

A Profitability Study of Automobile Sector – An Application of Return on Capital Employed for Listed Companies of India

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Abstract: This research is carried out to examine the financial structure in terms of profit. Ten leading automobile companies are examined for their performance on bases of return on capital employed of the firms.

Objective: To evaluate financial performance analysis of selected automobile companies in India in terms of different ratios. It assumed that there is no significant difference in profitability and efficiency ratio of the selected automobile companies during the period the study.

Time Taken for Study: Normally it is not possible for the researcher to study the financial performance of automobile companies in India for longer period because there is constrain of the time, money and efforts. So the present study is done for seven years of period because of convenience for proper data collection and analysis for the period of seven years for the study. The present study is made for a period of seven accounting years from 2013-2014 to 2019-20.

Parameters of the Study: Profitability Ratios – Return on Capital Employed

Tools Used For Study: Descriptive Statistics and Analysis of Variance

KEY WORDS: Automobile, Financial Ratios, Return on Capital Employed, ANOVA

1. INTRODUCTION

In Indian economy, the Indian automobile industry has arisen as a 'dawn area'. India is arising as one of the world's quickest developing traveler vehicle markets and second biggest bike maker. India is the biggest base to trade minimal vehicles to Europe. On the auto material, half and half and electronic vehicles are new turns of events and India is one of key business sectors for them. Worldwide and Indian producer are centering their endeavors to foster imaginative items, advances and store network. Automobile industry, the matter of creating and selling self-fueled vehicles, including traveler vehicles, trucks, ranch hardware and other business vehicles. By permitting buyers to drive significant distances for work, shopping and diversion, the vehicle business has empowered the improvement of a broad street framework, made conceivable the development of rural areas and retail outlets around significant urban communities, and assumed a vital part in the development of the auxiliary ventures like the oil and travel organizations.

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The word 'Automobile' comes through the French Automobile from the old Greek word (auto's, 'self') and Latin versatile ('Movable') implies a vehicle that moves itself, as opposed to being pulled or moved by an isolated creature or another vehicle. By definition, an auto or vehicle is a wheeled vehicle that conveys its own engine and transport travelers, as we probably are aware the car was not created in a solitary day or by single creator.

For the majority of the historical backdrop of car, a vehicle was relied upon to do minimal more than make a trip from spot to somewhere else with a few level of unwavering quality and economy. Vehicles were relied upon to go minimal quicker, ride all the more serenely and keep going to the point of making the speculation beneficial on account of streets and innovation improved and more individuals started to utilize them. Any new vehicle could do these things well by mid 1930s, and even as innovation progressed throughout the following 40 years, what the world expected of a vehicle remained fundamentally something similar. There was sped up, comfort and dependability consistently, yet for more than 60 to 70 years, a vehicle was relied upon to do just move individuals and their stuff. After than Government engaged in auto plan. State government began requiring specific things, for example, security glass, electric light and excess choke return springs on the grounds that the innovation became useful. Government Motor Vehicle Safety Standard was made in 1966 in US. The mission of the auto started changing because of Environment Protection Agency in 1973. Vehicles were in the long run expected to safeguard inhabitants in crash, hold all unburned fuel fumes, convert the result of ignition into less unsafe gases and report their breakdown rather than simply conveying individuals and their stuff rapidly, serenely and dependably. Society of auto Engineers set many sorts of securities and execution necessities which the vehicle organizations should meet these prerequisites. The actually a for buyer auto has additionally gone light a long time past solid, conservative transportation as though new specialized plan guidelines weren't sufficient. The 'auto style' alluded to a scope of monetary vehicles at one range and extravagance vehicles at different, has now incorporate a many various sorts of autos.

The present car architects and designing aren't anything not exactly legends. They should make a vehicle that meets more wellbeing and discharges guidelines and ridiculously inventive market requests which were undreamed of an age prior. Continuously they need to sort out some way to deliver these kind of machines at a particular expense on the grounds that the selling cost is essentially set before the plan work isn't yet started. Presently a day, auto organizations have significant piece on the lookout. An organization record, Ford sold 7.2 million vehicles worldwide in 1999. Passage additionally record for the total compensation \$ 7.2 billion and EPS \$5.86 while the complete expense diminished by \$1 billion. General Motors recorded procuring \$8.53 per share in 1999 which was twofold the \$4.32 per share acquired in 1998. Its incomes bounced 14%, working expense decreased by \$3.7 billion and its net revenue multiplied to 3.2%. Daimler Chrysler announced a total compensation of \$5.8 billion out of 1998, a 19% increase north of 1998. Overall deals were up and working benefit has expanded 28%. In 1993 absolute automobile industry creation arrived at 42 trillion yet which was 13.4% of the complete for all makers. The absolute number of people utilized straightforwardly and in a roundabout way is 7.2 million. Nissan Motor Co. Ltd. is building a \$930 million vehicle fabricating plant in Canton that will cover 2.6 million square feet and produce around 25,000 units every year.

A regular pickup truck, a standard game utility vehicle and a recently planned minivan will be created at this office. This creation has expressed to start in mid-2003. At first the plant will utilize around 3,300 specialists. All through twentieth century, the vehicle reconfirmed and refreshed its status as a victory of designing through persistent improvement and uneasy use of new innovation. The vehicle business is frequently viewed as the fundamental motor of modern development of the twentieth century. Its impacts on metropolitan life and the climate are obvious all over. The business is a complex and steadily changing

process for assembling, sub-project worker and unions. The change from make creation to large scale manufacturing, proclaimed a blast of assembling limit which has had an unavoidable impact of human action in this century. New mechanical improvement like the utilization of energy components as a power source will without a doubt keep the vehicle on the main edge of innovation in the 21st century. Automakers should offer highlights, for example, various air packs, driver data framework, solace controls, etc. to stay serious. Union of worldwide vehicle industry is pushing ahead at the amazing speed.

2. RETURN ON CAPITAL EMPLOYED (ROCE)

This proportion is otherwise called profit from speculation. To acquire a profit from capital is the essential point of a business undertaking. Overall term, capital utilized is utilized to show the complete interest in the firm while with respect to specialized term, the expression "capital utilized" is utilized to depict more than one importance. It could be depicted as gross capital utilized, net capital utilized and owner's net capital utilized. Gross capital utilized is the all out of fixed resources and current resources while net capital utilized is equivalent to the all out of fixed resources and current resources as diminished by current liabilities. Owner's capital utilized is determined by adding all possessed capital whether it is value or inclination and every single gathered save and benefit. Capital utilized is the instrument of estimating the productivity of the inspected units.

$$\text{Return on Capital Employed (ROCE)} = \frac{\text{Earnings after Tax}}{\text{Capital Employed}} \times 100$$

Table 2.1 Return on Capital Employed of Selected Automobile Companies for 2013-14 to 2019-20

	Maruti Suzuki Ltd.	Tata Motors	M & M Ltd.	Ashok Leyland	Bajaj Auto	Atul Auto	TVS Motor	Force Motor	Hero MotoCorp	Eicher Motor Ltd.
2013-14	12.39	2.75	16.68	0.35	32.37	29.54	12.85	6.08	37.16	43.93
2014-15	15	-16.02	13.85	4.04	25.38	32	14.73	7.35	35.93	0
2015-16	17.35	5.31	12.49	4.94	28.67	29.61	18.55	11.37	37.77	54.04
2016-17	26.42	-1.19	14.28	16.05	30.32	29.73	18.27	14.1	44	56.17
2017-18	25.83	5.04	16.95	30.07	29.5	31.06	19.48	11.26	42.35	52.91
2018-19	21.6	11.57	16.86	27.81	28.28	31.37	24.06	9.58	37.15	42.05
2019-20	14.04	-7.18	13.26	6.67	32.08	22.13	18.32	5.31	26.52	28
Avg	18.95	0.04	14.91	12.85	29.51	29.35	18.04	9.29	37.27	39.59
SD	5.71	9.17	1.88	12.01	2.41	3.33	3.57	3.20	5.61	19.95
CV	30.12	22927.03	12.61	93.47	8.15	11.34	19.81	34.41	15.05	50.39

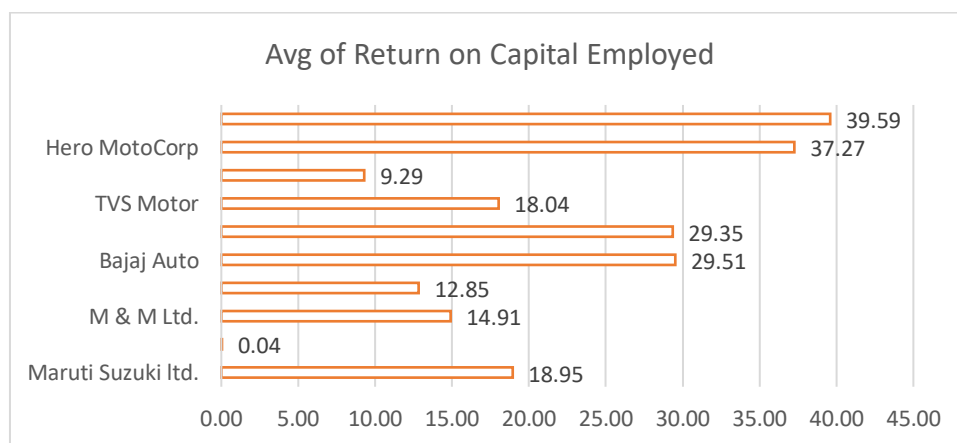


Figure 2.1 Return of Capital Employed of Automobile Companies

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The ROCE upsides of Maruti Suzuki for monetary year 2013-14 was determined 12.59%. The net benefit of firm was reliable. Goodbye Motors has ROCE of 2.75%, contrast with Maruti Suzuki Ltd the presentation of Tata Motors was poor in acquiring of benefit. Mahindra and Mahindra Ltd has acquired in net benefit. The firm has ROCE of 16.68%, which was higher than Maruti Suzuki Ltd. Ashok Leyland has ROCE of 0.35%, the firm shown lower worth of net benefit. Bajaj Auto has most noteworthy worth in look at of all talked about five qualities. The ROCE worth of Bajaj Auto was determined 30.37%. The firm stands third amide all organizations for monetary year 2013-14. Atul Auto has ROCE of 29.54%, the firm has stand on fourth situation in the midst of all organizations during monetary year 2013-14. Televisions Motor was determined ROCE of 12.85%, the firm has practically equivalent worth of ROCE as Maruti Suzuki Ltd. Force Motor has 6.08% of ROCE. Legend Moto Corp positioned second, the ROCE 37.16% was determined during the current year. Eicher Motor Ltd positioned first in the midst of all organizations. The ROCE esteem 43.93% was determined for monetary year 2013-14.

The ROCE worth of Maruti Suzuki Ltd was expanded during 2014-15 from 12.39% to 15%. It shown that the firm has getting progress in net benefit acquiring. Goodbye Motors has declined by this year. The firm has negative worth of ROCE. It shown incredible disappointment of ROCE of the firm. Mahindra and Mahindra has neglected to oversee ROCE. It has declined for this present year by 2.83% Ashok Leyland has expanded its ROCE by 4.69% this year. Bajaj Auto has declined by 6.99% than a year ago. Atul Auto has acquired 2.46% than a year ago. Televisions Motors has expanded ROCE esteem than a year ago. It has acquired by 1.88% this year. Force engine additionally expanded its net benefit therefore the ROCE worth of the edge likewise expanded. The firm has acquired ROCE of 1.27% than monetary year 2013-14. Legend Moto Corp declined by 1.23% of ROCE than a year ago. It has stood second in the midst of auto organizations for the year 2014-15. Eicher Motor Ltd has 47.12% of ROCE than the year before. The firm positioned first in completely analyzed vehicle organizations. The firm has acquired 3.09% of ROCE than the year before.

For monetary year 2015-16, Maruti Suzuki Ltd has expanded ROCE. The firm has acquired 2.35% in ROCE than a year ago. Goodbye engines got progress in overseeing ROCE, this year the ROCE was determined 5.31% for firm. Mahindra and Mahindra has declined in ROCE esteem. The firm has decreased 1.36% in ROCE. Ashok Leyland has acquired in ROCE of 0.9% than the year before. Bajaj Auto has likewise acquired by 2.39% in ROCE. Televisions Motors has acquired 3.82% this year. Force Motors has getting progress in ROCE of 4.02% during monetary year 2015-16. Legend Moto Corp has a little addition of 1.84% in ROCE. Eicher Motor Ltd has an addition of 6.92% of ROCE. The firm has acquired most noteworthy of ROCE this year. Besides, again the firm positioned first in the midst of auto area in ascertaining most elevated ROCE.

Maruti Suzuki Ltd came to 26.42% of ROCE during 2016-17. It shows that the firm has acquired in this year. The firm has acquired 9.07% in ROCE. Goodbye Motors again declined and counted with negative worth of ROCE of - 1.19%. It shown disappointment of firm n overseeing net benefit and deals than the year before. Mahindra and Mahindra has expanded by 1.79%. The last year ROCE hole shown that the firm was neglected to deal with the proportion. Ashok Leyland has reached to a progress of 11.1% in ROCE this year. Bajaj Auto has expanded by 1.65% of ROE than the year before. Atul Auto has a little climb of 0.12% in ROCE than the year before. Televisions Motors again neglected to oversee ROCE this year. For most recent two years the firm was inability to oversee deals and benefit. Force Motors has acquired by 2.73% in ROCE. Legend Moto Corp got expanded worth of 6.23% of ROCE. Eicher Motor Ltd additionally acquired its worth of ROCE. This year the actual firm crushed in ROCE. The hole of last year was higher than this year contrast. The firm again driven all vehicle organizations in ROCE for monetary year 2016.- 17.

For monetary year 2017-18, Maruti Suzuki Ltd, Bajaj Auto, Force Motors, Hero Moto Corp and Eicher Motor Ltd has neglected to oversee ROCE. This year Maruti Suzuki has fizzled by 0.59%, Bajaj Auto has decreased by 0.82%, Force Motor diminished by 2.84%, Hero Moto Corp declined by 1.65% and Eicher Motor Ltd has fizzled by 3.26% in ROCE. Eicher stood firs with most elevated worth of ROCE, yet as far as procuring the firm has fizzled and has a most elevated misfortune in ROCE than a year ago. The firm has bombed in

overseeing deals and net benefit for most recent three years. Goodbye Motors has kept with higher vacillation in ROCE values. The firm has included with elective qualities in ROCE. This year the firm has getting progress in ROCE esteem. Mahindra and Mahindra Ltd, after 2015-16 has getting progress in adjusting ROCE. Ashok Leyland has acquired higher worth of 14.02% in ROCC. Atul Auto acquired tad of 1.33% in ROCE esteem. Televisions Motors has acquired by 1.21% in ROCE. Monetary year 2017-18 has shown fifty-fifty effect for car area in India. The car area has been created all out dubious outcomes. Those organizations who were acquired in most recent couple of years had acquired and disappointments were reached to top.

Monetary year 2018-19 was a pound year for auto area. Out of ten organizations, seven were bombed in overseeing ROCE. Maruti Suzuki Ltd, Mahindra and Mahindra, Ashok Leyland, Bajaj Auto, Force Motors, Hero Moto Corp and Eicher Motor Ltd were neglected to oversee ROCE during monetary year 2018-19. Maruti Suzuki Ltd has declined by 4.23%, Mahindra and Mahindra Ltd fizzled by 0.09%, Ashok Leyland declined by 2.26%, Bajaj Auto fizzled with 0.12%, Force Motors has declined by 1.68%, Hero Moto Corp decreased by 5.2% and Eicher Motor Ltd has diminished by 9.86% during this year. Eicher Motors has confronted a major misfortune in ROCE than different organizations, still the firm stood first among all organizations for higher ROCE. Goodbye Motors, Atul Auto and TVS Motors acquired in ROCE. Goodbye Motors has acquired 6.53%, Atul Auto has expanded by 0.31% and TVS Motors has acquired by 4.58% in monetary year 2018-19.

Monetary year 2018-19 was a not much productive to the car area in India. The investigation of most recent six years shown that 70% of the organizations of area were disappointment in dealing with their benefit and deals. The net benefit decreased in think about of last year fiscal summary. Just three firms have a little addition in worth of ROCE. The organizations even were temperamental in acquiring of ROCE.

Monetary year 2019-20 was more essential than 2018-19. During this year just Bajaj Auto has getting outcome in expanding of ROCE esteem. The firm has acquired by 3.8% in ROCE in analyze of a year ago. Any remaining nine organizations were getting extraordinary ruin in ROCE esteem. This year the Covid-19 pandemic assumes significant part. Consequently, larger part of organizations was disappointment in overseeing of ROCE. Maruti Suzuki Ltd declined ROCE for most recent three years. Goodbye Motors again has an extraordinary misfortune in ROCE. The worth was viewed as negative. Mahindra and Mahindra declined ROCE for most recent three years. The firm has decreased by 3.6% than the year before. Ashok Leyland did an incredible misfortune in ROCE this year. The firm has decreased 21.14%. In the midst of history of Ashok Leyland, the firm has confronted higher misfortune in ROCE. Atul Auto has declined with 9.24% in ROCE. Televisions Motors has diminished worth of 5.74% in ROCE. Force Motor has declined by 4.27% this year. Legend Moto Corp declined with 10.63% of ROCE. Eicher Motor Ltd has again confronted an incredible misfortune. The firm reliably diminished ROCE esteem from 2016-17. This year, the firm has felled by 14.05% in ROCE. On a normal monetary year 2019-20 was a disappointment year for vehicle area. Complete 90% firms were getting disappointment in overseeing of ROCE.

Table 4.7 addresses the capital utilized proportion, normal capital work proportion and CV worth of chosen car organizations for the period under study. The most elevated capital utilized proportion was 56.17 percent for Eicher Motors in 2016-17 and least capital utilized proportion was (-) 16.02 percent for Tata Motors in 2014-15 among the chose units during the time of the review. The most noteworthy normal capital utilized proportion was 39.59 percent for Eicher Motors and least normal capital utilized was (-) 0.04 for Tata Motors during the review time frame. The most noteworthy CV worth of capital utilized proportion was 22927.0 percent for Tata engines and followed by Ashok Leyland 93.45 percent, Eicher Motors 50.39 percent, Force Motors 34.42 percent and least CV worth of capital utilized was 8.15 percent for Bajaj Auto. Along these lines, it uncovers that the profit from capital utilized of Bajaj Auto and Mahindra and Mahindra Ltd. was remained consistence during the period student.

To look at the inferential aspects of the organizations the factual theory is expressed as follows:

H0: There is no importance contrast between ROCE during monetary years 2013-14 to 2019-20.

H1: There is an importance contrast between ROCE during monetary years 2013-14 to 2019-20.

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Table 2.2 is presented for Analysis of Variance for ROCE as follows.

ANOVA						
Source of Variation	SS	df	MS	F	Pvalue	F crit
Variation in Companies	10116.48	9	1124.05	15.32	1.37E-12	2.04
Within Groups	4401.96	60	73.37			
Total	14518.45	69				

The measurable speculation is utilized to inspect the fluctuation among the progressions in upsides of ROCE of the vehicle organizations in India. The consequences of F test in view of amount of square and mean amount of square is determined as 15.32 (Fcal), which is higher than the importance esteem basic worth (Fcrit). It is seen that $F_{cal} > F_{crit}$ ($15.32 > 2.04$). Higher the worth of determined rejects the invalid theory. Hence, it is reasoned that there is an importance contrast between ROCE during monetary years 2013-14 to 2019-20 among generally chose vehicle organizations.

REFERENCES:

- Agarwal., S. M. (2016). Financial analysis of automobile industries(A comparative study of TATA Motors & Maruti Suzuki). International journal of applied research., 2(9), 533-539.
- Atkotiya, K. N. (2005). Analysis of Financial Performance of Tea industry in India. Retrieved from <http://ethesis.saurashtrauniversity.edu/id/eprint/203>
- Bhatia., S. k. (2014). Financial performance of Indian Automobile companies after liberalization, a comparative study of Maruti suzuki and TATA motors. International journal of advances research in management and social science., 3(9), 186-195.
- Chauhan., D. U. (2018). Financial performance of selected automobile companies. International journal of research in finance and marketing., 8(8), 51-58.
- Dr.Ujjwal M. Mishra, M. C. (2018, August). Financial Performance of Selected Automobile Companies. International Journal of Reserch in Finance and Marketing (IJRFM), 8(8), 51-58.
- Gayathri, D. &. (2016, January). Study on Liquidity of Sail and Tisco- A comparative study . International Journal of Scientific Research , 5(1), 153-157.
- Hiren., S. (2016). Financial performance analysis of Indian companies belongs to automobile industry with special reference of liquidity & leverage. International journal of multidisciplinary and current research., 4, 39-51.
- Jindal, S. (2018). Financial performance of the Banking sector in India: A case study of Punjab National Bank .
- Kumar, Y. (2017, January-june). A comparative study of working capital management in steel authority of India Limited and Tata Steel Limited. International Journal of Trad & Commerce-IIARTC, 6(1), 181-193.
- Lakshmi., P. (2020). An analysis of Indian Automobile industry slowdown as an opportunity for development. International journal of research in commerce, IT and management., 10(2), 8-13.
- M., Z. T. (2012). A comparative evaluation of financial performance and market value of Maruti & TATA company. Bookman International journal of accounts, economics and business management., 1(1), 7-16.
- Madhavi., D. (2013). Analytical study of four automobile sector companies in price movement of shares. International journal of application or innovation in engineering and management., 2(6), 131-141.