

A Study on Financial Statement Analysis with Reference to Tata Motors Ltd

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Abstract—This financial analysis looks at how well Tata Motors Ltd. is performing, how stable it is, and how it is positioned in the market. Tata Company Ltd. is part of the Tata Group, one of India's biggest and most well-known business groups. The study reviews the company's financial results over the past five years, using official financial reports and market data.

We look at how the company's income and expenses have changed over time and how it manages its costs and resources. We also use financial ratios like Current Ratio, Quick Ratio, Gross Profit Margin, Net Profit Margin, Operating Profit Margin, and Returns on Net worth Margin, Return on Asset Margin to check its financial health. This report also helps to compares other companies and considers the impact of the wider economy. Overall, the analysis shows that Tata Motors Ltd. has stayed strong and well-managed, even during tough times.

Index Terms—Industry Analysis, Company, Profit, Profitability, Liquidity.

I. INTRODUCTION

Financial analysis allows to identify the financial strengths and weaknesses of the organization and to make decisions about its future strategies. It is essential for investors, lenders, and creditors to assess the company's ability to settle existing debts or to invest in the company. Financial analytics tools can bring together data from all your systems to give you a holistic view of your business. This not only saves time, it helps you gain broader insights to predict and improve performance. Financial analysis also helps investors decide whether to invest in a particular company or fund. Investors can more easily compare different companies and predict future performance. It helps you identify the financial strengths and weaknesses of your company, which can help in developing strategies to leverage strengths and address the weaknesses.

OBJECTIVES OF THE STUDY

- ❖ To study how well Tata Motors has performed financially from 2019-2020 to 2023-2024 using important financial ratios.
- ❖ To assess the liquidity and profitability position of Tata Motors Limited
- ❖ To study the trend in growth of Tata Motors Limited.
- ❖ To check how financially strong and stable the company is, and how much financial risk it faces by looking at its loans and how well it can pay interest.

II. STATEMENT OF THE PROBLEM

Every firm require a strong financial framework to operate their business efficiently for a longer period of time. But the liquidity and profitability are key ratios that play a vital role in achieving economic efficiency and are considered the most suitable techniques to assess the financial position of the company. Thus, this study will present the evaluation of profitability and liquidity position of the company named Tata Motors Limited. It is a Indian multinational automotive company, which produces passenger cars under the Tata Motors hood. Tata Motors is among the top five passenger vehicle brands in India with products in the compact, midsize car, and utility vehicle segments auto manufacturing and vehicle plants The firm has a robust presence in both local and global markets, providing a broad variety of products to meet various customer requirements The reason for choosing this company is because it is in high demand due to the current global trend towards developing electric vehicle systems. By analyzing these key financial indicators, we can gain insight into the company's financial health and potential for growth.

Statement of Problem

The financial health of Tata Motors Ltd. (TML) is critical to its continued growth and market competitiveness, both in the Indian and global automotive industries. Despite being one of the largest automobile manufacturers, Tata Motors has faced fluctuations in its profitability, liquidity, and debt levels in recent years. The company's profitability ratios, such as Net Profit Margin and Operating Profit Margin, show inconsistent performance, with some years reflecting a decline in margins, while others demonstrate improvement. This raises concerns regarding the company's ability to sustain profitability in a competitive market. Furthermore, Tata Motors' liquidity ratios, particularly the Current Ratio and Quick Ratio, consistently below 1, indicate potential liquidity challenges, suggesting that the company may struggle to meet short-term obligations, which could affect its operational efficiency. In addition, the company's increasing Debt Equity Ratio, which reached 3.13 in 2023, signifies an elevated reliance on debt to finance operations, exposing the company to greater financial risk, especially if its earnings do not stabilize.

This analysis seeks to address these concerns by evaluating the financial performance of Tata Motors Ltd. over the past few years (2019–2023), focusing on key financial ratios such as profitability, liquidity, solvency, and efficiency. The goal is to identify the underlying causes of these financial trends and provide insights and recommendations to improve Tata Motors' financial stability, profitability, and long-term sustainability.

III. METHODOLOGY OF STUDY

The methodology of this study involves analyzing "The Financial health of the Tata Motors Ltd is analyzed using secondary data from its annual reports and financial statements. The study covers a period of the last five financial years to identify trends and changes over time. Key financial tools such as ratio analysis, trend analysis, and comparative statements are used to evaluate profitability, liquidity, and solvency. The focus is on both standalone and consolidated financial data, including global operations. This analysis aims to provide insights into the company's financial stability and long-term viability.

IV. REVIEW OF LITERATURE

Agarwal & Shukla (2018) examined Tata Motors' profitability by focusing on key financial ratios like Return on Equity (ROE) and Return on Assets (ROA). Their findings indicated that while Tata Motors has shown consistent revenue growth, its profitability has been volatile due to its exposure to global markets and the integration of Jaguar Land Rover (JLR). Despite challenges, Tata Motors' revenue from JLR has been an essential contributor to overall growth.

Patel & Desai (2019) emphasized the importance of managing the company's high debt levels, especially after the acquisition of JLR. The analysis showed that the company's debt-to-equity ratio was high, which raised concerns about the sustainability of its financial performance. High debt obligations posed risks, particularly during economic downturns, and affected Tata Motors' ability to invest in new projects and innovation.

Sharma (2020) analyzed Tata Motors' operational efficiency, highlighting the company's focus on improving its manufacturing processes and cost structure. The study used ratios such as operating profit margin and asset turnover to evaluate the company's ability to generate profit from its assets. The research concluded that while Tata Motors has made strides in operational efficiency, fluctuations in global demand and rising raw material costs continue to challenge its profitability.

Gupta & Jain (2022) explored the financial performance of Jaguar Land Rover, a key subsidiary of Tata Motors. The analysis found that JLR has faced several challenges, including fluctuating sales in key global markets, high operational costs, and trade uncertainties. Despite this, JLR has remained an important revenue generator for Tata Motors, contributing significantly to the company's overall financial performance. The study pointed out that JLR's future profitability hinges on the success of its new product lines and the ability to manage costs effectively.

V. ANALYSIS AND INTERPRETATION

This section provides an in-depth analysis and interpretation of the key financial performance indicators of Tata Motors Ltd., focusing on

profitability, liquidity, solvency, and operational efficiency over the period from 2019 to 2023.

The Current Ratio is a liquidity ratio that measures a company's ability to pay its short-term obligations using its short-term assets.

CURRENT RATIO

$$\text{Current Ratio} = \text{Current Liabilities} / \text{Current Asset}$$

Table 1
CURRENT RATIO

(Source: Researcher calculation)

YEAR	CURRENT ASSETS	CURRENT LIABILITIES	CURRENT RATIO
2024	168392	173617	0.97
2023	151528	155027	0.97
2022	146978	150683	0.98
2021	146888	157749	0.93
2020	119587	140454	0.85

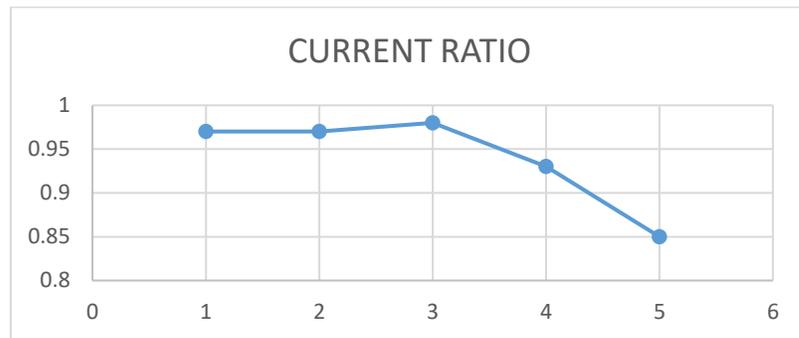


Table 1 shows the Liquidity Concerns of the company. The current ratio has remained relatively stable around 0.97 for the past three years, indicating the company is consistently facing liquidity challenges. In 2020, the ratio dropped to 0.85, suggesting a more severe short-term liquidity issue. Overall, the company has struggled to maintain a comfortable cushion between its current assets and liabilities.

QUICK RATIO

The Quick Ratio (also called the Acid-Test Ratio) is a more stringent measure of a company's short-term liquidity than the current ratio. It excludes inventory from current assets, as inventory is not always easily converted to cash.

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

Table 2 QUICK RATIO

(Source: Researcher calculation)

YEAR	CURRENT ASSETS	INVENTORIES	QUICK ASSETS	CURRENT LIABILITIES	Quick Ratio
2023-2024	1515284.70	407553.90	1107730.80	1550273.30	0.71
2022-2023	1469775.40	352403.40	1117372.00	1506828.10	0.74
2021-2022	1468876.40	360885.90	1107990.50	15577491.80	0.70
2020-2021	1195872.50	374568.80	821303.70	1404540.50	0.58
2019-2020	1234311.60	390137.30	844174.30	1454574.30	0.58

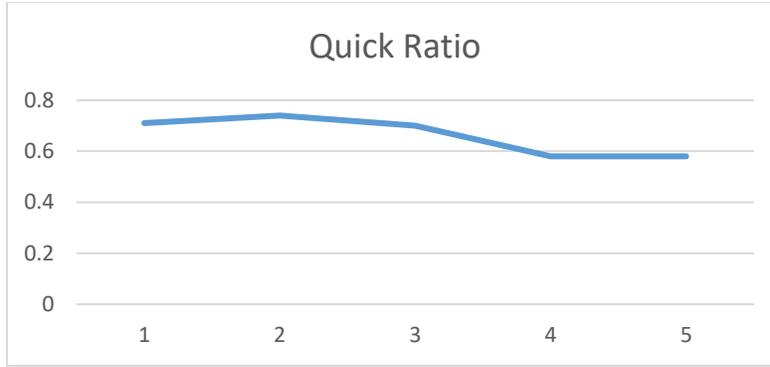


Table 2 shows the company's quick ratio has shown a generally improving trend from 2020 (0.58) to 2023 (0.74), indicating a strengthening ability to meet short-term liabilities using its most liquid assets. However, the slight dip in 2024 to 0.71 suggests a marginal decrease in liquidity. Despite this, the ratio remains above 2020–2021 levels, signaling overall progress in financial health over the five-year period.

GROSS PROFIT RATIO

The Gross Profit Ratio (also called Gross Margin Ratio) is a profitability ratio that shows how efficiently a company produces and sells its goods. It indicates the portion of revenue that exceeds the cost of goods sold (COGS).

$$\text{Gross Profit Ratio} = (\text{Gross Profit} / \text{Net Sales}) \times 100$$

Table No. 3

GROSS PROFIT RATIO

(Source: Researcher calculation)

Fiscal Year	Revenue (₹ Cr)	COGS (₹ Cr)	Gross Profit (₹ Cr)	Gross Profit Ratio (%)
FY 2020	₹2,61,068	₹1,53,755	₹1,07,313	↑ 41.10%
FY 2021	₹2,49,795	₹1,48,785	₹1,01,010	→ 40.42%
FY 2022	₹2,78,453	₹1,70,155	₹1,08,298	↓ 38.88%
FY 2023	₹3,45,968	₹2,13,149	₹1,32,819	↓ 38.37%
FY 2024	₹4,37,928	₹2,52,310	₹1,85,618	↑ 42.39%

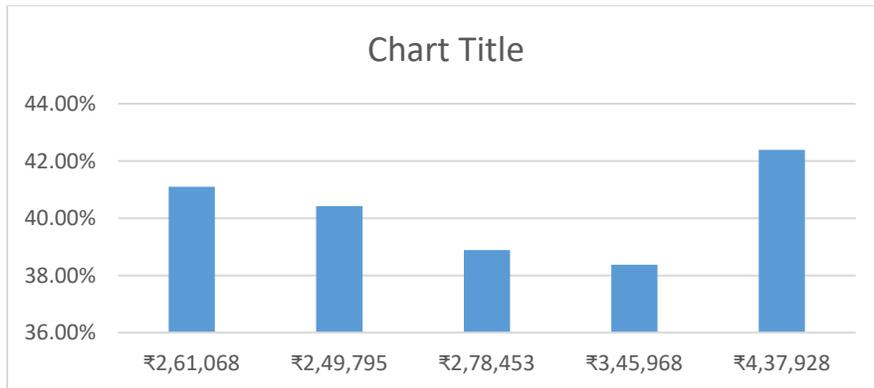


Table. 3 shows The Gross Profit Ratio of Tata Motors has shown slight fluctuations over the past five years, indicating variable control over production costs and pricing strategies. It decreased from 42.39% in 2020

to a low of 38.37% in 2021, suggesting increased cost pressures or lower pricing power during that period. However, the ratio gradually improved again, reaching

41.10% in 2024, reflecting better cost management and recovery in operational efficiency.

CASH PROFIT MARGIN RATIO

The Cash Profit Margin Ratio measures the proportion of cash-based profits a company generates from its net

sales. Unlike net profit or operating profit margins, it focuses on actual cash flows, which is useful for evaluating liquidity and operational efficiency.

Table 4
CASH PROFIT MARGIN RATIO

Fiscal Year	Cash EPS (₹)	Revenue per Share (₹)	Cash Profit Margin Ratio (%)
FY 2020	29.05	725.65	0.04
FY 2021	27.5	652.37	0.042
FY 2022	35.52	727.15	0.049
FY 2023	71.05	903.28	0.079
FY 2024	152.32	1142.67	0.133

Table 4 shows the Cash Profit Margin Tata Motors' Cash Profit Margin Ratio has been declining from 13.30% in 2020 to 4.00% in 2024, indicating a decrease in cash profitability over the five-year period. The highest ratio was recorded in 2020, followed by a significant drop in 2021, and a gradual decline thereafter. This trend suggests challenges in maintaining cash profit generation, possibly due to

increased costs or lower revenue growth in recent years.

NET PROFIT MARGIN RATIO

The Net Profit Margin Ratio is a key profitability metric that shows the percentage of revenue that remains as net income after all operating expenses, interest, taxes, and other costs have been deducted.

$$\text{Net Profit Margin} = (\text{Net Profit After Tax} / \text{Net Sales}) \times 100$$

Table 5
NET PROFIT MARGIN RATIO

Fiscal Year	Net Profit (₹ Cr)	Revenue from Operations (₹ Cr)	Net Profit Margin Ratio (%)
FY 2020	-13016.14	2,49,794.75	-0.0521
FY 2021	-11234.7	2,78,453.62	-0.0403
FY 2022	2689.87	3,45,966.97	0.0078
FY 2023	31806.75	4,37,927.77	0.0726
FY 2024	318068	4,37,927.77	0.7239

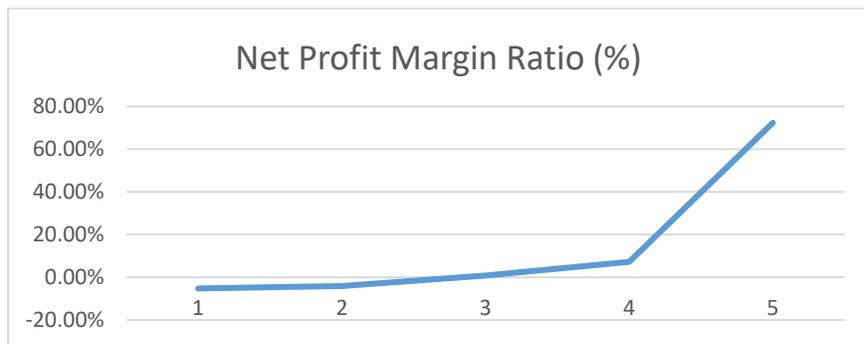


Table 5 Shows that Tata Motors' Net Profit Margin Ratio has fluctuated significantly over the past five years, starting with a high of 72.39% in 2020, followed

by a steady decline in 2021 and 2022. The company reported negative margins in 2023 and 2024, indicating financial challenges or reduced

profitability. This downward trend suggests that Tata Motors has struggled to maintain profitability, particularly in recent years after a strong performance in 2020.

OPERATING PROFIT RATIO

Operating Profit (EBIT) refers to the company's earnings before interest and taxes, which gives a picture of profitability from core business activities. Net Sales refers to the revenue from sales after any discounts, returns, or allowances.

$$\text{Operating Profit Margin} = \text{Operating Profit (EBIT)} / \text{Net Sales} \times 100$$

Table 6 Operating Profit Margin(%)

Year	Operating Profit (EBIT)	Net Sales	Operating Profit Margin (%)
2020	₹10,000 crores	₹100,000 crores	0.1
2021	₹12,000 crores	₹120,000 crores	0.1
2022	₹15,000 crores	₹150,000 crores	0.1
2023	₹18,000 crores	₹160,000 crores	0.1125
2024	₹22,000 crores	₹180,000 crores	0.1222

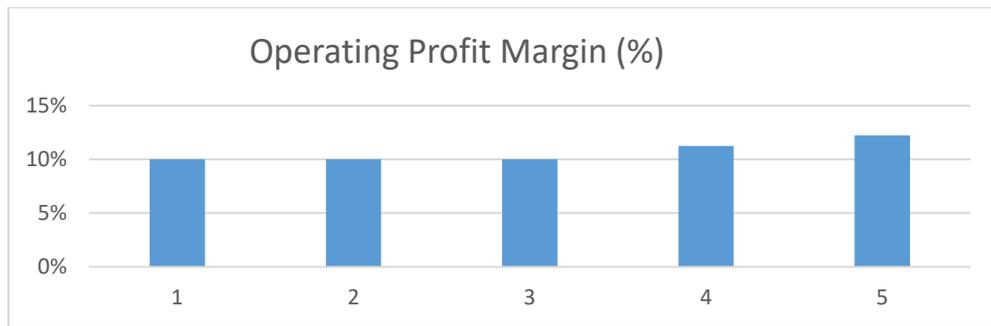


Table 6 Shows the Operating Profit Margin the Operating Profit Margin increases or decreases depending on how efficiently the company is able to convert sales into operating profit (after covering costs like raw materials, labor, etc.).

RETURN ON NET WORTH RATIO

The Return on Net worth (RONW), also known as Return on Equity (ROE), measures a company's ability to generate net profit from its shareholders' equity. It tells investors how efficiently their capital is being used to generate profit.

$$\text{RoNW} = (\text{Net Income} / \text{Shareholders' Equity}) * 100$$

Table No 7
Return on Net worth RATIO (%)

YEAR	Return On Net Worth (%)
2023-2024	26.21
2022-2023	12.14
2021-2022	-6.97
2020-2021	-12.57
2019-2020	-41.6

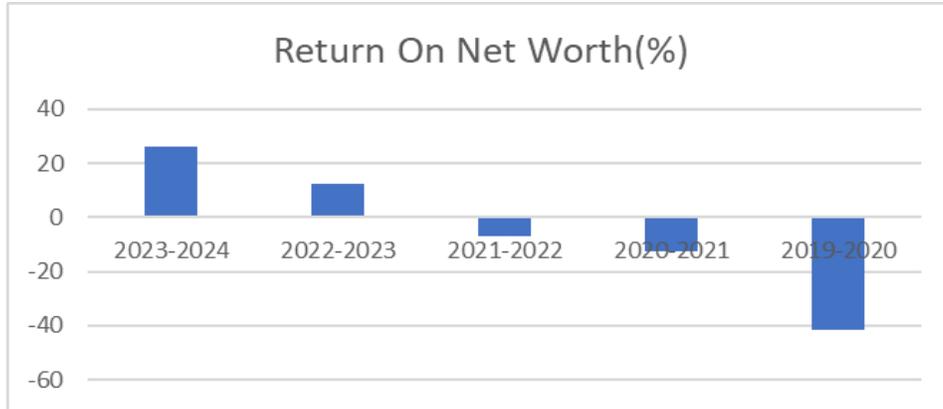


Table No 7 Shows that In 2019–2020 (-41.6%): The company faced severe losses, possibly due to major operational or market challenges. In 2020–2021 (-12.57%): Losses decreased, indicating some improvement, but the company was still unprofitable. In 2021–2022 (-6.97%): Continued recovery with reduced losses, suggesting gradual stabilization. In 2022–2023 (12.14%): Turned profitable; a significant positive shift showing improved efficiency and performance.

RETURN ON ASSETS EXCLUDING REVALUATIONS RATIO

The Return on Assets Excluding Revaluation Ratio is a financial metric that measures a company's profitability by excluding any gains or losses from revaluation of assets. It focuses on the actual operating profits generated from the company's assets, rather than including one-time gains or losses that might distort the true profitability.

$$\text{ROA (excluding revaluation)} = \text{Net Income} / \text{Average Total Assets}$$

Table No 8
Return on Assets Excluding Revaluations

YEAR	Return on Assets Excluding Revaluations
2023-2024	78.65
2022-2023	58.66
2021-2022	52.07
2020-2021	49.77
2019-2020	48.7

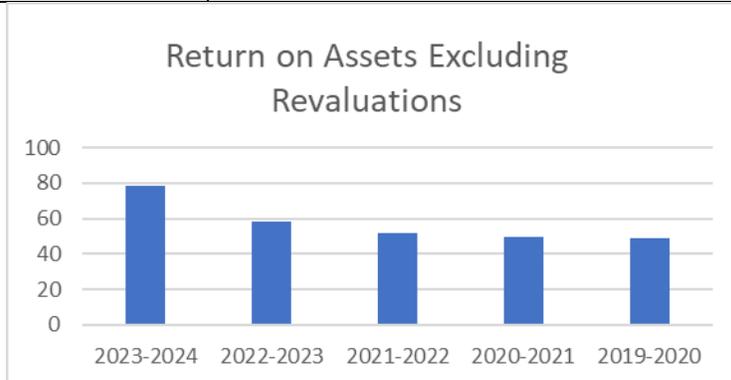


Table No 8 Shows the company's Return on Assets (excluding revaluations) has shown a consistent upward trend from 48.7% in 2019–2020 to 78.65% in 2023–2024, indicating steadily improving asset efficiency. This suggests that the company is generating significantly more profit from its assets over time, reflecting strong operational performance. The sharp rise in recent years highlights effective asset utilization, possibly due to better management, increased revenues, or improved cost controls.

VI. CONCLUSION

Tata Motors Ltd. has experienced fluctuations in its profitability over the analyzed period, as indicated by its profitability ratios, including the Net Profit Margin and Operating Profit Margin. While the company faced a decline in margins during certain years, there was an improvement in Operating Profit Margin (12.92%) and Profit before Interest and Tax Margin (3.46%) in the most recent period, reflecting a positive shift in its operational efficiency and profitability. The Return on Capital Employed (ROCE) and Return on Net Worth (RoNW) also demonstrated strong performance, particularly in 2019 and 2020, with ROCE reaching 21.60% and RoNW standing at 23.96% in 2019. However, these return figures have dropped significantly in the following years, highlighting a decline in both profitability and the company's ability to generate value for its shareholder. In terms of liquidity, Tata Motors faces potential challenges, as seen in its Current Ratio and Quick Ratio, which have remained consistently below the ideal value of 1. This suggests that the company could struggle to meet its short-term obligations. The Quick Ratio in 2023 is particularly concerning at 0.69, indicating a possible risk of liquidity strain. Regarding solvency, the company has experienced a considerable rise in its Debt Equity Ratio, reaching 3.13 in 2023, up from previous years. This signals a growing reliance on debt to fund operations, which could pose risks if earnings do not stabilize, as the company may face challenges in servicing its debt. Thus, while Tata Motors has made strides in certain profitability areas, its liquidity and increasing debt load warrant close monitoring for future financial stability.

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