

## Profitability performance of selected two wheeler companies in India: An analytical study

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### Abstract

This paper aims to find the profitability for a sample of 7 automobile companies in India for a period of ten years (2005 – 2015). 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 like Net Operating Profit ratio, Net Profit margin, Cash profit margin & Return on Net Worth. Conclusions are drawn with the help of results obtained through aforesaid techniques.

**Keywords:** profitability, automobile industry, ANOVA, ratio analysis

### Introduction

“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. 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 country’s gross domestic product (GDP). As of FY 2014 – 2015, 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.

### Two Wheeler Manufacturers and Its Market in India

Indian Two-Wheeler Industry is the largest in the world as far as the volume of production and sales are concerned. India is the biggest two-wheeler market on this planet, registering an overall growth rate of 9.5 percent between 2006 and 2014. The growth in Indian Automobile Industry owed the most to a steep upsurge witnessed in the two-wheeler segment in 2014. The volume growth recorded in the 2014-15 fiscal year stood at a commendable 14.8 percent on a year-on-year basis. The 'Make in India' campaign of the Government of India is also going to attract more foreign investment into Indian Two-Wheeler Industry creating further growth opportunities in the coming years.

Companies selected for the study are as follows

1. Bajaj Auto Limited
2. Eicher Motors Limited

3. Hero Motocorp Ltd
4. Lml Limited
5. Mahindra Two Wheelers Limited
6. Suzuki India
7. Tvs Motor Company

### Objectives of the Study

The main purpose of the study is to evaluate the profitability of selected automobile companies of India through different ratio such as cash profit margin, net profit margin, return on networth and net operating profit ratio.

### Hypothesis

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

### Review of Literature

Dharmendra s. Mistry (2012) <sup>[1]</sup> 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) <sup>[2]</sup> 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 (2005 to 2014). 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 (2014) [3] 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 2009 to 2014. 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) [4] 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.

**Research Methodology**

This study is based on the data obtained from the financial reports of selected seven companies for ten years (2005 to 2015). The data has been analyzed with the help of ratio analysis and ANOVA. Ratios help to make qualitative judgment about the firm's financial performance. ANOVA is used for testing the difference among different groups.

**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.

**Data Analysis**

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

**Table 1**

Net Profit Margin							
Year	Company						
	Bajaj Auto	Eicher Motors	Hero Motocorp	LML	Mahindra and Mahindra	Suzuki India	TVS Motor Company
2005 -2006	13.13	13.14	11.14	-76.15	10.53	9.74	3.78
2006-2007	8.56	3.11	8.66	-90.07	10.76	10.54	1.71
2007-2008	7.52	2.84	9.35	-51.28	9.75	9.58	0.98
2008-2009	14.39	-15.24	10.39	-31.51	6.42	5.87	0.84
2009-2010	20.36	17.06	14.09	-27.45	11.27	8.51	2.01
2010-2011	15.38	18.54	9.93	-14.56	11.34	6.24	3.09
2011-2012	15.21	13.79	10.08	-26.88	9.03	4.59	3.49
2012-2013	16.09	16.36	8.91	-27.79	8.29	5.48	1.64
2013-2014	13.01	18.43	8.34	-39.79	9.27	6.36	3.28
2014-2015	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

Source: secondary data

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 Net worth							
Year	Company						
	Bajaj Auto	Eicher Motors	Hero Motocorp	LML	Mahindra and Mahindra	Suzuki India	TVS Motor Company
2005 -2006	22.35	48.73	48.34	-2.08	29.6	21.8	15.98
2006-2007	47.6	14.81	34.73	-0.7	30.18	22.78	8.19
2007-2008	35	13.75	32.41	-0.71	25.43	20.56	3.86
2008-2009	58.05	0	33.72	-0.46	16.07	13.04	3.82
2009-2010	68.01	16.51	64.41	-0.88	26.72	21.1	10.17
2010-2011	49.72	23.06	65.21	-0.55	26.46	16.5	15.98
2011-2012	38.51	23.01	55.43	-0.79	24.08	10.76	21.3
2012-2013	33.75	33.92	42.31	-0.89	22.88	12.87	9.47
2013-2014	26.31	45.3	37.66	-0.99	22.39	13.26	18.48
2014-2015	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	6.617313

Source: secondary data

Table 2 shows return on networth 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 show 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	Company						
	Bajaj Auto	Eicher Motors	Hero Motocorp	LML	Mahindra and Mahindra	Suzuki India	TVS Motor Company
2005 -2006	17.071	5.171	12.455	-64.177	12.992	12.088	6.529
2006-2007	15.161	4.783	10.071	-53.708	12.881	12.382	4.328
2007-2008	10.535	7.783	10.905	-33.241	11.865	12.725	3.109
2008-2009	9.037	12.584	11.865	-20.839	8.625	9.287	1.841
2009-2010	15.568	19.51	15.299	-20.696	13.277	11.333	3.747
2010-2011	21.126	20.488	12.013	-9.977	13.111	9.017	3.998
2011-2012	16.128	15.431	14.739	-21.54	10.847	7.794	3.917
2012-2013	16.039	18.152	13.715	-23.089	10.048	9.757	5.049
2013-2014	16.987	20.094	12.725	-33.606	11.409	11.138	4.008
2014-2015	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	1.710149	1.231293

Source: secondary data

Cash profit ratio measures the relationship between cash generated from operations and the netsales. 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. Eventhough 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	Company						
	Bajaj Auto	Eicher Motors	Hero Motocorp	LML	Mahindra and Mahindra	Suzuki India	TVS Motor Company
2005 -2006	16.901	3.775	15.849	-33.866	10.771	15.558	6.652
2006-2007	14.117	5.696	12.134	-30.824	11.452	15.237	3.906
2007-2008	12.294	18.764	13.222	-11.42	10.235	14.549	-0.003
2008-2009	12.598	3.797	14.223	0.641	9.819	9.535	1.452
2009-2010	21.333	6.274	17.321	-4.187	16.293	13.045	3.304
2010-2011	19.338	6.699	13.468	0.541	14.724	9.936	5.457
2011-2012	19.048	7.633	15.347	-6.872	11.838	7.062	6.188
2012-2013	18.178	8.542	13.819	-8.259	11.645	9.704	5.919
2013-2014	20.376	10.349	14.006	-14.183	11.655	11.661	5.812
2014-2015	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	2.242877

Source: secondary data

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.

ANOVA Tables

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 Net worth

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.

profitability ratios during the study period of selected automobile companies.

**Findings of the Study**

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 networth 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.

**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 company’s should 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

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