PROFITABILITY ANALYSIS OF TWO WHEELER COMPANIES IN INDIA

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Abstract: Two wheelers are one of the most versatile forms of transportation. The Indian two wheeler industry since its beginning, had evolved many folds in technology and, in the numbers being manufactured and produced. It has seen tremendous growth in about half a century, in comparison to other countries where two wheelers are major components of transportation. This paper analyzes the profitability of automobile companies in India for a period of ten years (2007 – 2017). Profitability is the ability of a business to earn a profit. It involves in-depth analysis of profitability of the company with the help of key ratios and statistical analysis like ANOVA. Profitability ratios help in ascertaining the position of the company with respect to various profitability measures.

Key words: Profitability, Automobile industry, ANOVA, Ratio analysis, Net Worth.

I. Introduction

Two wheelers are one of the most versatile forms of transportation. The Indian two wheeler industry since its beginning, had evolved many folds in technology and, in the numbers being manufactured and produced. It has seen tremendous growth in about half a century, in comparison to other countries where two wheelers are major components of transportation.

The automobile industry is one of the key drivers for the economic growth of the country. In 1991 de-licensing of the sector and the subsequent opening up of 100% FDI through automatic route Indian automobile sector has come a long way. Today almost every global auto major has set up facilities in the country.

The Indian auto industry is one of the largest in the world. The industry accounts for 7.1% of the countries gross domestic product (GDP). As of FY 2016 – 2017, about 31% of small cars sold globally are manufactured in India. The two wheelers segment with 81% market share of Indian automobile market mainly concentrating on growing middle class and a young population. The overall passenger vehicle segment has 13% market share.

Profitability is the ability of a business to earn a profit. A profit is what is left of the revenue a business generates after it pays all expenses directly related to the generation of the revenue, such as producing a product, and other expenses related to the conduct of the business activities.

Profitability analysis is an important activity of evaluating financial soundness of the companies. The effective management and control of various components of short term funds has direct impact on profitability.

II. Objectives of the Study

The study covering a period of ten years from 2007 to 2017 has the following objectives:

i. To identify the net profit and cash profit margin of selected automobile companies
ii. To analyze the return on net worth and net operating profit ratio of selected automobile companies

III. Literature Review

Dharmendra s. Mistry (2012) in his study on," determinants of profitability in Indian automotive industry", he analyzed profitability of six selected Indian automobile industry for a period of five years (2004-2009). The samples were selected from three Indian passenger vehicle companies and three two wheeler companies on the basis of performance, position, sales and paid

up capital. The study found that Debt equity ratio, Inventory turnover ratio and size were the most important determinants of profitability. As concluded from various analyses of various determinants of profitability, it is clear that the firms having big size are earning good return on capital employed. As the size of the firm is the strongest factor in determining the profitability.

Mohan Kumar M.S , Safer Pasha M , Bhanu Prakash T.N (2015) in their research," profitability analysis of selected cement companies in India" have analyzed five cement companies whose securities should be listed in Indian stock exchange for the period of 9 years from (2008 to 2017). For analysis they have used Mean, Standard deviation, Co-efficient of variance and compound annual growth rate. After analyzing the profitability of different cement companies during the study period it is found that Ambuja cements shows satisfactory profitable position compare to other companies. The compound annual growth rate as shown satisfactory in India cements while compare to other companies.

Loriya Chirag Thakarshibhai (2017) in his research ,"A study of profitability analysis of selected public sector and private sector banks of India" analyzed the profitability performance of 10 public and private sector banks of India for the year 2011 to 2017. Statistical tools like ANOVA, mean, and standard deviation were used for analysis. The study concludes that public sector banks return on capital employed found poor as compared to private sector banks.

Aarti Garg, Anju Bala (2016) in their study, "Profitability analysis of automobile sector" has analyzed five automobile sectors for the period of eleven years using ratio analysis and ANOVA. The findings suggest that the profitability of Maruti Suzuki and Ashok Leyland from selected companies is satisfactory and of Lumax and TVS motors is not satisfactory in certain aspects.

IV. Methodology

Survey method has been followed for this study. Secondary information has been collected through various sources. Data collected from secondary sources includes annual reports of selected auto mobile industries and leading journals in the field of commerce and management and related websites. In the course of the analysis in this study, the use of various accounting and statistical techniques has been made. Ratio analysis, mean, standard deviation, and ANOVA test have been applied.

This study is based on purposive sampling method, making a study of seven companies in Indian automobile industry. List of companies included in the present study is as follows:

Bajaj Auto Limited (BAL)

Eicher Motors Limited (EML)

Hero Motocorp Ltd (HML)

LML Limited (LMLL)

Mahindra Two Wheelers Limited (MTWL)

Suzuki India (SI)

TVS Motor Company (TVSMC)

V. Hypothesis

There is no significant difference between the sample units lies for profitability ratios during the study period of selected automobile companies.

VI. Analysis of Profitability

Various ratios for the selected period are calculated and their mean is calculated to find out the results.

TABLE 1

NET PROFIT MARGIN

Year	BAL	EML	HML	LMLLL	MTWL	SI	TVSMC
2007-2008	13.13	13.14	11.14	-76.15	10.53	9.74	3.78
2008-2009	8.56	3.11	8.66	-90.07	10.76	10.54	1.71
2009-2010	7.52	2.84	9.35	-51.28	9.75	9.58	0.98
2010-2011	14.39	-15.24	10.39	-31.51	6.42	5.87	0.84
2011-2012	20.36	17.06	14.09	-27.45	11.27	8.51	2.01
2012-2013	15.38	18.54	9.93	-14.56	11.34	6.24	3.09
2013-2014	15.21	13.79	10.08	-26.88	9.03	4.59	3.49
2014-2015	16.09	16.36	8.91	-27.79	8.29	5.48	1.64
2015-2016	13.01	18.43	8.34	-39.79	9.27	6.36	3.28
2016-2017	16.09	19.87	8.64	-50.29	8.52	7.42	3.44
MEAN	13.974	10.79	9.953	-43.577	9.518	7.433	2.426
SD	3.741964	10.9822311	1.70556	23.84449	1.542399	2.045586	1.109236

The table 1 clears the position regarding the net profit margin of the selected two wheeler companies in india. Net profit margin showed fluctuation in each year. The average of Bajaj Auto for ten years was 13.974, Eicher Motors average was 10.79, Hero Motocorp was 9.953, LML shows negative sign and it was -43.577, Mahindra and Mahindra shows 9.518, Suzuki India was 7.433 and TVS Motor Company shows 2.426. comparing the seven companies LML company showed negative result and TVS company also have low average and other companies have a positive level of average. Overall seems to be LML having highest risk factor followed by Eicher Motors and Bajaj Auto.

TABLE 2

RETURN ON NETWORTH

Year	BAL	EML	HML	LMLLL	MTWL	SI	TVSMC
2007-2008	22.35	48.73	48.34	-2.08	29.6	21.8	15.98
2008-2009	47.6	14.81	34.73	-0.7	30.18	22.78	8.19
2009-2010	35	13.75	32.41	-0.71	25.43	20.56	3.86
2010-2011	58.05	0	33.72	-0.46	16.07	13.04	3.82
2011-2012	68.01	16.51	64.41	-0.88	26.72	21.1	10.17
2012-2013	49.72	23.06	65.21	-0.55	26.46	16.5	15.98
2013-2014	38.51	23.01	55.43	-0.79	24.08	10.76	21.3
2014-2015	33.75	33.92	42.31	-0.89	22.88	12.87	9.47
2015-2016	26.31	45.3	37.66	-0.99	22.39	13.26	18.48
2016-2017	29.71	57.18	36.47	-0.98	17.25	15.65	21.14
MEAN	40.901	27.627	45.069	-0.903	24.106	16.832	12.839
SD	14.62718	18.1246082	12.60589	0.448654	4.681349	4.389203	6.61731

Table 2 shows return on net worth of each company for ten years and its shows mean value of Hero Motocorp was 45.069 it is high than other companies and LML company showed negative result of -0.903. Actually this ratio is useful as a measure of how well a company is utilizing the shareholders investment to create returns for them and can be used for comparison

purposes with competitors in the same industry. Rule of thumb for this ratio is 0.50 or less than that, but all the seven companies shows more than 0.50. From this Eicher Motors seems to have a high risk and in next Bajaj Auto followed by Hero Motocorp.

TABLE 3
CASH PROFIT RATIO

Year	BAL	EML	HML	LMLLL	MTWL	SI	TVSMC
2007-2008	17.071	5.171	12.455	-64.177	12.992	12.088	6.529
2008-2009	15.161	4.783	10.071	-53.708	12.881	12.382	4.328
2009-2010	10.535	7.783	10.905	-33.241	11.865	12.725	3.109
2010-2011	9.037	12.584	11.865	-20.839	8.625	9.287	1.841
2011-2012	15.568	19.51	15.299	-20.696	13.277	11.333	3.747
2012-2013	21.126	20.488	12.013	-9.977	13.111	9.017	3.998
2013-2014	16.128	15.431	14.739	-21.54	10.847	7.794	3.917
2014-2015	16.039	18.152	13.715	-23.089	10.048	9.757	5.049
2015-2016	16.987	20.094	12.725	-33.606	11.409	11.138	4.008
2016-2017	14.256	20.1	10.605	-44.294	11.031	12.37	4.837
MEAN	15.1908	14.4096	12.4392	-32.5167	11.6086	10.7891	4.1363
SD	3.401774	6.39418745	1.732529	16.94883	1.524982	1.71014	1.23129

Cash profit ratio measures the relationship between cash generated from operations and the net sales. From table 3 it is found that Bajaj Auto seems to have highest cash profit margin of 15.1908 followed by Eicher Motors 14.4096 and Hero Motocorp 12.4392. Even though it does not have specific rule of thumb the companies should not have high or very low cash profit ratio, from this it is considered that the company having highest risk factor is LML followed by Eicher Motors and Bajaj Auto.

TABLE 4
NET OPERATING PROFIT RATIO

Year	BAL	EML	HML	LMLLL	MTWL	SI	TVSMC
2007-2008	16.901	3.775	15.849	-33.866	10.771	15.558	6.652
2008-2009	14.117	5.696	12.134	-30.824	11.452	15.237	3.906
2009-2010	12.294	18.764	13.222	-11.42	10.235	14.549	-0.003
2010-2011	12.598	3.797	14.223	0.641	9.819	9.535	1.452
2011-2012	21.333	6.274	17.321	-4.187	16.293	13.045	3.304
2012-2013	19.338	6.699	13.468	0.541	14.724	9.936	5.457
2013-2014	19.048	7.633	15.347	-6.872	11.838	7.062	6.188
2014-2015	18.178	8.542	13.819	-8.259	11.645	9.704	5.919
2015-2016	20.376	10.349	14.006	-14.183	11.655	11.661	5.812
2016-2017	19.047	11.855	12.841	-15	10.716	13.434	5.847
MEAN	17.323	8.3384	14.223	-12.3429	11.9148	11.9721	4.4534
SD	3.235445	4.48481086	1.547795	11.84997	2.037976	2.845703	2.24287

Net operating profit ratio gives attention on the net profit margin arising from the business process before tax is deducted. From table 4 it is found that Bajaj Auto is having highest net operating profit ratio of 17.323 followed by Hero Motocorp 14.223 and Suzuki India 11.9721. The company which is having high standard deviation is found to be risky from this the company which is having highest risk is found to be LML followed by Eicher Motors and Bajaj Auto.

VII. ANOVA

TABLE 5
NET PROFIT MARGIN

Source of Variation	*SS*	*df*	*MS*	*F ratio*	*F limit*
Between Groups	24456.4	6	4076.067	39.96847223	2.246408
Within Groups	6424.869	63	101.9821		
Total	30881.27	69			

Table 5 shows F is 39.96 which is more than table value 2.24 and it is considered that F is greater than table value and hypothesis is rejected. It means that there is significant difference in average Net profit margin of selected automobile companies.

TABLE 6
RETURN ON NETWORTH

Source of Variation	*SS*	*df*	*MS*	*F ratio*	*F limit*
Between Groups	15384.87	6	2564.144	22.82037118	2.246408
Within Groups	7078.81	63	112.3621		
Total	22463.68	69			

Table 6 shows F is 22.82 which is greater than table value 2.24 and is significant. Hence the hypothesis is rejected. It means that there is be significant difference in average return on net worth ratio of selected automobile companies.

TABLE 7
CASH PROFIT RATIO

Source of Variation	*SS*	*df*	*MS*	*F ratio*	*F limit*
Between Groups	17330.11	6	2888.352	57.85156427	2.246408
Within Groups	3145.398	63	49.92695		
Total	20475.51	69			

The above table shows F value 57.85 which is greater than table value and hence the hypothesis is rejected. It means that there is significant difference in average cash profit ratio of selected automobile companies.

TABLE 8
NET OPERATING PROFIT RATIO

Source of Variation	*SS*	*df*	*MS*	*F ratio*	*F limit*
Between Groups	5832.718	6	972.1196	35.68701164	2.246408
Within Groups	1716.13	63	27.24015		
Total	7548.847	69			

Table 8 shows F value is 35.68 which is greater than table value 2.24 and it is significant. Hence hypothesis is rejected. It means that there is significant difference in average operating profit ratio of selected automobile companies.

VIII. Limitations of the Study

- The data which is collected for the present study is entirely secondary in nature and in that case the study carries all the limitations inherent with the secondary data.
- The study is restricted to seven companies for the period of ten years.

IX. Discussion

As per the study table 1 Net profit margin showed fluctuation in each year. The average of Bajaj Auto for ten years was 13.974, Eicher Motors average was 10.79, Hero Motocorp was 9.953, LML shows negative sign and it was -43.577, Mahindra and Mahindra shows 9.518, Suzuki India was 7.433 and TVS Motor Company shows 2.426. Table 2 shows return on net worth of

each company for ten years and its shows mean value of Hero Motocorp was 45.069 it is high than other companies and LML company showed negative result of -0.903. From table 3 it is found that Bajaj Auto seems to have highest cash profit margin of 15.1908 followed by Eicher Motors 14.4096 and Hero Motocorp 12.4392. From table 4 it is found that Bajaj Auto is having highest net operating profit ratio of 17.323 followed by Hero Motocorp 14.223 and Suzuki India 11.9721. In ANOVA also the four ratios shows significant because F value is greater than table value (5% significant level) and the hypothesis is rejected.

X. Conclusion

The companies which have more net profit margins, net operating profit ratio, cash profit margins, return on net worth ratio is said to be more prone to risk. From ratio analysis among seven companies LML, Bajaj Auto and Eicher Motors seems to have high risk and the companies sholud concern about this and take remedial measures. Analysis of variance shows that all the four ratios are significant and hence the hypothesis is rejected and proved to say that there is significant difference between the samples units lies for profitability ratios during the study period of selected automobile companies.

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