



A STUDY ON FINANCIAL PERFORMANCE OF TATA MOTORS

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ABSTRACT

This project aims to conduct a financial study of Tata Motors Limited by utilizing both quantitative and qualitative research methods, specifically through ratio analysis and literature review. The quantitative methods will involve analyzing financial data and presenting it through charts, while the qualitative methods will focus on introducing the company and reviewing existing literature. The objective of this report is to determine the financial position of Tata Motors Limited, evaluate any significant or minor changes, and provide insights for further analysis.

KEYWORDS: *Ratio Analysis, Fund Flow Analysis, Financial Position Analyzing.*

INTRODUCTION

Finance is a necessary and important aspect of every business. The success of an organization depends on how competently the firm is managing the funds available to them. The topic for the project is “a study on the financial performance of Tata Motors Limited”. There are many stakeholders in a company, including trade creditors, bondholders, investors, employees, and management. Each group has its own interest in tracking the financial performance of a company. Understanding financial performance is essential for every organization because most of the organization's crucial decisions depend on the financial performances. The analysis of financial performance involves evaluating a company's operating and financial characteristics by examining its accounting and financial statements. The primary objective of this analysis is to assess the effectiveness and efficiency of the company's management, which is reflected in the financial reports and records. The aim is to determine the performance of the company's management and its efficiency in running the business.

STATEMENT OF PROBLEM

Financial performance analysis evaluates the effectiveness of decision-making within an organization. To assess effectiveness, various analytical tools are utilized to determine the profitability, liquidity, and solvency position of the business. These tools also evaluate the ability of the organization to meet its obligations promptly and fulfill them on time. By analyzing financial data and statements, the analysis helps identify areas for improvement and areas of success within the organization's financial management practices.

OBJECTIVES OF THE STUDY

- To find the liquidity position of the Tata motors Ltd and the activity of the assets and liabilities using the liquidity ratios.
- To assess the long-term solvency, and profitability of Tata motors ltd.
- To forecast the future and show the trend rate of Tata Motors Ltd.,

RESEARCH METHODOLOGY

Research design

The descriptive research designs have been adopted for the study. The descriptive design is the simplest. It allows the researcher to study and describe the distribution of one or more variables, without regard to any causal or other hypotheses.



Data collection method

Secondary data were used in the study. The data required for the study was gathered from the annual reports of the company through their website. Data is collected from the secondary sources, which include Annual Reports, Data company websites, Journals.

Period of the study

The study has been undertaken for the period of 10 years from 2012-13 to 2021-22. In order to analyze financial status in terms of Profitability, Solvency, Activity and Financial stability various accounting ratios have been used.

Tools used for the study

1. Liquidity Ratios
2. Solvency Ratios
3. Profitability Ratios
4. Trend Analysis

REVIEW OF LITERATURE

Vanshika Singh, Vichal Kumar, Dr. Ruchi Atri (2021)

A Study of Financial Performance of TATA Motors with Special Reference to the period 2017 - 2021 Vinit Kumar ,
Financial ratio analysis is the process of reviewing the financial position of the company. Ratio analysis is extensively used by firms as a technique to forecast the financial soundness of the company to build future growth. This study aims at analyzing the financial performance of Tata Motors by calculating financial ratios. The primary objective of this study is to evaluate the performance of Tata Motors during the last decade. The reference period taken for the study is 5 years starting from 2017 to 2021. The results reveal that the company has performed reasonably well during the reference period. The company has shown good potential by earning returns for their shareholders.

Mr. P. Kanagaraj, Ms. S.S. Priyadharshini (2021)

A STUDY ON FINANCIAL PERFORMANCE OF TATA MOTORS

The purpose of this study is to analyze the financial performance of Tata Motors over a six-year period, from 2015 to 2020, using data from their balance sheets and profit and loss accounts. By conducting financial analysis, companies can identify their strengths and weaknesses, and improve their performance. This study utilized secondary data collected from Tata Motors' annual reports. The findings suggest that the company's profitability position is not optimal, and it needs to decrease its production costs, maintain lower costs, increase sales prices, and improve efficiency in converting sales into actual profit. The study emphasizes the importance of improving financial performance and provides suggestions for achieving this goal.

Nikkita Arora (2021)

Financial Statement Analysis of Tata Motors Ltd

The aim of this study is to conduct a financial statement analysis of TATA Motors Ltd for the period of 2016-2017 and evaluate the company's financial position. Despite facing some challenges, Tata Motors has managed to maintain its influence in the industry, and its strong reputation as a large company is expected to help it rebound. The study indicates that Tata Motors' ability to make contractual payments has been adversely affected, and 2016-2017 was the strongest financial year of the four years analyzed. During that period, the company had the highest current and quick ratios, but these have since declined, indicating a decrease in liquidity over time. However, it is believed that effective asset management and sufficient financing for debts will aid the company in recovering from losses.

Shaikh Salman Masood (2020)

Financial Statement Analyses of Tata Motors Limited

The objective of this project is to conduct a financial analysis of Tata Motors Limited using ratio analysis and research. The study employs both qualitative and quantitative methods, including literature review, introduction, and analysis through charts. The data for the analysis was obtained from Yahoo Finance for a three-year period spanning from 2017 to 2019. The report assesses the financial position of Tata Motors Limited by determining the magnitude of changes, both major and minor. In conclusion, the study reveals that Tata Motors has had a significant impact on the industry, but also experienced a downfall. The analysis indicates that the company has a substantial amount of debt, and its ability to make contractual payments has decreased significantly. However, effective asset management and proper debt financing are expected to aid the company in recovering from its losses.

**DATA ANALYSIS AND INTERPETATION****LIQUIDITY RATIOS**

Liquidity ratios are an important set of financial ratios used to evaluate a company's ability to meet its short-term obligations. These ratios measure a company's ability to convert its assets into cash quickly to pay off debts and meet other short-term financial obligations.

CURRENT RATIO

The current ratio is a widely used financial ratio that measures a company's ability to pay its short-term liabilities with its short-term assets. It is calculated by dividing a company's current assets by its current liabilities. A current ratio of 1 or higher generally indicates that a company has enough current assets to cover its current liabilities. A ratio below 1 indicates that a company may struggle to meet its short-term obligations.

Current Ratio = Current Assets / Current Liabilities

TABLE NO 1

Years	Current Assets	Current Liabilities	Current Ratio
Mar-22	1,46,977.54	1,50,682.81	0.975
Mar-21	1,46,887.64	1,57,749.18	0.931
Mar-20	1,19,587.25	1,40,454.05	0.851
Mar-19	1,23,431.16	1,45,457.43	0.849
Mar-18	1,35,972.84	1,43,219.47	0.949
Mar-17	1,16,119.75	1,15,629.52	1.004
Mar-16	1,09,923.67	1,07,049.43	1.027
Mar-15	1,01,758.40	1,00,272.00	1.015
Mar-14	95,845.33	92,356.13	1.038
Mar-13	74,006.73	86,285.90	0.858

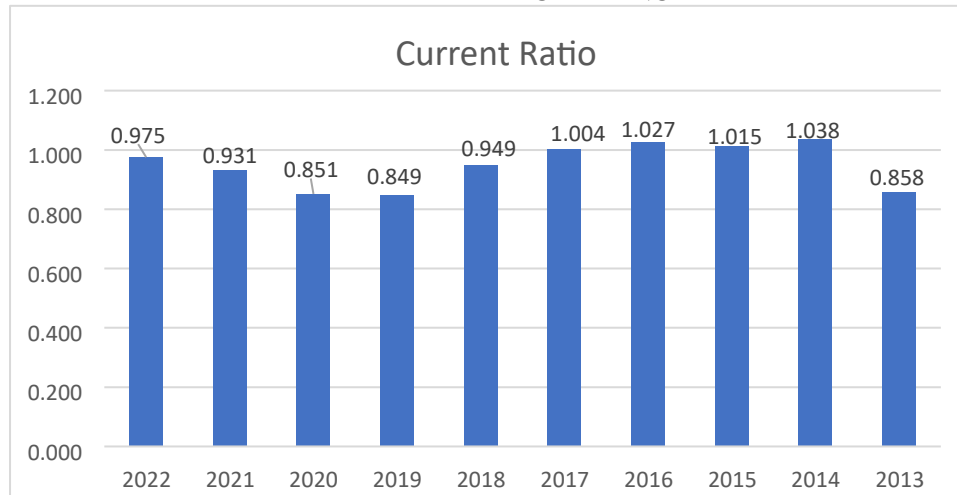
INTERPRETATION

The above table shows current ratio of TATA Motors Ltd. For the past ten years its below ideal ratio (Ideal Current ratio is 2:1) But the current ratio of the company is unsatisfied.

That means it is not able to meet even the current liabilities of the company.

INFERENCE

The current ratio was highest in the year 2014 it is 1.038 and its lowest was 0.849 in the year of 2019.

**CHART NO 1****QUICK RATIO**

The Quick ratio, also known as the Acid-Test ratio, is a financial ratio used to measure a company's ability to pay its short-term liabilities with its most liquid assets. It is a more stringent measure of a company's liquidity than the current ratio, as it excludes inventory and other current assets that may be difficult to convert to cash quickly.

Quick ratio = (Current assets - Inventory - Prepaid expenses) / Current liabilities

TABLE NO 2

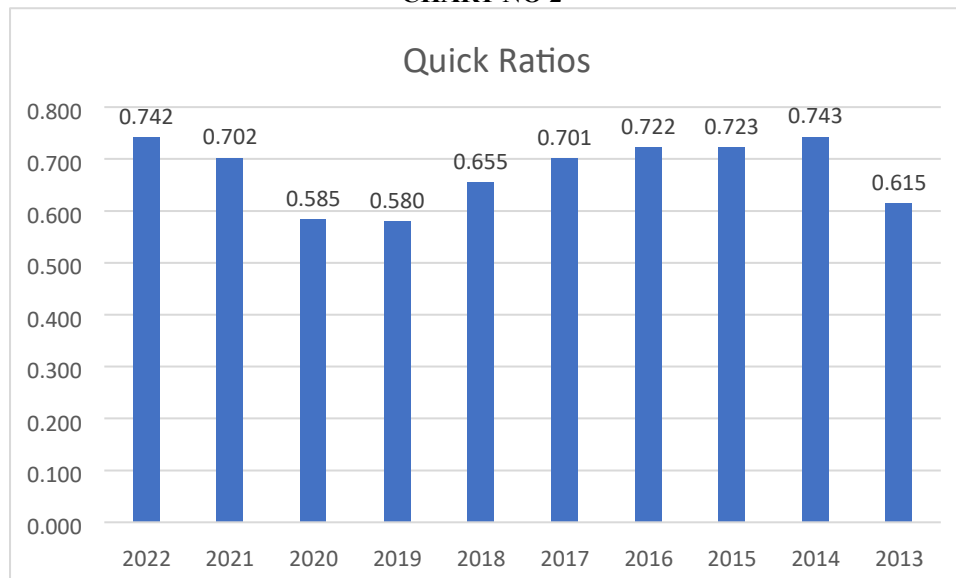
Years	Quick Asset	Current Liabilities	Quick Ratios
Mar-22	111737.2	1,50,682.81	0.742
Mar-21	110799.05	1,57,749.18	0.702
Mar-20	109430.76	1,40,454.05	0.585
Mar-19	107873.91	1,45,457.43	0.580
Mar-18	104750.01	1,43,219.47	0.655
Mar-17	81034.44	1,15,629.52	0.701
Mar-16	77267.94	1,07,049.43	0.722
Mar-15	72486.06	1,00,272.00	0.723
Mar-14	68574.44	92,356.13	0.743
Mar-13	53037.72	86,285.90	0.615

INTERPRETATION

The above table show quick ratio. Generally, liquid ratio of 1:1 is considered as satisfactory. For this company the past ten years show a less than liquid ratio, when compared to the satisfactory ratio. It further means that, the company is not able to pay off its current liabilities.

INFERENCE

The Quick ratio was highest in the year 2014 it is 0.743 and its lowest was 0.580 in the year of 2019.

**CHART NO 2****SOLVENCY RATIO**

Solvency ratio is a financial metric that measures a company's ability to meet its longterm obligations and debts. It is calculated by dividing a company's total assets by its total liabilities. A solvency ratio of greater than 1 indicates that a company has more assets than liabilities, which suggests that it has the ability to repay its debts in the long run.

PROPRIETARY RATIO

The proprietary ratio, also known as the equity ratio or net worth ratio, is a financial ratio used to evaluate the proportion of a company's assets that are financed through its shareholders' equity, as opposed to its debt. It is calculated by dividing the shareholder's equity of a company by its total assets. The proprietary ratio measures the extent to which a company's assets are financed through equity, which indicates the level of financial risk associated with the company. A higher proprietary ratio indicates that a company relies more on equity financing, which is generally considered less risky than debt financing. On the other hand, a lower proprietary ratio suggests that a company has a higher level of debt financing, which could increase the financial risk of the company.

Proprietary Ratio = Shareholders' Equity / Total Assets

TABLE NO 3

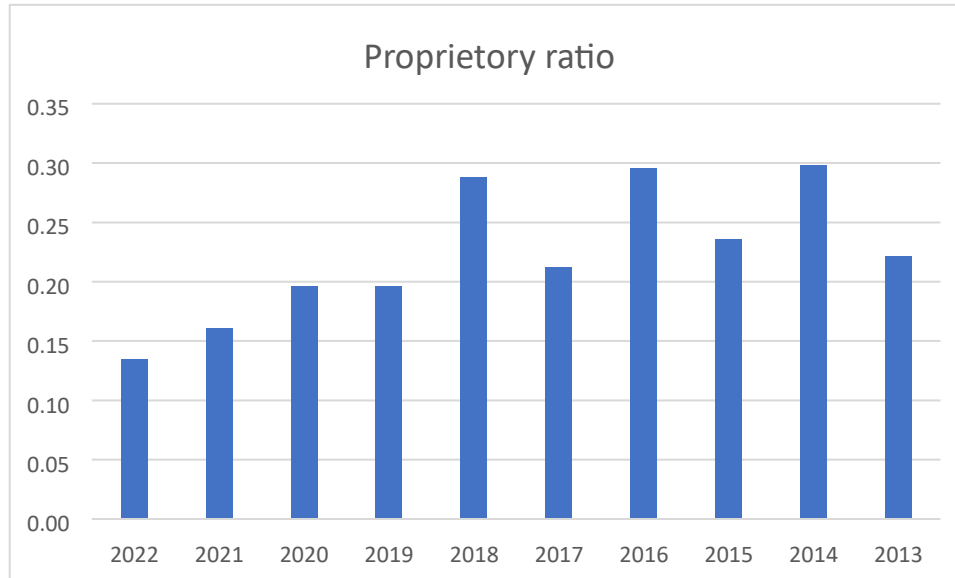
Years	Share Holder's Equity	Total Assets	Proprietary Ratio
Mar-22	44,554.85	3,30,619.93	0.13
Mar-21	55,246.72	3,43,125.80	0.16
Mar-20	63,078.53	3,22,121.26	0.20
Mar-19	60,179.56	3,07,194.53	0.20
Mar-18	95,427.91	3,31,350.51	0.29
Mar-17	58,061.89	2,73,754.36	0.21
Mar-16	78,952.41	2,67,141.15	0.30
Mar-15	56,261.92	2,38,657.99	0.24
Mar-14	65,603.45	2,19,998.32	0.30
Mar-13	37,637.30	1,70,026.45	0.22

INTERPRETATION

The above table shows proprietary ratio of the TATA Motors Ltd. A ratio of 0.5:1 or above is considered as satisfactory. The proprietary ratio has a constant increase and decrease up to 2018 but after that the ratio has declined for the last four years which is a greater risk to the creditors. In the share holders' point of view, the lower ratio indicates the company is highly dependent on creditors for its working capital.

**INFERENCE**

The Proprietary ratio was highest in the year 2014 and 2016 it is 0.30 and its lowest was 0.13 in the year of 2022.

CHART NO 3**4.2.2 DEBT RATIO**

The debt ratio is a financial ratio that indicates the proportion of a company's total assets that are financed through debt. It is calculated by dividing the company's total debt by its total assets. A high debt ratio indicates that a company is relying heavily on debt to finance its operations and growth, which can increase its financial risk. A low debt ratio indicates that a company is relying less on debt and may be less risky. Generally, a debt ratio of less than 0.5 is considered low, while a debt ratio of more than 0.5 is considered high. However, the ideal debt ratio varies depending on the industry, the size of the company, and the company's financial goals

Debt Ratio = Total Debt / Total Assets

TABLE NO 4

Years	Total Debt	Total Assets	Debt Ratio
Mar-22	2,81,787.63	3,30,619.93	0.85
Mar-21	2,86,305.59	3,43,125.80	0.83
Mar-20	2,58,229.17	3,22,121.26	0.80
Mar-19	2,46,491.91	3,07,194.53	0.80
Mar-18	2,35,397.54	3,31,350.51	0.71
Mar-17	2,15,239.30	2,73,754.36	0.79
Mar-16	1,87,755.90	2,67,141.15	0.70
Mar-15	1,81,962.73	2,38,657.99	0.76
Mar-14	1,53,974.22	2,19,998.32	0.70
Mar-13	1,32,018.67	1,70,026.45	0.78

INTERPRETATION

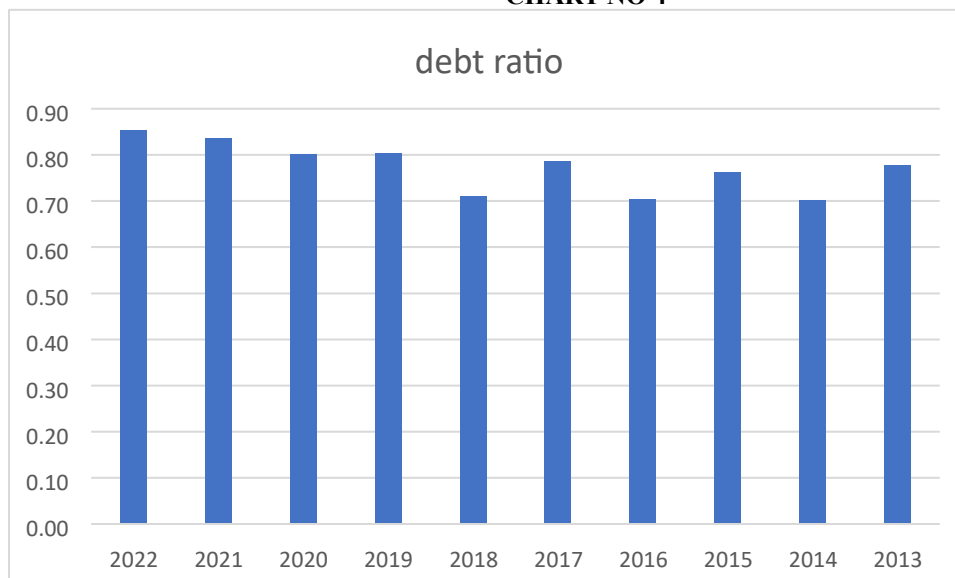
The above table show Debt Ratio of TATA Motors form 2013-2022. A good debt ratio should between 0.3 to 0.6 or it should be below 1 which means the company has more asset than it liability to pay back and the company has a good debt ratio as for the past ten years the company's debt ratio lies below 1.

INFERENCE

The Debt ratio was highest in the year 2022 it was 0.85 and its lowest was 0.70 in the years of 2014 and 2016.



CHART NO 4



PROFITABILITY RATIOS

Profitability ratios are key financial indicators that offer valuable insights into a company's capacity to generate profits through its business operations. These ratios hold significant importance for investors, creditors, and other stakeholders who need to assess a company's financial performance.

NET PROFIT RATIO

Net profit ratio, also known as net profit margin, is a financial ratio that measures the percentage of net profit earned in relation to a company's total revenue. This ratio is a key indicator of a company's profitability and efficiency in managing its costs. Net profit is the amount of revenue that remains after all expenses, including taxes and interest payments, have been deducted. Total revenue includes all sales, as well as any other income generated by the company. A higher net profit ratio indicates that a company is able to generate more profit from its revenue. This can be achieved by increasing revenue or reducing expenses. A lower net profit ratio may indicate that a company is facing challenges in controlling its costs or that its pricing strategy is not competitive.

Net Profit Ratio = (Net Profit / Total Revenue) x 100

TABLE NO 5

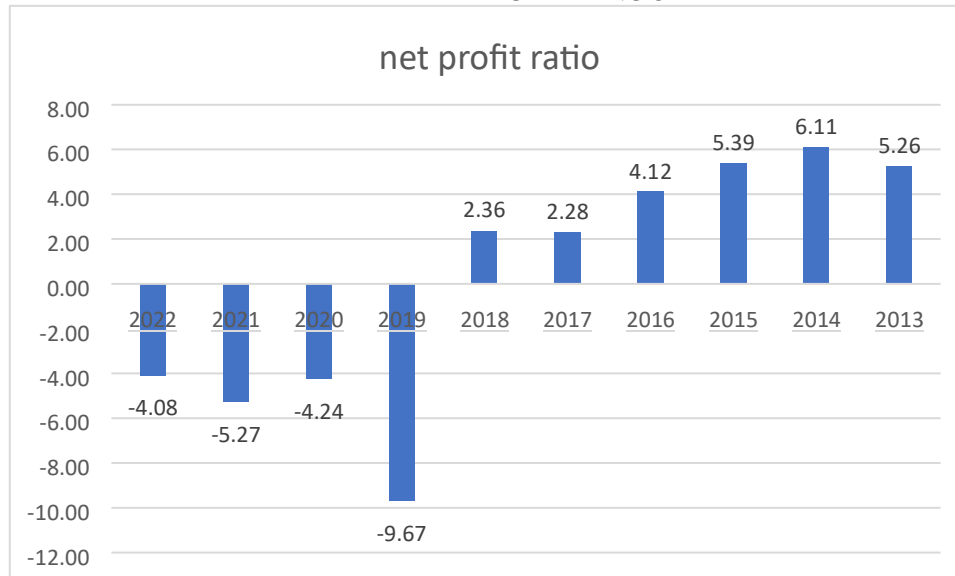
YEARS	Net Profit	Net Sales	Net Profit Ratio
Mar-22	-11,234.70	2,75,235.23	-4.08
Mar-21	-13,016.14	2,46,972.17	-5.27
Mar-20	-10,975.23	2,58,594.36	-4.24
Mar-19	-28,933.70	2,99,190.59	-9.67
Mar-18	6,813.10	2,88,596.09	2.36
Mar-17	6,063.56	2,65,498.47	2.28
Mar-16	11,100.72	2,69,560.11	4.12
Mar-15	14,059.65	2,60,734.33	5.39
Mar-14	14,104.18	2,30,677.10	6.11
Mar-13	9,862.49	1,87,652.84	5.26

INTERPRETATION

The above table shows the net profit Ratio of TATA Motors. The net profit ratio of the company is generally decreasing from 2014 to 2018. After that the net profit of the company's net profit has drastically declined as the company had facing loss for past four years.

INFERENCE

The net profit ratio was highest in the year 2014 it is 6.11 and its lowest was -9.67 in the year of 2019.

**CHART NO 5****OPERATING PROFIT**

Operating profit ratio is a financial metric that measures a company's operating profit as a percentage of its revenue. It is also known as operating margin or return on sales. Operating profit is calculated by subtracting the company's operating expenses from its revenue. Operating expenses include the costs of goods sold, salaries and wages, rent, and other overhead expenses.

Operating Profit Ratio = Operating Profit / Revenue x 100%

TABLE NO 6

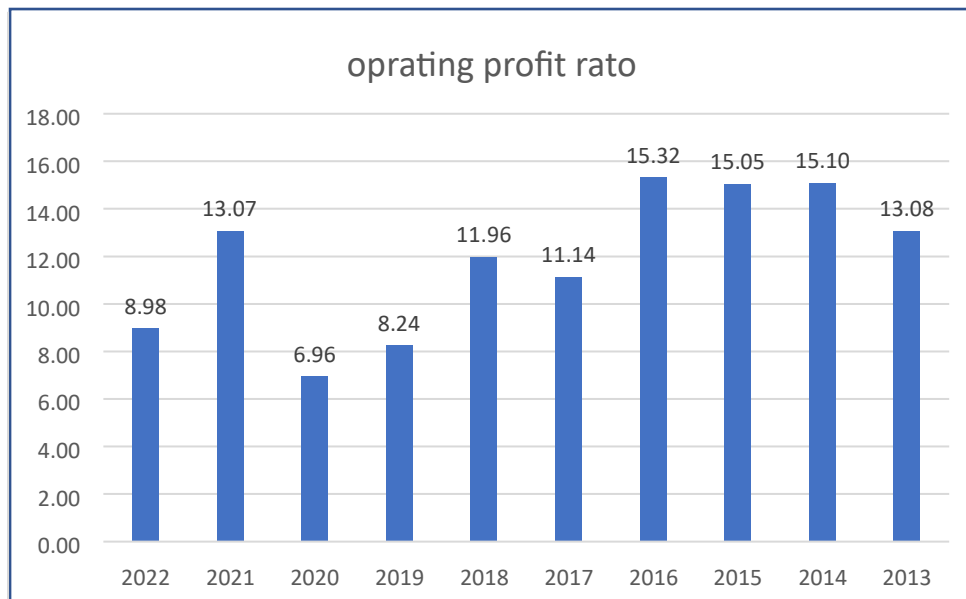
YEARS	Operating Profit	Net Sales	Operating Profit Ratio
Mar-22	24,720.09	2,75,235.23	8.98
Mar-21	32,287.43	2,46,972.17	13.07
Mar-20	17,987.07	2,58,594.36	6.96
Mar-19	24,664.33	2,99,190.59	8.24
Mar-18	34,526.38	2,88,596.09	11.96
Mar-17	29,588.69	2,65,498.47	11.14
Mar-16	41,305.62	2,69,560.11	15.32
Mar-15	39,238.65	2,60,734.33	15.05
Mar-14	34,837.70	2,30,677.10	15.10
Mar-13	24,547.30	1,87,652.84	13.08

INTERPRETATION

The above table shows the Operating profit Ratio of TATA Motors. The Operating profit ratio of the company is low compared to the previous years but it is not entirely low and declined, the rate is increasing and decreasing like a zigzag and the operating profit ratio is never gone in the negative rate for the past ten years.

INFERENCE

The net profit ratio was highest in the year 2016 it is 15.32 and its lowest was 6.96 in the year of 2020.

**CHART NO 6****TREND ANALYSIS**

The term “Trend Analysis” refers to one of the most useful analytical tools employed for financial analysis of statements. Trend analysis is a valuable financial analytical tool that is used for evaluating financial statements. This type of analysis involves comparing the changes in each line item across different time periods in order to gain meaningful insights. By measuring the movement of line items in terms of amount or percentage change year over year, trend analysis helps to identify significant trends and changes over time.

The analyst can effectively compare two or more companies over time with the aid of trend analysis. It may also be contrasted to the industry standard. In other words, it aids in understanding a particular firm's strength or weakness in relation to other similar firms in the industry.

The formula for trend analysis can be derived by using the below formula:

Change in Amount=Current Year Amount-Base Year Amount

Percentage Change= (Current Year Amount-Base Year Amount)/Base Year Amount



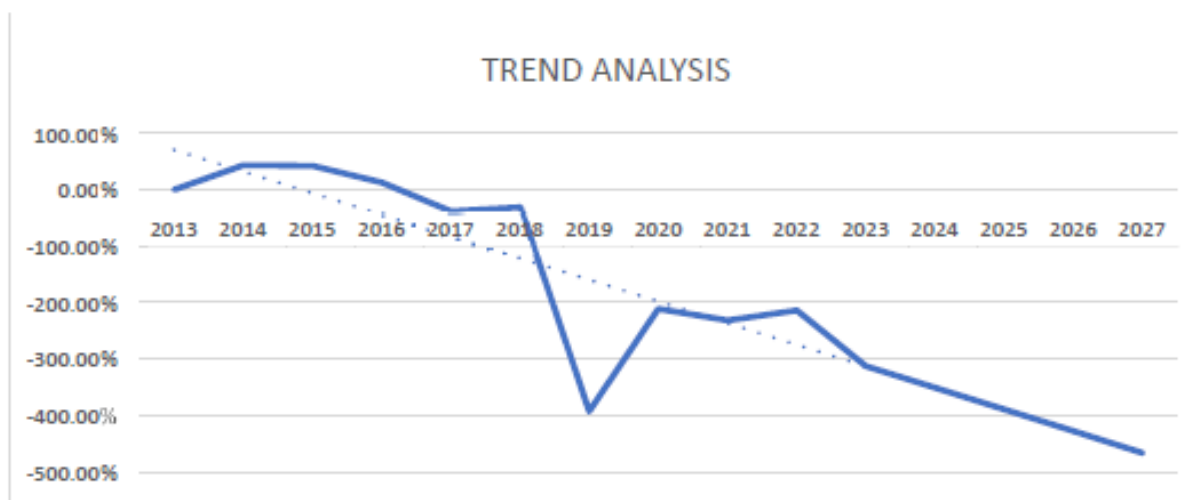
TABLE NO 7
TABLE SHOWING TREND ANALYSIS OF TATA MOTORS LTD

YEAR	NET PROFIT	CHANGE IN AMOUNT	PERCENTAGE AMOUNT
2013	9,862.49	0.00	0.00%
2014	14,104.18	4,241.69	43.01%
2015	14,059.65	4,197.16	42.56%
2016	11,100.72	1,238.23	12.55%
2017	6,063.56	-3,798.93	-38.52%
2018	6,813.10	-3,049.39	-30.92%
2019	-28,933.70	-38,796.19	-393.37%
2020	-10,975.23	-20,837.72	-211.28%
2021	-13,016.14	-22,878.63	-231.98%
2022	-11,234.70	-21,097.19	-213.91%
FORECASTED FUTURE VALUES			
2023	-21023.776	-30,886.27	-313.17%
2024	-24807.07945	-34,669.57	-351.53%
2025	-28590.38291	-38,452.87	-389.89%
2026	-32373.68636	-42,236.18	-428.25%
2027	-36156.98982	-46,019.48	-466.61%

INTERPRETATION

The above table 4.5 shows the trend value of the net profit for the study period of 2013 to 2022. The analysis also shows the trend rate of the forecasted net profit value for the next five years from 2023 to 2027. From the below trend rate, it shows a declining growth and it shows that the company is facing a loss for a long period. This shows if the company's growth continuous declining the company will face even more loss in next 5 years.

CHART 7
CHART SHOWING TREND ANALYSIS OF TATA MOTORS LTD





FINDINGS

- † The current ratio is below the ideal ratio for the past ten year, it has an unstable growth in past ten years and it is not satisfying.
- † Quick ratio of the company is not satisfactory because it is lower than the standard ratio.
- † The company has a low Proprietary ratio that indicates that it is more depend on debt financing which is a great risk to the company.
- † The debt ratio of the company is considerably high according to the ideal ratio this shows that the company is facing the financial risk.
- † Net profit ratio shows that the company facing loss for past four years.
- † The operating profit ratio tells that the operating expenses in more than the profit but it never goes to negative in the past ten years.

SUGGESTIONS

The company has to improve its short-term financial position by increasing its working capital. It has no sufficient funds to its short-term liabilities and it has to work more to fulfil its short-term obligations. The company is facing loss for past four years this shows that the company does not pay the dividend to its investors and this may create a bad impact on the investors. So, it is very important to increase its sales revenue. The activity ratio shows that the company should improve in use its assets efficiently. And the solvency ratio says that the company is more rely on its debt to finance and cannot meet their long-term obligations as it should focus and improve the cash flow of the company and working capital to face the longterm obligations. The company should increase its equity capital and work more on capital for financing.

CONCLUSION

The study on financial performance analysis of TATA MOTORS is stated in this report, this shows the company's financial analysis for the period of 10 years. The result revealed that the company has performed very bad almost in all parameters. We can see Tata Motors' downfall, but it is expected to rebound because it is such a big company. The profitability position of the company is not promising, that the company, has to decrease the cost of production and keep the cost lower or increase the sales price and also need to improve the efficiency in converting sales into actual price.

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