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Financial Performance of Indian Automobile Industry – with Special Reference to Selected Companies

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ABSTRACT

The study was made with the objective to analyse financial performance of selected automobile companies in India. For this purpose the researcher selected six companies for the study period of ten years from 2005-06 to 2014-15 using Altman's Z-score model. The study found that financial performance under Altman's z-score model was good in case of Maruti Suzuki India Ltd., since calculated value of z-score was more than the standard norm during all the years of the study period. The calculated value of z-score of Mahindra and Mahindra Ltd. was more than the standard norm (2.99) during eight years and it was more than the standard norm during eight years in case of Bajaj Auto Ltd. and TVS Motor Company, since their financial performance was satisfactory. Financial performance of Tata Motors Ltd. and Ashok Leyland Ltd., was good during four years, since their z-score was more than the standard norm during four years and during five years it was at grey zone and in one year it was poor.

Introduction

India is one of the fastest growing economies in the world. Various sectors contribute to the development of Indian economy. Automobile industry has playing prominent role in the aspects of production, sales and employment. Automobile industry is the key driver of Indian economy. It plays a vital role in the economy and industrial development of India. It supports the development of some other industries by the procurement of raw material, those basic industries are steel, metal, plastic, petrochemicals, rubber, glass, and so on. These industries give more employment opportunity to people directly and indirectly. The success of an industry depends on industrial units consisted in such industry. Hence the study on the units (companies) is getting importance. The automobile industry is one of the fastest growing industries in India. It is also one of the largest in the world. It is the sixth largest in the world in terms of passenger car and commercial vehicle manufacturing. Finance is the life blood of any business activity, efficient financial management will help the company for earning profit and long survival. Hence the researcher has made an attempt to analyse financial performance of selected automobile companies in India.

Statement of the Problem

Automobile industry is playing vital total in Indian economy. This industry provides a considerable number of employment opportunities to people in the country directly and indirectly. Financial management is one of the important components of management of a company and it is backbone of any business activities of a business concern. Efficient financial management of a company will give success for any business activity. Efficient management of finance of a company will help them to earn more profit and will help to increase shareholders wealth. Performance of a business concern is studied under various aspects, of which financial performance analysis is occupying predominant place. Hence the researcher has made an attempt to analyse financial performance of selected automobile companies using Z-score model.

Objective

- The study has been made with the following objective.
- To study financial performance of selected automobile companies in India.

Methodology

The present study has been made to analyse financial performance of selected automobile companies in India. For this purpose the researcher selected six automobile companies namely, Tata Motors Ltd., Mahindra and Mahindra Ltd., Maruti Suzuki India Ltd., Bajaj Auto Ltd., Ashok Leyland Ltd. and TVS Motor Company Ltd. The study was made for a period of ten years from 2005-06 to 2014-15. The researcher used Z-score model developed by Altman. It is a linear combination of five common business ratios, weighted by coefficients. The coefficients were estimated by identifying a set of firms which had declared bankruptcy and then collecting a matched sample of firms which had survived, with matching by industry and approximate size (assets).

The original Z-score formula was as follows,

$Z = 1.2T_1 + 1.4T_2 + 3.3T_3 + 0.6T_4 + 0.99T_5$.

Here,

T_1 = Working Capital / Total Assets. Measures liquid assets in relation to the size of the company.

T_2 = Retained Earnings / Total Assets. Measures profitability that reflects the company's age and earning power.

T_3 = Earnings Before Interest and Taxes / Total Assets. Measures operating efficiency apart from tax and leveraging factors. It recognizes operating earnings as being important to long-term viability.

T_4 = Market Value of Equity / Book Value of Total Liabilities. Adds market dimension that can show up security price fluctuation as a possible red flag.

T_5 = Sales/ Total Assets. Standard measure for total asset turnover (varies greatly from industry to industry).

The score may be interpreted as follows.

$Z > 2.99$ -"Safe" Zones

$1.81 < Z < 2.99$ -"Grey" Zones

$Z < 1.81$ -"Distress" Zones

Results and Interpretation

Table 1 presents the results of Z-score model for Tata Motors Ltd. during the study period.

Table 1: Z-Score Results of Tata Motors Ltd.

Year	T1	T2	T3	T4	T5	Z-Score
2005-06	0.25	0.32	0.13	3.34	1.48	4.63
2006-07	0.22	0.34	0.14	2.31	1.45	4.01
2007-08	0.10	0.29	0.10	1.34	1.12	2.76
2008-09	0.03	0.31	0.03	0.37	0.69	1.47
2009-10	-0.05	0.29	0.06	1.21	0.71	1.95
2010-11	0.02	0.36	0.04	2.32	0.89	2.93
2011-12	-0.10	0.35	0.02	2.51	1.00	2.94
2012-13	-0.15	0.35	0.00	2.60	0.86	2.74
2013-14	-0.20	0.37	-0.02	4.20	0.69	3.41
2014-15	-0.22	0.28	-0.08	5.03	0.73	3.61

Source: Computed from Annual Reports

Table 1 presents the results of Z-score model for Tata Motors Ltd. during the study period. The calculated value of overall z-score of the company was good during first two years and last two years of the study period, during the period it was more than 2.99, it shows that the company's financial position was good during the years. The calculated value of Z-score during 2007-08 and from 2009-10 to 2012-13 was between 1.81 and 2.99, it shows that the company's financial position was at grey zone and further attention is needed to improve its financial position. Z-score of the company was less than 1.81 in 2008-09, it shows poor financial condition. Overall the financial position of the Tata Motors Ltd. as per Z-score model was satisfactory.

Table 2 presents the results of Z-score model for Mahindra and Mahindra Ltd. during the study period.

Table 2: Z-Score Results of Mahindra and Mahindra Ltd.

Year	T1	T2	T3	T4	T5	Z-Score
2005-06	0.24	0.45	0.18	4.75	1.33	5.68
2006-07	0.26	0.42	0.18	4.30	1.22	5.29
2007-08	0.18	0.40	0.14	2.82	1.05	3.97
2008-09	0.15	0.35	0.07	1.18	0.90	2.51
2009-10	0.21	0.47	0.18	3.71	1.12	4.81
2010-11	0.12	0.50	0.18	4.31	1.15	5.15
2011-12	0.08	0.50	0.15	3.50	1.33	4.71
2012-13	0.08	0.52	0.16	3.97	1.45	5.19
2013-14	0.13	0.53	0.14	3.99	1.29	5.03
2014-15	0.08	0.58	0.13	5.13	1.18	5.57

Source: Computed from Annual Reports

It was known from table 2 that financial position of Mahindra and Mahindra ltd. was good as per z-score model during the study period. The calculated value of Altman's Z-score was more than 2.99 during nine years out of ten years of the study period, it shows that the company was in safe zone, therefore financial performance in terms of Z-score analysis was good during the study period. The calculated value of Z-score of the company was 2.51, it was between 1.81 to 2.99, it was in grey zone, hence financial performance of the company was satisfactory during the year. The calculated values of Z-score of the company were high and their financial position was good.

Table 3 presents the results of Z-score model for Maruti Suzuki India Ltd. during the study period.

Table 3: Z-Score Results of Maruti Suzuki India Ltd.

Year	T1	T2	T3	T4	T5	Z-Score
2005-06	0.36	0.70	0.23	11.83	1.58	10.84
2006-07	0.27	0.66	0.22	7.18	1.44	7.71
2007-08	0.14	0.67	0.20	6.16	1.45	6.92
2008-09	0.26	0.68	0.12	5.24	1.50	6.29
2009-10	0.37	0.71	0.22	9.04	1.77	9.35
2010-11	0.27	0.61	0.14	4.26	1.63	5.80
2011-12	0.23	0.67	0.10	5.48	1.60	6.40
2012-13	0.18	0.69	0.11	4.74	1.63	6.01
2013-14	0.22	0.68	0.12	6.23	1.43	6.77
2014-15	0.02	0.70	0.15	11.35	1.49	9.77

Source: Computed from Annual Reports

Table 3 shows that financial position of Maruti Suzuki India ltd. was good as per z-score model during all the years of the study period. The calculated value of Altman's Z-score was more than 2.99 during all the years, it ranged from 5.80 to 10.84. It shows that the company was in safe zone, therefore financial performance in terms of Z-score analysis was very good during the study period.

Table 4 presents the results of Z-score model for Bajaj Auto Ltd. during the study period.

Table 4: Z-Score Results of Bajaj Auto Ltd.

Year	T1	T2	T3	T4	T5	Z-Score
2005-06	0.18	0.47	0.16	1.20	0.76	2.87
2006-07	0.23	0.47	0.15	1.01	0.80	2.83
2007-08	0.14	0.30	0.24	2.71	1.80	4.78
2008-09	0.25	0.29	0.16	2.23	1.43	4.00
2009-10	0.17	0.39	0.34	6.93	1.61	7.62
2010-11	0.11	0.50	0.39	9.80	1.74	9.73
2011-12	0.24	0.52	0.36	9.63	1.70	9.67
2012-13	0.29	0.61	0.34	11.35	1.56	10.69
2013-14	0.19	0.63	0.31	11.70	1.37	10.52
2014-15	0.45	0.67	0.26	11.99	1.39	10.91

Source: Computed from Annual Reports

Table 4 presents the results of Altman's Z-score of Bajaj Auto Ltd. for the study period of ten years from 2005-06 to 2014-15. the calculated value of Z-score of the compnay was increasing every year. Z-score of the compnay was between 1.81 to 2.99 during first two years, it indicated that the compnay was at grey zone during the years. during remaining eight years the calculated values of z-score were more than 2.99, it shows that financial performance of the compnay was good in terms of Altman's z-score model was good.

Table 5 presents the results of Z-score model for Ashok Leyland Ltd. during the study period.

Table 5: Z-Score Results of Ashok Leyland Ltd.

Year	T1	T2	T3	T4	T5	Z-Score
2005-06	0.37	0.35	0.12	2.16	1.42	4.03
2006-07	0.26	0.39	0.13	1.96	1.60	4.06
2007-08	0.24	0.36	0.11	1.38	1.39	3.37
2008-09	0.17	0.43	0.03	0.55	0.76	1.97
2009-10	0.17	0.38	0.06	1.32	0.78	2.49
2010-11	0.13	0.36	0.08	1.14	1.05	2.63
2011-12	-0.01	0.33	0.06	1.05	1.08	2.34
2012-13	-0.05	0.32	0.04	0.68	0.95	1.85
2013-14	-0.08	0.33	-0.01	0.75	0.78	1.56
2014-15	-0.01	0.36	0.03	2.55	1.02	3.15
Source: Computed from Annual Reports						

It was observed from table 5 that the calculated values of Z-scores of Ashok Leyland Ltd. were more than 2.99 during first three years, from 2009-10 to 2011-12 and during 2014-15, it shows that during these years, the company was in safe zone and therefore its financial performance under z-score model was good. The calculated value of z-score of Ashok Leyland Ltd. during 2008-09 and during 2012-13 was between 1.81 and 2.99, it was at grey zone, therefore financial position of the company was satisfactory during the years and during 2013-14, the calculated value of z-score was below 1.81, it shows the company was at dangerous level financially as per the model. Hence during the year financial performance of the company was poor.

Table 6 presents the results of Z-score model for TVS Motor Company Ltd. during the study period.

Table 6: Z-Score Results of TVS Motor Company Ltd.

Year	T1	T2	T3	T4	T5	Z-Score
2005-06	0.12	0.39	0.09	2.97	1.71	4.47
2006-07	0.16	0.35	0.04	1.00	1.73	3.13
2007-08	0.15	0.36	0.02	0.60	1.46	2.55
2008-09	0.17	0.32	0.01	0.32	1.48	2.35
2009-10	0.22	0.31	0.03	1.05	1.61	3.01
2010-11	0.11	0.33	0.09	1.53	2.16	3.95
2011-12	-0.07	0.36	0.10	1.00	2.29	3.63
2012-13	-0.02	0.38	0.05	0.81	2.26	3.40
2013-14	-0.01	0.38	0.10	2.15	2.23	4.35
2014-15	-0.02	0.35	0.10	4.23	2.19	5.50
Source: Computed from Annual Reports						

Table 6 shows the results of Altman's z-score analysis for TVS Motor Company Ltd. The results shows that the calculated value of z-score of the company was between 1.81 and 2.99 during 2007-08 and 2008-09, it was at grey zone and therefore its financial performance was satisfactory during the years. During other eight years of the study period, the calculated value of z-score was more than the standard norm (2.99), it shows that financial performance of TVS Motor Company Ltd. was good during the eight years.

Conclusion

The study was made with the objective to analyse financial performance of selected automobile companies in India. The study found that financial performance under Altman's z-score model was good in case of Maruti Suzuki India Ltd., since calculated value of z-score was more than the standard norm during all the years of the study period. The calculated value of z-score of Mahindra and Mahindra Ltd. was more than the standard norm (2.99) during eight years and it was more than the standard norm during eight years in case of Bajaj Auto Ltd. and TVS Motor Company, since their financial performance was satisfactory. Financial performance of Tata Motors Ltd. and Ashok Leyland Ltd., was good during four years, since their z-score was more than the standard norm during four years and during five years it was at grey zone and in one year it was poor.

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