

Research Paper

Commerce

Analysing the Financial Performance of Selected Indian Automobile Companies

A. Dharmaraj	Ph.D Research Scholar, Department of Commerce, Karpagam University, Coimbatore-641021
Dr. N.Kathirvel	Assistant Professor, Department of Commerce, M.R. Government Arts College, Mannargudi, Thiruvarur District

ABSTRACT

The Indian Automobile Industry is growing at an average rate of 17 per cent for the past few years. During April-March 2012 production growth was 13.83 percent. An attempt is made to study the financial strength of this industry. The data were collected for fifteen years for selected fifteen companies from the annual reports. The descriptive statistics

includes Mean, Standard Deviation. Analysis of variance is a tool used to test the differences amount the means of populations by examining the amount of variation within each of these examples, relative to the amount of variation between the samples. The study provides companies with understanding the activities that would enhance their financial performances. The results of this study imply that, they are financially strong and they are growing at the rate of 17% per annum.

KEYWORDS: Liquidity, Profitability, Solvency and ANOVA

Introduction

India is one of the world's fastest growing passenger car markets and it is the second largest two wheeler manufacturer. It is the largest motor cycle manufacturer and fifth largest commercial vehicle manufacturer. The industry is producing nearly thirteen lakhs passenger vehicles, four lakhs commercial vehicles, seventy six lakhs two wheelers and three lakhs tractors per year. This industry's production is worth of US\$ 28 billion. The Indian Automobile Industry marked a new journey in 1991 with financial revolution New Industrial Policy Act 1991 opening automatic route through allowed 100 per cent FDI. Most of the global players have set up their business in India. Growing middle class population and increasing purchasing power along with the economic growth during past decade have attracted multinational corporations enter into Indian market. Trained manpower at minimum cost and market linked exchange rate also attracted Indian market. Increasing competition in auto companies leads to variety of choices and improve productivity by 20 per cent per year. The Indian Automobile industry after de-licensing in July, 1991 is growing at an average rate of 17 per cent for the past few years. During April-March 2012 production growth was 13.83 percent.

STATEMENT OF PROBLEM

Since the Automobile companies face threats to their viability, this study bears a relevance to the present problems. This study is made to know the liquidity, profitability, solvency position against the background above situation. Under this environment, the researcher considered it necessary to study financial performance of Automobile industries with the following objectives.

OBJECTIVES

The main objective of the study is to analyse the financial performance of the Automobile industry India and to offer suggestions for the improvement of the profitability of the Automobile companies.

RESEARCH METHODOLOGY

Source of data: The study is based on secondary data. The data were collected from the official directory and database of CMIE namely PROWESS. The published annual reports of the selected companies from respective websites, magazines and journals on finance have also been used as data source.

Period of study:

The study covers a period of fifteen years covering a period from 1998-1999 to 2011 -2012. It is also decided by taking into consideration of the availability of data.

Sample for the study:

We have selected only 15 Indian automobile companies to see to what extent they are profitable, financially strength, and liquidity position. The lists of companies are

- Ashok Leyland Ltd
- 2. Atul Auto Ltd
- 3. Eicher motors Ltd
- 4. Force motor Ltd
- 5. Hero motor corporation Ltd
- 6. HMT Ltd
- 7. Kinetic engineering Ltd
- 8. LML Ltd
- 9. Mahindra & Mahindra Ltd
- 10. Maharashtra scooters Ltd
- 11. Majestic auto Ltd
- 12. Scooters india Ltd
- 13. SML ISUZU Ltd
- 14. Tata Motors Ltd
- 15. VST Tillers Tractors Ltd

Framework of analysis:

Statistical tools are applied to analyze the financial performance with help of ratios analysis. Calculations were made to test the financial performance of the Indian Automobile industry. The descriptive statistical analysis includes Minimum, Maximum, Mean and Standard Deviation.

Limitations of the study

- The study covers a period of fifteen years on the basis of availability of data.
- These findings and suggestions only suitable to these companies, it is not suitable to all other type of industries

ANALYSIS AND INTERPRETATION

Financial performance is analysed with the help of ratio analysis based on fifteen years data (1998-99 to 2011-2012) through Mean and Standard Deviation (SD). The ratios considered for the study are as follows; Current ratio, Fixed Assets Turnover, Inventory turnover, Debtors Turnover, Debt-Equity ratio, Long term Debt-Equity ratio, Return on Net worth and Interest Coverage Ratio were cal-

culated.

Table 1: Calculated Ratios of Indian Automobile Companies for Fifteen Years (1998-99 to 2011-12)																	
S. No	Ratios	Current Ratio				Fixed Assets Turnover				Inventory Turnover				Debtors Turnover			
	Companies	Mini	Maxi	Mean	SD	Mini	Maxi	Mean	SD	Mini	Maxi	Mean	SD	Mini	Maxi	Mean	SD
1	Ashok Leyland	0.87	2.93	1.68	0.59	1.62	3.60	2.28	0.62	3.87	9.09	6.60	1.58	2.11	20.34	9.09	5.52
2	Atul Auto Ltd	1.05	3.96	1.80	0.93	1.49	6.98	3.56	1.84	4.56	19.68	10.93	4.19	4.95	57.36	20.35	15.27
3	Eicher Motors Ltd	0.57	2.89	1.27	0.62	3.28	5.11	4.13	0.49	11.53	24.53	16.93	4.41	7.41	190.65	42.04	59.20
4	Force Motor Ltd	0.82	1.59	1.17	0.21	0.99	2.07	1.45	0.29	2.84	7.40	5.28	1.49	6.99	29.03	14.22	6.83
5	Hero Motor Corp Ltd	0.25	1.06	0.59	0.25	4.15	8.51	6.17	1.37	13.12	46.82	34.73	12.15	38.06	174.20	80.98	40.85
6	HMT Ltd	1.03	3.11	2.03	0.67	1.12	2.59	1.65	0.40	1.41	5.94	3.56	1.20	1.03	4.66	2.16	0.93
7	Kinetic Engineering	0.68	2.05	1.32	0.38	0.22	1.89	0.91	0.66	1.72	10.05	5.02	2.38	1.27	5.40	3.06	1.38
8	LML Ltd	0.26	1.43	0.81	0.38	0.17	2.99	1.12	0.90	0.86	6.84	3.40	1.99	13.65	191.44	34.83	45.12
9	Mahindra & Mahindra	0.83	1.85	1.29	0.32	1.97	4.98	3.22	0.88	7.70	17.92	12.50	3.58	6.15	21.15	13.24	4.96
10	Maharashtra Scooters	0.44	1.05	0.84	0.18	0.10	13.25	3.53	4.80	2.41	23.24	11.53	6.31	4.15	32.89	14.14	9.56
11	Majestic Auto Ltd	0.48	0.97	0.78	0.13	0.68	2.60	1.57	0.48	4.71	17.21	11.61	3.97	2.64	13.98	7.37	3.02
12	Scooters India Ltd	0.73	4.84	1.98	1.17	2.46	4.20	3.43	0.53	3.20	5.57	4.49	0.79	8.26	83.67	26.40	22.46
13	SML ISUZU Ltd	1.02	1.34	1.13	0.09	5.20	16.93	10.59	4.46	3.85	9.06	6.55	1.66	3.09	9.56	5.66	1.76
14	Tata Motors Ltd	0.50	1.36	0.88	0.27	1.43	3.79	2.40	0.74	7.02	14.99	12.00	2.79	3.21	42.18	19.40	11.55
15	VST Tillers Tractors	1.47	2.12	1.79	0.19	2.13	6.16	3.57	1.13	3.07	8.80	5.92	1.92	4.79	8.26	6.52	0.91
Indu	Industry Mean Average 1.29 3.30 10.07 15.29																

Source: Compiled from Annual Reports of the Companies

Current Ratio of the company, Hero Motor Corporation Ltd, Majestic Auto Ltd, LML Ltd, Maharastra Scooters Ltd and Tata Motors Ltd were very low at 0.25, 0.48, 0.44, and 0.50 respectively during the last fifteen years. For Scooters India Ltd, Atul Auto Ltd and HMT Ltd has maximum of 4.84, 3.96 and 3.11 respectively, it shows excessive working capital. The Companies like HMT, Atul and VST (i.e 2.03, 1.80 & 1.79) are having an average near to 2 which is the rule of thumb. These companies have better liquidity position. The fixed-asset turnover ratio measures a company's ability to create net sales from fixed-asset investments. For SML Isuzu Ltd, Hero Motor Corp Ltd it is 10.59 and 6.17. Mostly fixed assets turnover ratios of the companies are between 2 to 4. For Kinetic Engineering only it is very Low. Inventory Turnover Ratio establishes industry average of 10.07, companies like VST, Majestic, Maharastra. M&M, Eicher and Atul Auto Ltd are efficient. For Hero Motor Corp Ltd it is too high and it must have to take further investigation to balance the Sales and the Stock. For all other companies, Mean value is lower than the industry average should take necessary steps to overcome this situation. The Debtor turnover ratio is an activity ratio, overall industry average is 15.29, companies, Atul Auto Ltd, Eicher Motors Ltd, Force Motor Ltd, Hero Motor Corp Ltd, LML Ltd, Scooters India Ltd and Tata Motors Ltd are above the industry average so these companies having efficient credit policies. All other companies debtors turnover ratio is less than the industry average so they have to re-assess their credit policies.

Table 2: Calculated Ratios of Indian Automobile Companies for Fifteen Years (1998-99 to 2011-12)																	
S. No	Ratios	Debt Equity Ratio				Long Term Debt Equity				Return on Net Worth				Interest Coverage Ratio			
	Companies	Mini	Maxi	Mean	SD	Mini	Maxi	Mean	SD	Mini	Maxi	Mean	SD	Mini	Maxi	Mean	SD
1	Ashok Leyland	0.38	1.13	0.79	0.23	0.35	0.95	0.71	0.18	0.59	27.07	15.48	9.32	1.04	21.96	6.00	5.85
2	Atul Auto Ltd	0.10	1.17	0.49	0.36	0.02	0.64	0.23	0.22	4.95	57.36	20.35	15.27	1.13	36.50	11.37	12.11
3	Eicher Motors Ltd	0.89	0.89	0.89	0.00	0.01	0.70	0.34	0.26	0.89	0.89	0.89	0.00	7.60	52.56	22.31	11.06
4	Force Motor Ltd	0.21	2.12	0.75	0.51	0.07	0.91	0.35	0.25	0.21	2.12	0.75	0.51	-18.88	33.19	5.05	14.21
5	Hero Motor Corp Ltd	0.02	0.55	0.16	0.13	0.00	0.50	0.13	0.13	0.02	0.55	0.16	0.13	44.49	99.22	66.35	17.47
6	HMT Ltd	30.27	30.27	30.27	0.00	0.00	20.44	4.74	6.17	30.27	30.27	30.27	0.00	0.00	10.70	2.65	4.10
7	Kinetic Engineering	0.65	9.34	2.77	2.32	0.47	7.41	2.17	2.05	0.65	9.34	2.77	2.32	0.00	10.70	2.65	4.10
8	LML Ltd	2.04	2.04	2.04	0.00	0.00	8.77	2.30	2.61	2.04	2.04	2.04	0.00	-1.58	27.94	3.71	8.70
9	Mahindra & Mahindra	0.98	0.98	0.98	0.00	0.24	0.91	0.55	0.20	0.98	0.98	0.98	0.00	7.28	32.25	20.47	7.98
10	Maharashtra Scooters	0.00	0.07	0.04	0.03	0.00	0.05	0.02	0.02	0.00	0.07	0.04	0.03	-4.32	20.63	5.78	6.99
11	Majestic Auto Ltd	0.89	3.12	1.63	0.49	0.41	2.22	0.95	0.42	0.89	3.12	1.63	0.49	-3.58	32.41	7.53	8.66
12	Scooters India Ltd	0.00	2.18	0.61	0.58	0.00	1.10	0.33	0.30	0.00	2.18	0.61	0.58	0.00	22.30	4.80	6.61
13	SML ISUZU Ltd	0.16	4.48	1.47	1.08	0.00	1.47	0.32	0.39	0.16	4.48	1.47	1.08	8.38	85.13	30.83	21.34
14	Tata Motors Ltd	0.44	1.10	0.78	0.19	0.36	0.74	0.54	0.12	0.44	1.10	0.78	0.19	-0.16	33.77	15.61	11.52
15	VST Tillers Tractors	0.04	0.80	0.29	0.24	0.00	0.27	0.14	0.09	0.04	0.80	0.29	0.24	7.43	27.77	16.60	6.65
Indu	Industry Mean Average 2.93 .92 5.23 14.78																

Overall industry average of debt equity ratio is 2.93. Accepted level of Debt Equity ratio is 1:2, companies HMT Ltd, Kinetic Eng, LML Ltd ratio is more than the accepted level, these companies were utilizing the debt capital promptly. All other companies were lower debt equity ratio, which are advised to restructure their capital structure. Long term to Debt Equity ratio, the overall industry average is 0.92, HMT Ltd, Kinetic Eng, LML Ltd and Majestic Auto Ltd ratio is higher. They were very good Long Term Debt to Equity Ratio. For all other companies it is less than the industry average. Return on Net Worth higher the ratio illustrates that the firm has greater effectiveness in the utilization of assets, means greater profits reaped by the total assets and vice versa. Ashok Leyland (15.23), Atul Auto Ltd (20.35) and HMT Ltd (30.27) have high value than the industry average (5.23). Overall Industry average of Interest Coverage ratio is 14.78, companies specifically Force Motor Ltd, Hero Motor Corp Ltd and SML ISUZU Ltd has higher than the industry average and others have lesser value than the industry average, so they having lower capacity of making payment of interest.

Analysis of variance is a tool used to test the differences amount the means of populations by examining the amount of variation within each of these examples, relative to the amount of variation between the samples

Hypothesis:

- H0– There is no significant difference between calculated ratios of the selected Indian Automobile companies
- H1– There is significant difference between calculated ratios of the selected Indian Automobile companies

Table 3: One-Way ANOVA of ratios of Selected Automobile Companies in India

Ratios		Sum of Squares	df	Mean Square	F	Sig.
C	Between Groups	46.209	14	3.301	12.094*	.000
Current Ratio	Within Groups	57.311	210	.273		
	Total	103.520	224			
Fixed Assets	Between Groups	1255.915	14	89.708	25.212*	.000
Turnover Ratio	Within Groups	747.204	210	3.558		
	Total	2003.119	224			
	Between Groups	589.451	14	42.104	.534	.911
Inventory T/0 Ratio	Within Groups	16556.809	210	78.842		
	Total	17146.260	224			
Debt T/O Ratio	Between Groups	26146.675	14	1867.620	2.208*	.009
	Within Groups	177654.607	210	845.974		
	Total	203801.283	224			
	Between Groups	8.337	14	.595	.010	1.000
Debt Equity Ratio	Within Groups	12225.652	210	58.217		
	Total	12233.989	224			
Long term	Between Groups	60.526	14	4.323	.936	.521
debt equity ratio	Within Groups	970.342	210	4.621		
	Total	1030.869	224			
Return on	Between Groups	413.162	14	29.512	.283	.995
net worth ratio	Within Groups 21864.048		210	104.115		
	Total	22277.210	224			
Interest coverage ratio	Between Groups	3187.366	14	227.669	.602	.862
	Within Groups	79429.023	210	378.233		
	Total	82616.389	224			

Source: Compiled from the Annual Reports

From the above table it is concluded that for most of the ratios (via Inventroy Turnover Ratio, Debt Equity Ratio, Lon Term Debt Equity Ratio, Retrun on Networth Ratio, and Interest Coverage Ratio) calulated value is greater than the table value so null hypothesis is rejected. It is deceided that for all these ratios there is no significant difference among the variables. For Current Ratio, Fixed assets turnover Ratio and Debtors turnover ratio calculted value is less than the Table value so null hypothesis is accepted.

Finding

Current Ratio of HMT, Atul and VST have better liquidity position. Mostly fixed assets turnover ratios of the companies are between 2 to 4, Kinetic Engineering it is very Low. Inventory Turnover Ratio of VST, Majestic, Maharastra. M&M, Eicher and Atul Auto Ltd are shows their efficiency. The Debtor turnover ratio of Atul Auto Ltd, Eicher Motors Ltd, Force Motor Ltd, Hero Motor Corp Ltd, LML Ltd, Scooters India Ltd and Tata Motors Ltd are having efficient credit policies. Debt Equity ratio shows of HMT Ltd, Kinetic Eng, LML Ltd were utilizing the debt capital promptly. All other companies were lower debt equity ratio, which are advised to restructure their capital structure. Long term to Debt Equity ratio of HMT Ltd, Kinetic Eng, LML Ltd and Majestic auto Ltd ratio is higher and for all other companies it is less than the industry average. Return on Net worth of Ashok Leyland (15.23), Atul Auto Ltd (20.35) and HMT Ltd (30.27) have high value than the industry average (5.23). Force Motor Ltd, Hero Motor Corp Ltd and SML ISUZU Ltd has higher than the industry average. HMT Ltd, Kinetic Eng, LML Ltd, M&M, Maharashtra Scooters, Majestic Auto Ltd, Scooters India Ltd, VST, and Ashok Leyland have lower value than the industry average, so they having lower capacity of making payment of interest. The results of the ANOVA indicates for most of the ratios calculated value is greater than the table value so null hypothesis is rejected. It is decided that for all these ratios there is no significant difference among the variables. For Current Ratio, Fixed assets turnover Ratio and Debtors turnover ratio calculated value is significant at 1% level so null hypothesis is accepted.

Conclusion:

The financial performance of Atul Auto Ltd, Ashok Leyland, HMT Ltd, Tata Motors Ltd, and SML ISUZU Ltd are highly improved as compared to the group average value for all ratios. In India there is a huge scope for automobile companies. They are financially strong and they are growing at the rate of 17% per annum and contributing to the Indian economy reasonably. Finally, the study provides companies with understanding of the activities that would enhance their financial performances. The results of this study imply that it might be necessary for all companies to take all required decisions to enhance their financial position.

REFERENCES

1. Khan.M.Y and P.K. Jain, 2010. "Financial Management, Text and Problems", Tata McGraw Hill Publishing Company Ltd., New Delhi. 2. Kothari, C.R. 2008. "Research Methodology methods & techniques", second edition, New age international publishers, Delhi. 3. Pandey, I.M. 2010. "Financial Management," Ninth Edition, Vikas Publishing, House Pvt.Ltd, NewDelhi. 4. Automotive Mission Plan 2006-2012, Ministry of Heavy Industries and Public enterprises, Government of India, New Delhi, pp 1 – 81 5. Kumar P. "Corporate Growth and Profitability in the large

Indian companies", Margin, Vol.17, No.4, July 1985. 6. Vijayakumar, A. "Determinants of Profitability- A Firm Level study of the sugar industry of Tamilnadu", Financé India, Vol. X, No.4, December 1996. 7. Agarwal, R.N. "Profitability and Growth in Indian Automobile manufacturing industry", Indian Economic Review, Vol.XXVI, No.1, 1991. 8. Barthwal,R.R. "The Determinants of Profitability in Indian Textile Industry", Economica, Vol.43, 1976. 9. Sahu R.K. "Analysis of corporate profitability a multivariate approach", The Management Accountant, Vol 35, No.8, August 2000. 10. Kadirvelu S. "Profitability analysis of selected Indian public sector manufacturing enterprises- before and after liberalisation", doctoral dissertation, bharathiar university, december 2002.