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AN ANALYSIS OF SOLVENCY POSITION OF AUTOMOBILE INDUSTRY IN INDIA – WITH SPECIAL REFERENCE TO SELECT COMPANIES

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ABSTRACT

Automobile companies are contributing considerable contribution to the national economy. Successful running of these companies will help for further employment opportunities and help the economy in several ways. The study has aimed to analyse the solvency position of six selected automobile companies in India for the study period of ten years from 2005-06 to 2014-15. The secondary data were collected from financial reports of the selected companies. The period of the study is ten years from 2005-2006 to 2014-2015. The study used the tools of ratio analysis, Mean, Standard Deviation and Co-efficient of Variation. The researchers found that long term financial performance of Bajaj and MM were good in terms of Debt Equity ratio, since their debt equity ratios were good. On the other hand Tata Motors utilized more debts than equity, this position is not preferable, similar position was identified in case of TVS Motors. It was also found that all the selected companies performed well in terms of utilization of their capital to increase sales, in particular this position was good for TVS Motors. Proprietary ratio of all the selected companies was found to be good. Long term financial performance in terms of utilization of fixed assets was good in case of Bajaj Auto Ltd. followed by Mahindra and Mahindra and TVS.

KEYWORDS: *Automobile, Solvency, Debt, Equity, Mean and Proprietary.*

INTRODUCTION:

Automobile industry is one of the key industries in Indian economy. Automobile industry in India has grown faster in the post- liberalization period. This is particularly attributable to the rising middle class income in the recent past and consequent rise of the demand for personalized vehicles. The inflow of FDI in this segment as well as equity participation by foreign firm also could happen because of the reforms and Indian producers both assemblers and component manufactures are increasingly pulled into the global value chain. Automobile industry has good scope for its business in the country, since it is a developing economy. In India transport is increasing both public and private transport. Most of the people have started to purchase cars in the recent decades. The industry also has scope in international automobile market. Automobile industry in India is also facing though competition. A company can survive in the business only when it manages its finance efficiently. Finance is required for a company both for short term and long term purposes. Short term finance is known as working capital. Working capital is used to meet out day to day financial needs. Long term finance is required at the time of establishment of the business. The amount required at the time of establishment is huge. Long term finance is also required when the business is expanded. Long term financial requirements are huge in size; hence the company has to give more attention on long term financial management. Because defects in long term financial management will affect to larger

extent. Hence the researchers have aimed to study the long term financial management of selected automobile companies in India.

REVIEW OF LITERATURE

Dharmendra and Mistry (2012) found that DE, ITR and SIZE were the most important determinants of the profitability which affected the profitability of the companies under the study positively. DE was the most important determinant of profitability of the automobiles industry because its regression coefficients were the highest and found statistically significant. Muninarayanaappa and Shruti Aggarwal (2013) found that Mahindra and Mahindra ltd. was a low debt company signifying its dependence mainly on its internal accruals for its financial requirements. Mahindra and Mahindra ltd. continued to strengthen its financial position by channelising these internal accruals to fund its expansion programmes. Sumesh Kumar and Gurbachan Kaur Bhatia (2014) evidenced that there was not much difference in the companies in short term solvency and liquidity and in profitability. The long term solvency of both the firms was different as the t values of debt equity ratio and equity ratio were significant that means both the firms were different in meeting their long term obligations and long term solvency. Sanjay Hiran and Mahendra Sojatia (2014) evidenced that there was negative and low degree of relationship between the variables under study. This implies that there were many other elements and factors apart from debt equity ratio (capital structure) which determine and affected the financial performance of the companies under study. Arijit Ghosh (2014) stated that with the help of efficiency scores generated by DEA and subsequent factor analysis we are able to identify comparatively technically efficient automobile companies. Santhiyavalli and Abirami (2015) evidenced that TVS Motors Ltd showed the highest average Z-score value. The low average Z-score of Tata Motors Ltd was at stated that the company was at the grey zone and it was the alarm for the management to take necessary steps to improve the performance of the company improving working capital, downsizing long term debt and improving sales.

STATEMENT OF PROBLEM

Efficient management of long term finance is very important for any business organization for running a business successfully. Especially industries such as Automobile requires large amount of capital for its establishment. Hence it is necessary to plan and manage its long term finance carefully. Long term financial management is not done only at the time of establishment of the business. Management of long-term finance is a continuous process. Whenever the company goes for further capital, whenever the company goes for new project and so on, it is pulled to manage its long term finance. Hence the researchers aimed to analyse long term financial performance of selected automobile companies in India.

OBJECTIVES

1. To analyze the solvency position of selected Automobile companies in India.

METHODOLOGY

The researcher anlaysed the solvency position of six selected automobile companies in India, namely, Tata Motors Ltd., Mahindra and Mahindra Ltd., Maruti Suzuki India Ltd., Bajaj Auto Ltd., Ashok Lyland Ltd. and TVS Motors Ltd. The present study is based on secondary data. The study required financial data for analysis. These secondary data were collected from financial reports of the selected companies; they were extracted from annual reports of the concerned companies. The period of the study is ten years from 2005-2006 to 2014-2015. The collected information analysed with the help of appropriate tools like ratio analysis, Mean, Standard Deviation and Co-efficient of Variation. The researchers calculated debt equity ratio, capital turnover ratio, proprietary ratio, debt to assets ratio and fixed assets turnover ratio.

RESULTS AND INTERPRETATION

This part of the research work gives the results and interpretation for analyzing solvency position of the selected automobile companies in India. Table 1 gives the results of debt equity ratio, its mean value, Standard Deviation and Co-efficient of variation.

Table 1: Debt Equity Ratio of Selected Automobile Companies

Ratio

Year	Tata	MM	Maruti	Bajaj	Ashok	TVS
2005-06	0.64	0.35	0.03	0.33	0.62	0.70
2006-07	0.70	0.47	0.12	0.31	0.44	0.98
2007-08	0.93	0.61	0.13	0.85	0.53	1.00
2008-09	1.16	0.77	0.09	0.84	0.64	1.30
2009-10	1.21	0.40	0.08	0.46	0.72	1.29
2010-11	0.90	0.27	0.33	0.07	0.78	0.88
2011-12	0.65	0.36	0.04	0.07	0.68	0.54
2012-13	0.62	0.32	0.08	0.06	0.75	0.52
2013-14	0.61	0.34	0.07	0.04	0.85	0.44
2014-15	1.00	0.24	0.04	0.04	0.62	0.43
Mean	0.84	0.41	0.10	0.31	0.66	0.81
SD	0.23	0.16	0.09	0.32	0.12	0.33
CV	27.18	39.45	86.61	104.55	18.21	41.15

Source: Computed from Annual Reports

Table 1 shows that the debt equity ratio of Tata Motors Ltd. was high during the study period. The ratio was high during 2008-09, 2009-10 and 2014-15, the ratio was more than one during the period, it showed that debt fund was more than own fund, this position is not desirable, since the company has to pay more interest on its loan, it may affect the profit of the company. Eventhough the ratio was less than one during the other seven years, it is comparatively high, it indicated a high value of debt in their capital structure. The results of SD and CV showed low a level of deviation in the ratio from its mean value. Debt equity ratio of Mahindra and Mahindra Ltd. was high during 2007-08 and 2008-09 at 0.61 and 0.77 respectively, during the other years it was low. Its mean value was 0.41, hence the capital structure of the company was good. The results of SD and CV were 0.16 and 39.45 per cent, it showed low level of deviation in the ratio from its mean value. Debt equity ratio of Maruti Suzuki India Ltd. was very low during all the years of the study period. The ratio ranged between 0.03 and 0.33 and the mean value of the ratio was 0.10, which showed that the company had more own fund on its capital structure. There was a wide deviation in the ratio as shown by the results of SD and CV. Debt equity ratio of Bajaj Auto Ltd. was also low during the study period except during 2007-08 and 2008-09. The ratio ranged from 0.04 to 0.85, mean value of the ratio was 0.31, it a showed low proportion of debt fund in its capital structure. A high level of deviation was found in the ratio as shown by the results of SD and CV. Debt equity ratio of Ashok Leyland Ltd. was moderately high during the study period. The ratio ranged from 0.44 to 0.85, mean value of the ratio was 0.66, it indicated that the debt capital was moderately high in its capital structure. The results of SD and CV showed a low level of deviation in the ratio from its mean value. Debt equity ratio of TVS Motor Company Ltd. shows that the company's debt was more than the equity during 2008-09 and 2009-10, since their debt equity ratio was more than one at 1.30 and 1.29 respectively. During 2007-08, the company's debt and equity were equal and during 2006-07 they were almost equal. During the last four years of the study period, the company had low value of debt fund in its capital structure. The debt equity ratio of the company ranged from 0.43 to 1.30. Mean value of the ratio was 0.81, it is considered high and therefore the

debt fund of the company was more in its capital structure. A moderate level of deviation was found in the ratio from its mean value as per the results of SD and CV.

Capital Turnover Ratio

Table 2 shows the results of capital turnover ratio of the selected automobile companies in India and its mean, standard deviation and co-efficient of variation during the study period.

Table 2: Capital Turnover Ratio of Selected Automobile Companies

Times

Year	Tata	MM	Maruti	Bajaj	Ashok	TVS
2005-06	4.34	2.75	2.20	1.57	3.72	4.22
2006-07	4.01	2.71	2.13	1.68	3.78	4.76
2007-08	3.66	2.48	2.12	5.46	3.60	3.92
2008-09	2.10	2.40	2.18	4.51	1.72	4.53
2009-10	2.38	2.30	2.45	3.93	1.97	5.04
2010-11	2.40	2.21	2.64	3.26	2.81	6.18
2011-12	2.77	2.62	2.34	3.13	3.06	6.11
2012-13	2.34	2.72	2.35	2.47	2.80	5.77
2013-14	1.79	2.41	2.08	2.10	2.24	5.63
2014-15	2.46	2.02	2.11	2.02	2.65	6.14
Mean	2.82	2.46	2.26	3.01	2.84	5.23
SD	0.87	0.24	0.18	1.30	0.72	0.84
CV	30.66	9.79	8.01	43.06	25.46	16.15

Source: Computed from Annual Reports

Capital turnover ratio of Tata Motors Ltd. was decreasing every year. During first three years it was found to be high, it indicated that the company efficiently utilized its capital in terms of increase of sales. The calculated values of SD and CV were 0.87 and 30.66 per cent, they showed a low level of deviation in the ratio. The capital turnover ratio of Mahindra and Mahindra Ltd. was averagely maintained. Mean value of the ratio was 2.46, it shows that the company used its capital efficiently. The results of SD and CV indicatged low level of deviation in the ratio from its mean value. The capital turnover ratio of Maruti Suzuki India Ltd. was more than two times in all the years of the study period. Mean value of the ratio was 2.26, it is considered good and therefore this company utilized its capital good. A very low level of deviation was found in the ratio as per the results of SD (0.18 times) and CV (8 per cent).

Capital turnover ratio of Bajaj Auto Ltd. was low during first two years and it was high during the other eight years of the study period. Mean value of the ratio was 3.01 times, in other words, the sales of the company were three times more than its capital. These results showed efficient utilisiation of the capital of Bajaj Auto Ltd. in terms of increase of sales. The capital turnover ratio of Ashok Leyland Ltd. was also high during the study period. The ratio was less than two times during 2008-09 and 2009-10 and during other years it was more than two times. Mean value of the ratio was 2.84 times. It is considered high and therefore, the company efficiently utilized its capital to increase sales. The capital turnover ratio of TVS Motor Company Ltd. was several times more than other selected companies. Mean value of the ratio was 5.23, it shows that the company's sales were five times more than its capital. Hence, the company utilized its capital more efficiently than the other selected companies. The results of SD and CV showed a low level of deviation in the ratio from its mean value.

Proprietary Ratio

Table 3 gives the results of proprietary ratios of the selected automobile companies in India, their mean, standard deviation and co-efficient of variation.

Table 3: Proprietary Ratio of Selected Automobile Companies

Ratio

Year	Tata	MM	Maruti	Bajaj	Ashok	TVS
2005-06	0.34	0.49	0.72	0.48	0.38	0.41
2006-07	0.36	0.45	0.68	0.48	0.42	0.36
2007-08	0.30	0.42	0.68	0.33	0.39	0.37
2008-09	0.33	0.37	0.69	0.32	0.44	0.33
2009-10	0.30	0.48	0.72	0.41	0.40	0.32
2010-11	0.37	0.52	0.62	0.53	0.37	0.35
2011-12	0.36	0.51	0.68	0.55	0.35	0.38
2012-13	0.37	0.53	0.69	0.63	0.34	0.39
2013-14	0.39	0.54	0.69	0.65	0.35	0.40
2014-15	0.30	0.58	0.71	0.69	0.38	0.36
Mean	0.34	0.49	0.69	0.51	0.38	0.37
SD	0.03	0.06	0.03	0.13	0.03	0.03
CV	9.65	12.51	4.26	25.38	8.44	7.93

Source: Computed from Annual Reports

Table 3 reports that the proprietary ratio of Tata Motors Ltd. was low during the study period. Mean value was 0.34 times. It shows that the total assets of the company were majorly invested by the borrowed fund of the company. It increases the risk of the company in terms of high level of loan fund. In other words creditors of the company had low security. This position will also increase interest payments by the company and it will impact profitability inversely. A very low level of deviation was found in the ratio as shown by the results of SD and CV. Proprietary ratio of Mahindra and Mahindra Ltd. was at moderate level. The results show that, half of total assets of the company are financed by own fund and another half are financed by debt fund. It is considered good and therefore creditors of the company have optimum level of security. The results of SD and CV indicate a low level of deviation in the ratio from its mean value. Proprietary ratio of Maruti Suzuki India Ltd. was higher than the other selected companies. The results showed that the company depended more on own fund for its total assets. It will lead for low expenses in terms of interest payments to its debts and it will have direct and positive impact on the profitability of the company. A very low level of deviation from its mean value was found in the ratio as shown by the results of SD and CV.

The proprietary ratio of Bajaj Auto Ltd. was high during the study period. Mean value of the ratio was 0.51 times, it indicates that the company depended more on its own fund than debt. It increases the security of creditors and has low interest expenses. This will have direct and positive impact on the profitability of the company. A low level of deviation was found in the ratio. The proprietary ratio of Ashok Leyland Ltd. was low during the study period. Mean value of the ratio was 0.38 times. It shows that the company depended more on debt fund, two third of its total assets are financed by debt capital. This position would increase the risk of creditors and would increase the interest expenses of the company. A very low level of deviation was found in the ratio from its mean. The proprietary ratio of TVS Motor Company Ltd. was also low during the study period. Mean value of the ratio was 0.37, it shows that the company highly depended on debt fund for financing its assets. It is not a preferred one as it would

decrease the profit of the company by way of increase of its interest expenses. The results of SD and CV show a low level of deviation in the ratio from its mean value.

Fixed Assets Turnover Ratio

The following table shows the results of fixed assets turnover ratio of the selected automobile companies in India and their mean, standard deviation and co-efficient of variation.

Table 4: Fixed Assets Turnover Ratio of Selected Automobile Companies

Times

Year	Tata	MM	Maruti	Bajaj	Ashok	TVS
2005-06	5.31	5.14	6.72	6.46	4.84	3.94
2006-07	4.31	5.15	5.03	7.17	4.64	3.84
2007-08	2.75	4.58	4.43	6.70	3.77	3.09
2008-09	1.76	3.94	4.13	5.45	1.36	3.54
2009-10	2.17	4.87	5.35	7.57	1.51	4.44
2010-11	2.75	5.21	5.73	10.33	2.23	6.21
2011-12	2.85	6.27	4.38	12.39	2.36	6.62
2012-13	2.22	6.85	3.71	9.29	2.09	6.74
2013-14	1.59	5.70	3.26	9.37	1.70	6.79
2014-15	1.66	4.80	3.53	9.95	2.52	7.12
Mean	2.74	5.25	4.63	8.47	2.70	5.23
SD	1.21	0.84	1.08	2.14	1.27	1.59
CV	44.15	16.02	23.37	25.31	46.88	30.44

Source: Computed from Annual Reports

Table 4 reports that the fixed assets turnover ratio of Tata Motors Ltd. was low compared to other selected companies. Mean value of the ratio was 2.74 times. It shows that utilization of fixed assets of the company in terms of increase of sales was not good as other selected companies. But the ratio was good during the first two years. A moderate level of deviation was found in the ratio as shown by the results of SD and CV. The fixed assets turnover ratio of Mahindra and Mahindra Ltd. was good during the study period. Mean value of the ratio was 5.25 times. It is considered good and therefore the company utilized its fixed assets more efficiently. A low level of deviation was found in the ratio from its mean value as per the results of SD and CV. Maruti Suzuki India Ltd. also used its fixed assets efficiently, since fixed assets turnover ratio was high during the study period. The results of SD and CV showed a low level of deviation from its mean value. The fixed assets turnover ratio of Bajaj Auto Ltd. was high compared to other selected companies. Mean value of the ratio was 8.47 times. It indicated the efficient utilization of fixed assets by the company to increase sales. Low level of deviation was found in the ratio. The fixed assets turnover ratio of Ashok Leyland Ltd. was low during the study period. The mean value of the ratio was 2.70, it is considered low and therefore utilization of fixed assets by the company was not good. A moderate level of deviation was found in the ratio from its mean value. The results of fixed assets turnover ratio show that TVS Motor Company Ltd. efficiently utilized its fixed assets during the study period. The mean value of the ratio was 5.23 times. It was observed that efficiency of the company was increasing over the study period. The results of SD and CV show a low level of deviation in the ratio from its mean value.

CONCLUSION

Automobile companies are contributing considerable contribution to the national economy. Successful running of these companies will help for further employment opportunities and help the economy in several ways. Hence the study has been made to analyse the solvency position of six selected automobile companies in India for the study period of ten years from 2005-06 to 2014-15. The researchers found that long term financial performance of Bajaj and MM were good in terms of Debt Equity ratio, since their debt equity ratios were good. On the other hand Tata Motors utilized more debts than equity, this position is not preferable, similar position was identified in case of TVS Motors. It was also found that all the selected companies performed well in terms of utilization of their capital to increase sales, in particular this position was good for TVS Motors. Proprietary ratio of all the selected companies was found to fbe good. Long term financial performance in terms of utilization of fixed assets was good in case of Bajaj Auto Ltd. followed by Mahindra and Mahindra and TVS.

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