Analysis of long-term financial strength of to select private sector paper industry in India

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Abstract:

Paper industry is a diverse industry which produces a wide range of pulp, paper and paperboard products to meet specific end user requirements. Although paper has many uses, its most important contribution to modern civilization is its use as a medium to record knowledge. The Indian pulp and paper industry at present is very well developed and established. Now, the paper industry is categorized as forest-based, agro-based and others. The pulp and paper industries in India have been categorized into large-scale and small-scale.

Those paper industries, which have the capacity of more than 24,000 tonnes per annum, are designated as large-scale paper industries. Objectives of the study, to analyze the long term financial strength of the selected private sector paper industry in India. Methodology of the study, Secondary data has been used in this study. Top ten paper industries have been selected for the study. The period for this study covered ten years from 2005-2006 to 2014-2015 and the essential data for this period have been collected.

1. INTRODUCTION:

Paper industry is a diverse industry which produces a wide range of pulp, paper and paperboard products to meet specific end user requirements. Although paper has many uses, its most important contribution to modern civilization is its use as a medium to record knowledge. The Indian pulp and paper industry at present is very well developed and established. Now, the paper industry is categorized as forest-based, agro-based and others. The pulp and paper industries in India have been categorized into large-scale and small-scale. Those paper industries, which have the capacity of more than 24,000 tonnes per annum, are designated as large-scale paper industries. India is self-sufficient in the manufacture of most varieties of paper and paperboards.

Business financial strength is of vital concern to business owners, corporate managers, investors and lenders. Efficiency and cost control are keys to success in many companies throughout the United States and the world. There are many ways to

measure the financial strength of a company. The key is identifying the right measurement tools for the company, taking into consideration: the industry, stage of life cycle, time horizon, business objectives, and economic conditions. It is also important to understand your company's financial performance relative to its industry as all companies compete in the marketplace on a local, regional, national or international level.

1.1. STATEMENT OF THE PROBLEM

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. The Indian Paper Industry has emerged as a diversified and specialized industry that produces numerous types of papers that come in various uses 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. Today, the Indian exporters export nearly Rs. 400 crores worth paper products per annum to the developed nations. In this study have selected following questions were raised in researcher mind

What is the financial strength of private sector paper industries in India?

What are the relationships between borrowed funds and owners equity of the selected private sector paper industry in India?

What are the estimates investment policies of management in fixed assets of the selected private sector paper industry in India?

1.2. OBJECTIVES OF THE STUDY

- To analyze the long term financial strength of the selected private sector paper industry in India.
- To improve the suitable suggestions to improve the financial strength of private sector paper industry in India.

2. REVIEW OF LITERATURE

1. Reddy G Sudarsana (2003), in their doctoral dissertation, "Financial performance of paper industry in Andhra Pradesh" selected issues related to the financial performance of some selected paper mills in Andhra Pradesh. Non-financial areas such as production, marketing, personnel and research and development were excluded. Primary data have been obtained from responses to unstructured interview held with the executives of sample mills. The statistical tools like correlation, regression and trend analysis have been used for the study purpose.

2. K.S.Kavitha and Dr.P.Palanivelu (2014), in their article titled "A Study on Financial Performance of Iron and Steel Industries India" states that India is world's second largest producer of steel. High demand of Iron and steel by sectors like, Infrastructure, Automobile and Real estate have given a boost to Iron and Steel Industry in India. Combined with huge production to the export of Iron and steel has also grown by 12.5%. They have used ANNOVA (Analysis of Variance) as a statistical tool. They concluded by stating that profit and utilize maximum production capacity. They

can control the cost of goods sold and operating expenses. Improper planning and delays in implementation of projects lead to rise in their cost. So properly planning should be made. Companies try to increase production and sales for getting maximize profit to strengthen financial position.

3. RESEARCH METHODOLOGY

The methods section describes the rationale for the application of specific procedures or techniques used to identify, select, and analyze information applied to understanding the research problem, thereby, allowing the reader to critically evaluate a study's overall validity and reliability. The methodology section of a research paper answers two main questions: How was the data collected or generated? And, how was it analyzed?

3.1. RESEARCH DESIGN

The research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data.

3.2. PERIOD OF THE STUDY

The period for this study covered ten years from 2005-2006 to 2014-2015 and the essential data for this period have been collected. This ten years period is chosen to have a fairly long, cyclically well balanced period, for which reasonably homogeneous, reliable and up to-date financial data would be available.

3.3. TOOLS USED

The following statistical tools have been used for the study purpose

- Mean
- Standard deviation
- Co-efficient of Variation
- Compound annual growth rate
- ANNOVA

4. DATA ANALYSIS AND INTERPRETATION

The long term creditors, debenture holders and financial institutions would judge the soundness of a firm on the basis of the long-term financial strength in terms of its ability to pay the interest regularly as well as to repay the principal amount as and when it falls due. To examine the long-term solvency of a firm, capital structure ratios are calculated. These ratios indicate the proportion between funds provided by owners and outsiders. As a general rule, there should be an 'appropriate' mix of debt and owners equity in financing the firm's assets. To judge the long-term financial strength of selected paper industries the following ratios have been computed and analyzed in the following paragraph.

4.1. DEBT-EQUITY RATIO

The relationship between borrowed funds and owners equity is a popular measure of the long-term financial strength of a concern. The higher the coverage of owned funds" the lower will be the ratio and the greater will be the protection to the creditors against possible losses in the event of liquidation. This ratio is also important for judging the financial policy followed by the concern. An ideal norm of the ratio is 1: 1 that is the long-term debt should not exceed the owned funds in the business.

TABLE 4.1

ANALYSIS OF LONG-TERM FINANCIAL STRENGTH-DEBT-EQUITY RATIO

Year	Ballarpur Industries Ltd	SPP Ltd	JK Papers Ltd	Shreyans Industries Ltd	West Coast Paper Mills Ltd	Rainbow Papers Ltd	Emami Papers Ltd	Pudumjee Pulp And Papers Ltd	Shree Rama News Print Ltd	Star Paper Mills Ltd
2005-06	0.87	1.48	1.9	18.63	1.29	2.23	1.05	0.49	1.03	0.56
2006-07	0.85	1.4	1.8	12.47	1.14	2.13	0.82	0.57	0.95	0.53
2007-08	0.77	1.5	1.62	5.26	0.82	2.18	1.82	0.67	0.88	0.54
2008-09	0.7	1.81	1.88	3.04	0.91	2.47	2.71	0.7	0.79	0.54
2009-10	0.7	1.9	1.8	1.6	1.63	3.05	2.98	0.59	0.79	0.37
2010-11	0.58	1.67	1.42	0.94	2.06	2.03	2.98	0.51	0.92	0.15
2011-12	0.56	1.42	1.13	0.64	1.92	1.52	2.57	0.48	1.56	0.07
2012-13	0.54	1.04	1.21	0.64	2	1.67	2.73	0.62	2.69	0.17
2013-14	0.51	0.97	1.65	0.63	2.01	1.93	2.34	0.77	3.61	0.29
2014-15	0.58	1.1	2.36	0.54	1.8	2.16	1.69	0.63	6.79	0.47
Mean	0.666	1.429	1.677	4.44	1.558	2.137	2.169	0.603	2.001	0.369
S.D	0.131	0.317	0.361	6.21	0.478	0.423	0.784	0.095	1.932	0.187
CV	19.69	22.18	21.55	139.96	30.69	19.78	36.16	15.69	96.56	50.64
RANGE	0.36	0.93	1.23	18.09	1.24	1.53	2.16	0.29	6.00	0.49
CAGR	-0.044	-0.032	0.024	-0.325	0.038	-0.004	0.054	0.028	0.233	-0.019

Source: Computed

The Debt-Equity ratio of the sample paper companies was shown in Table 4.1. The mean value was the highest in Shreyans Industries Ltd i.e., (4.44) followed by Emami Papers Ltd i.e., (2.169). Debt-Equity ratio of all the selected paper companies reflected that they were below the mean ratios in most of the years. Hence, it could be concluded that the Debt-Equity ratio was not in a satisfactory position of all the companies.

The range of Debt-Equity ratio which worked out as (18.09) of Shreyans Industries Ltd. showed highest among selected paper companies in India for the present study. The compound annual growth rate of Shree Rama News Print Ltd.(0.233), had highest growth rate, and followed by Emami papers Ltd, (0.054), Pudumjee Pulp And Papers Ltd (0.028), JK Papers Ltd., (0.024), West Coast Paper Mills Ltd(0.038), than the other companies showed negative growth rate in selected paper companies.

The Debt-Equity of variation showed that the co-efficient variation ratio of Pudumjee Pulp And Papers Ltd. was more consistent (15.69) than the other companies and it was followed by Ballarpur Industries Ltd (19.69), Rainbow Papers Ltd. (19.78), JK Papers Ltd (21.55), and SPP Ltd (22.18) and so on.

4.2. FIXED ASSETS TURNOVER RATIO

The long term investors, creditors and shareholders are concerned with the investment policy of management in fixed assets. The investments in fixed assets involve commitment of funds for longer period into the future and usually are difficult and costly to reserve; often they are in large increments. Therefore, the management should be very cautious in deciding about the investment in fixed assets.

TABLE 4.2

ANALYSIS OF LONG-TERM FINANCIAL STRENGTH FIXED ASSETS TURNOVER RATIO

Year	Ballarpur Industries Ltd	SPP Ltd	JK Papers Ltd	Shreyans Industries Ltd	West Coast Paper Mills Ltd	Rainbow Papers Ltd	Emami Papers Ltd	Pudumjee Pulp And Papers Ltd	Shree Rama News Print Ltd	Star Paper Mills Ltd
2005-06	0.64	1.28	0.84	1.35	1.19	1.68	1.16	0.71	0.47	1.24
2006-07	0.66	1.27	0.89	1.63	1.32	1.72	0.96	0.69	0.5	1.16
2007-08	0.74	1.29	0.9	1.73	1.33	1.49	0.85	0.91	0.52	1.06
2008-09	0.47	1.28	0.82	1.9	1.36	1.16	0.69	0.98	0.52	1.06
2009-10	0.83	0.94	0.91	1.83	1.47	1.2	0.81	0.93	0.49	1.06
2010-11	0.75	0.71	0.92	1.42	0.9	0.87	0.71	0.94	0.44	1.05
2011-12	0.69	0.79	1.00	1.48	0.77	0.94	0.77	0.95	0.45	1.07
2012-13	0.7	0.84	1.06	1.49	0.72	1.04	0.82	0.92	0.49	0.95
2013-14	0.62	0.95	1.15	1.72	0.77	0.85	0.78	0.8	0.54	1.14
2014-15	0.57	1.00	0.9	1.93	0.82	0.73	0.79	0.88	0.57	1.14
Mean	0.667	1.035	0.939	1.648	1.065	1.168	0.834	0.871	0.499	1.093
S.D	0.101	0.226	0.102	0.206	0.295	0.353	0.137	0.102	0.040	0.079
CV	15.13	21.88	10.85	12.51	27.68	30.23	16.39	11.74	8.04	7.26
RANGE	0.36	0.58	0.33	0.58	0.75	0.99	0.47	0.29	0.13	0.29
CAGR	-0.013	-0.027	0.008	0.041	-0.041	-0.088	-0.042	0.024	0.022	-0.009

Source: CMIE Database

The Fixed Assets Turnover ratio of the sample paper companies was shown in table 4.2. The mean value was the highest in Shreyans Industries Ltd**.,** (1.648) followed by Rainbow Papers Ltd i.e., (1.168). Fixed Assets Turnover ratio of all the

selected paper companies reflected that they were below the mean ratios in most of the years. Hence, it could be concluded that the Fixed Assets turnover ratio was not in a satisfactory position of all the companies.

The range of Fixed Assets Turnover ratio which worked out as (0.99) of rainbow papers Ltd. showed highest among selected paper companies in India for the present study. The compound annual growth rate of Shreyans Industries Ltd,(0.041), had highest growth rate, and followed by Pudumjee pulp and papers Ltd, (0.024),Shree Rama News Print Limited (0.022), JK Papers Ltd., (0.008) than the other companies showed negative growth rate in selected paper companies.

The Fixed Assets Turnover ratio of variation showed that the co-efficient variation ratio of Star Paper Mills Ltd. was more consistent (7.26) than the other companies and it was followed by Shree Rama News Print Ltd (8.04), JK Papers Ltd. (10.85), Pudumjee Pulp Papers Ltd (11.74), Shreyans Industries Ltd (12.51), and so on.

4.3. LONG TERM DEBT-EQUITY RATIO

The relationship between borrowed funds and owners equity is a popular measure of the long-term financial strength of a concern. This relationship is reflected by the debt-equity ratio. This ratio is employed as a principal tool for analyzing the composition of financial structure. From the creditor's point of view, the debt-equity ratio measures the extent to which their interests are covered by owned funds.

TABLE 4.3

ANALYSIS OF LONG-TERM FINANCIAL STRENGTH - LONG TERM DEBT-EQUITY RATIO

Year	Ballarpur Industries Ltd	SPP Ltd	JK Papers Ltd	Shreyans Industries Ltd	West Coast Paper Mills Ltd	Rainbow Papers Ltd	Emami Papers Ltd	Pudumjee Pulp and Papers Ltd	Shree Rama News Print Ltd	Star Paper Mills Ltd
2005-06	0.74	0.95	1.66	15.62	0.96	1.6	0.74	0.39	0.92	0.5
2006-07	0.73	0.99	1.66	10.44	0.9	1.38	0.76	0.39	0.83	0.43
2007-08	0.72	1.17	1.43	4.49	0.67	1.45	1.66	0.48	0.77	0.45
2008-09	0.69	1.53	1.49	2.54	0.8	1.79	2.27	0.45	0.63	0.45
2009-10	0.7	1.57	1.44	1.28	1.57	2.42	2.36	0.4	0.55	0.28
2010-11	0.58	1.27	1.17	0.75	2.02	1.73	2.39	0.36	0.54	0.07
2011-12	0.36	0.74	0.79	0.38	1.59	1.1	1.75	0.31	0.74	0.01
2012-13	0.18	0.38	0.87	0.22	1.24	1.01	1.53	0.39	1.05	0.02
2013-14	0.18	0.42	1.43	0.21	1.12	1.29	1.55	0.54	1.71	0.01

2014-15	0.23	0.52	2.15	0.14	0.99	1.57	1.31	0.47	3.7	0.03
Mean	0.511	0.954	1.409	3.61	1.186	1.534	1.632	0.418	1.144	0.219
S.D	0.244	0.436	0.396	5.29	0.422	0.401	0.597	0.067	0.962	0.222
CV	47.82	45.66	28.13	146.68	35.55	26.15	36.56	15.98	83.92	101.39
RANGE	0.56	1.19	1.36	15.48	1.35	1.41	1.65	0.23	3.16	0.5
CAGR	-0.122	-0.065	0.029	-0.408	0.003	-0.002	0.066	0.021	0.167	-0.353

Source: CMIE Database

The Long Term Debt-Equity Ratio of the sample paper companies was shown in table 4.3. The mean value was the highest in Shreyans Industries Ltd**.,** (3.61) followed by Emami Papers Ltd**.,** (1.632). Long Term Debt-Equity Ratio of all the selected paper companies reflected that they were below the mean ratios in most of the years. Hence, it could be concluded that the Long Term Debt-Equity Ratio was not in a satisfactory position of all the companies.

The range of Long Term Debt-Equity Ratio which worked out as (15.48) of Shreyans Industries Ltd. showed highest among selected paper companies in India for the present study. The compound annual growth rate of Shree Rama News Print Ltd , (0.167), had highest growth rate, and followed by Emami papers Ltd, (0.066), JK Papers Ltd., (0.029) Pudumjee Pulp Papers Ltd (0.021), West Coast Paper Mills Ltd., (0.003) than the other companies showed negative growth rate in selected paper companies. The Long Term Debt-Equity Ratio of variation showed that the co-efficient variation ratio of Pudumjee Pulp Papers Ltd. was more consistent (15.98) than the other companies and it was followed by Rainbow Papers Ltd (26.15), JK Papers Ltd. (28.13), West Coast Paper Mills Ltd., (35.55) and so on.

TABLE – 4.4

ANALYSIS OF LONG TERM FINANCIAL STRENGTH - ANOVA

Debt-Equity Ratio			**Fixed Assets Turnover Ratio**			**Fixed Assets To Net Worth Ratio**		
F-value	**p-value**	**S/NS**	**F-value**	**p-value**	**S/NS**	**F-value**	**p-value**	**S/NS**
3.09	0.003	**S**	26.60	0.000	**S**	3.03	0.002	**S**

**P<0.01   S- Significant

Source: *Computed using the values of for ratios*

In order to examine the significant effect of difference between the years and companies on the Debt-Equity Ratio, F test has been made which is exhibited in the Table 4.4. The table reveals that the p-value of F is less than 0.01; the null hypothesis is rejected at one per cent level of significance. The hypothesis "there is no difference between the years and companies on the Debt-Equity Ratio" is disproved It is concluded that, there is difference between the years and companies on the Debt-Equity Ratio and also F test of Fixed Assets To Net Worth Ratio has been made which is exhibited in the above Table. The table reveals that the p-value of F is less than 0.01; the null hypothesis is accepted at

five per cent level of significance. The hypothesis "there is no a difference between the years and companies on the Fixed Assets to Net worth Ratio" is disproved. It is concluded that, there is a difference between the years and companies on the Fixed Assets to Net worth Ratio.

5. FINDINGS

1. The Debt-Equity ratio of the sample paper companies was found that, the mean value was the highest in Shreyans Industries Ltd i.e., (4.44) followed by Emami Papers Ltd i.e., (2.169). Debt-Equity ratio of all the selected paper companies reflected that they were below the mean ratios in most of the years. Hence, it could be concluded that the Debt-Equity ratio was not in a satisfactory position in all the companies. It is clear that, the p-value is less than 0.01 and 0.05; the null hypothesis is rejected at 1 per cent and 5 per cent level of significance as there is significant difference between actual value and the trend value of sales among selected companies for different years expect Star Paper Mills Ltd.

2. The Fixed Assets Turnover ratio of the sample paper companies was found that, the mean value was the highest in Shreyans Industries Ltd., (1.648) followed by Rainbow Papers Ltd i.e., (1.168). Fixed Assets Turnover ratio of all the selected paper companies reflected that they were below the mean ratios in most of the years. Hence, it could be concluded that the Fixed Assets turnover ratio was not in a satisfactory position in all the companies.

3. The Long Term Debt-Equity Ratio of the sample paper companies, the mean value was the highest in Shreyans Industries Ltd., (3.61) followed by Emami Papers Ltd., (1.632). Long Term Debt-Equity Ratio of all the selected paper companies reflected that they were below the mean ratios in most of the years. Hence, it could be concluded that the Long Term Debt-Equity Ratio was not in a satisfactory position in all the companies.

4. In order to examine the significant effect of difference between the years and companies on the Debt-Equity Ratio, F test has been made and it is results that, the p-value of F is less than 0.01; the null hypothesis is rejected at one percent level of significance. The hypothesis "there is no difference between the years and companies on the Debt-Equity Ratio" is disproved. It is concluded that, there is difference between the years and companies on the Debt-Equity Ratio. F test of Fixed Assets to Net worth Ratio has been made and it is exhibited in the results. The reveals that, the p-value of F is less than 0.05; the null hypothesis is rejected at five percent level of significance. The hypothesis "there is no difference between the years and companies on the Fixed Assets to Net worth Ratio" is disproved. It is concluded that, there is difference between the years and companies on the Fixed Assets to Net worth Ratio.

6. SUGGESTIONS

- Debt to equity is also called debt to net worth. It quantifies the relationship between the capital invested by owners and investors and the funds provided by creditors. The higher the ratio, the greater the risk to a current or future creditor. In this study, all the companies are inadequate of quick assets except Ballarpur Industries Ltd, Pudumjee Pulp and Papers Ltd and Star Paper Mills Ltd. A lower ratio means your client's company is more financially stable and is probably in a better position to borrow now and in the future. The remaining companies have to concentrate much on quick ratio.

- 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 and eliminate the risk of arranging finance regularly

- Fixed asset reveals investment based on the net profit of the organizations, which affect the firm's position to accumulate its net block. Based on the study almost all the companies reveal marginal satisfaction towards their fixed asset position. However, the companies shall take initiatives to improve the fixed asset position.

- The quantum of sales generated should be improved impressively in order to enjoy a better performance of the assets and capital employed.

- The management should try to utilize their production capacity fully in order to reduce factory overheads and to utilize their fixed assets properly.

7. CONCLUSION

The paper industry was passing through rough days and hard times. There have been many periods of adversity, when growth charts have dipped and it has appeared that misfortune will overtake. Today, rapid changes in the World trading system have endangered the stability of the paper industry and created an atmosphere of uncertainty and turbulence in the industry.

But it is also a fact that turbulence is necessary for any change in the system. There is need to bring about technological improvement, structural changes, liberalization from controls and regulations, increased productivities of labour and machine and reliable quality assurance systems to meet the present day needs. If there is insecurity inherent in the globalised economy, there should be also opportunity – opening up of vast markets to Indian paper that were earlier closed or regulated.

Indian paper industry is ready to take up this opportunity of free trade and secure its well deserved position in the international paper arena through improved efficient financial management by framing effective policies in raising and utilizing the funds.

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