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FINANCIAL RISK ANALYSIS OF SELECTED AUTOMOBILE INDUSTRIES IN INDIA

V.Sudha
Ph.D research scholar, Bharathiar University, Coimbatore, India

Dr.R.Umamaheswari
Associate Professor, Department of Management Studies,
Sree Saraswathi Thyagaraja College, Pollachi, Coimbatore District, India

Dr.P.S.Venkateswaran
Professor, Department of Management Studies,
PSNA College of Engineering and Technology, Dindigul, India

ABSTRACT

This paper set out with the aim of answering the question to what extent the financial risks are bearded by the select automobile industries. A theoretical framework describing risk management approach to captives is discussed. The study suggests that observed changes in risk among automotive manufacturers can to a large extent 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.

Keywords: Financial risk, financial indicators, automobile industry, ratio analysis
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1. INTRODUCTION

The Indian automotive industry has emerged as a 'sunrise sector' in the Indian economy. India is emerging as one of the world's fastest growing passenger car markets and second largest two wheeler manufacturer. It is also home for the largest motor cycle manufacturer and fifth largest commercial vehicle manufacturer. The present study has thrown major concern in risk analysis, from the 5 years balance sheet and profit and loss a/c. Based on the five years balance sheet and profit and loss a/c suitable suggestion were given by the researcher for a better soundness and risk prevent of the company.

2. REVIEW OF LITERATURE

Froot (2003) describes risk as variability in cash flows, which is a disturbing factor to both investment and financing activities. Risk is defined by Culp (2002) as; *"any source of randomness that may have an adverse impact on the market value of a corporation's assets net of liabilities, on its earnings, and/or on its raw cash flows"* (Culp C. L., 2001, p.14). Santanu Kumar Ghosh and Paritosh Chandra Sinha (2007) studied the Firm's capital structure Decision to help an Investor. The results reveal that share holder's returns significantly vary with firm's debt levels. Firm are more conservative in maintenance of long-term debt to equity ratio than that of total debt to equity ratio. Increase in dept levels does not contain always good news to the investors and risk takers act differently.

Manor Selvi .A and Vijaya Kumar. A (2007) examine the trends of profit of selected Indian automobile Industries over the period from 1991-92 to 2003-04. It shows a declining trend in profitability of 55.55 per cent of India automobile industries. The falling tendency of profit rates of these industries is a proof of adverse effect of various controls on prices, output, expansion and investment etc., extended by government on these industries over time.

Sur and Mitra (2011) made a modest attempt to analyse the BR associated with the selected Indian IT companies using Ginny's coefficient of mean difference and to ascertain the relative risk-return status of the companies during the period 1999-2000 to 2008-09. Lack of uniformity in respect of risk-return trade off among the selected IT companies was noticed in the study.

Sur et.al. (2014) in their study analysed the BR associated with 20 selected companies in the Indian FMCG sector during the period 1995-96 to 2011-12. The study revealed that the highest BR was faced by Colgate while Godfrey enjoyed the least BR and it was found that LR, CSR and CPR established themselves as significant contributors of the BR during the study period.

3. METHODLOGY

Financial performance is processes of creation an intellectual activity. Financial performance is also concern with the business operations which contribute to increase the profits and also to enhance the total investments. Financial performance is also concern with the prosperity of shareholders. Thus, researcher has evaluated the concept and various related aspects of Financial Performance Analysis. Researcher explores the data and s also decided to investigate the whole concept in the Automobile Industry of India. The researcher utilizes the facts and information available in various secondary sources to make evaluation and thus the nature of the study become analytical.

4. ANALYSIS AND INTERPRETATION

Based on data from Table 1 we calculated the 5 financial indicators that will be used in construction of 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 4.1 Financial indicators (Fiscal year 2017)

Company	CR	ROI	DTE	TAT	WCA
Ashok Leyland	0.95	1.461	0.35	0.8608	0.02889
TATA	0.52	1.045	0.92	1.2	-0.0727
Maruti Suzuki	0.66	1.356	0.01	1.309	-0.127
Mahindra & Mahindra	1.03	0.7417	0.11	1.74	0.08534
Bajaj Auto Ltd	3.21	1.098	0.01	0.9935	0.2855

Source: Secondary data. Researcher own calculation

Table 4.1 indicates the financial indicators of the selected automobile companies. The current risk is showing a positive and good trend for Mahindra & Mahindra and Bajaj Auto industries. Return on investment for the selected companies are in good position except Mahindra & Mahindra. Debt to Equity position is high for TATA and Ashok Leyland and low for Maruti Suzuki and Bajaj Auto. Total Assets Turnovers is high for Mahindra & Mahindra and Maruti Suzuki. Working Capital to Total Assets risk shows a negative for TATA and Maruti Suzuki whereas Bajaj Auto Ltd has a strong and positive trend in WCA.

Table 4.2 Results for α and β

Financial indicators	Minimum level	Maximum level	α	β
CR	0.031	2.424	1.2273	0.376
ROI	-3.106	5.601	1.2475	1.3678
DTE	-0.463	1.545	0.5413	0.3155
TAT	-3.548	4.24	0.3461	1.2235
WCA	-0.101	1.779	0.8391	0.2954

Source: Secondary data, Researcher own calculation

For every indicator, researcher identifies the highest and the lowest value for the discriminante 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

α1, α2, α3, α4, α5 – parameters

β - Error

Hence, FRS = 1.2273*CR+ 1.2475*ROI+ 0.5413*DTE + 0.3461*TAT +0.8391*WCA

Table 4.3 Financial risk score (FRS)

COMPANY	1.227 *CR	1.2457* ROI	0.5413 *DTE	0.3461 *TAT	0.8391 *WCA	FRS	Rank
Ashok Leyland	1.166	1.823	0.189	0.298	0.024	3.510	II
TATA	0.638	1.304	0.498	0.415	-0.061	2.794	V
Maruti Suzuki	0.81	1.692	0.005	0.453	-0.107	2.854	IV
Mahindra & Mahindra	1.264	0.925	0.06	0.602	0.072	2.923	III
Bajaj Auto	3.94	1.37	0.005	0.344	0.24	5.898	I
AVERAGE	1.564	1.423	0.152	0.422	0.034	3.594	

Source: Secondary data. Researcher own calculation

The above table 4.3 shows the Financial Risk Score for the selected automobile companies. It indicates that Bajaj Auto have a highest FRS score (Ranked 1) followed by Ashok Leyland (ranked 2) and Mahindra & Mahindra (ranked 3). The least FRS was scored by TATA and ranked 5.

5. COMPARATIVE ANALYSIS

Researcher analyse the results in comparison with industry average

Table 4 FRS value with industry average

COMPANY	FRS value	Industry average	Assessment
Ashok Leyland	3.510	3.594	Good
TATA	2.794	3.594	Poor
Maruti Suzuki	2.854	3.594	Moderate
Mahindra & Mahindra	2.923	3.594	Moderate
Bajaj Auto	5.898	3.594	Best

Source: Secondary data. Researcher own calculation

The above table 4.4 shows the FRS value and industry average. It indicates that Bajaj Auto is in best position and greater than the industry average. Ashok Leyland is in good position and equal to industry average. Maruti Suzuki and Mahindra & Mahindra are in moderate position. TATA is in poor condition towards its financial risk values, and have a lesser FRS value than the industry average.

Table 4.5 CR value with industry average

COMPANY	CR value	Industry average	Assessment
Ashok Leyland	1.166	1.564	Good
TATA	0.638	1.564	Poor
Maruti Suzuki	0.81	1.564	Moderate
Mahindra & Mahindra	1.264	1.564	Moderate
Bajaj Auto	3.94	1.564	Best

Source: Secondary data. Researcher own calculation

The above table 4.5 shows the CR value and industry average. It indicates that Bajaj Auto is in best position and greater than the industry average. Ashok Leyland is in good position and equal to industry average. Maruti Suzuki and Mahindra & Mahindra are in moderate position. TATA is in poor condition towards its financial risk values, and have a lesser CR value than the industry average.

Table 4.6 ROI value with industry average

COMPANY	ROI	Industry average	Assessment
Ashok Leyland	1.823	1.423	Very Good
TATA	1.304	1.423	Good
Maruti Suzuki	1.692	1.423	Very Good
Mahindra & Mahindra	0.925	1.423	Moderate
Bajaj Auto	1.37	1.423	Good

Source: Secondary data. Researcher own calculation

The above table 4.6 shows the ROI value and industry average. It indicates that Ashok Leyland and Maruti Suzuki is in Very Good position and greater than the industry average. Bajaj Auto and TATA is in good position and equal to industry average. Mahindra & Mahindra are in moderate position.

Table 4.7 DTE value with industry average

COMPANY	DTE	Industry average	Assessment
Ashok Leyland	0.189	0.152	Very Good
TATA	0.498	0.152	Best
Maruti Suzuki	0.005	0.152	Worst
Mahindra & Mahindra	0.06	0.152	Poor
Bajaj Auto	0.005	0.152	Worst

Source: Secondary data. Researcher own calculation

The above table 4.7 shows the DTE value and industry average. It indicates that TATA is in best position and greater than the industry average. Ashok Leyland is in very good position and greater to industry average. Maruti Suzuki and Bajaj Auto are in worst position. Mahindra & Mahindra is in poor condition towards its DTE values, and have a lesser DTE value than the industry average.

Table 4.8 TAT value with industry average

COMPANY	TAT	Industry average	Assessment
Ashok Leyland	0.298	0.422	Moderate
TATA	0.415	0.422	Good
Maruti Suzuki	0.453	0.422	Very Good
Mahindra & Mahindra	0.602	0.422	Best
Bajaj Auto	0.344	0.422	Good

Source: Secondary data. Researcher own calculation

The above table 4.8 shows the TAT value and industry average. It indicates that Mahindra & Mahindra is in best position and greater than the industry average. TATA and Bajaj Auto is in good position and equal to industry average. Maruti Suzuki is in moderate position. TATA is in very good condition towards its TAT values.

Table 4.9 WCA value with industry average

COMPANY	WCA	Industry average	Assessment
Ashok Leyland	0.024	0.034	Good
TATA	-0.061	0.034	Very good
Maruti Suzuki	-0.107	0.034	Worst
Mahindra & Mahindra	0.072	0.034	Best
Bajaj Auto	0.240	0.034	Best

Source: Secondary data. Researcher own calculation

The above table 4.9 shows the WCA value and industry average. It indicates that Mahindra & Mahindra and Bajaj Auto is in best position and greater than the industry average. Ashok Leyland is in good position and slightly lesser than the industry average. TATA are in very good position. Maruti Suzuki is in worst position and is lesser than the industry average.

6. CONCLUSION

Sometimes by taking financial risks, companies can gain more profit or revenues, transforming these risks into financial opportunities. The analysis of assessing the financial risks shows that no company has better or worse score than average at all 5 indicators. The Indian automobile industries are able to meet its current obligation as and when they become due for expense. Although the current risk is less than the standard norms, even then the liquidity position of the selected industry may be considered satisfactory. The analysis 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 automobile companies may be considered satisfactory in the Indian automobile industry.

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