Chapter – VI

FINDINGS AND SUGGESTIONS

This chapter gives its emerging conclusion based on the analysis carried out during the study. The chapter contains major findings and suggestions regarding improving efficiency, activity and effectiveness for Indian paper industry. The main findings on the basis of thorough investigation of the subject and analysis of data of the various paper mills at macro level and financial performance at micro level the conclusions derived by the researcher are summarized as follows:

CHAPTER I: BACKGROUND OF THE STUDY

The first chapter is an insight into the entire research project. It was found that the present study entitled, “Performance Appraisal of Paper industry in India- A Case Study of Some Selected paper Mills” covers the large paper mills of India. The main objective of the study is to know the position of paper industry, profitability position, liquidity position, activity position and cash flow position of selected paper mills. The study is based primarily on the secondary data published by selected Indian paper mills for the financial years from 2000-2001 to 2009-2010. Data relating to general economic conditions was collected from the leading newspapers, government publications and journals. The data collected has been analyzed and presented using tables, schedules, pie charts, bar diagrams and graphs. 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.

The chapter also covers the problems related to paper industry, relevance of the study, review of the literature, statement of problem, objectives of study, hypothesis of the study, universe of the study, period of the study, sampling design, data collection method, tools and techniques which included various statistical measures like mean, standard deviation, co-efficient of variation have been used and
have been fitted, One way-analysis of variance test has been applied to test the validity of two hypotheses namely (1) Null hypothesis (2) Alternative hypothesis., plan of study, finally the limitations of present study have been shown.

CHAPTER II: PERFORMANCE APPRAISAL- A CONCEPTUAL EXPOSITION

This chapter includes its importance, limitations, purpose of performance appraisal, various tools and techniques used to appraise the performance of an organization. Performance appraisal is composed of two words performance and appraisal. Performance indicates how the management of an enterprise has been accomplishing the goals, which they had set for the enterprise. Performance appraisal is a technique to evaluate past; current and projected performance of a concern which measures of degree to which an organization fulfills its purpose and the purpose is to achieve its objectives. To quote E.A. Helfert, “The measurement of business performance is more complex and difficult, since it must deal with the effectiveness with which capital is employed, the efficiency and profitability of operations, and the value and safety of the various claims against the business. Appraisal refers to critical review with a view to improving performance. It includes the act to examine, to measure, to interpret and to draw conclusions.

Generally, performance appraisal is concerned with the analysis of financial statements. Financial statements represent the snapshot of a concern's activities at the end of a particular period. These statements are the end product of financial accounting. They reveal how a business has prospered under the leadership of its management personnel. Financial statements are the medium of evaluation of management’s performance. The three important financial statements to know and to investigate the financial position and soundness of a business enterprise are the Balance Sheet, the Income Statement and the statement of Owner's Equity. Such statements give a bird's eye view of the financial situation of a concern. Financial statements are of vital importance to all those who are concerned with them directly or indirectly. The balance sheet shows the financial position of a business on a certain date. Income statement is a statement of net gain or loss resulting from the operations
of a business during the period covered by the report. Financial appraisal is intended to give an accurate picture of the financial condition of a concern in condensed form. Financial appraisal is generally directed towards evaluating the liquidity, stability and profitability of a concern. The financial appraisal of a concern involves the following steps, namely, collection of financial data, classification and tabulation of financial data and application of appropriate techniques.

Collection of financial data is the first step in evaluating the performance of an enterprise. Generally the sources used to collect the information consist of primary data and secondary data. The second step in the process of financial appraisal is to classify and tabulate the financial data while, the third step is the use and application of appropriate techniques. Accounting techniques used in analyzing financial statements include Ratio Analysis, Trend Analysis, Common-size Analysis, Fund Flow Analysis and Break-even Analysis. Ratio analysis in this context is the process of computing, determining and presenting the relationship of items and groups of items in financial statements. In financial analysis, a ratio is used as an index or yardstick for evaluating the financial position and performance of firm. The relationship between two accounting figures, expressed mathematically, is known as a financial ratio (or simply as a ratio). A ratio indicates a quantitative relationship, which can be, in turn, used to make a qualitative judgement. Fund flow statement is to indicate where funds come from and where they are used during a certain period. Break-even analysis determines the relationship between sales volume and total costs.

CHAPTER III: GROWTH AND DEVELOPMENT OF PAPER INDUSTRY IN INDIA

This chapter gives the detailed account of growth and development of Indian paper industry. History of paper is also discussed in this chapter. Paper has a long history, beginning with the ancient Egyptian and continuing to the present day. For thousand of year, hand-made methods dominated and then, during the 19th century, paper production became industrialized. Paper can be defined as a sheet or continuous web of material formed by the deposition of vegetable, mineral, animal or synthetic fibres or mixtures with or without the addition of other substances into liquid vapors,
or gas in such a way that the fibres are intermeshed together. Paper is more than an industrial product. It is the cultural barometer of the nation. We need paper every day for widening the frontier of our knowledge. The Indian paper industry accounts for about 1.6 per cent of the world’s production of paper and paperboard. Indian paper industry is the 15th largest in the world and provides employment to 1.3mn people in country contributing Rs25bn to the government. The growth in paper is inevitable and is likely to contribute significantly to the government’s target of achieving an overall growth of 12 per cent in manufacturing. Per capita consumption increased from 8.3 kg during 2008-09 to 9.18 kg in 2009-10. Indian paper industry has a1:1 correlation with the economy. The futuristic view is that growth in paper consumption would be in multiples of GDP and hence an increase in consumption by 1kg per capita would lead to an increase in demand of I million tonnes. As per industry estimates, paper production are likely to grow at a CAGR of 8.4 per cent while paper consumption will grow at a CAGR of 9 per cent till 2012-13. The import of pulp and paper products is likely to show a growing trend. The role of the government is crucial in the Indian paper industry as it plays the role of regulation, supplier (the wood supplying forests are owned by the government) and buyer (government is the single largest buyer of paper). The government had completely delicensed the paper industry from July 17, 1997; foreign participation is permissible. The excise duty on paper and paperboard has been increased from 4 per cent to 5 per cent. The basic custom duty on paper and paper board has been retained at 10 per cent.

The custom duty on wood pulp has also been retained at 5 per cent. However the custom duty on waste paper has been reduced from 5 per cent to 2.5 per cent.

Pulp and paper mills generate varieties of pollutants depending upon type of the pulping process being used. The production, use and recycling of paper has a number of adverse effects on the environment which are known collectively as paper pollution. Pulp mills contribute air, water and land pollution. Discarded paper is a major component of many land-fill sites, accounting for about 35 per cent by weight of municipal solid waste (before recycling). Even recycling paper can be a source of pollution due to the sludge produced during deinking.
The sharp rise of prices during 1973-74 created a paper crisis in the country. Since then, the paper industry was engulfed in a crisis due to a variety of reasons, leading to a sub-optimal use of installed capacity. The major problem faced by the India paper industries are: high cost of raw material, low capacity utilization, low scale of operation, high capital issues etc. At present the paper industry is at cross roads with the above mentioned problems. Therefore, the industry has to take all the above mentioned problems as challenges and try to overcome the problems and bring back the industry into profitable position. The SWOT analysis is also discussed in this chapter.

The Indian paper and paperboards industry has potential and also capabilities to service the growing demand in domestic and international market and also to create huge employment avenues in the rural India through agro/production, forestry and at mills, provided the competitiveness of the value chain is encouraged by the government. The Indian paper industry is a booming industry and is expected to grow in the years to come. The usage of paper cannot be ignored and this awareness is bound to bring about changes in the paper industry for the better. Reading a book will remain a great pleasure into the future and paper, as a ubiquitous material with its many uses, will continue to play an influential role. Many artists will continue to express themselves by using this most versatile material.

CHAPTER IV: PAPER INDUSTRY IN INDIA – PROFILE OF SOME SELECTED PAPER MILLS IN INDIA

In this chapter a brief profile of select paper mills has been given in order to prepare a background to appraise thoroughly the performance of paper industry in India.

Ballarpur Industries Limited

Ballarpur Industries Limited (BILT) is an India based company. The company was incorporated on 26th April 1945 by Lala Karam Chand Thapar at Nagpur. Ballarpur Industries Limited (BILT) is a flagship of the US$ 4bn Avantha Group and
India’s largest manufactures of writing and printing (W&P) paper. This company has its headquarters in the city of Gurgaon and factories in the states of Maharashtra and Orissa. Their branch offices are located in the cities like New Delhi, Chennai, Mumbai and Kolkata. They have introduced some of the products like ten on ten copier, LWC paper, sack paper and maplitho NSD paper. It subsidiaries include Sabah Forest Industries (SFI), Malaysia’s largest pulp and paper company, and BILT Tree Tech limited (BTTL), which runs BILT’S farm forestry programme in several states in India. During the fiscal year ended June 30 2009 Ballarpur industries limited had six manufacturing units across India, which give the company geographic coverage over most of the domestic market. (http://en.wikipedia.org/). BILT’s acquisition of SFI in 2007 was a watershed event. It was the first overseas acquisition by an Indian paper company, it transformed Ballarpur Industries Limited into a major regional player and elevated BILT’s ranking among the global top 100.

The production of paper and paper boards went up from 241191 MT in 2001 to 796718 MT in 2010. Sales also increase with the increase in production. In 2001 it was 1445.46cr and reached to 2162.32cr in 2007 this may be due to some cost effective measures used by the Company to improve its profitability, but the significant contribution comes from Company’s efforts to reduce the overall indebtedness of the Company. This included swapping of high cost debt with low cost debt besides extending the tenor of debt. But there was slight decrease in sales in 2008 and 2009, but again it increases to 1020.58 in 2010. Gross profit, operating profit and net profit was 235.32cr, 308.10cr, 100.28cr respectively in 2001. Gross profit, operating profit, and net profit showed an increasing trend till 2007. But in the year 2008 it started declining and was 102.56cr, 193.10cr, and 58.28 in 2010 respectively, this may be due to decrease in the selling price of the goods sold without corresponding decrease in the cost of goods sold or stock at the end may have been undervalued or the opening stock may be have been overvalued.

The shareholders fund in the year 2001 was 898.19 cr and reached to 2000.42 cr in the year 2007. There was slight decrease in the shareholders fund 1267.99 cr in the year 2008 but again it increase and was 1651.30cr in 2010. In 2001 borrowing was 1164.58 cr and it declined to 862.08 cr in 2010. In between there were slight increase and decrease in the borrowings. The net fixed assets, current assets and current [229]
liabilities was 1286.32 cr, 881.03 cr and 659.59cr respectively in 2002 as against 2001 which was 1180.35 cr, 573.70 cr and 341.55 cr respectively. Current assets of Ballarpur industries limited in the year 2003 was 715.16 cr and after that it went on increasing and reached to 1466.70 cr in 2008. But again it declined and was 927.17 cr in the year 2010. Current liabilities were 341.55cr in 2001 and went up to 523.99 cr in 2010. In between the study period there was increase and decrease in current liabilities of Ballarpur industries limited.

**Tamil Nadu Newsprint & Papers Limited**

Tamil Nadu Newsprint and Papers Limited (TNPL) was formed by the government of Tamil Nadu in April 1979 as a public limited company under the provisions of the companies act 1956 The headquarters of this Public Sector undertaking is located in the city of Chennai and Tamil Nadu and their factory is located in the Karur District in Tamil Nadu. They have branch offices at Secunderabad, New Delhi, Nagpur, Mumbai, Kolkata, Ernakulam, Bangalore and Ahmedabad. Some of their products are AceMarvel, Perfect Copier, and Commander A4 size paper. As a company committed to responsible manufacturing practices, TNPL has implemented several environment friendly processes under its well defined environment policy. This commitment is reflected in its minimum impact- best process’ technology – green production, resource conservation, responsible waste management and minimum pollution load-making TNPL one of the most environmentally compliant paper mills in the world. TNPL primarily uses bagasse an environmentally benign raw material, for producing paper in substitution of wood and thereby avoids denudation of trees in more than 40,000 acres every year. TNPL has committed itself to making a positive contribution to the communities and societies where it operates. The company is consistently taking various community welfare measures for the benefit of the people living in the neighbourhood.

In 2001 the production was 191106MT and the net sale was 596.39cr. In 2003 the production was 167878MT and sale was 539.87cr after that both production and sale shows an increasing trend and reached to 254903MT and 1066.46cr in 2009 respectively. The production increases from 184267MT to 254903MT in 2002 and
2009 respectively. But there was slight decrease in production and sales of TNPL in 2010 and it was 245008MT and 1025.68 cr.

The gross profit of TNPL was 107.05cr in 2001. In the first half of the study period it showed a declining trend. But thereafter there was a significant increase in the gross profit and reached to 148.11 cr in the year 2010. Operating profit shows a very interesting trend. In the first five year i.e. from 2001 to 2005 it shows a decreasing trend. In 2001 it was 170.27cr and came down to 117.27cr in 2005 but after that it start increasing continuously and reached to 319.80cr in 2010. In 2001 net profit of TNPL was 76.42cr and came down to 37.95cr in 2005. But after that Net Profit increase tremendously and was 80.55cr in 2006 and reached to 126.06cr in 2010.

In 2001 shareholders fund of TNPL was 488.29cr. In 2002 it slightly decreases and was 380.40cr but after that shareholders fund significantly increases and reached to 804.50cr in 2010. Borrowings of TNPL decrease in the first half of the period i.e. in 2001 it was 335.50cr and came down to 250.04cr in 2005. After 2005 borrowings of TNPL increases continuously and went up to 1362.91cr in the year 2010.

In 2001 the net fixed assets was 689.63 cr. There was very slow in progress till 2005 but after 2005 it show a tremendous increment in the net fixed assets and it went up to 2096.59 cr in 2010 Current assets in the year 2001 were 266.27 cr. It continuously shows an increasing trend except in the year 2003 and 2007 but at end of the study period i.e. in 2010 it went up to 593.98 cr. Current liabilities were 133.25cr in the year 2001. It continuously shows an increasing trend and went up to 334.04cr in the year 2010.

**Andhra Pradesh Paper Mills Limited**

The company was incorporated on 29\(^{th}\) June 1964 as “The Andhra Pradesh Paper Mills Limited” at Rajahmundry. The certificate of commencement of business was obtained on 10\(^{th}\) July 1964. This company has its headquarters in the city of Secunderabad and factories at Rajahmundry and MR Palem. They have branch offices at Bangalore, Kochi, Chennai, Mumbai, Kolkata and New Delhi. Their product range includes Andhra Royal Silk, Andhra Primavera, Andhra Starwhite and Reflection.
The company manufactures and deals in all kinds of paper. All shares issued to Andhra Pradesh Government including 65850 shares without payment in cash. In the 1990 the company undertook a project for capture power generation. It was also proposed to modernize the plant and expand the production capacity to 400 TPD. Production declined 1991 due to labor problems and stoppage of work during the first quarter of the year. The Andhra Pradesh Paper Mills Limited, one of the largest paper mills in the country, has lined up a number of measures to overcome the recession. The Andhra Pradesh Paper Mills Limited (APPML), a Bangur group company, has been certified as ISO 9002 company w.e.f 9th December 1998 by the Netherlands-based Det Norske Veritas (DNV) for its quality management system.

In the year 2001 the production was 88745MT and sales were 248.93 cr. Both production and sales increases continuously but in 2009 and 2010 production falls down and was 177748MT and 176452MT respectively. But the sales continue to increase and at the end of the study period i.e. in 2010 it was 649.08cr with increase in growth rate of 3.36 per cent 2010.

In the year 2001 gross profit, operating profit and net profit were 33.73cr, 40.35cr and 28.03cr respectively. In the year 2010 gross profit went up to 90.41 cr. Operating profit was 40.35cr in the year 2001 and went up to 120.87cr in the year 2010. Net profit also increases after 2002. In 2003 it was 20.67cr and went up to 35.03cr in 2006. But in 2008 it came down to 16.54cr. In the year 2010 it shows incredible increase and went up to 54.19cr.

In the year 2001 shareholders fund was 162.79 cr. Thereafter it witnessed a significant increase and went up to 502.95 cr in the year 2010. Borrowings were 107.15 cr in 2001. It came down to 161.87 cr and 150.81 cr in the year 2003 and 2004 respectively. But again the borrowing of the company increases. In 2006 it increases significantly and was 334.17 cr and continues to increase and went up to 561.03 cr in 2009. In the end of the study period i.e. in 2010 it was 506.84 cr.

In the year 2001 net fixed assets was 158.15 cr and went up increasing but in 2005 it was 310.41 cr and made a remarkable increment and was 683.68 cr in 2006. As the current assets increases the current liabilities also increases. In the year 2001 the current assets were 111.03 cr and went up to 248.35 cr in 2010. The current liabilities
were 68.03 cr in the year 2001. In 2002 it went up to 88.43 cr. In 2010 it came down in comparison to 2009. In the year 2009 it was 159.75 cr and came down to 128.41 cr.

West Coast Paper Mills Limited

West Coast Paper Mills is located in the city of Bangalore with its factory in Dandeli in the state of Karnataka. Their branch offices are located in cities like Chennai, Mumbai, Kolkata and New Delhi and they have introduced different copier papers and computer paper grades. The manufacturing facilities of West Coast Paper Mill spread across 240 acres are located at Dandeli in Karnataka, in close proximity to the main raw material sourcing areas. The location of the mill in the heart of thick forests at Dandeli is perfectly suited for a paper mill with the river Kali flowing in close proximity. With the completion of its major expansion plan, the Company now has an ECF, modernized pulp manufacturing plant and a state-of-the-art, fully automated and fully integrated paper manufacturing line supplemented by several other modernized ancillary manufacturing equipments. The Company is self-sufficient in power and post-expansion has a thermal power generation capacity of 70.3 MW, apart from 12.84 MW multi-fuel based power plants and after meeting its requirement, there will be surplus power of 20 MW which the Company will be in a position to export. The Registered Office of the Company is at Dandeli while its corporate office is located at Bengaluru (Karnataka) with four zonal offices at Mumbai (Maharashtra), Kolkata (West Bengal), Chennai (Tamil Nadu) and New Delhi (Delhi). The Company’s well-established presence in the market is strengthened by its strong and long standing dealership network across 38 cities in 15 states.

In the year 2001 the production was 120210MT. In 2002 and 2003 production was 120293MT and 151477MT respectively. At the end of the study period production went up to 173638 cr i.e. in the year 2010. In 2001 net sales was 362.35 cr and thereafter it increases continuously except in the year 2005. It slightly decreased and was 480.33 cr in the year 2005. In the year 2010 net sales went up to 623.90 cr.

The gross profit was 60.61cr in the year 2001 and came down to 56.77cr in 2002. In 2003 it was 62.92cr but again it fall down to 48.56cr. The gross profit was highest 101.08cr in the year 2009 and in 2010 it fall down to 87.53cr. In 2001 the operating profit was 48.26cr. It increases continuously except in the year 2004 and
In 2010 operating profit went up to 105.24cr. Net profit shows an increasing trend. In 2001 it was 28.48cr and in 2002 it was 31.36cr. In 2006 it shows a tremendous increase and went up to 66.46cr. Net profit in 2009 went up to 90.54cr but in 2010 it came down to 54.70cr.

The shareholders’ fund in the year 2001 was 106.10 cr. In the year 2002 it went up to 110.82 cr. Thereafter it continuously increases and at the end of the study period i.e. in 2010 it went up to 601.33 cr. In the year 2001 the borrowings were 118.76cr. It continuously increases. In 2008 the borrowings were 406.16cr and in 2009 it went up to 1173.65 cr. At the end of the period i.e. in 2010 it rose to 1234.71 cr.

The net fixed assets in the year 2001 were 105.26cr it increased continuously and went up to 268.90cr in 2004. Thereafter net fixed assets show a down fall. In 2007 it was 231.58cr. But it increases tremendously in 2008 and was 531.19cr. In the year 2009 it jump to 1326.86cr and in the year 2010 it was 1552.52cr. In 2001 current assets was 171.21cr. It kept on increasing and went up to 614.77cr in the year 2009. In the year 2010 current assets declined to 513.20. In the year 2001 current liabilities was 76.84cr and in 2002 it was 77.86cr. Current liabilities witnessed an increasing trend. In the year 2001 it was 76.84cr and kept on increasing and was 260.24cr in the year 2009 and was 260.24cr in 2009. There was slight decrease in the current liabilities in the year 2010 and came down to 209.90cr.

Most of these top companies in the paper industry make their contribution to the society by using eco-friendly production techniques and they also help the society by offering a wide range of employment opportunities in their factories and offices in different parts of the country.

CHAPTER VI: PERFORMANCE APPRAISAL OF SOME SELECTED PAPER MILLS

Analysis of accounting ratios and the testing of hypotheses carried out in the foregoing chapter have brought trends in the financial performance of paper mills. As already pointed out in earlier the biggest limitation of the study had been that a large
number of companies had to be left out due to constraints of time and funds. Further, beyond data published in annual accounts no further data were made available by any company. Therefore, detailed probe could not be made on many aspects which have been pointed out at relevant places. Subject to these limitations following conclusions can be drawn from the study:

1. The gross profit in relative terms as per cent of net sales. As regard the paper mills the average gross profit ratio of BILT was highest among all the paper mills. The average ratio of BILT (16.13 per cent) followed by TNPL (14.29) WCPM (13.10) and APPM (9.13). In this ratio, the management was very much interested. The average ratio of APPM indicated a very low profitability. It suggests that the APPM should reduce the cost of goods sold.

2. ANOVA test indicates that the calculated value of is greater than critical value thus the alternative hypothesis is accepted and null hypothesis is rejected and hence it is concluded that gross profit does differ significantly.

3. The operating profit ratio of paper mills of India showed fluctuated trend during the study period. The operating profit ratio was the highest in TNPL. The average ratio of TNPL (26.29 per cent) followed by BILT (23.30) WCPM (14.87) and APPM (12.99). Among all the mills, the lowest ratio is seen in the APPM. A higher operating profit ratio is favorable for the company. Further it can be said that TNPL has achieved good remarks in the case of operating profit ratio.

4. ANOVA (F) test indicates that there is significant difference in operating profit ratio of paper mills under study. Hence it can be concluded that there is no high deviation in the operating profit ratio of paper mills under study.

5. The net profit ratio in paper mills was not much satisfactory. The average ratio of TNPL was highest among all the paper mills. The average ratio of TNPL (9.33 percent) followed by WCPM (8.97), BILT (8.45) and APPM (5.81). The average ratio of APPM indicated a very low profitability.
6. ANOVA test indicates that the calculated value of is greater than critical value so, null hypothesis is rejected and the alternative hypothesis is accepted and hence it is concluded that net profit does differ significantly.

7. Return on net worth indicates how well the company has used the resources of the owners. The analysis of the return on net worth ratio in individual paper mills of the study period reveals that it was the highest return on net worth ratio in WCPM (21.37 per cent) Followed by TNPL (13.73 per cent), BILT (9.83 per cent) and APPM (9.60 per cent). In WCPM and TNPL return on net worth ratio of the company was satisfactory during the study period.

8. ANOVA test indicates that the calculated value is greater than critical value null hypothesis is rejected and the alternative hypothesis is accepted and hence it is concluded that return on net worth does differ significantly. ANOVA Test analysis indicates that there were no similarities in return on net worth ratio of paper mills under study.

9. The current ratio in paper mills was satisfactory. The average ratio of BILT was highest among all the paper mills. The average ratio of BILT (2.60) followed by WCPM (2.28), TNPL (1.70) and APPM (1.62). The average current ratio of APPM is low than BILT, WCPM and TNPL. BILT and WCPM made excessive investment in current assets particularly in the form of inventory and sundry debtor. The ratio was always more than two times in BILT and WCPM indicated efficient utilization of current assets.

10. Since F (ANOVA) calculated value is greater than F critical value (at 5 per cent level of significance) null hypothesis is rejected and the alternative hypothesis is accepted and hence it is concluded that current ratio does differ significantly.

11. The quick ratio of paper mills of India showed fluctuated trend during the study period. The quick ratio was the highest in BILT. The average ratio of BILT (1.51) followed by WCPM (0.96) TNPL (0.67) and APPM (0.60). Among all the mills, the lowest ratio is seen in the APPM. As a convention
quick ratio of 1:1 is considered satisfactory. Hence BILT and WCPM are in much better position to meet its short term obligations.

12. Since F (ANOVA) calculated value is greater than F critical value (at 5 per cent level of significance) thus, null hypothesis is rejected and the alternative hypothesis is accepted and hence it is concluded that quick ratio does differ significantly.

13. The debt equity ratio of paper mills was satisfactory. A ratio of 1:1 may be usually considered to be satisfactory ratio. The average ratio of WCPM was highest among all the paper mills. The average ratio of WCPM (1.34) followed by APPM (0.94), BILT (0.92) and TNPL (0.87). The average debt equity ratio of TNPL is low than WCPM, APPM, and BILT. As every paper mill is nearer to 1:1 ratio, hence it can be conclude that all the paper mills have satisfactory debt equity ratio.

14. ANOVA test analysis indicates that there were similarities in debt equity ratio of paper mills under study. As F critical value is greater than F calculated null hypothesis is accepted and the alternative hypothesis is rejected and hence it is concluded that debt equity does not differ significantly.

15. On the basis of analysis it can be concluded that the highest average long term debt equity ratio was of 1.10 times of WCPM, followed by BILT, APPM, and TNPL. Most of the companies under the study did not maintain the standard norm of 1:1. The average ratio of TNPL was 0.63 times which was lowest among all the mills under the study and the company was more relied on owner's funds.

16. Since F critical value is greater than F calculated null hypothesis is accepted and the alternative hypothesis is rejected and hence it is concluded that long term debt equity does not differ significantly. Thus ANOVA test analysis indicates that there were similarities in long term debt equity ratio of paper mills under study.
17. Inventory turnover ratio registered a fluctuating trend during the period under study. Inventory turnover ratio measures the velocity of conversion of stock into sales. Usually, a high inventory turnover indicates efficient management of inventory because more frequently the stocks are sold; the lesser amount of money is required to finance the inventory. The average ratio of BILT was the highest 11.20 times while it was the lowest 8.56 and 8.63 times in APPM and WCPM respectively.

18. Since F calculated value is greater than F critical value null hypothesis is rejected and the alternative hypothesis is accepted and hence it is concluded that there were no similarities in inventory turnover ratio of paper mills under study.

19. The average fixed assets turnover ratio of WCPM was highest 1.28 during the study period. The ratio showed fluctuating and mixed trend in almost all the selected paper mills under study during the period under review. The ratio was less than one times in APPM (0.82), BILT (0.71), and TNPL (0.50). Thus, the ratio suggests that the WCPM, were able to utilize its fixed assets properly in generating sales whereas rest of the three paper mills failed to maintain the rate on increase in sales.

20. The calculated value of ANOVA is greater than critical value null hypothesis is rejected and the alternative hypothesis is accepted and hence it is concluded that fixed assets turnover ratio does differ significantly.

21. Dividend payout ratio measures the relationship between the earnings belonging to the ordinary shareholders and the dividend paid to them. It is an important ratio because ploughing back of profit enables a company to grow and pay more dividends in future. It can be generalized that the average dividend payout ratio of TNPL was the highest followed by BILT, WCPM, and APPM. TNPL has (37.45 per cent) followed by BILT (34.27 per cent), WCPM (28.85 per cent) and APPM (14.92 per cent).

22. Since F calculated value is greater than F critical value null hypothesis is rejected and the alternative hypothesis is accepted and hence it is concluded that dividend payout ratio does differ significantly.

[238]
23. If the trend of cash earnings retention ratio is declining, it is paying more shareholders. If the trend is growing, it is using more of the earnings for company expansion/expenses. A value of 100% means the company is not paying any dividends while a value of 0% (which is impossible) would mean the company is paying every cent earned to the shareholders. The highest cash earnings retention ratio was in APPM (92.30) followed by BILT (82.40), TNPL (81.24), and WCPM (80.45).

24. Since F (ANOVA) calculated value is greater than F critical value thus, null hypothesis is rejected and the alternative hypothesis is accepted and hence it is concluded that cash earnings retention ratio does differ significantly.

25. The earnings per share registered a fluctuated trend during the period under study. The highest average earning per share was in WCPM (9.8) followed by APPM (3), TNPL (2.3) and BILT (2.1). The earnings per share are a good measure of profitability and when compared with E.P.S of similar other companies, it gives a view of the comparative earnings or earning power of firm. Thus it is concluded that WCPM has highest earnings per share.

26. ANOVA Test indicates that the calculated value is greater than critical value thus null hypothesis is rejected and the alternative hypothesis is accepted and hence it is concluded that earning per share does differ significantly.

SUGGESTIONS:

The paper mills should try to increase the production so as to get economies of large-scale production. In order to increase the profitability of the companies, it is suggested to control the cost of goods sold and operating expenses. The management should try to adopt cost reduction techniques in their companies to get over this critical situation. The selected paper mills are highly capital intensive in nature but the policy of purchase of fixed assets should be carefully planned and reviewed so that the funds may be properly utilized. The selected paper mills should try to match the amount of working with the sales trends. Where there is a deficit of working capital,
they should try to build on adequate amount of working capital. Where, there is an excessive working capital, it should be invested either in trade securities or should be used to repay borrowings.

The management should try to utilize their production capacity fully in order to reduce factory overheads and to utilize their fixed assets properly. The burden of interest has produced a deteriorating effect and reduced the percentage of net profit. It is suggested that the companies should try to reduce the interest burden gradually by increasing the owner's fund. The few paper mills, which did not follow a definite policy of financing fixed assets, should follow such policy. To strengthen the financial efficiency, long-term funds have to be used to finance core current assets and a part of temporary current assets. It is better if the companies can reduce the over sized short-term loans and advances eliminates the risk arranging finance regularly.

The policy of borrowed financing in selected paper mills under study was not proper. So the companies should use widely the borrowed funds and should try to reduce the fixed charges burden gradually by decreasing borrowed funds and by enhancing the owner's fund. For this purpose companies should enlarge their equity share capital by issuing new equity shares. For regular supply of raw materials and the final product infrastructure facilities are required further improvement.

Cost accounting and cost audit should be made mandatory and cost sheet along with annual financing statement should be prepared. There has been too much of government interference in policy and day-to-day working and decisions. This leads to delays in decision-making. This should be abolished. There is no incentive to the employees to perform better. Also there is no accountability because no one is held responsible for a failure in achieving targets for this kind of problem responsibility centre should be created. Improper planning and delays in implementation of projects lead to rise in their cost. So properly planning should be made. The paper mills should reduce power and fuel consumption by using low as content coal (imported coal), lignite, agro waste product especially ground nut husk, and beggars should be used as coal substitute. To regularize and optimize the use of cash balance proper techniques may be adopted for planning and control of cash. The investments in inventories should be reduced and need to introduce a system of
prompt collection of debts. Selected paper mills should try to use properly their operating assets and should try to minimize their non-operating expenses.

The government should minimize the subsidy and encourage the capital market for the paper industries. Since the paper mills could not pay regular and fair dividend, the shareholders are disguised and disinterested about the performance of the companies. This particular trend is not conductive for future expansion of industry in India. Therefore, the managements should put in sincere and committed efforts to improve the profitability of the companies in order to restore their financial health. Paper industry provides a great employment opportunity mainly for the backward classes and tribal, therefore government should develop the paper industry for generating employment opportunities particularly in rural areas and for the backward classes and tribal and improve economic condition.

FUTURE RESEARCH DIRECTIONS

Concluding with results from this study is not an end in itself. In fact its results, with their embedded limitations, involve many more implications, possible contributions to theories and practice, and future research opportunities. At the end the researcher tries to convey the message that this thesis is not an end, but a starting point for an academic journey.

It is challenging to unfold and list all the possibilities for a future research agenda since so many research opportunities have arisen from this study. The present study has elaborately dwelt at financial performance appraisal of paper industry in India. In view of the gaps in the present study, further research can be undertaken to with reference to following areas of performance appraisal:

Performance appraisal of paper industry in India-‘Z’ scores analysis (A case study). Further the performance of paper industry can also be analyzed through value added ratio. Studies could also analyze the performance appraisal of paper industry in other countries and in other subject disciplines in order to test
whether the results obtained are general and consistent across different samples. Performance Appraisal of Paper Industry – A Heuristics Based Approach can also be used to judge the performance. Another opportunity is to submit the proposed model to quantitative testing in the same context, like Profitability Scoring Multiplier Model, Du Pont Model, and Break Even Model etc. Performance analysis of paper industry can also be done through data envelopment analysis. Another aspect could be that we can show the financial performance of Indian manufacturing companies during pre and post liberalization. Further performance financial analysis of public and private sector - a comparative analysis can also be done.