiencies along with self-efficiencies, by analyzing longitudinal data spread over four years and also by comparing the efficiencies with the operating ratios. The study had also helped to understand the impact of the recent restructuring of the zones on their performance.

Chirayil (2009), in his paper “Economic reform and Productivity Growth in Indian Paper and Paper Products Industry: A Nonparametric Analysis” had applied the Malmquist Productivity Index in order to estimate total factor productivity growth and its components (efficiency change and technological progress) in Indian paper and paper products industry during pre and post-reform period. The obtained estimates of TFP change at the aggregate and sectoral level, indicates that the net impact of economic reforms on the productivity growth of paper and paper products industry was negative. It was evident in the study that the negative TFP change was decreased (from -8.6 per cent to -5.2 per cent) in the post-reform period in paper and paper products industry at the aggregate level. It was found in the study that the technical efficiency change and the technical change was the deteriorating factor for productivity change in Indian paper and paper products industry. The results of the study suggest that specific policies should be implemented in order to improve
efficiency as well as technical progress, thus ultimately facilitating long-run productivity growth.

Singh (2009), in his paper “Profitability Analysis (A Case Study of HCL)” tried to analyze the profitability position of the Hindustan Copper Limited. The relationship between different components of income statement with sales (Turnover) were highlighted and tried to examine overall profitability maintained by HCL by applying statistical tool of coefficient of variation. To analyze the profitability of Hindustan Copper Limited, Financial statements had been rearranged, summarized & presented in suitable form and various ratios reflecting profitability had been computed. The study covers the period of seven years from 2001-02 to 2007-08. Statistical tools like mean, standard deviation have been applied. The results gave the conclusion that the profitability position of HCL was not satisfactory.

Roy and Koul (2009), in his paper “Financial Performance Appraisal of a Steel Plant: A SD Model” studied the detailed SD modeling and analyze the financial performance of the company. The key financial ratios taken up by them for simulation and analysis were (i) Leverage ratios (ii) Liquidity ratios (iii) Turnover ratios, and (iv) Profitability ratios. A study period of 20 years was taken from 1994. The results were validated. The model was utilized to explore alternative policies which had been compared for their relative effectiveness. They successfully applied the SD model to portray the dynamic behaviour of the financial subsystem of the plant. The reasons for excellent performance had been identified as (i) increase in production and sales volume (ii) Cost reduction measures (iii) reduction in borrowings and (iv) Buoyancy in steel market.

Pria (2009), in his paper “The Application of Value-Based Management: An Empirical Analysis on Indian Auto Ancillary Industry” attempted to apply the valuation methods to the Indian Auto ancillary Industry. The study tests whether value based frameworks are applicable in Indian condition. The relationship between shareholder's value and financial variables was examined. A sample of 18 top companies had been taken from Auto-ancillary industries during the period spanning 1992-2006. Regression results showed that Economic Value added, Total Shareholder Return and Future Growth value had positive impact on Market Value Added.
Bhunia and Brahma (2009), in their paper “Efficiency Analysis - A Study of Liquidity and Profitability” endeavored to study of Indian private sector steel Industry for assessing the impact of working capital policies & practices on profitability during the period 1997-98 to 2005-06. Seven private sector steel companies operating in India have been selected for the study. The main objective of the present study was to make a study on the efficiency of the management of working capital in operating selected private sector Iron and Steel enterprises in India. In the course of analysis in this study, accounting techniques include ratio analysis, while among statistical technique the multiple correlations and multiple regression analysis, co-efficient of determination (R) and ‘T’ test had been applied.

Khandare (2009), in his dissertation “Financial Performance Appraisal of Dr. Babasaheb Ambedkar Urban Co-Operative Bank Ltd., Aurangabad” endeavored to appraise the financial Performance of the bank. The study aimed to find out the genesis, growth and development of UCBs particularly in Aurangabad district. The study covers the period of 5 years i.e. from 2003 to 2007. Financial statement, common size statements, trend analysis, ratio analysis and SWOT analysis was used to evaluate the performance. The result gave the conclusion that bank had sound profitability and had adequate liquidity.

Deepa et.al. (2009), in their paper “Performance Analysis of Karnataka State Agricultural Produce Processing and Export Corporation, Limited” endeavored to evaluate the performance of Karnataka State Agricultural Produce Processing and Export Corporation, Limited. Secondary data were used for the study for the period 1997-2007. The statistical tools like compound growth rate and ratio analysis were used to evaluate the performance. Solvency ratio (0.70) revealed the significant dynamism of the organization. Liquidity ratio showed that the corporation had maintained a reasonable level of liquidity position as revealed by current ratio (3.21) and acid test ratio (0.70). The profitability ratio showed that the corporation had not maintained a fair level of profit (0.12) because it gave more importance to social obligations than the profit. The operating efficiency of the corporation was high. On an average Rs.94 and Rs.72 were spent respectively as total expenses and variable expense to earn an income of Rs. 100 by the corporation. The growth rate of Onion export (69.40) was found to be positive and significant whereas, growth rate of Potato
(-12.70), Mango (-4.39) and Niger seeds (-66.08) were found to be negative and non-significant. Apart from this compound growth rates of domestic market, import markets in terms of quantity and value showed a negative growth rate. But export markets growth rate were positive in terms of quantity (31.18 per cent) and value (32.06 per cent) which indicated an increasing trend over the years.

Sinha (2009), in her paper ‘Profitability Performance Analysis of State Bank of India’ attempted to appraise the financial position of the bank through the application of profitability performance analysis technique. For the purpose of the study, a major and the largest nationalized bank of India viz., State Bank of India (SBI) had been selected. The financial data of the bank had been taken for a period of six years, i.e., from fiscal 2003 to fiscal 2008. To make an assessment of the financial position of a bank, profitability performance analysis technique like spread ratios and burden ratios were used. Results gave the conclusion that the bank had not performed in a satisfactory manner. The decrease in the ratio of interest earned as the % of working funds had caused a decline in the spread ratio, whereas the decline in the ratio of non-interest income as % of working funds had resulted in an increase in burden ratio. A decreasing spread ratio and an increasing burden ratio was not a healthy sign for the profitability of a bank.

Selverasu et.al. (2009), in their paper “A Strategic Profit Model To Measure Indian Apparel Retail Performance” endeavored to measure the performance of three Indian retail companies that focus in apparel with the help of strategic profit model (SPM). They selected three companies on the basis of large, medium and small corporate, Pantaloon (large), Shoppers’ Stop (medium) and Provogue (small). Their study also aimed (i) to draw the interrelationship of various retail financial indicators of companies for the year 2007 (ii) to compare the retail financial ratio used for establishing SPM for three years from 2005 to 2007 (iii) to analyze the deviation of COGS, total expenses and current assets from its peer average for the year 2005 (bench mark-the best performance so far) and its peer average for the year 2007.

Bara (2010), in his thesis “A Study on Liquidity Management of Indian Steel Industry” dealt with the Analysis on liquidity of steel industry in India, which were mainly engaged in production of steel Products, The study aimed at exploring analysis
of liquidity performance of steel industry in India. The study covers a period of 10 years i.e. from 1999-2000 to 2008-2009. Four companies JSWSL, JS&AL, SAIL, and TSL were selected for the study. In order to analyze the liquidity performance six types of ratios were calculated i.e. current ratio, quick ratio, and inventory turnover ratio working capital turnover ratio, debtor turnover ratio, and average collection period. To test the hypothesis one way ANOVA was used. The analysis describe that the need for liquidity to run day-to-day business activities can’t be over emphasized.

Nikoomaram et.al. (2010), in their paper “Efficiency Measurement of Enterprises Using the Financial Variables of Performance Assessment and Data Envelopment Analysis” studied the Data Envelopment Analysis (DEA) technique as well as the financial-based variables such as Return On Investment (ROI), Residual Income (RI), Return On Sale (ROS), Earnings Per Share (EPS), Price to Earnings ratio (P/E), Return On Assets (ROA), and Operating Cash Flows to owners’ equity (OCF) had been applied to measure the performance and efficiency of companies belonging to the metal industries and accepted in Tehran Stock Exchange Corporation. A six-year data of 24 companies, totally 144 observations, had been collected and used. The multivariate regression had been employed to study the relationship between the financial variables and DEA. The results of the test showed that there were significant relationships between three variables (ROS, EPS, and OCF) and the efficiency results of DEA.

Nandi (2010), in his paper “Performance Analysis of Central Public Sector Enterprises (CPSE’S) in India” had tried to examined the performance of an enterprise especially in case of public sector enterprises in India. Both financial and social performance measures are considered. An attempt had been made to appraise and critically explained the performance of the central public sector enterprises (CPSE’S) in India through different parameters like profitability, contribution to central exchequer, internal resource generation, value addition, and employment generation and foreign exchange earnings. The study period covers from 1999-2000 to 2007-08. For analysis and interpretation of data simple mathematical tools like percentages, averages, various conventional ratios had been used for measuring the financial and social performance of the CPSEs. Results gave the conclusion that there was continuous increasing trend in case of profitability, internal resource generation,
contribution to central exchequer, value addition and foreign exchange earnings while an overall decreasing trend was found in case of generation of employment.

Dwivedi (2010), in his paper “An Empirical Study on Gur (Jaggery) Industry (with special reference to operational efficiency & profitability measurement)” examined the cost-return analysis, profitability and operational efficiency of Gur manufacturing units. The study revealed that units of medium and large sizes were able to cover their operating expenses with significant level of profit but small size units were earning a marginal profit. The profit earned by this category was very low as compared to other two sizes. The manufacturers were not interested in any new product of Gur, they just want to earn more profit through Gur only.

Okundamiya and Ojieabu (2010), in their paper “Performance Analysis and Evaluation of Communication System” developed a mathematical approach to obtaining closed formula for generating functions of a system’s content from which most important performance measures are derived. The derivation of such generating functions was based on Queuing Theory (QT), as means of analysing the performance of communication systems for effective data transmission system while asymptotic approximation a standard result in the Theory of Large Deviation (TLD) in the analysis of broadband networks and linearization of their boundaries was adopted due to high transmission rates and stringent Quality of Service (QoS) guarantees of modern systems. The numerical results of analysis was satisfactory, a confirmation of the validity of derived performance measures.

Bhanawat (2010), in his paper “An Analysis of Raw Material Cost in Indian Manufacturing Industry” tried to analyze the share of raw material cost in the cost structure of the manufacturing industry. A sample of 58 companies engaged in manufacturing activities was selected. The sample covers pharmaceutical, textile, cement, metal, oil, automobile, consumer goods and electrical industries. The study gave the conclusion that there was no significant difference among different sectors of the Indian manufacturing industry regarding raw material cost as percentage of gross sales. Various ratios, chi-square test were administered to test the hypothesis. The study results rejected the hypothesis. The results also reveal that, on an average, raw
material cost as percentage of gross sales is 46.46 per cent for the Indian manufacturing industry.

Seghal and Pandey (2010), in their paper “Equity Valuation Using Price Multiples: A Comparative Study for BRICKS” tried to evaluate the efficacy of three value drivers namely, earnings per share, book value and sales for developing stock price forecasts using two performance evaluation criteria: 1) Root Mean Squared Error and 2) Thail Inequality Coefficient. They employ data for BRICKS economies excluding Russia from 1993-2007. An analysis was conducted in three phases. In phase one they found that price to book value was the best standalone price multiple for the Asian economies (India, China and South Korea) while price to earnings does a better job for equity valuation in case of Brazil and South Africa. The study showed that combination of value drivers do not significantly improve price forecast vis-à-vis standalone multiples. The results found that in Indian context market regression is a better tool for price forecasting compared to sector regression as larger number of observations result in better estimator for our forecast equation.

Tatuskar (2010), in his research paper “A Study Of Financial Performance Of Select Indian Scheduled Commercial Banks Using Camels Methodology For 2006-2010” endeavored to evaluate the performance and efficiency of select Indian commercial banks like state bank of India, ICICI bank, Axis bank, HDFC and bank of India during the period 2009-2010 using the CAMEL methodology. The study covers the period of 2006-2010. Further the author compared the performance of these banks with the previous year 2008-2009 and ranks each bank on the basis of the findings got by the CAMEL methodology evaluation. Results indicated that the public sector banks like bank of India had done remarkable well on every CAMEL parameter and in the case of private sector banks ICICI had outperformed the other private sector banks. The findings showed that the performance of the banks for the year ended 2010 had been much better as against their performance during the previous year ended 2009.

Rama and Lenin (2010), in their paper “Performance Evaluation of Equity Mutual Funds” tried to evaluate the performance of Equity Mutual Funds. Mutual funds which had been operating for greater than five years and performing during the
period of study (i.e. 2003 – 2007) are selected. The sample for the study consists of 102 equity mutual funds comprising 56 equity diversified funds, 21 equity index funds, 18 equity tax savings funds, seven equity technology funds. The performance of selected funds was evaluated using average rate of return of fund, standard deviation, Risk/Return, Sharpe Ratio, Treynor ratio and Jensen ratio. Benchmark comparison was also made as it indicates to what extent the fund managers were able to produce better performance of managed portfolio compared to the market or index portfolios.

Dr. Ishwara (2011), in his paper “A Financial Performance Analysis of RRBs: Pre and Post Transformation” attempted to study the performance of the RRBs since 1980 to 2009. The study focuses financial results before and after amalgamation to know the implications of transformation of RRBs in 2004. The study revealed that, RRBs seem to have better Non-Performing Assets (NPA) management with net NPA coming down every year after the amalgamation.

Mistry (2011), in his paper “Performance Appraisal of Indian Automotive Industry through Production Trend Analysis” endeavored to make performance appraisal of the Indian automotive industry through analysis of the production trend thereof with the help of the arithmetic mean, the coefficient of variance, trend Indices and ANOVA. It was found that the differences between actual and trend values of production during the period of the study were significant in all the segments of the Indian automotive industry but it was not significant in commercial vehicles segment. It was observed from analysis of the production indices that production performances of all segments of the industry were improved. It was revealed form the study that the mean value of the production was the highest in Two-Wheeler segment and coefficient of variation suggested higher fluctuations in commercial vehicle and passenger vehicle segments as compared to two-wheelers and three-wheelers segments.

Srinivasan et.al. (2011), in their paper “Financial Performance of Foreign Direct Invested Pharmaceutical Units in India” examined the performance of select Foreign Direct Invested (FDI) assisted pharmaceutical units in India for the period from 1st April 1999 to 31st March 2008. Capital Structure Ratios, Liquidity Ratios,
Profitability Ratios, Du Pont Analysis and Return on Investment ratios were used in the study to evaluate the financial performance of FDI pharmaceutical units in India. During the period of study 23 companies had been taken for the purpose of analysis. From the analysis done they found that most of the units had performed well and shown positive growth. But, the remaining units had proved with downward trend. But this insignificant effect was not constant because most of the units was been lagging due to improper utilization of the funds.

Sakthivel (2011), in his paper “Shareholders’ Value in Indian Pharmaceutical Industry: An Empirical Analysis” attempted to analyze the trend and growth of Shareholders’ Value in terms of EVA and MVA in Indian Pharmaceutical Industry. The study covers the sample size of ‘15’ pharmaceutical companies from Indian Pharmaceutical Industry. These companies were selected as sample companies by considering the availability of financial data for computing EVA, components of EVA (NOPAT, WACC) and MVA, components of MVA (Market Capitalization, Net Worth) for the study period from 1997-98 to 2006-07. For analyzing the trend and growth of value addition in terms of EVA and MVA in Indian Pharmaceutical Industry, statistical tools like mean, standard deviation, CV, LGR (Linear Growth Rate) and ‘T’ statistic was used for analyzing the financial data of sample cement companies. The study gave the conclusion that pharmaceutical in India had succeeded in shareholders’ value creation to the expectation of the public through MVA and EVA.

Bhunia et.al. (2011), in their joint paper “Financial Performance Analysis- A Case Study” aimed to identify the financial strengths and weaknesses of the Indian public sector pharmaceutical enterprises by properly establishing relationships between the items of the balance sheet and profit and loss account. The study covers two public sector drug and pharmaceutical enterprises listed on BSE. These are: Karnataka Antibiotics and Pharmaceuticals Ltd. (KAPL) and Rajasthan Drugs and Pharmaceuticals Ltd. (RDPL). In order to analyze financial performance in terms of liquidity, solvency, profitability and financial efficiency, various accounting ratios had been used. Various statistical measures had been used i.e., A.M., S.D., C.V., linear multiple regression analysis and test of hypothesis t-test in the study. The study had been undertaken for the period of twelve years from 1997-98 to 2008-09.
results of the study concluded that the liquidity position was strong in case of both the selected companies thereby reflecting the ability of the companies to pay short-term obligations on due dates and they relied more on external funds in terms of long-term borrowings thereby providing a lower degree of protection to the creditors. The results further indicated that the financial stability of both the selected companies had showed a downward trend and consequently the financial stability of selected pharmaceutical companies had been decreasing at an intense rate.

Raiyani (2011), in his research paper ‘Performance Analysis with Sustainable Growth Rate: A Case Study’ aimed to identify the components of SGR and the efficiency in their usage; analyze the impact of the components on the Sustainable Growth Rate (SGR) and relationship between SGR and Actual Growth Rate (AGR). Important traditional performance measures such as Retention Ratio Analysis, Leverage Analysis, Asset Turnover Analysis, and Profitability Analysis, Correlation Analysis, Overall Performance Analysis along with a new performance measure called Sustainable Growth Rate (SGR) have been used. Study empirically tests the strength of the relationship between SGR and AGR in Indian IT Companies for the period between 1999 and 2007. The data had been analyzed with the help of statistical tools like ratios, percentages, averages and trend analysis, the Karl Pearson’s correlation coefficient (r), students’ ‘t’ test. The statistical technique of hypothesis testing had further been used to analyze the significance of differences between sustainable and actual Growth Rate. The Study gave the conclusion that as the calculated value of Wipro was much less than the table value; the null hypothesis accepted and concluded that there is no significant association between SGR and AGR and in the case of Infosys, the calculated value (2.78) was much higher than the table value. Hence, the author rejects the null hypothesis and concluded that the association between the two variables in the case of Infosys is significant.

**RESEARCH GAP**

Review of literature done above throws light on various gaps in the previous researches carried out in this field. The researcher intends to put in honest efforts to provide her sincere contribution in this field. It is seen that performance appraisal of
various industries are done like cement industry, steel industry, pharmaceutical industry, textile industry, automobile industry and many more but no study till date has been conducted to study the performance appraisal of Indian paper industry in general and selected paper mills in particular.

**RESEARCH AIMS AND OBJECTIVES**

The purpose of the study is to analyze the financial performance of paper industry of India. It seeks to examine the changes that have occurred in it over the period of time from 2000-01 to 2009-10 and to judge the financial strength and changes therein with the help of comparison of industry ratios and results with standard ratios and also the individual company's ratios with the standard ratios as well as industry ratios. The main objectives of this study are as under:

1. To study the concept of performance appraisal at length;
2. To analyze the trends in the growth and development of Indian paper industry;
3. To study the profile of some top Indian paper mills;
4. To examine the overall performance of selected paper mills in India; and
5. To summarize the findings and offer some important suggestions.

**HYPOTHESES**

A hypothesis is a special proposition, formulated to be tested in a certain given situation as a part of research which states what the researcher is looking for. Lundberg (1982) corroborates that, "A hypothesis is a tentative generalization the validity of which remains to be tested. In its most elementary stage, the hypothesis may be any hunch, guess or imaginative idea, which becomes the basis for action or investigation" The definition rightly specifies that the hypothesis provides the basis for the research work and the entire research work is oriented towards the hypothesis. A hypothesis may be descriptive, which identifies the existence, form, size or distribution of the variables for their analysis. The testable hypothesis may also be
relational. It describes relationship between variables. This relation may or may not be cause-effect relation. However, the explanatory hypothesis always shows a cause effect relationship. In the present research project, four types of hypotheses have been tested, these are as under:

**Hypotheses for Profitability Ratios**

**In Relation to Sales:**

1. There is no significant difference between the Gross Profit Ratios of paper mills.
2. There is no significant difference between the Operating Profit Ratios of paper mills.
3. There is no significant difference between Net Profit Ratios of paper mills.

**In Relation To Investments:**

1. There is no significant difference between the Return on Net Worth ratio of paper mills.
2. There is no significant difference between the Earnings per Share of paper mills.

**Hypotheses for Liquidity and Solvency Ratios:**

1. There is no significant difference between the Current Ratio of paper mills.
2. There is no significant difference between the Quick Ratios of paper mills.
3. There is no significant difference between the Debt Equity Ratio of paper mills.
4. There is no significant difference between the Long Term Debt Equity Ratio of paper mills.
Hypotheses for Activity Ratios:

1. There is no significant difference between the Inventory Turnover Ratios of paper mills.

2. There is no difference between the Fixed Asset Turnover Ratios of paper mills.

Hypotheses for Cash Flow Indicator Ratio:

1. There is no significant difference between the Dividend Payout Ratio (Net Profit) of paper mills.

2. There is no significant difference between the Cash Earnings Retention Ratio of paper mills.

RESEARCH METHODOLOGY

The study is primarily based on the secondary and tertiary sources of data collected from the published annual reports of the Mills which have been suitably rearranged, classified and tabulated according to the requirements of the study. Besides, some data has been collected from the articles published in various business newspapers, journals, and books on the financial services. Some information has been browsed from the internet from the related websites. In the courses of analysis in this study, various accounting and statistical tools and techniques have been used. In order to analyze financial performance in terms of liquidity, solvency, profitability, and financial efficiency, various accounting ratios have been calculated to make a comparison of the performance of different Mills. To test the validity of the hypothesis, the help of various statistical tools such as A.M., S.D., C.V., and one way ANOVA - test has been taken. These tools are of great help in telling us whether the hypothesis assumed are positive or negative in nature.
Universe of Study

The universe of study consists of all the limited paper Mills working in India and listed in Stock Exchanges of India.

Sampling Design

There are about 656 paper mills out of that 33 mills are large integrated wood based, 165 mills belong to medium agro, and 458 mills belong to small waste paper. Researcher has selected 4 Mills as the sample for this study. The sample has been selected considering following factors:-

1. The mills for which the data is available for the period of study i.e. from 2000-01 to 2009-10;
2. The mills, which are engaged in production of paper and paper board, newsprint and writing and printing,
3. The mills should be top players of paper industry, and
4. The Mills should be listed in Stock Exchanges of India.

The following four paper manufacturing Mills have been chosen:

1) Ballarpur Industries Limited (BILT)
2) Tamil Nadu Newsprint And Paper Limited (TNPL)
3) West Coast Paper Mills Limited (WCPM)
4) Andhra Pradesh Paper Mills Limited (APPM)

Period of the Study

The study covers the period of 10 years i.e. from 2000-2001 to 2009-2010.
Presentation Instruments

The data collected would be analyzed and presented using tables, schedules, pie charts, graphs and bar diagrams etc.

SCOPE OF THE STUDY

The present study is significant from various points of view. The study would contribute to the stakeholder, i.e. the management, the staff, and the public at large. The present study aimed to appraise the financial performance of Indian paper industry. The whole study and its conclusions are totally depended on the published annual reports of the paper industry and the period of ten years ranging from 2000-01 to 2009-10 has been considered and taken for the study. The financial performance of Indian paper industries is restricted to this period only. The total number of industries considered for the study is 4.

Consequently, all the findings and results are among this period. As the study is totally depends on the annual reports of the paper industry, the appraisal of the paper industry is based on the analysis and interpretation of the ratio analysis.

LIMITATIONS OF THE STUDY

The present study is based primarily on secondary sources of data derived from published annual reports and accounts of selected companies, so it is subject to some limitations that are inherent in the condensed published financial statements and as such its findings depends entirely on the accuracy of such data. The following are some main limitations of the study:

Firstly, the study is based on the data and information relating to the year 2001 to 2010 i.e. 10 years period. But even these data and information do not appear widespread. More data and information would have made this study more exhaustive.
Secondly, the companies operating in the same industry have followed different accounting policies. The choices of accounting policies may distort intercompany comparison.

Thirdly, one of the sample companies closes its books on June 30th every year which is not the usual date of year ending for other companies. No changes in accounting period have made for the purpose of the study. This creates difficulty in comparing financial figures.

Fourthly, the study is mainly based on ratio analysis, which has its own limitations. As we know that ratio analysis has, like all other methods, limited value and application, it cannot reveal exact picture of the financial performance and its conclusion are not always reliable.

Finally, due to constraints of time and funds a sample of only four paper mills has been selected for performance appraisal of entire paper industry of India which might not be the true representation of the population. This is a major limitation of the research project.

Undoubtedly, the aforementioned limitations were encountered by the researcher and a sample of four companies may not be considered as representative of the entire paper industry in India but in this endeavor all possible efforts have been made to make the study more exhaustive and goal oriented. Moreover, it is sincerely hoped that the results would be a guideline for other paper mills in India.

**STRUCTURE OF THE THESIS**

In order to pursue the objectives of the study, the entire work has been divided into five chapters:

The first chapter gives a ‘Background of the study’ as a whole. It highlights the core objectives of the study. Besides, hypotheses relating to the study, statement of the problem, scope of the study, methodology adopted, review of literature, research gap and limitations have also been covered in this chapter.
Second chapter deals with ‘Performance Appraisal- A Conceptual Exposition’. It focuses on the concept of financial analysis, types of financial analysis, procedure of financial statement analysis, importance of financial analysis, limitations of financial analysis, purpose of financial statement. Various techniques of financial analysis like comparative statement, trend analysis, common size statement, fund flow statement, cash flow statement and various ratios are also discussed at length.

The third chapter, titled ‘Growth and Development of Paper Industry in India’ enumerates the historical background of paper industry. It throws light on the growth, development, production, consumption, import and export scenario, policies of the government, demand and supply scenario. Various issues and challenges related to Indian paper industry and their suggestions are also discussed in this chapter.

In chapter fourth, titled ‘Paper Industry in India – A Profile of Some Selected Paper Mills’ discusses the brief profile of selected paper mills. A background is prepared in this chapter in order to appraise thoroughly the performance of selected paper mills in India.

In fifth chapter, titled ‘Performance Appraisal of Some Selected Paper Mills’ has been dealt with the analysis and interpretations of the financial statements i.e. balance sheet and profit and loss accounts. Various accounting ratios have been calculated in order to judge the performance of selected paper mills. Various hypotheses framed have also been tested in this chapter.

Chapter sixth titled ‘Findings and Suggestions’ presents the summary of entire research project. An endeavor has also been made to put forth some suggestions depending upon the study, research and conclusion.

REFERENCES:


