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ANALYSIS OF SOLVENCY POSITION OF SELECTED COMPANIES IN INDIAN PAINT INDUSTRY

Dr. S. KAMALA DEVI
ASST. PROFESSOR
DEPARTMENT OF COMMERCE
ERODE ARTS & SCIENCE COLLEGE
ERODE

ABSTRACT

In this paper an attempt has been made to know the solvency position of selected companies in Indian paint industry. Finance is regarded as the life blood of a business. It is for the company to find out the short-term and long-term requirement in order to meet day to day activities and long-term debt obligation. We need proper management of short-term and long-term requirement for making organisation profitable the present study is determinants of solvency position. The study concentrates on the various accounting ratios of solvency. The statics tool like averages, standard deviation and co-efficient of variation have been applied.

KEYWORDS

Indian paint industry, solvency, financial performance.

JEL CODES

G30, G31, G32.

INTRODUCTION

India is among the top producers of all forms of paint in the world. Easy availability of low cost manpower and presence of abundant reserves make India competitive in the global setup. Leverage or long-term funds indicate the proportion between owner's funds and non-owners funds. It serves as a yard stick for judging the competence and efficiency of the management of short-term and long-term requirement for making organization profitable. The term 'solvency' refers to the ability of a concern to meet its long-term obligations. The long-term indebtedness of a firm includes debenture holders, financial institutions providing medium and long-term loans and other creditors selling goods on instalment basis. Solvency ratio measures the relative interests of the owners and the creditors in an enterprise. They portray the long-term financial position of a concern. They are helpful to the owners in ascertaining their interests and control in the enterprise. Accordingly, long-term solvency ratios indicate a firm's ability to meet the fixed interest and costs and repayment schedules associated with its long-term borrowings. To survive in a market economy and to avoid bankruptcy, companies need to know how well to manage finances, what should be the capital structure of the composition and what proportion should hold their own means, and how much borrowing is to be done. The main purpose of the analysis of solvency is to identify and address weaknesses in financial performance and find room of improvement. Hence, a detailed analysis of solvency has been made to better study and for tracing out the factors responsible for changes in the solvency.

STATEMENT OF THE PROBLEM

Solvency indicates the company's ability to repay their debts in a liquidation scenario. Unlike liquidity, solvency is related to both long and short-term assets and liabilities. Briefly stated, measures of solvency assess what would happen if all assets were sold and converted into cash for payment of obligations. Instead, what firms want is the ability to anticipate or predict the prospect of future insolvency, before the worsening of financial difficulties and the company becomes insolvent. Liquidity or solvency position of a firm may be analyzed on the basis of a time frame i.e. short-term and long-term liquidity or solvency. Short-term liquidity implies the capacity of the firm to repay the debt of a short-term creditor and trade payables. Long-term solvency implies the capacity of the firm to pay off the claims of debenture holders, preference shareholders and other long-term creditors. Because of the dramatic change in the business operation environment, firms face serious competition.

OBJECTIVE OF THE STUDY

The primary purpose of the present study is to obtain the long-term financial strength of selected companies in Indian paint industry.

RESEARCH METHODOLOGY

SELECTION OF SAMPLE

Keeping in view the scope of the study, it is decided to include all companies under Indian paint industry working before or from the year 2000-01. But owing to several constraints such as non-availability of financial statement or non-working of a company in a particular year etc., it is compelled to restrict the number of sample companies to six.

There are 40 companies under Indian Paint Industry. The following criteria were used to select the companies from among these 40 companies. The sample set includes the following:

i. Companies which are listed in BSE
ii. Companies which are started before 2000-2001.
iii. Companies which didn't undergo merger during the period of study
iv. Companies which provided financial data for the study period of thirteen years.
v. Companies which maintained market share more than 2 percent

Based on above criteria, only six companies are available. Therefore, all the six companies are included in the sample. Thus the findings based on the occurrence of such representative sample may be presumed to be true representative of selected companies in Indian paint industry. The list of companies selected in the present study along with their year of incorporation, ownership and its market share is presented in Table 1.

It is evident from Table 1 that the sample companies represent 79.75 percentage of market share of Indian paint sector. Thus, the findings based on the occurrence of such representative sample may be presumed to be true representative of selected companies in Indian paint industry.

PERIOD OF STUDY

The analysis of financial performance of selected companies in Indian paint industry is made for a period of thirteen years from the accounting year 2000-01 to 2012-13. The thirteen years' period is chosen in order to have a fairly long, cyclically well balanced, for which reasonably homogenous, reliable and up to-date financial data would be available.

SOURCES OF DATA

The study was mainly based on secondary data. Secondary data were collected from Prowess, which is the most reliable and empowered corporate database of CMIE. It contains a highly normalized database built on a sound understanding of disclosure in India on around 13,000 companies, which include public, private, co-operative and joint sector companies. The database provides financial statements, ratio analysis, fund flow, product profiles, returns and risks on the stock markets, etc., Besides Prowess Database, the data were also collected from Centre for Monitoring Indian Economy Reports on Currency and Finance, Department of Company Affairs Publications, Institute of Chartered Financial Analyst, Institute of Financial Management and Research, Libraries of various institutions, Research Publications, Dailies and Periodicals such as Economic Times, Financial Express, Fortune India, Investment Today, Business World, Business India, Business Today, Applied Finance, Finance India and various newspapers.

DATA ANALYSIS

For the purpose of this study, the ratios namely, debt equity ratio, fixed assets to net worth ratio and fixed interest coverage ratio. The role of statistical tools is important in analysing the data and drawing inferences there from. In order to derive the results from the information collected through secondary data, various statistical tools such as Mean, Standard Deviation, Coefficient of Variance, Compound Average Annual Growth Rate, ANOVA, and Trend Analysis has been accomplished through EXCEL and SPSS software.

HYPOTHESIS

In this study the following hypothesis have been framed and tested:

H_0 – There is no significant difference in the mean percentage of solvency ratios between the companies and years

(Or)

H_a – There is significant difference in the mean percentage of solvency ratios between the companies and years

LIMITATIONS OF THE STUDY

1. The analysis is based on annual reports of the company. So it is subjected to the limitations of secondary data.
2. Ratio analysis is the important tool used in this project. So it is subjected to the limitations of ratio analysis.
3. The study is only for six particular companies, so general conclusions about the paint processing as a whole cannot be made.
4. The study is restricted for a period of 13 years, from 2000-2001 to 2012- 2013.

ANALYSIS

DEBT EQUITY RATIO

Debt-equity ratio expresses the relationship between debt and equity. It is the measure of the contribution of the owners to the long-term finances of the concern as compared to the contributions of the creditors. Debt-equity ratio is also known as external-internal equity ratio. The purpose of this ratio is to get an idea of the cushion available to outsiders on the liquidation of the firm. Theoretically, if the owners' interests are greater than that of the creditors, the financial position is highly solvent. A ratio of 1:1 may be usually considered to be a satisfactory ratio although there cannot be any rule of thumb for all types of businesses. According to the guidelines issued by the Financial Ministry to the Financial Institutions, "The debt equity ratio in the case of projects engaging an investment of less than Rs.5 crores will be in the range of 1:1 and 1.5:1 in the case of projects whose investments range between Rs.5 crores and Rs.10 crores, the debt-equity ratio will be in the range of 1.5:1 to 2:1. Similarly, where the investment on the project exceeds Rs.10 crores which is considered capital intensive, the debt-equity ratio will be 2:1 or more. The analysis of debt-equity ratio of selected companies in Indian paint industry is presented in the Table 2.

Table 2 reveals a fluctuating trend in the debt-equity ratio of the selected companies. The Akzo Nobel India Ltd (0.01 per cent), Asian Paints Ltd (0.14 per cent), Berger Paints India Ltd (0.28 per cent), Jenson & Nicholson (Inida) Ltd (-0.24 per cent) and Kansai Nerolac Paints Ltd (0.21 per cent) maintain their debt-equity ratio less than 2 and show high financial risk. This ratio of Shalimar Paints Ltd (1.68 per cent) is closer to standard norm. It shows that the company adopted financial policy during the study period. The high CV value shows that Akzo Nobel Inida Ltd, Asian Paints Ltd, Berger Paints India Ltd and Kansai Nerolac Paints Ltd and Jenson & Nicholson (India) Ltd proves that there are erratic fluctuations in this ratio except for Shalimar Paints Ltd during the study period. The compound annual growth rate of debt-equity is negative in all the cases. The analysis of t values explains that the mean debt-equity are significantly different from the industry in the case Akzo Nobel India Ltd, Asian Paints Ltd and Shalimar Paints Ltd during the study period.

It is evident from Table 3 that the calculated value of F (10.36) is higher than the table value of F (2.53) at 5 per cent level of significance between the companies. Thus the null hypothesis is rejected, whereas, the calculated value of F (1.30) is lower than the table value of F (1.92) at 5 per cent level of significance between the years. Hence, there is no significant difference between years. Thus, the null hypothesis is accepted. This is due to the analysis of debt-equity ratio of all the selected companies which are less than 2 and showed high financial risk except for Shalimar Paints Ltd which is closer to standard norm during the study period.

FIXED ASSETS TO NET WORTH RATIO

The fixed assets to net worth ratio indicates the proportion of a business owner's cash blocked in capital assets Fixed Assets are any long-term, tangible asset held by the firm for business use, and which the firm does not plan to convert to cash in the current or upcoming fiscal years. It excludes intangible assets. The net worth of a firm, also known as owner's equity or net assets is the total assets minus total liabilities. The net worth mainly includes all money invested in the firm since inception excluding loans, and the earnings retained during the course of operations, less all liabilities such as outstanding loans. The analysis of fixed assets to net worth ratio of selected companies in Indian paint industry is presented in Table 2.

Table 2 depicts a fluctuating trend of fixed assets to net worth ratio among the selected companies over the study period. The highest mean of this ratio is 1.67 times for Shalimar Paints Ltd followed by Asian Paints Ltd (1.06 times), Kansai Nerolac Paints Ltd (0.84 times), Berger Paints India Ltd (0.76 times), Akzo Nobel India Ltd (0.58 times) and Jenson & Nicholson (India) Ltd (0.08 times). The analysis of CV value shows that Kansai Nerolac Paints Ltd has consistent, Asian Paints Ltd, Berger Paints India Ltd and Shalimar Paints Ltd have fluctuating trend, Akzo Nobel India Ltd has highly fluctuating trend and Jenson Nicholson (India) Ltd has erratic fluctuations. The compound annual growth rate is negative in the case of all the selected companies except Kansai Nerolac Paints Ltd. The analysis of t values reveals that the mean fixed assets to net worth ratio of Akzo Nobel India Ltd, Asian Paints Ltd, Berger Paints India Ltd, Kansai Nerolac Paints Ltd and Shalimar paints Ltd are significantly different from the industry mean during the study period.

The F test exhibited in Table 3 reveals that the differences in this ratio between the companies are significant as the calculated value of F (5.60) is higher than the table value of F (2.53) at 5 per cent level of significance. The framed hypothesis is rejected. However, the differences between the years are not significant as the calculated value of F (1.07) is lower than the table value of F (1.92) at 5 per cent level of significance. Thus, the null hypothesis is accepted. The analysis of fixed assets to net worth ratio of all the selected companies indicates the proportion of a business owner's cash blocked in capital assets.

FIXED INTEREST COVERAGE RATIO

A ratio used to determine how easily a company can pay interest on outstanding debt. The interest coverage ratio is calculated by dividing a company's Earnings Before Interest and Taxes (EBIT) of one period by the company's interest expenses of the same period: The lower the ratio, the more the company is burdened by debt expense. When a company's interest coverage ratio is 1.5 or lower, its ability to meet interest expenses may be questionable. An interest coverage ratio below 1 indicates the company is not generating sufficient revenues to satisfy interest expenses. A company that barely manages to cover its interest costs may easily fall into bankruptcy if its earnings suffer for even a single month. The analysis of fixed interest coverage ratio of selected companies in Indian paint industry is presented in Table 2.

Table 2 explains a very high fluctuating trend in fixed interest coverage ratio of the selected companies during the study period. The average of fixed interest coverage ratio varies from company to company. The highest average is 1648.03 times for Kansai Nerolac Paints Ltd followed by 61.38 times for Akzo Nobel India Ltd, 55.12 times for Asian Paints Ltd, 14.19 times for Berger Paints India Ltd and 2.36 times for Shalimar Paints Ltd. The average of fixed interest coverage ratio is negative in the case of Jenson & Nicholson (India) Ltd which implies excessive usage of debt by the companies. The CV value indicates erratic fluctuations for Akzo Nobel India Ltd, Berger Paints India Ltd, Jenson & Nicholson (India) Ltd and Kansai Nerolac Paints Ltd. The compound annual growth rate is positive for three out of six companies during the study period. The analysis of t values shows that the mean of fixed interest coverage is significantly different from the industry mean during the study period.

Table 3 shows that difference in fixed interest coverage ratio is significant between the companies and between the year as calculated value of F (2.06 and 1.00) is less than the table value of F (2.53 and 1.92) at 5 per cent level of significance. So, the null hypothesis is accepted. This is due to analysis of fixed interest coverage ratio which has better coverage of all the selected companies except Jenson & Nicholson (India) Ltd during the study period.

FINDINGS

The analysis of solvency ratio indicated that majority of the selected companies registered a negative compound annual growth rate in the solvency ratio which showed the poor position of the selected companies during the study period. The analysis of debt-equity ratio showed that there was a satisfactory position of the debt-equity ratio for Akzo Nobel India Ltd, Asian Paints Ltd, Berger Paints India Ltd, Kansai Nerolac Paints Ltd and Shalimar Paints Ltd during the study period. The mean fixed assets to net worth ratio of Asian Paint Ltd and Shalimar Paints Ltd showed that favourable position of the ratio, but the remaining companies have not maintained a standard ratio of 1:1. The analysis of fixed interest coverage ratio reveals that all the selected companies have the ability to meet fixed interest changes during the study period. The analysis of variance showed that there were significant differences between the companies in the solvency ratio except fixed interest coverage ratio. Similarly, there were no significant differences in the solvency ratios between the years during the study period.

CONCLUSION

Majority of the selected companies showed good solvency position during the study period. This was obviously due to the decrease in the debt of majority of the selected companies. Therefore, it is suggested that the problem of decrease the payment of fixed interest and increase the profitability, the industry should take necessary steps to reduce the debt finance to increase profitability.

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APPENDIX

TABLE 1: LIST OF SAMPLE COMPANIES INCLUDED IN THE PRESENT STUDY

S. No.	Companies	Year of Incorpo-ration	Ownership	Market Share (%)
1	Akzo Nobel India Ltd.	1954	I.C.I (F) Group	9.70
2	Asian Paints Ltd.	1945	Asian Paints Group	35.05
3	Berger Paints India Ltd.	1923	Private (India)	13.59
4	Jenson & Nicholson (India) Ltd.	1922	Jenson & Nicholson Group	2.12
5	Kansai Nerolac Paints Ltd.	1920	Private (Foreign)	15.78
6	Shalimar Paints Ltd.	1902	Om Prakash Jindal Group	3.51
Total				**79.75**

Source: Prowess Database, 2013

TABLE 2: STATISTICAL VALUES OF RATIOS RELATING TO SOLVENCY INDICATORS (For the period from 2000-2001 to 2012-2013)

Particulars	Statis-tics	Akzo Nobel India Ltd	Asian Paints Ltd	Berger Paints India Ltd	Jenson & Nichol-son (India) Ltd	Kansai Nerolac Paints Ltd	Shalimar Paints Ltd	Whole In-dustry
Debt-Equity Ratio	**Mean**	0.01	0.14	0.28	-0.24	0.21	1.68	0.24
	CV	3.00	1.00	0.57	-10.58	0.52	0.23	0.54
	CAGR	-25.99	-24.25	-5.86	-14.67	-16.58	-4.87	-11.30
	t value	-7.38	-4.75	1.44	-0.73	-1.18	15.27	
Fixed Assets to Net-worth Ratio	**Mean**	0.58	1.06	0.76	0.08	0.84	1.67	1.02
	CV	0.39	0.21	0.17	38.50	0.05	0.14	0.19
	CAGR	-3.56	-2.85	-1.89	-18.81	0.38	-2.63	-2.52
	t value	-11.14	2.08	-6.63	-1.11	-3.91	10.87	
Fixed Interest Cov-erage Ratio	**Mean**	61.38	55.12	14.19	-2.01	1648.03	2.36	20.94
	CV	1.11	0.48	0.58	-1.39	2.49	0.30	0.75
	CAGR	17.80	17.91	9.51	3.84	91.70	8.71	19.75
	t value	2.64	4.40	-1.93	-4.83	1.43	-4.33	

*** Significant at 0.01 level**

Source: Computed from the annual reports of the respective companies

TABLE 3: ANOVA RESULTS – RATIO RELATING SOLVENCY – COMPARISON

S. No.	Liquidity Ratio	Between the Companies		Between the Years	
		F Ratio	H_0	F Ratio	H_0
1	Debt-Equity Ratio	10.36	Rejected	1.30	Accepted
2	Fixed Assets to Networth Ratio	5.60	Rejected	1.07	Accepted
3	Fixed Interest Coverage Ratio	2.06	Accepted	1.00	Accepted

Critical Value 'F' at 0.05 level (between company) = 2.53;
Critical Value 'F' at 0.05 level (between year) = 1.92

Source: Computed

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With sincere regards

Thanking you profoundly

Academically yours

Sd/-
Co-ordinator

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