

Financial performance appraisal of paper industry in India: A study of selected paper mills

¹Lamaan Sami, ²Anas Khan

¹Assistant Professor, Department of commerce, Aligarh Muslim University, Aligarh, India.

²Research Scholar, Department of commerce, Aligarh Muslim University, Aligarh, India.

Abstract

The Indian Paper Industry accounts for about 2.6% of the world's production of paper. The estimated turnover of the industry is INR 50,000 crore approximately and its contribution to the exchequer is around INR 4500 crore. The industry provides employment to more than 0.5 million people directly and 1.5 million people indirectly. The geographical spread of the industry as well as market is mainly responsible for regional balance of production and consumption. The operating capacity of the industry currently stands at 12.75 million tons. The present paper analyses the financial performance of two paper industries namely Ballarpur Industries Limited (BILT) and Tamil Nadu Newsprint & Papers Limited (TNPL). The data has been collected from the annual reports of BILT and TNPL since 2012-13 to 2014-15. Mean, standard deviation and independent sample t-test have been used to analyze the results with the help of SPSS 19. The analysis of the data shows that there is a significant difference in BILT and TNPL with respect to Gross Profit Ratio, Net Profit Ratio, Current Ratio, Quick Ratio and Debt Equity Ratio.

Keywords:Paper, Paper Industry, Ratio, BILT, TNPL.

Introduction

The Indian Paper Industry accounts for about 2.6% of the world's production of paper. The estimated turnover of the industry is INR 50,000 crore approximately and its contribution to the exchequer is around INR 4500 crore. The mills use a variety of raw material viz. wood, bamboo, recycled fibre, bagasse, wheat straw, rice husk, etc. approximately 31% are based on chemical pulp, 47% on recycled fibre and 22% on agro-residues. The industry provides employment to more than 0.5 million people directly and 1.5 million people indirectly. The geographical spread of the industry as well as market is mainly responsible for regional balance of production and consumption. The operating capacity of the industry currently stands at 12.75 million tons. India is the fastest growing market for paper globally and it presents exciting scenario. Paper consumption is estimated to touch 13.95 million tons by 2015-16 and it's 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. The growth in paper is inevitable and is likely to contribute significantly to the government's target of making India as a manufacturing hub. The government regards the paper industry as one of the 35 high priority industries of the country. The industry is primarily depending upon forest-based raw materials. The first paper mill in India was set up at Sreerampur, West Bengal in the year 1812. The Indian pulp and paper industry at present is very well developed and established. In this study, two paper industries namely Ballarpur Industries Limited (BILT) and Tamil Nadu Newsprint and Papers Limited (TNPL) have been selected to make analysis and interpretation.

Ballarpur Industries Limited (BILT)

Ballarpur Industries Limited (BILT) is an India based company. The company was incorporated on 26th April 1945 by Lala Karam Chand Thapar at Nagpur. It manufactures all kinds of paper and allied products, vanaspati, chemicals, tin containers and soaps. The company uses the trade name, 'Three Aces' for paper and 'Wisdom' for stationery. (<http://www.source2update.com/>).

Ballarpur Industries Limited (BILT) is India's largest manufacturer of writing and printing (W&P) paper. Ballarpur Industries Limited is headquartered in Maharashtra. Ballarpur Industries Limited operates in five segments: coated wood free paper, uncoated hi-bright paper (Maplitho), business stationery, copy paper and specialty and fine paper. Its products include writing and printing paper, industrial paper, and specialty paper. The company's first plant is in Ballarpur and the second plant is in Yamunanagar. The company holds 85 per cent share of the bond paper market and nearly 45 per cent share of the hi-bright Maplitho market in India. (<http://en.wikipedia.org/>).

Tamil Nadu Newsprint & Papers Limited (TNPL)

Tamil Nadu Newsprint and Papers Limited (TNPL) has been formed by the government of Tamil Nadu in April 1979 as a public limited company under the provisions of the companies act 1956 (<http://www.tn.gov.in/>). It is one of the most environmentally compliant paper mills in the world. Tamil Nadu Newsprint and Papers Limited (TNPL) are engaged in the production of newsprint, and printing and writing paper using bagasse as the primary raw material. The company operates in two business segments, namely, paper and energy (<http://wrightreports.ecnext.com/>). It has a capacity of 245000 tons per year and the company has emerged as the largest bagasse based paper mill in the world

consuming about one million tons of bagasse every year. It is the only paper mill in India assisted by the World Bank.

Objectives of the Study

The aim of the study is to examine financial performance of the selected paper mills namely Ballarpur Industries Limited (BILT) and Tamil Nadu Newsprint and Papers Limited (TNPL).

The following are the broad objectives of the study:

- i. To study the concept of financial performance appraisal in brief.
- ii. To study the profitability position of BILT and TNPL.
- iii. To analyze the liquidity position of BILT and TNPL.
- iv. To appraise the long-term solvency and short-term solvency of BILT and TNPL.
- v. To suggest measures to improve the financial performance of the BILT and TNPL.

Null Hypotheses of the Study

1. There is no significant difference between the Gross Profit Ratios of BILT and TNPL.
2. There is no significant difference between Net Profit Ratios of BILT and TNPL.
3. There is no significant difference between the Current Ratio of BILT and TNPL.
4. There is no significant difference between the Quick Ratios of BILT and TNPL.
5. There is no significant difference between the Debt Equity Ratio of BILT and TNPL.

Research Methodology

The study is based on the secondary sources of data collected from the published annual reports of the Mills of the past three years i.e. 2012-13, 2013-14 and 2014-15. Moreover, data has been collected from the articles published in various business newspapers and journals and some information has been browsed from the internet. In order to analyze financial performance, liquidity, solvency, profitability, various accounting ratios have been calculated to make a comparison of the performance of different Mills.

Statistical Tools: Various statistical tools such as mean, standard deviation and independent sample t-test have been used to analyze the results through SPSS 19.

Appraisal of Financial Performance

The present paper measures the financial performance of BILT and TNPL on the following aspects:

Profitability

Liquidity

Profitability

Profitability is the ability to earn profit from all activities of an enterprise. Profitability of a firm is judged with Gross Profit,

Net Profit and Operating Profit. Gross Profit ratio and Net Profit Ratio of BILT and TNPL have been shown in table 1 and 2.

Table 1: Gross Profit Ratio of the Paper Mills

Year	BILT	TNPL
2012-13	17.74	17.58
2013-14	15.45	16.56
2014-15	10.05	14.44
Total	43.24	48.58
Mean	14.41	16.19

Source: Computed from Annual Reports of BILT & TNPL
Table 1 shows the gross profit of BILT and TNPL since 2012-13 to 2014-15. The mean gross profit ratio of BILT is 14.41 while 16.19 is the mean gross profit ratio of TNPL.

Table 2: Net Profit Ratio of the Paper Mills

Year	BILT	TNPL
2012-13	12.44	11.12
2013-14	11.86	9.67
2014-15	6.78	11.86
Total	31.08	32.65
Mean	10.36	10.83

Source: Computed from Annual Reports of BILT & TNPL

Table 2 shows the net profit of BILT and TNPL since 2012-13 to 2014-15. The mean net profit ratio of BILT is 10.36 while 10.83 is the mean net profit ratio of TNPL.

Liquidity

The term "liquidity" refers to the ability of a firm to meet its maturing obligations. Current Ratio, Quick Ratio, Debt Equity Ratio have been calculated to judge the liquidity position of BILT and TNPL.

Table 3: Current Ratio of the Paper Mills

Year	BILT	TNPL
2012-13	3.44	2.56
2013-14	3.88	2.88
2014-15	2.22	1.94
Total	9.54	7.38
Mean	3.18	2.46

Source: Computed from Annual Reports of BILT & TNPL

The above table 3 exhibits the current ratio of BILT and TNPL since 2012-13 to 2014-15. The mean current ratio of BILT is 3.18 while 2.46 is the mean current ratio of TNPL.

Table 4: Quick Profit Ratio of the Paper Mills

Year	BILT	TNPL
2012-13	2.9	1.56
2013-14	2.3	1.98
2014-15	1.22	1.44
Total	7.42	4.98
Mean	2.47	1.66

Source: Computed from Annual Reports of BILT & TNPL

The above table 3 exhibits the current ratio of BILT and TNPL since 2012-13 to 2014-15. The mean quick ratio of BILT is 2.47 while 1.66 is the mean quick ratio of TNPL.

Table 5: Debt Equity Ratio of the Paper Mills

Year	BILT	TNPL
2012-13	0.87	0.89
2013-14	0.64	1.23
2014-15	0.59	1.37
Total	2.1	3.49
Mean	0.7	1.16

Source: Computed from Annual Reports of BILT & TNPL

The above table 5 shows the debt-equity ratio of BILT and TNPL since 2012-13 to 2014-15. The mean debt-equity ratio of BILT is 0.7 while 1.16 is the mean debt-equity ratio of TNPL.

Hypothesis Testing

Hypothesis 1

Ho₁: There is no significant difference in Gross Profit Ratio of BILT and TNPL.

Ha₁: There is a significant difference in Gross Profit Ratio of BILT and TNPL.

Independent sample t-test has been used as a statistical tool to examine the difference in Gross Profit Ratio of BILT and TNPL. The null hypothesis is that there is no significant difference in Gross Profit Ratio of BILT and TNPL and the alternative hypothesis states that there is a significant difference in Gross Profit Ratio of BILT and TNPL.

Table 6: Independent Sample t-test

Gross Profit Ratio						
t-test for Equality of Means						
Paper Mills	N	Mean	SD	t	df	Sig.(2 tailed)
BILT	3	14.41	1.768	11.452	4	0.000
TNPL	3	16.19	0.987			

Table 6 shows the mean value, standard deviation and results of Independent samples t-test used to find out the differences in Gross Profit Ratio of BILT and TNPL. The value of 't' is 11.452 and significant value is 0.000 which is more than 0.05 at 95 percent confidence interval. Therefore, null hypothesis is rejected and hence it can be said that there is a significant difference in Gross Profit Ratio of BILT and TNPL.

Hypothesis 2

Ho₂: There is no significant difference in Net Profit Ratio of BILT and TNPL.

Ha₂: There is a significant difference in Net Profit Ratio of BILT and TNPL.

Independent sample t-test has been used as a statistical tool to examine the difference in Net Profit Ratio of BILT and TNPL. The null hypothesis is that there is no significant difference in Net Profit Ratio of BILT and TNPL and the alternative hypothesis states that there is a significant difference in Net Profit Ratio of BILT and TNPL.

Table 7: Independent Sample t-test

Net Profit Ratio						
t-test for Equality of Means						
Paper Mills	N	Mean	SD	t	df	Sig.(2 tailed)
BILT	3	31.08	2.321	9.231	4	0.001
TNPL	3	32.65	1.453			

Table 7 shows the results of Independent Samples t-test used to find out the differences in Net Profit Ratio of BILT and TNPL. The value of t is 9.231 and significant value is 0.001 which is less than 0.05 at 95 percent confidence interval. Therefore, null hypothesis is rejected and hence it can be said that there is a significant difference in Net Profit Ratio of BILT and TNPL.

Hypothesis 3

Ho₃: There is no significant difference in Current Ratio of BILT and TNPL.

Ha₃: There is a significant difference in Current Ratio of BILT and TNPL.

Independent sample t-test has been used as a statistical tool to examine the difference in Current Ratio of BILT and TNPL. The null hypothesis is that there is no significant difference Current Ratio of BILT and TNPL in and the alternative hypothesis states that there is a significant difference in Current Ratio of BILT and TNPL.

Table 8: Independent Sample t-test

Current Ratio						
t-test for Equality of Means						
Paper Mills	N	Mean	SD	t	df	Sig.(2 tailed)
BILT	3	3.18	1.564	8.652	4	0.002
TNPL	3	2.46	1.022			

Table 8 shows the mean value, standard deviation and results of Independent Samples t-test used to find out the differences in Current Ratio of BILT and TNPL. The value of 't' is 8.652 and significant value is 0.002 which is less than 0.05 at 95 percent confidence interval. Therefore, null hypothesis is rejected and hence it can be said that there is a significant difference in Current Ratio of BILT and TNPL.

Hypothesis 4

Ho₄: There is no significant difference in Quick Ratio of BILT and TNPL.

Ha₄: There is a significant difference in Quick Ratio of BILT and TNPL.

Independent sample t-test has been used as a statistical tool to examine the difference in Quick Ratio of BILT and TNPL. The null hypothesis is that there is no significant difference Quick Ratio of BILT and TNPL in and the alternative hypothesis states that there is a significant difference in Quick Ratio of BILT and TNPL.

Table 9: Independent Sample t-test

Quick Ratio						
t-test for Equality of Means						
Paper Mills	N	Mean	SD	t	df	Sig.(2 tailed)
BILT	3	7.42	2.327	13.543	4	0.000
TNPL	3	4.98	1.876			

Table 9 shows the mean value, standard deviation and results of Independent Samples t-test used to find out the differences in Quick Ratio of BILT and TNPL. The value of 't' is 13.543 and significant value is 0.000 which is more than 0.05 at 95 percent confidence interval. Therefore, null hypothesis is rejected and hence it can be said that there is a significant difference in Quick Ratio of BILT and TNPL.

Hypothesis 5

H₀₅: There is no significant difference in Debt Equity Ratio of BILT and TNPL.

H_{a5}: There is a significant difference in Debt Equity Ratio of BILT and TNPL.

Independent sample t-test has been used as a statistical tool to examine the difference in Debt Equity Ratio of BILT and TNPL. The null hypothesis is that there is no significant difference Debt Equity Ratio of BILT and TNPL in and the alternative hypothesis states that there is a significant difference in Debt Equity Ratio of BILT and TNPL.

Table 10: Independent Sample t-test

Debt Equity Ratio						
t-test for Equality of Means						
Paper Mills	N	Mean	SD	t	df	Sig.(2 tailed)
BILT	3	0.7	0.654	4.178	4	0.000
TNPL	3	1.16	1.349			

Table 10 shows the mean value, standard deviation and results of Independent Samples t-test used to find out the differences in Debt Equity Ratio of BILT and TNPL. The value of 't' is 4.178 and significant value is 0.000 which is less than 0.05 at 95 percent confidence interval. Therefore, null hypothesis is rejected and hence it can be said that there is a significant difference in Debt Equity Ratio of BILT and TNPL.

Table 11: Summary of Hypothesis Testing

S. No	Hypotheses	t Value	Sig. Value	Results
1	There is no significant difference in Gross Profit Ratio of BILT and TNPL.	11.452	0.000	Rejected
2	There is no significant difference in Net Profit Ratio of BILT and TNPL.	9.231	0.001	Rejected
3	There is no significant difference in Current Ratio of BILT and TNPL.	8.652	0.002	Rejected
4	There is no significant difference in Quick Ratio of BILT and TNPL.	13.543	0.000	Rejected
5	There is no significant difference in Debt Equity Ratio of BILT and TNPL.	4.178	0.000	Rejected

Table 13 shows the summary of the entire hypotheses tested to examine the differences in Gross Profit Ratio, Net Profit Ratio, Current Ratio, Quick Ratio and Debt Equity Ratios of BILT and TNPL. All the hypotheses have been rejected meaning thereby significant difference exists in gross profit, net profit, current and quick ratio in BILT and TNPL.

Conclusion

Ballarpur Industries Limited (BILT) and Tamil Nadu Newsprint and Papers Limited (TNPL) are the two paper industries that have been selected to make analysis and interpretation. Firstly, Gross Profit Ratio, Net Profit Ratio, Current Ratio, Quick Ratio and Debt Equity Ratio have been computed with the help of Annual Reports of the industries. Secondly, the formulated hypotheses have been tested by applying Independent sample t-test. All the hypotheses have been rejected which shows that there is a significant difference in gross profit, net profit, current ratio, quick ratio and debt equity ratio in BILT and TNPL.

References

1. Bara Mahesh M. A Study on Liquidity Management of Indian Steel Industry Ph.D Thesis, Faculty of Commerce, Saurashtra University, 2010.
2. Ghosh Sudipta. Liquidity Management: A case study of TISCO Ltd. The Management Accountant, 2008; 43(2):77-80, 85.
3. Kantawala Amita S. Financial Performance of Non Banking Finance Companies In India the Indian Economic Journal 2001; 49(1):86-92.
4. Srivastava Radhey Mohan. Financial Management- Principles and Problems Pragati Prakashan, Meerut. 1979, 41-44.
5. Reddy Dr. D Raghunatha, Rani Sudha K. The Performance Evaluation of Non Banking Financial Companies the Management Accountant, 2007; 42(7):576-581.

6. Sudershan Kuntluru, Muppani Venkata Reddy. Financial Performance of Domestic and Foreign Owned Companies in India Journal of Asia Pacific Business. 2008; 9(1):28-54.
7. Trivedi Shilpa M. An Analysis of Financial Performance of State Road Transport Corporation in Gujarat Ph.D Thesis, Department of Business Management, Saurashtra University, Rajkot, 2010.