# FINANCIAL RISK ANALYSIS OF SELECTED PAPER INDUSTRIES IN INDIA

# \*Dr. S. KARPAGALAKSHMI \*\*Dr. A. MUTHUSAMY

\*Teaching Assistant, Department of International Business, Alagappa University, Karaikudi-4, Tamil Nadu.

\*\* Professor, Department of International Business, Alagappa University, Karaikudi-4, Tamil Nadu.

# **ABSTRACT**

The Indian Paper & Paperboard industry is one of the oldest organized manufacturing industries in India. The paper industry in India is growing of a rapid speed with demand increase and opportunity conception and allure to the international players. Paper products are used in education, healthcare, food, trade, communication and packaging. The study suggests that observed changes in risk among paper products manufacturers can to a large scope be attributed to their captive activities. The proposed model helps to evaluate financial risk, by using discriminate analysis, which integrates five of the most important financial indicators: current risk, return on investment, Debt to equity, total assets turnover, working capital to total assets. This paper laid down out with the aim of answering the question to what extent the financial risks are challenged by the selected paper industries.

Keywords: Financial risk score, Financial indicators, Paper industry, Ratio analysis

#### INTRODUCTION

India embraces 15th rank with paper manufacturing nations in the world. Paper is one of the core industries and is linked to basic human needs. Paper is the pre-requisite for education and literacy and its use is a key to advancement in these two fields as well as the overall well-being of the society. The domestic paper sector is likely to observe marginal improvement in demand in financial year 2017 from education and corporate sectors, aided by expected higher GDP growth of the country. Paper Industry is a large capital intensive and yields the poor return on investment. It is disorienting to observe that the per capita consumption of paper in India is very low as compared to other developed countries. The paper industry is also contributing towards the fulfillment of various requirements of the industry as a whole like information

dissemination, publicity, which in turn stimulate industrial growth of the country. The Indian paper industry is expanding at a rate of 6 to 7 per cent would drive the growth of Century Pulp and Paper company. The Indian paper industry could observe a round of consolidation and cooperation in the course of different players in the next few years to together leverage quick changing manufacturing technologies and smoothen diffident addition for raw materials. This study will be useful to the management to make investment decisions and the strength of their essential value. It would also enable shareholders, investors and investment analysts the determinants of corporate performance. The present study has observed major concern in risk analysis, facts, and information available in various secondary sources to make an evaluation of selected Paper industries in India.

#### IMPORTANCE OF THE STUDY

The Indian paper industry faces many serious problems and prospects do not look very bright. The biggest problem faced by this industry is the scarcity of raw materials. India is facing a wide gap between supply and demand of paper level at the low rate of consumption. Unless technology to solve the effluent problem is evolved and implemented with only marginal additional investment, many of the paper mills run the risk of economic losses and even closure due to a high cost of basic inputs and environmental issues are the other two major problems required to be addressed by the paper industry to become globally competitive.

Financial performance is the processes of making an intellectual activity. Financial performance is also the concern with the business operations contribute to increase the profits and also to enhance the total investments. Financial performance is also a concern with the prosperity of shareholders. In order to understand a lot of these problems related to the paper industry, it is considered useful to take up a study for financial performance analysis of selected private sector paper manufacturing companies in India.

#### **OBJECTIVES OF THE STUDY**

- To analyze the financial position and the selected paper companies in India.
- To assess the financial health of selected paper companies in India with the help of financial risk score model.

### METHODOLOGY OF THE STUDY

The study is mainly based on secondary data. The required data were collected from private sector paper manufacturing companies and also important publication reports which are available on the web. The sample selection of five paper companies is based on random sampling. This study has used statistical tools such as Ratio analysis, financial risk score, and comparative assessment of industry average.

#### SAMPLE COMPANIES

The following are the sample companies taken for the study

- 1. Ballarpur Industries Ltd
- 2. JK Paper Ltd
- 3. Rainbow Papers Ltd
- 4. Seshasayee Paper & Boards Ltd
- 5. Kuantum papers Ltd

#### PERIOD OF THE STUDY

The study covers a period of five years from the financial year 2013-14 to 2017-18

## MEASURING FINANCIAL INDICATOR OF SAMPLE COMPANIES

To assess the current risk, return on investment, debt to equity total assets turnovers and working capital Based on data from Table 1 calculated the five financial indicators that will be used in the construction of a model, such as:

- CR (Current risk) = Current Assets / Current Liabilities
- ROI (Return on Investment) = Net income / Total Assets
- DTE (Debt to Equity) = Total Liabilities / Shareholders` Equity
- TAT (Total Assets Turnovers) = Revenues / Total Assets
- WCA (Working Capital to Total Assets) = (Current Assets Current Liabilities)/Total

Assets

TABLE 1 FINANCIAL INDICATORS (THE FISCAL YEAR 2017-2018)

COMPANY	CR	ROI	DTE	TAT	WCA
Ballarpur Industries Ltd	0.14	0.073	1.25	0.086	-0.486
JK Paper Ltd	1.08	0.774	0.64	0.795	0.018
Rainbow Papers Ltd	0.04	0.002	-1.46	0.002	-4.394
Seshasayee Paper & Boards Ltd	1.31	0.863	0.13	0.886	0.081
Kuantum papers Ltd	1.35	0.732	0.37	0.726	0.010

Source: Computed

Table 1 indicates the financial indicators of the selected paper companies. The current risk is showing a positive and good trend for Kuantum papers Ltd and Seshasayee Paper & Boards Ltd. Return on investment for the selected companies are in a good position except for Rainbow Papers Ltd. Debt to Equity position is high for Ballarpur Industries Ltd and JK Paper Ltd and low for Seshasayee Paper & Boards Ltd and Rainbow Papers Ltd. Total Assets Turnovers is high for Seshasayee Paper & Boards Ltd and JK Paper Ltd.Working Capital to Total Assets risk shows a negative for Ballarpur Industries Ltd and Rainbow Papers Ltd whereas Seshasayee Paper & Boards Ltd has a strong and positive trend in WCA.

TABLE 2 RESULTS FOR  $\alpha$  AND  $\beta$  FOR THE PERIOD OF 2013-14 TO 2017-18

Financial indicators	Minimum level	Maximum	α	β
		level		
CR	0.04	1.35	0.695	0.351
ROI	0.01	2.04	1.025	0.698
DTE	-21.43	25.83	2.2	0.222
TAT	0.02	1.94	0.98	0.696
WCA	-4.39	0.08	-2.155	0.026

Source: Computed

For every indicator, the researcher identifies the highest and the lowest value for the discriminate analysis. The proposed Financial Risk Score model is based on the following equation:

FRS = 
$$\alpha_1$$
CR +  $\alpha_2$ ROI +  $\alpha_3$ DTE +  $\alpha_4$ TAT +  $\alpha_5$ WCA +  $\beta$ 

Where,

FRS - Financial Risk Score

 $\alpha 1$ ,  $\alpha 2$ ,  $\alpha 3$ ,  $\alpha 4$ ,  $\alpha 5$  – Parameters

 $\beta$  - Error Hence, FRS = 0.695\*CR+ 1.025\*ROI+ 2.2\*DTE + 0.98\*TAT +2.155\*WCA

TABLE 3
FINANCIAL RISK SCORE FOR THE PERIOD OF 2013-14 TO 2017-18

	*0.695	*1.025	*2.2	*0.98	*2.155		
COMPANY	CR	ROI	DTE	TAT	WCA	FRS	RANK
Ballarpur Industries Ltd	0.097	0.075	2.750	0.084	1.047	0.811	I
JK Paper Ltd	0.751	0.056	0.800	0.069	0.009	0.333	III
Rainbow Papers Ltd			-				V
	0.028	0.001	0.934	0.001	-0.079	-0.197	
Seshasayee Paper & Boards			1				IV
Ltd	0.910	0.001	0.190	0.001	-0.358	0.073	
Kuantum Papers Ltd	0.938	0.632	0.048	0.643	0.001	0.452	II
AVERAGE	0.545	0.153	0.495	0.160	0.121	1.473	

Source: Computed

Table 3 shows the Financial Risk Score for the selected paper companies. It indicates that Ballarpur Industries Ltd has the highest FRS score (Ranked 1) followed by Kuantum papers Ltd (ranked 2) and JK Paper Ltd (ranked 3). The least FRS was scored by Seshasayee Paper & Boards Ltd (ranked 4) and Rainbow Papers Ltd (ranked 5).

#### COMPARATIVE ANALYSIS OF SAMPLE COMPANIES

The study has analyzed the results in comparison with the industry average.

TABLE 4
FRS VALUE WITH INDUSTRY AVERAGE

COMPANY	FRS Value	Industry average	Assessment
Ballarpur Industries Ltd	0.811	1.473	Good
JK Paper Ltd	0.333	1.473	Moderate
Rainbow Papers Ltd	-0.197	1.473	Poor
Seshasayee Paper & Boards Ltd	0.073	1.473	Moderate
Kuantum Papers Ltd	0.452	1.473	Good

Source: Computed

Table 4 reveals the FRS value and industry average. It indicates that Ballarpur Industries Ltd is in a good position and equal to the industry average. Kuantum papers Ltd is in a good position and equal to the industry average. JK Paper Ltd and Seshasayee Paper & Boards Ltd are in a moderate position. Rainbow Papers Ltd is in poor condition towards its financial risk values, and have a lesser FRS value than the industry average.

TABLE 5
CR VALUE WITH INDUSTRY AVERAGE

COMPANY	CR Value	<b>Industry average</b>	Assessment
Ballarpur Industries Ltd	0.097	0.545	Moderate
JK Paper Ltd	0.751	0.545	Good
Rainbow Papers Ltd	0.028	0.545	Poor
Seshasayee Paper & Boards Ltd	0.910	0.545	Best
Kuantum Papers Ltd	0.938	0.545	Best

Source: Computed

Table 5 reveals the CR value and industry average. It indicates that Kuantum papers Ltd and Seshasayee Paper & Boards Ltd is in the best position and greater than the industry average. JK Paper Ltd is in a good position and equal to the industry average. Ballarpur Industries Ltd is in a moderate position. Rainbow Papers Ltd is in poor condition towards its financial risk values, and have a lesser CR value than the industry average.

TABLE 6
ROI VALUE WITH INDUSTRY AVERAGE

COMPANY	ROI Value	Industry average	Assessment
Ballarpur Industries Ltd	0.075	0.153	Good
JK Paper Ltd	0.056	0.153	Moderate
Rainbow Papers Ltd	0.001	0.153	Poor
Seshasayee Paper & Boards Ltd	0.001	0.153	Poor
Kuantum Papers Ltd	0.632	0.153	Very Good

Source: Computed

Table 6 shows the ROI value and industry average. It indicates that Kuantum papers Ltd is in Very Good position and greater than the industry average. Ballarpur Industries Ltd is in a good position and equal to the industry average. JK Paper Ltd is in a moderate position.

TABLE 7
DTE VALUE WITH INDUSTRY AVERAGE

COMPANY	DTE Value	Industry average	Assessment
Ballarpur Industries Ltd	2.750	0.495	Best
JK Paper Ltd	0.800	0.495	Very Good
Rainbow Papers Ltd	-0.934	0.495	Poor
Seshasayee Paper & Boards Ltd	-0.190	0.495	Poor
Kuantum Papers Ltd	0.048	0.495	Moderate

Source: Computed

Table 7 shows the DTE value and industry average. It indicates that Ballarpur Industries Ltd is in the best position and greater than the industry average. JK Paper Ltd is in a very good position and greater to the industry average. Kuantum papers Ltd is in a moderate position. Rainbow Papers Ltd and Seshasayee Paper & Boards Ltd are in poor position towards its DTE values and have a lesser DTE value than the industry average.

TABLE 8
TAT VALUE WITH INDUSTRY AVERAGE

COMPANY	TAT Value	Industry average	Assessment
Ballarpur Industries Ltd	0.084	0.160	Good
JK Paper Ltd	0.069	0.160	Moderate
Rainbow Papers Ltd	0.001	0.160	Worst
Seshasayee Paper & Boards Ltd	0.001	0.160	Worst
Kuantum Papers Ltd	0.643	0.160	Best

Source: Computed

Table 8 shows the TAT value and industry average. It indicates that Kuantum papers Ltd is in the best position and greater than the industry average. Ballarpur Industries Ltd is in a good position and equal to the industry average. JK Paper Ltd is in a moderate position. Rainbow Papers Ltd and Seshasayee Paper & Boards Ltd are in the worst position its financial risk score.

TABLE 9
WCA VALUE WITH INDUSTRY AVERAGE

COMPANY	WCA Value	Industry average	Assessment
Ballarpur Industries Ltd	1.047	0.121	Best
JK Paper Ltd	-0.009	0.121	Poor
Rainbow Papers Ltd	-0.079	0.121	Poor
Seshasayee Paper & Boards Ltd	-0.358	0.121	Poor
Kuantum Papers Ltd	0.001	0.121	Moderate

Source: Computed

Table 9 shows the WCA value and industry average. It indicates that Ballarpur Industries Ltd is in the best position and greater than the industry average. Kuantum Papers Ltd is in a moderate position and slightly lesser than the industry average. JK Paper Ltd, Rainbow Papers LtdandSeshasayee Paper & Boards Ltd are in the worst position and is lesser than the industry average.

#### CONCLUSION

From time to time by taking financial risks, companies can gain more return or revenues, transforming these risks into financial opportunities. The Indian paper industries are competent to meet its current requirement as and when the companies become owed for the expense. While the current risk is less than the standard norms, even then the liquidity position of the selected industry may be considered satisfactory. The study of long-term financial strength as reviewed by debt-equity risk, return on investment, working capital to total assets and total assets turnover risk, it is concluded that the long-term financial position of selected paper companies may be considered satisfactory in the Indian Paper industry. Hence, all the selected companies can monitor a similar strategy to develop themselves. The technological improvement must be updated in all the companies.

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