



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

A Study Of Profitability Analysis With Reference To Selected Automobile Industry India

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Abstract:

One of the most important functional areas of management is financial performance since a company's ability to operate effectively is heavily reliant on how well its financial resources are used. Since retained earnings provide a significant percentage of the investment money needed to maintain an ongoing business, an enterprise's potential for expansion is also influenced by its financial performance. The last ten years have seen a significant increase in the significance of financial management because of persistent inflation. The manufacturing, power and energy, service, and retail sectors' financial activities have all been significantly impacted. The retail industry's cost of capital has increased due to high interest rates. The retail industry's cost of capital has increased due to high interest rates. It has also resulted in a rise in the amount of money required to run retail operations. The sector's current working capital needs and financial expenditures for expansion, modernization, and replacement have significantly increased. As a result, the challenge of generating more funds falls on financial managers. The government strategy of limiting the amount of loanable cash has made their task more challenging. For finance managers in the retail industry, their responsibilities are more demanding, crucial, and complicated all at once.

Key Words: Profitability, net profit, operating profit, Financial Performance.

Introduction:

Making money is one of a company's main goals when it first starts out. Essentially, the goal of any business owner is to make more money for their enterprise than they spend. It follows that a thorough analysis of profit is crucial to evaluating the expansion of your company, and this much is certain. On the other hand, the true picture of your company's profitability will come from the subtleties that are hidden beneath different financial statistics.

You may monitor the operation of your business by analysing the profits, which are essentially the funds left over from the capital after all overhead has been deducted. Through profitability analysis, businesses can increase their profits. Consequently, this leads to the optimization of company prospects for sustained growth in a highly dynamic, competitive, and energetic market. Profitability analysis gives decision-

makers a clearer view of the company by assisting businesses in identifying growth prospects, fast- or slow-moving stock items, market trends, etc.

Profitability ratio analysis

Profitability ratios are used by analysts and investors to assess a company's capacity to turn a profit in relation to revenue, operational costs, balance sheet assets, and shareholders' equity during a given time period. They demonstrate how well a business makes use of its resources to generate revenue and add value for investors.

A greater ratio indicates that the business is productive and producing adequate cash flow, profit, and revenue. When comparing your company's current financial situation to that of your competitors in the market or even to earlier periods, this ratio analysis is useful.

Objectives:

- To be aware of the financial results and how they affect the liquidity and profitability of a particular automotive industry
- To analyse and assess a certain automotive industry's financial standing.
- To evaluate the entire working capital management of a particular car industry.

Research Methodology:

Since research is a scholarly endeavour, the word should only be used in a technical meaning. Clifford Woody states that conducting research entails defining and redefining problems, formulating hypotheses or potential solutions, gathering, organizing, and analysing data, drawing conclusions, and deducing implications, and finally carefully testing the conclusions to see if they support the original hypothesis. "The manipulation of things, concepts, or symbols for the purpose of generalizing to extend, correct, or verify knowledge, whether that knowledge aids in the construction of theory or in the practice of an art," is how D. Steiner and M. Stephenson define research in the Encyclopaedia of Social Sciences.

In actuality, it's a journey of discovery. We all have the essential curiosity instinct because, when faced with the unfamiliar, we all wonder. Our curiosity leads us to investigate and gain a deeper and deeper grasp of the unknown. This natural curiosity is the source of all knowledge, and the process by which humans attempt to learn about the unknown is known as study.

Since it is an empirical study, the researcher designed the investigation's research methodology using a scientific approach. The researcher is using secondary data, such as material from websites, annual reports, and other publications, for this study. The study has categorized the following tools and techniques. (A) Accounting Techniques

Statistical Techniques.

- The present study is descriptive as well as analytical in nature. The required data were mainly collected in secondary sources.
- The data is collected from various websites
- The top five automobile Industries were select for this concern those are as follows: -
 - o Tata Motors Limited
 - o Mahindra & Mahindra Limited
 - o Force Motors Limited

- o Maruti Suzuki India
- o Ashok Layland.

RATIO ANALYSIS

A ratio is the process of determining and presenting the relationship of items and groups of items in the financial statements.

1. PROFITABILITY RATIO

The profitability ratio measured as the ability to achieve maximum profit from the optimal use of resources by a business concern is called profitability.

➤ GROSS PROFIT RATIO

This ratio is also known as Gross Margin or Trading Margin Ratio. Gross profit ratio includes the difference between sales and direct costs.

$$\text{Gross Profit} = (\text{Gross profit} / \text{Net sales}) * 100$$

➤ NET PROFIT RATIO

It measures the effectiveness of management in successful business management owner's view. The higher the ratio, the better the operational efficiency of the business concern.

$$\text{Net Profit} = (\text{Net Profit After} / \text{Tax Not Sales}) * 100$$

RETURN ON CAPITAL OR RETURN OF NET VALUE

This ratio means the return on equity funds of shareholder. The profit went beyond the calculation of the ratio is carried out after the payment of the preferential dividend

$$\text{Return on equity} = (\text{net profit after interest \& taxes} / \text{shareholders' funds}) * 100$$

2. ACTIVITY RATIO OR TURNOVER RATIO:

Activity ratios highlight the operational efficiency of a business. The term operational efficiency refers to the efficient, profitable, and rational use of available resources concern.

➤ WORKING CAPITAL TURNOVER RATIO

The working capital ratio measures the effective use of working capital. It also measures the smooth running of the business. The ratio determines the relationship between cost of sales and working capital.

$$\text{Working Capital Turnover} = (\text{Sales} / \text{Net Working Capital})$$

➤ CAPITAL TURNOVER RATIO

Managerial efficiency is also calculated by determining the relationship between cost of sales or sales with the amount of capital invested in the business.

$$\text{Capital turnover ratio} = (\text{sales} / \text{capital employed})$$

➤ FIXED ASSETS TURNOVER

This ratio determines the efficiency of the use of fixed assets and the profitability of the company concern.

$$\text{Fixed asset turnover ratio} = (\text{sales} / \text{net fixed assets})$$

3. SOLVENCY OR FINANCIAL RATIOS

Solvency or financial indicators include all indicators that express the financial position of the concern. The term financial position generally refers to the short-term and long-term solvency of a business concern, including the security of various stakeholders.

➤ CURRENT RATIO

To measure the short-term liquidity or solvency of the concern, comparisons of common assets and current liabilities is inevitable. The current ratio indicates the ability of concern meet its current obligations when they fall due.

$$\text{Current ratio} = (\text{current assets} / \text{current liabilities})$$

➤ EQUITY DEBT RATIO

The equity ratio is intended to determine the reliability of the company's long-term financial policies, as well as to measure the supply of foreign funds and shareholders' investments in the company.

$$\text{Debt to Equity Ratio} = (\text{Total Long-Term Debt} / \text{Shareholder's Funds})$$

➤ DEBT TO TOTAL FUNDS RATIO

This ratio gives the same indication as the debt ratio because it is a variation of the debt ratio. This ratio is the relationship between long-term debt and total long-term assets.

$$\text{Debt to total funds ratio} = (\text{long-term debt} / \text{total funds})$$

➤ EQUITY TO TOTAL FUNDS

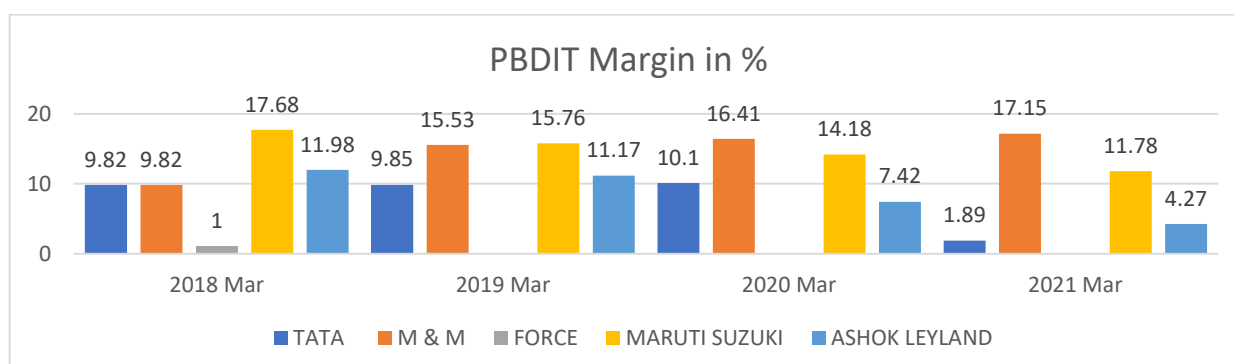
Equity to total funds explains the relationship between equity and total funds.

$$\text{Equity to Total Funds} = (\text{Equity} / \text{Total Funds})$$

Data Analysis & Interpretation

PBDIT Margin

	2018	2019	2020	2021	2022
Tata M.	8.27	10.82	1.66	6.21	4.56
M & M	14.91	15.53	16.41	17.15	15.87
Force M.	9.82	9.85	10.1	1.89	3.66
Maruti S	17.68	15.76	14.18	11.78	8.48
Ashok L	11.98	11.17	7.42	4.27	4.93



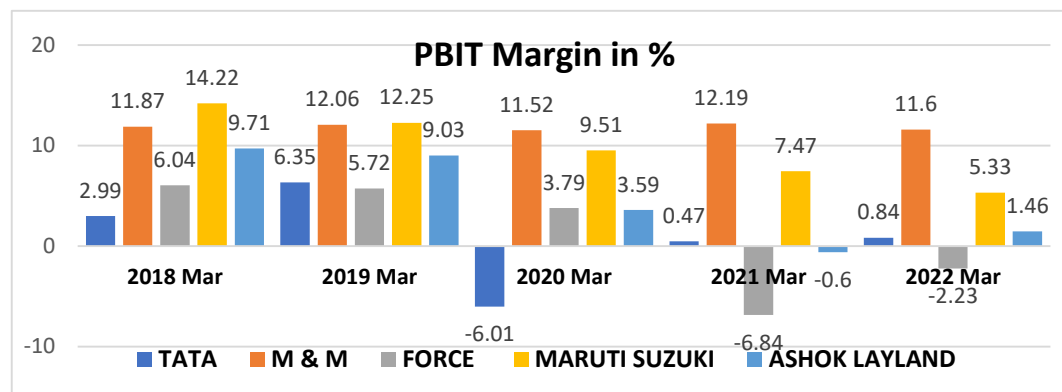
Interpretation:

The PBDIT margin comparison of the last five years' auto businesses is displayed in the above graph. When compared to other companies, Maruti & Mahindra has the highest PBDIT margin from 2018 to 22. Force, on the other hand, has the lowest PBDIT margin for the entire period (from 18-22).

Findings:

Mahindra & Mahindra's performance is strong due to their PBDIT margin, which is rising annually.

- The largest PBDIT margin was recorded by Maruti Suzuki in 2018.
- When comparing Mahindra and Maruti to Tata Motors, Ashok Layland, and Force, the PBDIT margin is lower.



Suggestion:

- Force Motors should pay close attention to their PBDIT margin ratio as their PBDIT margin is extremely low from 2018 to 2022.
- Although the margin ratios of TATA, Maruti Suzuki, and Ashok Layland are good, they should strive to increase their PBDIT margin ratio as the numbers are trending downward.

PBDIT Margin:

PBDIT referring to 'profit before interest and tax.'

PBDIT measures an enterprise's profitability by subtracting operating expenses from profit, while excluding tax and interest costs. PBDIT is commonly used by creditors to screen companies with minimal depreciation and amortisation activities. They use PBDIT because it represents the amount of money companies can earn to pay off creditors.

$$\text{PBDIT} = \text{Net profit} + \text{interest} + \text{taxes}$$

	2018	2019	2020	2021	2022
Tata M.	2.99	6.35	-6.01	0.47	0.84
M & M	11.87	12.06	11.52	12.19	11.6
Force M.	6.04	5.72	3.79	-6.84	-2.23
Maruti S	14.22	12.25	9.51	7.47	5.33
Ashok L	9.71	9.03	3.59	-0.6	1.46

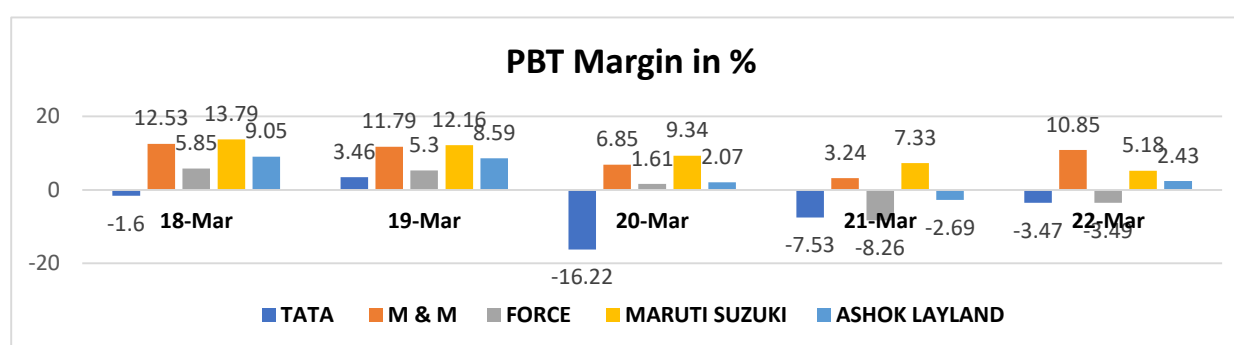
Interpretation:

The graph above compares the PBIT margins of the top five automakers over the past five years. Maruti Suzuki has the greatest PBIT margin in 2018 and it has been declining year over year. & Tata has a negative PBIT margin (-6.01) in 2020. For two years, Force has a negative margin as well. (2021–2022).

	2018	2019	2020	2021	2022
Tata M.	-1.6	3.46	-16.22	-7.53	-3.47
M & M	12.53	11.79	6.85	3.24	10.85
Force M.	5.85	5.3	1.61	-8.26	-3.49
Maruti S	13.79	12.16	9.34	7.33	5.18
Ashok L	9.05	8.59	2.07	-2.69	2.43

Findings:

- From 2020 to 2022, TATA & Force Motors' PBIT margin is negative.
- Maruti Suzuki & Mahindra has a healthy PBIT margin, but its situation is getting worse.



Suggestion:

- Although Suzuki's margin ratio is good, the company should strive to increase its PBIT margin ratio as the numbers are trending downward.
- Tata Motors, Force, and Ashok Layland need to concentrate and work to turn their negative numbers in 2020, 21st, and 22nd into positive ones.

PBT Margin

The measurement of a company's profit before to the payment of corporate income tax is called profit before tax, or PBT. It is mentioned on the company's income statement. The main goal was for the business owners to calculate the actual profit margin of the organization without accounting for different tax rates and structures.

$$\text{PBT} = \text{Revenue} - (\text{Cost of Goods Sold} - \text{Depreciation Expense} - \text{Operating Expense} - \text{Interest Expense})$$

Interpretation:

The PBT margin comparison of the last five years' auto businesses are displayed in the above graph. While Tata has a consistently negative PBT margin from 2020 to 22 and Force & Ashok Layland has a negative PBT margin for two years, Mahindra & Maruti Suzuki have positive PBT margins for the last five years. (21-22)

Findings:

- From 2020 to 2022, Ashok Layland, TATA, and Force Motors had negative PBT margins.
- For the past five years, Mahindra & Maruti Suzuki have had a positive PBT margin.

Suggestion:

Why Tata Motors' PBT margin ratio should be improved because it was negative from 2020 to 2022, which is not healthy for them. Force motors are in the same state as well.

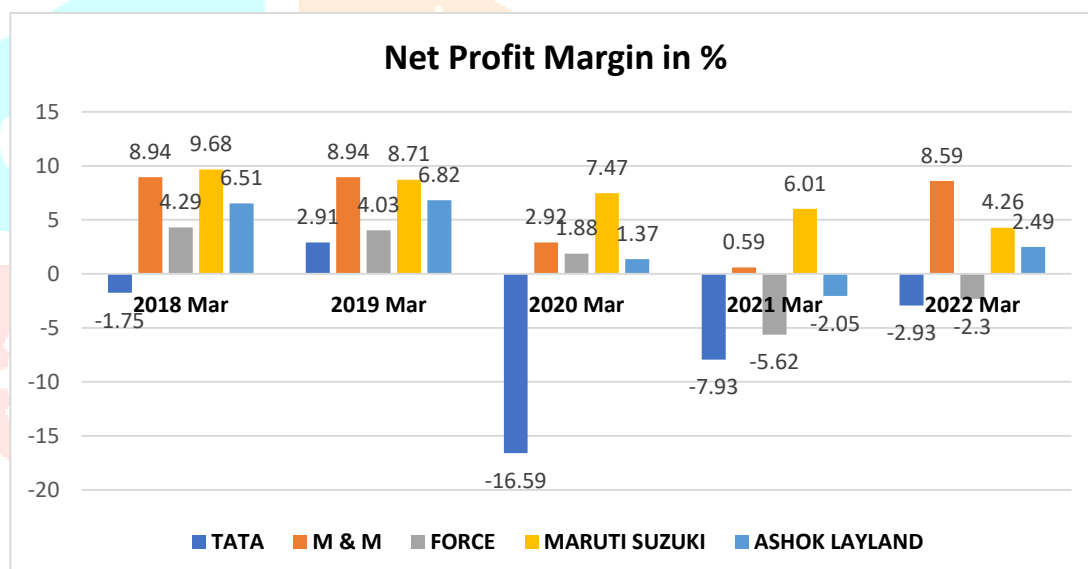
- Although Maruti Suzuki & Mahindra has a decent margin ratio, its PBT margin ratio needs to be improved as the numbers are trending downward.

Net Profit Margin:

The net profit margin, or simply net margin, measures how much net income or profit is generated as a percentage of revenue. It is the ratio of net profits to revenues for a company or business segment.

$$\text{Net Profit margin} = \text{Net Profit} / \text{Total revenue} \times 100$$

	2018	2019	2020	2021	2022
Tata M.	-1.75	2.91	-16.59	-7.93	-2.94
M & M	8.94	8.94	2.92	0.59	8.59
Force M.	4.29	4.03	1.88	-5.62	-2.3
Maruti S	9.68	8.71	7.47	6.01	4.26
Ashok L	6.51	6.82	1.37	-2.05	2.49



Interpretation:

The graph above compares the net profit margins of the top five automakers over the previous five years. From years 18 to 22, Maruti Suzuki has the greatest profit margin ratio. (continuously rising), and Mahindra likewise has all positive margin data. Tata's net profit margin is positive in 2019 and negative in the following years.

Findings:

- TATA Motors' net profit margin was negative in 2018, 20, 21, and 22. 2019 is the only year with positive fig.
- Ashok Layland, Maruti, and Mahindra have strong net profit margins. However, Ashok Layland's net profit margin is negative in 2021.

Suggestion:

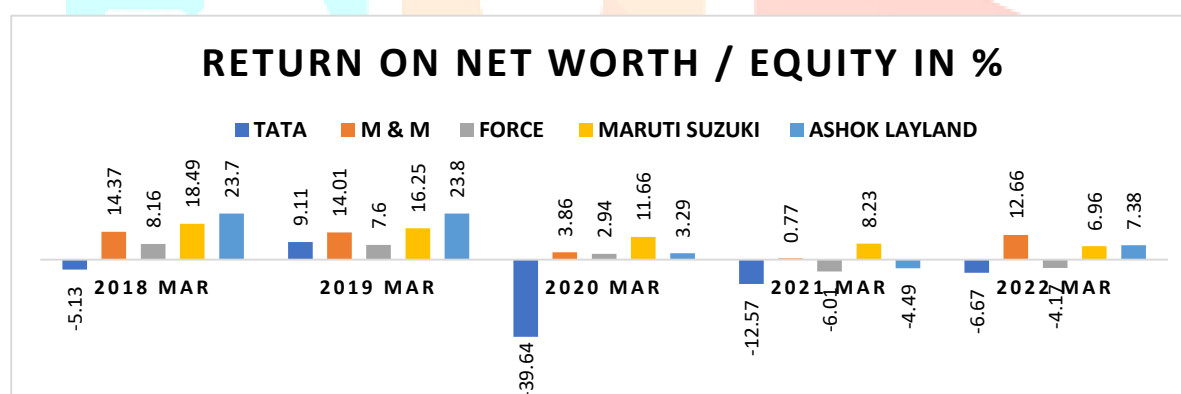
- In 2018, 2020, 21 & 22 Tata Motors' net profit margin was quite low. It's not good for their growth (continuously declining), therefore concentrate on it and work to increase Net Profit margin for the upcoming year.
- Although Mahindra Suzuki & Co. has a decent margin ratio, its net profit margin ratio needs to be improved as well, as the numbers are trending downward.

Return on Net worth / Equity

The financial performance metric known as return on equity (ROE) is computed by dividing net income by shareholders' equity. ROE is referred to as the return on net assets since shareholders' equity is calculated by deducting debt from assets.

Return on Equity= Net Income/ Average Shareholders' Equity

	2018	2019	2020	2021	2022
Tata M.	-5.13	9.11	-39.64	-12.57	-6.97
M & M	14.37	14.01	3.86	0.77	12.66
Force M.	8.16	7.6	2.94	-6.01	-4.17
Maruti S	18.49	16.25	11.66	8.23	6.96
Ashok L	23.7	23.8	3.29	-4.49	7.38

**Interpretation:**

The graph above compares the net worth and equity of automakers over the previous five years. Ashok Layland has the highest equity ratio in 2019. In 2020, Tata Motors has the lowest equity ratio (-39.64) at 23.8. From 2018 to 22 both Mahindra and Maruti Suzuki had positive equity ratios.

Findings:

- Ashok Layland has the greatest equity ratio in 2018 and 2019. in contrast to other people.
- Tata Motors is not doing well; they only have one positive figure and the rest are negative. (Motors from Tata)

Suggestion:

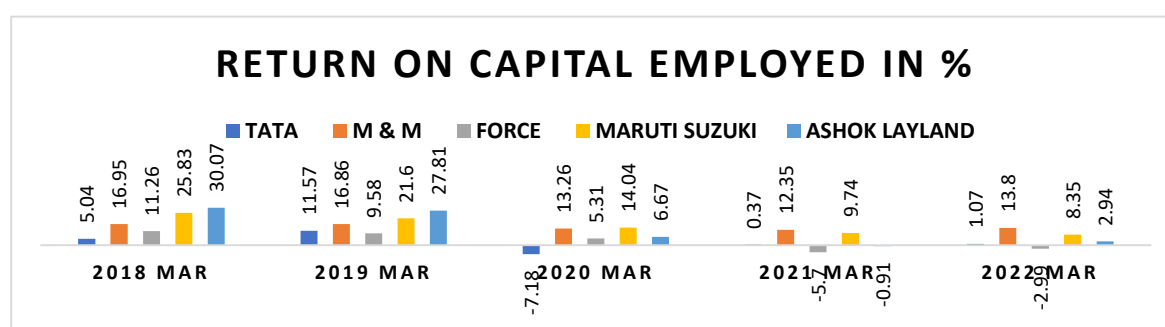
- Tata Motors is not doing well; they only have one positive figure and the rest are negative. (TATA Motors), hence they must raise their ratio of net equity.
- In the years 21 and 22, Force and Ashok Layland also have some negative numbers. They ought to raise their net equity ratio as a result.

Return on Capital Employed

Return on Capital Employed (ROCE) is a measure which identifies the effectiveness in which the company uses its capital and implies the long-term profitability and is calculated by dividing earnings before interest and tax (EBIT) to capital employed, capital employed is the total assets of the company minus all the liabilities.

$$\text{ROE} = \text{Profit After Tax (PAT)} / \text{Net Worth}$$

	2018	2019	2020	2021	2022
Tata M.	5.04	11.57	-7.18	0.37	1.07
M & M	16.95	16.86	13.26	12.35	13.8
Force M.	11.26	9.58	5.31	-5.7	-2.99
Maruti S	25.83	21.6	14.04	9.74	8.35
Ashok L	30.07	27.81	6.67	-0.91	2.94



Interpretation:

The return on capital used by automakers during the previous five years is displayed in the above graph. Tata has the lowest return on capital in 2020 while Ashok Layland has the best return in 2018. For the prior two years, force was likewise negative. (21-22) Maruti Suzuki & Mahindra consistently produces profitable outcomes.

Findings:

- When compared to other companies, Ashok Layland has the highest return on capital in 2018 and 2019.
- TATA & Force Motors' numbers are negative from 2020 to 22.

Suggestion:

- The capital employed by Mahindra & Suzuki is good. However, given the declining tendency of the data, they ought to endeavour to preserve their ratio.
- TATA & Force Motors' numbers are negative from 2020 to 22. Therefore, it is not beneficial for their reputation; instead, they should concentrate and work to change those numbers to favourable ones.

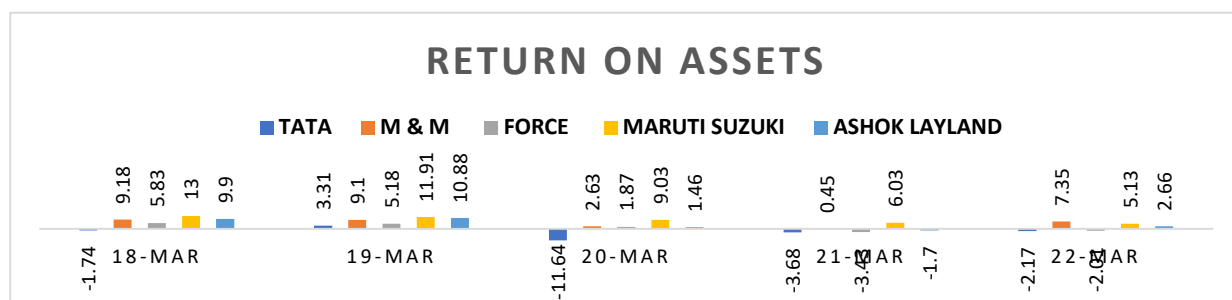
Return on Assets

The term return on assets (ROA) refers to a financial ratio that indicates how profitable a company is in relation to its total assets. Corporate management, analysts, and investors can use ROA to determine how efficiently a company uses its assets to generate a profit.

$$\text{ROA} = \text{Net Income} / \text{Average Assets}$$

$$\text{ROA} = \text{Net Income} / \text{End of Period Assets}$$

	2018	2019	2020	2021	2022
Tata M.	-1.74	3.31	-11.64	-3.68	-2.17
M & M	9.18	9.1	2.63	0.45	7.35
Force M.	5.83	5.18	1.87	-3.43	-2.01
Maruti S	13	11.91	9.03	6.03	5.13
Ashok L	9.9	10.88	1.46	-1.7	2.66



Interpretation:

The return on assets and comparison of the top auto mobile companies over the previous five years are displayed in the above graph. Maruti Suzuki had the greatest percentage return on asset in 2018. (13%). However, following 2018, the return on investment as a percentage is declining. Tata Motors has the lowest rate of return (-11.64) in 2020; only 2019 is positive. (3.31%)

Findings:

- Maruti and Mahindra have a good return on asset, albeit there are many variable numbers.
- From 2020 to 2022, TATA, Mahindra & Force's statistics are negative.

Suggestion:

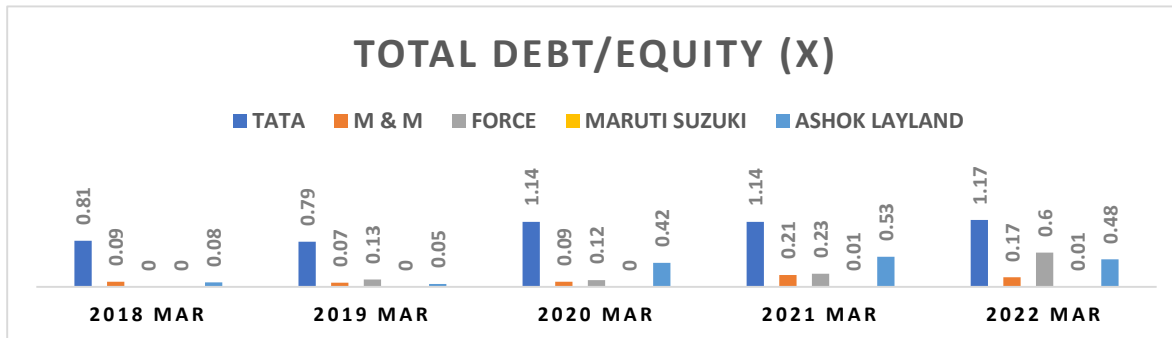
- Tata Motors should increase their returns because they only have one positive figure and the other four are negative.
- Maruti and Mahindra have a good return on asset, albeit there are many variable numbers. In order to balance their returns, they should strive.

Total Debt/Equity (X)

Debt-to-equity (D/E) ratio is used to evaluate a company's financial leverage and is calculated by dividing a company's total liabilities by its shareholder equity. D/E ratio is an important metric in corporate finance.

Debt/Equity= Total Liabilities/Total Shareholders' Equity

	2018	2019	2020	2021	2022
Tata M.	0.81	0.79	1.14	1.14	1.17
M & M	0.09	0.07	0.09	0.21	0.17
Force M.	0	0.13	0.12	0.28	0.6
Maruti S	0	0	0	0.01	0.01
Ashok L	0.08	0.05	0.42	0.53	0.48



Interpretation:

The total debt to equity ratio of automakers during the preceding five years is displayed in the above graph. Tata Motors' total debt has been steadily rising from 2018 to 22. Tata Motors has the greatest equity ratio (1.17) in 2022, followed by Ashok Layland & Force, which both have good equity ratios.

Findings:

Why For the previous five fiscal years, Tata Motors has the highest total debt to equity ratio.

- Asok Layland is likewise on the rise, although in 22 there were once more some equity declines.

Suggestion:

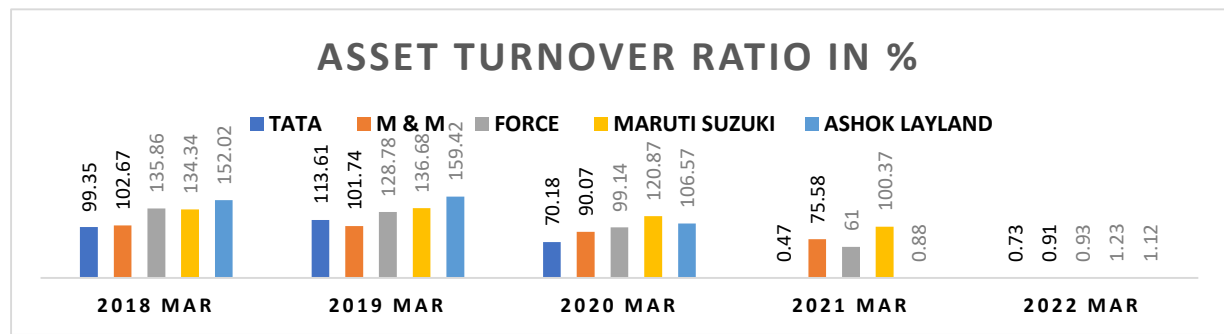
- Compared to other companies, Mitsubishi Suzuki has a very low equity ratio; therefore, they should attempt to raise their overall equity ratio.
- Force & Ashok Layland's equity ratio is good, but there is occasional volatility, therefore they still need to improve their overall equity ratio.

Asset Turnover Ratio

The asset turnover ratio analyses how well a company uses its assets to drive sales. The ratio is calculated by dividing a company's net sales for a specific period by the average total assets the company held over the same period. The asset turnover ratio can be modified to analyses only the fixed assets of a company.

Asset turnover ratio = Net Sales/Average Total Assets

	2018	2019	2020	2021	2022
Tata M.	99.35	113.61	70.18	0.47	0.73
M & M	102.67	101.74	90.07	75.58	0.91
Force M.	135.86	128.78	99.14	61	0.93
Maruti S	134.34	136.68	120.87	100.37	1.23
Ashok L	152.02	159.42	106.57	0.88	1.12



Interpretation:

The asset turnover of automakers during the last five years is displayed in the following graph. Compared to the other four, Ashok Layland has the greatest asset turnover ratio in the years 2018 and 2019. & All companies' asset turnover ratios in 2022 are quite low.

Findings:

- The asset turnover ratio for all enterprises in 2022 is quite low.
- Every company's statistic from years 18 to 22 are positive.
- When compared to other companies, Ashok Layland has the greatest asset turnover ratio in 2018 and 2019.

Suggestion:

Why Since all five of the companies' asset turnover ratios are declining annually, it is unfair that any company should be required to increase its asset turnover ratio.

Conclusion:

Financial performance forecasts the firm's short- and long-term objectives and helps identify the firm's strengths and weaknesses. Industries' liquidity position is judged to have maintained a strong profitability position throughout time. To improve an industry's profitability position, attention must be paid to its liquidity position. Liquidity therefore affects the profitability situation. Therefore, in order to prevent difficult situations, it is advised that all industries stick to their general guidelines. A trade-off between liquidity and profitability is also advised, as the latter is influenced by the makeup of present assets as well as the capital used to acquire them.

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