

# A Study on Profitability Analysis of Indian Selected Automobile Industry in India

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**Abstract - The present study is an attempt to ascertain the determinants of profitability of automobile industry in India by taking a sample of all the automobile firms covering various segments of automobile industry in India viz. commercial vehicles, three wheelers, two wheelers, and passenger vehicles which are listed on Bombay Stock Exchange (BSE), for a period of five years from 2013-14 to 2017-18. In order to achieve the objectives of the study, firm-specific factors viz. It was found that profitability of automobile industry in India is significantly influenced by the liquidity position of firm, growth of firm, inventory turnover ratio, debt equity ratio, and average payment period. The present study is based on secondary data. The data for the study has been collected from "CAPITALINE" database for a period of 5 years (2013-14 to 2017-2018). The study uses statistical tools like Ratio analysis.**

**Keywords: Profitability, Liquidity, Automobile, Commercial Vehicles.**

## I. INTRODUCTION

Automobile industry is the key driver of any growing economy and plays a pivotal role in country's rapid economic and industrial development. It caters to the requirement of equipment for basic industries like steel, non-ferrous metals, fertilizers, refineries, petrochemicals, shipping, textiles, plastics, glass, rubber, capital equipment's, logistics, paper, cement, sugar, etc. It facilitates the improvement in various infrastructure facilities like power, rail and road transport. Due to its deep forward and backward linkages with several key segments of the economy, the automobile industry is having a strong multiplier effect on the growth of a country and hence is capable of being the driver of economic growth. It plays a major catalytic role in developing transport sector in one hand and help industrial sector on the other to grow faster and thereby generate a significant employment opportunities. In India, automobile is one of the largest industries showing impressive growth over the years and has been significantly making increasing contribution to overall industrial development in the country. Automobile industry includes two wheelers, three wheelers, commercial vehicles and passenger vehicles.

### HISTROY OF INDIAN AUTOMOBILE INDUSTRY:

The first automobile in India rolled in 1897 in Bombay. India is being recognized as potential emerging auto market. Foreign players are adding to their investments in Indian automobile industry. Because, in Indian market motorcycles contribute 75% of the segment size. Unlike the USA, the passenger vehicle market is dominated by cars

(79%). Among Automobile industries Tata Motors dominates over 60% of the Indian commercial vehicle market. Further India is the Largest three wheeler market in the world, Second largest two wheeler market in the world Seventh largest passenger car market in Asia & 10th Largest in the world ,Fourth largest tractor market in the world and fifth position in commercial vehicle, bus & truck market in the world. Since it is well proven India it is biggest market in automobile industry as well as biggest competitor among the world automobile manufactures.\

## II. REVIEW OF LITERATURE

1. **Ravichandran, M. & Subramanium (2018)** the main idea behind this study is to assessment of viability, stability and profitability of Force motors limited. Operating position of the company can be measured by using various financial tools such as profitability ratio, solvency ratio, comparative statement & graphs etc. This study finds that company has got enough funds to meet its debts & liabilities. Company can further improve financial performance by reducing the administrative, selling & operating expenses.
2. **Jothi, K. & Geethalakshmi, A. (2017)**, this study tries to evaluate the profitability & financial position of selected companies of Indian automobile industry using statistical tools like, ratio analysis, mean, standard deviation, correlation. The study reveals the positive relationship between profitability, short term and long term capital.
3. **Mathur,Shivam and Aggarwal, Krati (2016)**, the main idea this study is measure operating position of

the company by using various financial tools such as profitability ratio, solvency ratio, comparative statement & graphs etc. This study finds that company has got enough funds to meet its debts & liabilities.

4. **Surekha B. & Krishnalal K.Rama (2015)**, this study reveals the prosperity of Tata motors company. It can be concluded that inner strength of company is remarkable. Company can further improve its profitability by optimum capital gearing, reduction in administration and financial expenses for the growth of company.
5. **Nandhini, M. & Sivasalthi, V.(2015)**, have studied the impact of both financial leverage as well as operating language on the profitability of TVS motor company. The result shows that company suffers from certain weakness & suggested to control fixed cost as well as variable cost to gain adequate profits.
6. **Dharmaraj and Kathirvel (2013)**, the Indian Automobile Industry marked a new journey in the 1991 with the financial revolutionary New Industrial Policy Act 1991, opening automatic route which allowed the 100 per cent Foreign Direct Investment(FDI). Here, an attempt is made to find out the effect of FDI on the financial performance of Indian Automobile Industry. For this purpose, sixteen companies were selected and analysed through various financial ratios. Descriptive statistical tools like Mean, Standard Deviation and Student's paired 't' Test were used to test the hypothesis.
7. **Daniel A. Moses Joshunar (2013)**, the study has been conducted to identify the financial strength and weakness of the Tata motors Ltd. using past 5 year financial statements. Trend analysis & ratio analysis used to comment of financial status of company. Financial performance of company is satisfactory and also suggested to increase the loanlevels of company for the better performance.
8. **Ray Sarbapriya (2012)**, this study tries to evaluate the performance of Indian automobile industry in terms of various financial indicators, sales trend, production trend, export trend etc. for the period of 2003-04 to 2009-10. The result suggests that the automobile industry has been passing through turbulent phases characterized by enhanced debt burden, low utilization of assets, and above all, huge liquidity crunch. The key to success in the industry is to improve labour productivity, labour flexibility, and capital efficiency.
9. **Kale Dinar (2011)**, in this study "Impact of Financial Crisis on The Financial Performance of The Indian Automobile Industry" India a country diverse in culture and religion, strong in will and manpower, large in size and opportunities has become a highly wooed automobile market. On the analyses of the t-Test and Analysis of Variance, it is found that the impact is not significant which proves that though the global economies are impacted by recession, the Indian

Automobile Sector showed resilience and was not affected significantly by the recession.

### III. RESEARCH GAP

The above reviews clearly states that many studies have been done on profitability, financial performance and liquidity analysis of various industries. No attempt has been made to analyze the liquidity and its impact on profitability particularly on selected Automobile Industry in India. So the present study is undertaken to fill the research gap in these areas.

Sample consists of 5 Industry listed in BSE & NSE. The companies were selected on the basis of Total Sales.

#### STATEMENT OF PROBLEM:

Automobile industry is the key driver of any growing economy and plays a pivotal role in country's rapid economic and industrial development. In Indian Automobile industries Tata Motors dominates over 60% of the Indian commercial vehicle market. The remaining automobile industries cover 40% shares in the market.

In this background an attempt has been made to ascertain the determinants of profitability of automobile industry in India by taking a sample of all the automobile firms covering various segments of automobile industry in India. Further the present study is undertaken to fill the research gap in these areas and pertain the answer for the following question.

What about the financial performance and their impact on liquidity and profitability position of selected automobile Industry.

#### OBJECTIVE OF THE STUDY:

To know the financial performance and their impact on liquidity and profitability position of selected automobile Industry.

#### SCOPE OF THE STUDY:

The present study is undertaken to assess the long term liquidity position and its impact on profitability of selected Automobile Industry in India. The study is confined to 5 Industry only.

### IV. RESEARCH METHODOLOGY

The present study is descriptive as well as analytical in nature. The required data were mainly collected in secondary sources. The data relating to the study has been collected from "Capitaline" database which is one of the most reliable and empowered corporate database of BSE. Also various websites like money control.com, journals, magazines, etc were used. The top five automobile Industries were select for this concern those are as follows

Tata Motors Limited

- Mahindra & Mahindra Limited
- Maruti Suzuki India Limited
- Hero Moto Corp Limited
- Bajaj Auto Limited

Measurement of Liquidity and Profitability position of selected Automobile Industry in terms of various financial characteristics embodied in the accounting ratios. Further

data were analysed by using various financial and statistical tools like Ratio analysis, Mean, Standard Deviation, Minimum, Maximum, and Compound Annual Growth Rate.

**PERIOD OF STUDY:**

The present study covers a period of 5 years from 2013-14 to 2017-2018.

**V. ANALYSIS AND INTERPRETATION**

**Tata Motors Limited**

**Table no.1 Profitability Ratio**

YEAR	PBDIT	PBIT	PBT	NET PROFIT	RONW	ROCE	ROA	ATR
2013-14	8.52	2.48	-2.99	0.97	1.74	1.08	0.67	68.94
2014-15	1.77	-5.39	-10.95	-13.05	-38.93	-16.02	-9.48	72.67
2015-16	10.15	4.71	0.36	-0.14	-0.26	-0.16	-0.1	75.59
2016-17	5.84	-1	-5.31	-5.48	-11.48	-6.5	-4.12	75.26
2017-18	8.27	2.99	-1.6	-1.75	-5.13	-2.95	-1.74	99.35
MEAN	6.91	0.758	-4.098	-3.89	-10.812	-4.91	-2.954	78.362
SD	3.259747	4.014159	4.352019	5.67219975	16.52460801	6.860109	4.083525	12.03095
MIN	1.77	-5.39	-10.95	-13.05	-38.93	-16.02	-9.48	68.94
MAX	10.15	4.71	0.36	0.97	1.74	1.08	0.67	99.35
CAGR	-0.00742	0.047864	-0.14471	-0.37575	-0.65952	-0.45753	-0.25471	0.095656

Source: Secondary data

From the above table it can be seen that Tata Motors Limited has the highest Mean value of 78.362, highest value SD of 16.52460801, Minimum value of -38.93 and Maximum value of 99.35 and the highest CAGR value of 0.095656.

**Mahindra & Mahindra Limited**

**Table no.2 Profitability Ratio**

YEAR	PBDIT	PBIT	PBT	NET PROFIT	RONW	ROCE	ROA	ATR
2013-14	13.42	11.29	1078	9.27	22.39	16.68	12.01	129.46
2014-15	12.89	10.39	10.7	8.52	17.25	13.85	10.08	118.21
2015-16	13.38	10.76	10.48	7.83	14.29	12.49	9.02	115.14
2016-17	13.3	9.83	10.72	8.27	13.6	12.01	9.11	110.22
2017-18	14.91	11.87	12.53	8.94	14.37	12.77	9.18	102.67
MEAN	13.58	10.828	224.486	8.566	16.38	13.56	9.88	115.14
SD	0.77282	0.789253	477.1295	0.56278	3.640	1.87016	1.264852	9.927167
MIN	12.89	9.83	10.48	7.83	13.6	12.01	9.02	102.67
MAX	14.91	11.87	1078	9.27	22.39	16.68	12.01	129.46
CAGR	0.026671	0.012603	-0.67165	-0.009021012	-0.104943051	-0.0646	-0.06497	-0.05632

Source: Secondary data

From the above table it can be seen that Mahindra & Mahindra Limited has the highest Mean value of 224.486, highest value SD of 477.1295, Minimum value of 7.83 and Maximum value of 1078 and the highest CAGR value of 0.026671.

**Maruti Suzuki India Limited**

**Table no.3 Profitability Ratio**

YEAR	PBDIT	PBIT	PBT	NET PROFIT	RONW	ROCE	ROA	ATR
2013-14	13.54	8.77	8.37	6.36	13.26	12.39	9.11	143.11
2014-15	15.09	10.15	9.74	7.42	15.65	15	11.06	148.93

2015-16	17.98	13.07	12.93	9.32	17.95	17.35	12.79	137.19
2016-17	18.59	14.77	14.64	10.8	20.17	19.33	14.34	132.74
2017-18	17.68	14.22	13.79	9.68	18.49	17.57	13	134.34
MEAN	16.576	12.196	11.894	8.716	17.104	16.328	12.06	139.262
SD	2.160539	2.617705	2.704945	1.79356628	2.689215499	2.686563	2.01974	6.695765
MIN	13.54	8.77	8.37	6.36	13.26	12.39	9.11	132.74
MAX	18.59	14.77	14.64	10.8	20.17	19.33	14.34	148.93
CAGR	0.068971	0.128431	0.132947	0.110719919	0.086671675	0.091252	0.092965	-0.01569

Source: Secondary data

From the above table it can be seen that Maruti Suzuki India Limited has the highest Mean value of 139.262, highest value SD of 6.695765, Minimum value of 6.36 and Maximum value of 148.93 and the highest CAGR value of 0.132947.

**Hero Moto Corp Limited**

**Table no.4 Profitability Ratio**

YEAR	PBDIT	PBIT	PBT	NET PROFIT	RONW	ROCE	ROA	ATR
2013-14	15.77	11.39	11.34	8.34	37.66	37.16	20.88	250.31
2014-15	14.62	12.66	12.06	8.64	36.47	35.93	22.67	262.17
2015-16	16.91	15.37	15.36	10.95	39.42	37.77	25.38	231.74
2016-17	18.09	16.36	16.34	11.84	33.39	31.85	22.98	193.95
2017-18	18.01	16.29	16.27	11.47	31.41	29.82	22.08	192.54
MEAN	16.68	14.414	14.274	10.248	35.67	34.506	22.798	226.142
SD	1.490101	2.260604	2.394886	1.639106464	3.240702084	3.490635	1.651551	31.933
MIN	14.62	11.39	11.34	8.34	31.41	29.82	20.88	192.54
MAX	18.09	16.36	16.34	11.84	39.42	37.77	25.38	262.17
CAGR	0.033762	0.093577	0.094444	0.082927399	-0.044354311	-0.05353	0.014068	-0.0634

Source: Secondary data

From the above table it can be seen that Hero Moto Corp Limited has the highest Mean value of 226.142, highest value SD of 31.933, Minimum value of 8.34 and Maximum value of 262.17 and the highest CAGR value of 0.094444.

**Bajaj Auto Limited**

**Table no.5 Profitability Ratio**

YEAR	PBDIT	PBIT	PBT	NET PROFIT	RONW	ROCE	ROA	ATR
2013-14	23.88	22.99	22.98	16.09	33.75	32.37	21.99	136.62
2014-15	21.74	20.5	18.9	13.01	26.31	25.38	18.08	138.87
2015-16	25.92	24.56	24.56	17.39	29.62	28.67	23.83	137
2016-17	25.93	24.51	24.51	17.58	22.46	21.74	18.38	104.57
2017-18	24.36	23.11	22.97	16.16	29.29	20.64	17.07	105.64
MEAN	24.366	23.14	22.784	16.046	28.286	27.04	19.87	124.54
SD	1.548749	1.475544	2.063576	1.636564695	3.754722893	4.382801	2.586125	15.89049
MIN	21.74	20.5	18.9	13.01	22.46	21.74	18.08	104.57
MAX	25.93	24.56	24.56	17.58	33.75	32.37	23.83	138.87
CAGR	0.004988	0.001302	-0.00011	0.001085862	-0.034813145	-0.1064	-0.06135	-0.06227

Source: Secondary data

From the above table it can be seen that Bajaj Auto Limited has the highest Mean value of 124.54, highest value SD of 15.89049, Minimum value of 13.01 and Maximum value of 138.87 and the highest CAGR value of 0.004988.

**FINDINGS:** The findings of the present study are as follows:

## PROFITABILITY:

- Bajaj Auto Limited has the highest Net Profit of 17.58.
- Hero Moto Corp Limited has the highest ROCE of 37.77.
- Hero Moto Corp Limited has the highest ROA of 25.38.

It is found that Hero Moto Corp Limited is more profitable when compare to other Companies.

## VI. CONCLUSION

Financial Performance helps in identifying the strengths and weakness of the firm and also helps in forecasting the short term and long term goals. The liquidity position of Industries is found to have good profitability position during the years. Attention has to be made on liquidity position of the Industries so as to increase its profitability position. Thus liquidity has an impact over the profitability position. Hence it is advisable for any Industries to maintain its rule of thumb so as to avoid any hard circumstances. It is also suggested to have trade off between liquidity and profitability because it is the outcome of composition of not only the current assets but funds invested in obtaining current assets too.

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