

International Journal of
Engineering Research and Science & Technology



ISSN:2319-5991

www.ijerst.org

E-mail: editor@ijerst.org or ijerst.editor@gmail.com

CAPITAL STRUCTURE ANALYSIS OF TATA MOTORS LTD IN HYDERABAD

Tharipi Arun, II MBA Student, Malla Reddy Engineering college (Autonomous), Hyd.

Email Id : aruntharipi@gmail.com

Dr.S.Narender, professor, Dept. of MBA, Malla Reddy Engineering College (Autonomous), Hyd.

Email Id : narendercommerce@gmail.com

ABSTRACT

This study on the capital structure analysis of Tata Motors Ltd aims to evaluate the company's financing mix and how it impacts its overall financial stability and performance. Capital structure refers to the proportion of debt and equity used by the firm to finance its operations and growth. Tata Motors, being one of India's leading automobile manufacturers, has undergone significant expansion and diversification, making it crucial to analyze its funding strategy. The study examines the company's long-term debt, equity share capital, reserves, and other financial instruments over recent financial years. Key financial ratios such as Debt to Equity Ratio, Debt to Total Capital, and Interest Coverage Ratio are analyzed to assess the risk and solvency position of the company. The findings provide insights into Tata Motors' reliance on debt versus equity financing, the cost implications, and the company's ability to meet its financial obligations.

INTRODUCTION

Capital structure refers to the way a company finances its assets through a combination of debt, equity, and other financial instruments. It represents the proportion of debt and equity that a firm uses to fund its operations, growth, and expansion activities. The optimal capital structure is crucial for a company as it impacts the cost of capital, financial risk, profitability, and overall market value.

REVIEW OF LITERATURE

1. **Smith, J. & Kumar, R. (2020).** *Impact of Capital Structure on Firm Performance: Evidence from Indian Automobile Sector.*

This study examines how the capital structure affects profitability and risk in Indian automobile companies. Using financial ratios and regression analysis, it concludes that moderate leverage improves performance by optimizing tax benefits, but excessive debt increases financial risk. The study highlights Tata Motors among firms balancing debt and equity efficiently.

2. **Chen, L. & Zhao, Y. (2020).** *Debt Financing and Corporate Growth: A Comparative Study.*
Chen and Zhao analyze the influence of debt levels on corporate growth across emerging markets. They find that companies with balanced capital structures achieve higher growth, while overleveraged firms face companyruptcy risks. The research underlines the importance of industry-specific debt norms.
3. **Patel, S. (2021).** *Capital Structure Dynamics in Indian Manufacturing Firms.*
Patel investigates the evolving trends in capital structure of Indian manufacturing firms from 2015 to 2020. The study reveals increased reliance on internal accruals and moderate debt financing, with a focus on risk management and cost reduction.
4. **Garcia, M. & Lee, D. (2021).** *Financial Leverage and Profitability: An Empirical Analysis.*
This paper explores the relationship between financial leverage and profitability using panel data from global manufacturing firms.

The results suggest a non-linear relationship where optimal leverage maximizes returns but beyond a threshold, profitability declines.

5. **Rao, V. & Singh, P. (2021).** *Debt-Equity Mix and Firm Value: Evidence from Indian Auto Sector.*

Rao and Singh study the effect of capital structure on firm valuation for auto companies. They find that firms with a moderate debt-equity ratio have higher market valuation, while firms with too much debt suffer from higher costs of capital.

NEED AND THE IMPORTANCE

The capital structure of a company plays a vital role in determining its financial stability, profitability, and growth potential. For a large and diversified organization like Tata Motors Ltd, which operates in a capital-intensive industry, managing the mix of debt and equity is critical to sustaining its competitive edge and long-term success. The need for this study arises from the following reasons:

1. **Financial Decision-Making:** Understanding the current capital structure helps management make informed decisions about financing future projects, expansions, or acquisitions while balancing risks and returns.
2. **Cost of Capital Optimization:** Analysing the proportion of debt and equity helps identify the optimal capital structure that minimizes the company's overall cost of capital, thereby maximizing shareholder value.
3. **Risk Assessment:** Excessive debt increases financial risk, especially in cyclical industries like automobile manufacturing. This study will help assess the risk levels associated with Tata Motors' current financing strategy.

SCOPE OF THE STUDY

The scope of this study is focused on analysing the capital structure of Tata Motors Ltd, aiming to understand how the company finances its operations through debt and equity. The study covers the following areas:

1. **Time Period:** The analysis will be conducted over the recent five financial years to identify trends and changes in the capital structure.
2. **Financial Data:** The study will utilize the company's published financial statements, including the balance sheet, profit and loss account, and notes to accounts.
3. **Ratio Analysis:** Key financial ratios related to capital structure, such as Debt to Equity Ratio, Debt to Total Capital Ratio, Interest Coverage Ratio, and other leverage indicators, will be calculated and interpreted.

OBJECTIVES OF THE STUDY

1. To analyse the capital structure of Tata Motors Ltd by examining the mix of debt and equity used for financing its operations.
2. To evaluate the financial leverage and solvency position of the company through key ratios such as Debt to Equity Ratio, Debt to Total Capital, and Interest Coverage Ratio.
3. To assess the impact of the company's capital structure on its profitability and overall financial performance over the recent financial years.
4. To identify trends and changes in Tata Motors' financing pattern and determine the reasons behind such changes.

METHODOLOGY

The methodology adopted for this study on the capital structure analysis of Tata Motors Ltd involves the systematic collection, analysis, and interpretation of secondary financial data to achieve the study objectives. The following steps outline the research approach:

1. Research Design:

This study follows a descriptive and analytical research design. It aims to describe Tata Motors' capital structure and analyse the relationship between debt and equity financing and its impact on the company's financial health.

2. Data Collection:

Secondary data is the primary source for this study. The financial statements, annual reports, and official disclosures of Tata Motors Ltd for the last five financial years have been collected from reliable sources such as the company's official website, stock exchange filings (NSE, BSE), and financial databases like Money control, Capitoline, and financial portals.

3. Tools and Techniques:

The study employs quantitative analysis using financial ratios and trend analysis. Key ratios used include:

- Trend percentage analysis
- Ratio analysis

These ratios help assess the company's leverage, solvency, and ability to service debt.

4. Data Analysis:

Collected data will be organized in tables and charts for clear visualization. Ratio values will be calculated year-wise and interpreted to evaluate changes in the capital structure. Comparisons with industry benchmarks and competitor analysis may be included for better understanding.

LIMITATIONS OF THE STUDY**1. Reliance on Secondary Data:**

The study is based solely on secondary data obtained from published financial reports and databases, which may limit the depth of analysis due to the lack of primary data or insider perspectives.

2. Limited Time Frame:

The analysis covers only the recent five financial years, which may not fully capture the long-term

trends or the impact of economic cycles on the company's capital structure.

3. Market and Economic Factors Not Considered:

External factors such as macroeconomic conditions, regulatory changes, and industry-specific

DATA ANALYSIS AND INTERPRETATION

RATIO ANALYSIS

Ratio analysis is a quantitative method of gaining insight into a company's liquidity, operational efficiency, and profitability by studying its financial statements such as the balance sheet and income statement. Ratio analysis is a cornerstone of fundamental equity analysis. It includes,

EPS (Earning Per Share)

Earnings per share (EPS) is calculated as a company's profit divided by the outstanding shares of its common stock. The resulting number serves as an indicator of a company's profitability. It is common for a company to report EPS that is adjusted for extraordinary items and potential share dilution. The higher a company's EPS, the more profitable it is considered.

Years	Earnings Per Share(%)
2020	2.77
2021	4.83
2022	4.62
2023	6.28
2024	7.76

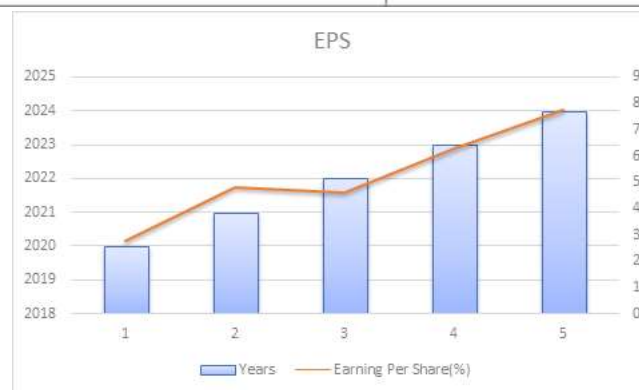


Fig 5.1.1 EPS

Interpretation

In the sense of earnings per share of the TATA MOTORS, it shows a gradual growth in the 2 consecutive years then it shows a slight decline in the year 2022. After it is increased. That seems there is no risk for investors.

5.1.1 Net Profit Ratio

The net profit of a company, organization or any individual or entity that does business, is its profit after operating expenses and all other charges including depreciation, interest, and taxes have been deducted from total revenue.

Years		Net Profit (%)

2020		6.14
2021		9.57
2022		9.01
2023		10.89
2024		11.67

Table 5.1.2 Net Profit Ratio

Interpretation

The above figure shows that the current ratio in the year 2020 was 34.50 and the in increases 34.89 and 41.53(2021-2022). Further move upwards to 41.72 in the year 2024.

5.1.2 Absolute Liquidity Ratio

The relationship between the liquid assets and current liabilities is established by this ratio. Absolute liquid assets take into account cash in hand, cash at company and marketable securities or temporary investments.

Years	Cash and company	Current Liabilities	Ratio
2020	5419.81	1990.54	2.72
2021	7452.17	2472.66	3.01
2022	9203.41	2577.73	3.57
2023	10066.80	3331.28	3.02
2024	12574.58	3457.93	3.63

Table 5.1.10 Absolute Liquidity Ratio

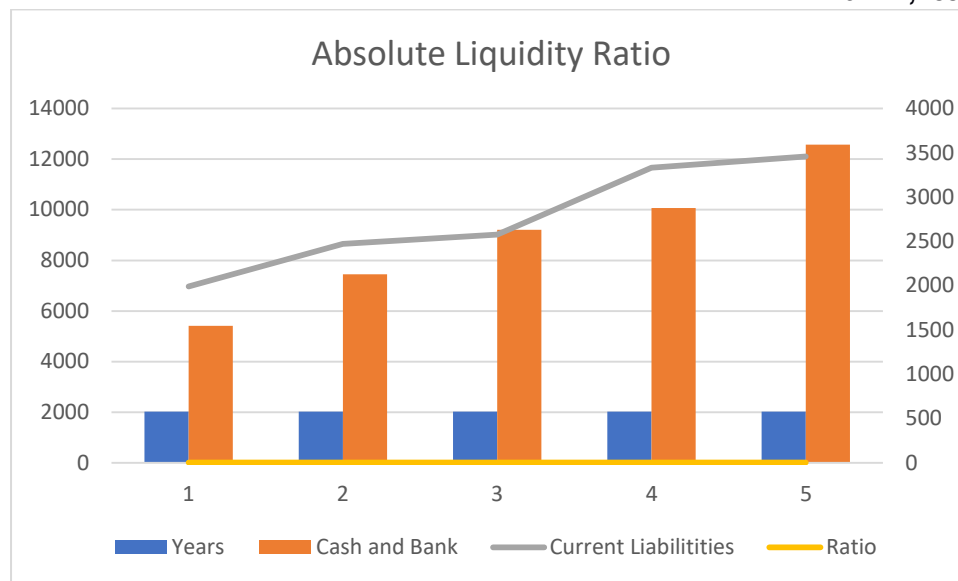


Fig 5.1.10 Absolute Liquidity Ratio

Interpretation

The acceptable norm for this ratio is 1:2 to attain liquidity position. In TATA MOTOERS liquidity ratio is very high from 2020-2024. The company can easily manage day to day cash management progression.

5.1.3 Fixed Asset Turnover Ratio

The fixed asset turnover ratio (FAT) is, in general, used by analysts to measure operating performance. This efficiency ratio compares net sales to fixed asset and measure a company's ability to generate net sales from its fixed asset investments, namely property, plant and equipment.

Years	Net Sales	Fixed Asset	Ratio
2020	7744.69	517.98	14.98
2021	8677.38	489.47	17.72
2022	9752.86	457.37	21.32
2023	11419.02	472.04	24.19
2024	13210.75	479.99	27.52

Table 5.1.11 Fixed Asset Turnover Ratio

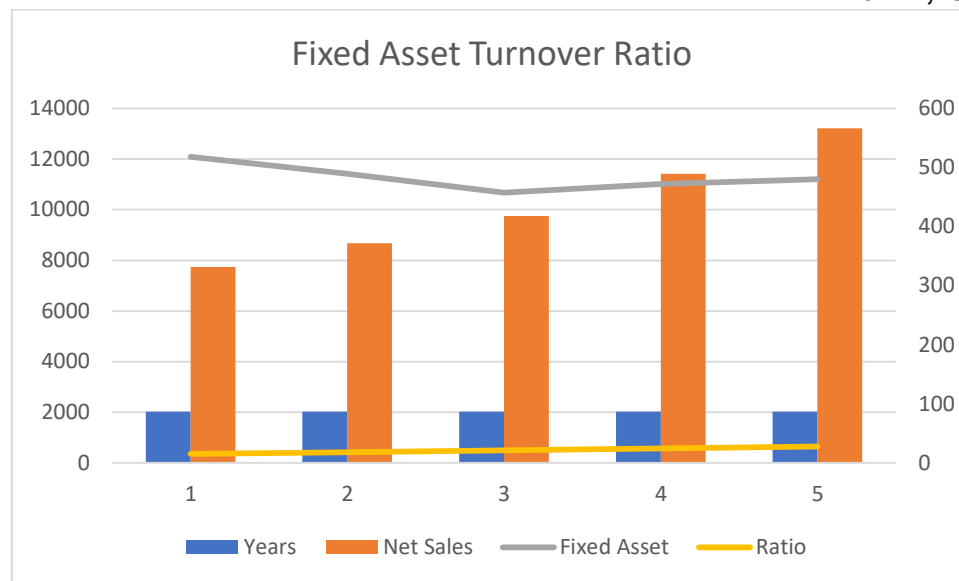


Fig 5.1.11 Fixed Asset Turnover ratio

Interpretation

Fixed assets are used in the business for producing goods to be sold. The effective utilization of fixed asset will result in increased production and reduced cost. The effective utilization of fixed asset shows a higher ratio in the year 2024.

5.1.4 Working Capital Turnover Ratio

Working capital turnover is a ratio that measures how efficiently a company is using its working capital to support a given level of sales. Also referred to as net sales to working capital, working capital turnover shows the relationship between the funds used to finance a company's operations and the revenues a company generates as a result.

Years	Net Sales	Working Capital	Ratio
2020	7744.69	15.72	492.66
2021	8677.38	14.92	581.59
2022	9752.86	9.29	1049.8
2023	11419.02	17.09	810.43
2024	13210.75	24.58	537.45

Table 5.1.12 Working capital turnover ratio

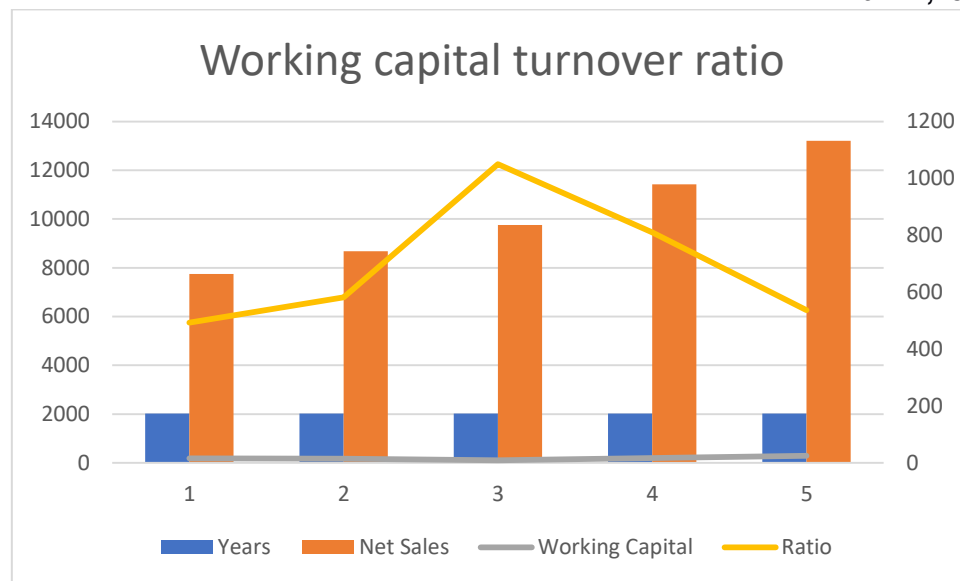


Fig 5.1.12 Working capital turnover ratio

Interpretation

The above figure shows that the fluctuation in the working capital of TATA MOTOERS. In the year 2022 shows the highest working capital ratio.

5.2 TREND ANALYSIS

Table 5.2.1 showing trend for net profit from 2016-2020.

Years	X	Y (Net Profit)	XY	x ²
2020	1	475.65	475.65	1
2021	2	830.79	1661.58	4
2022	3	878.85	2636.55	9
2023	4	1243.89	4975.56	16
2024	5	1542.78	7713.9	25
Total	15	4971.96	17463.24	55

Table 5.2.1 Trend Analysis (2016-2020)

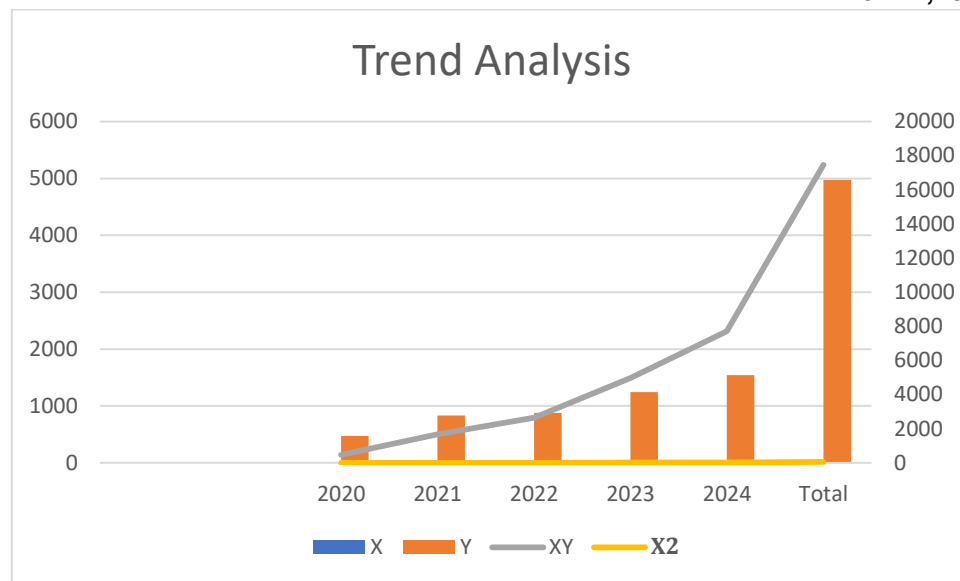


Fig 5.2.1 Trend Analysis

FINDINGS

- The EPS of the company is one of the determinants during the selection of share, how earn from that share? This answer will answer by the EPS information. According to the analysis of EPS the lowest value and highest value IN 2022 and 2024.
- The net profit of the company which is the number represents how much money a company has after all expenses are paid. From this analysis the years 2020 and 2024 have the lowest and highest values of net profit.
- The minimum capital adequacy ratio that company must maintain is 8%. In the case of TATA MOTOERS, the capital adequacy ratio is more than the minimum level so there is less risky.
- The normal ROE in the utility sector could be 10% or less. In 2024 the ROE ratio of the company is 10.63% others are less than 10%.
- Cost to income ratio is important for determining the profitability of a company. The TATA MOTOERS is running more profitably.
- Around 10% a good ROCE varies between industries. But if the firm has a history of achieving over 30%, this would represent a worsening level. In case of TATA MOTOERS moving an acceptable level.
- CD ratio for tata stood at 78.1%. The CD ratio of TATA MOTOERS are less than 80%.

SUGGESTIONS

1. **Maintain Optimal Debt-Equity Ratio:** Tata Motors should continuously monitor and maintain an optimal balance between debt and equity to minimize the overall cost of capital and financial risk.
2. **Improve Debt Management:** The company should aim to reduce high-cost debt and refinance existing loans at lower interest rates to improve profitability and cash flow.

ISSN 2319-5991 www.ijerst.com

Vol. 21, Issue 2, 2025

3. **Enhance Equity Financing:** To reduce dependency on debt, Tata Motors could consider issuing more equity during favorable market conditions to strengthen its capital base.
4. **Focus on Internal Accruals:** Increasing retained earnings through efficient operations can provide a low-cost source of financing and reduce the need for external borrowing.
5. **Strengthen Cash Flow Management:** Effective cash flow forecasting and management will help Tata Motors meet debt obligations timely, reducing the risk of default.

CONCLUSION

The capital structure analysis of Tata Motors Ltd reveals insightful aspects of the company's financial health and performance over recent years. Key financial indicators such as Earnings Per Share (EPS), Net Profit, Return on Equity (ROE), and Capital Adequacy Ratio (CAR) highlight both strengths and areas for monitoring.

The EPS, a critical determinant for investors when selecting shares, showed notable variation with the lowest and highest values observed in 2022 and 2024, respectively, indicating improved earnings potential in the latter year. Net profit trends further reinforce this, with 2020 reflecting the lowest profitability and 2024 achieving the highest, underscoring the company's successful turnaround and strategic growth.

REFERENCES

Books:

1. Khan, M.Y., & Jain, P.K. (2020). *Financial Management: Text, Problems and Cases*. Tata McGraw-Hill Education.
2. Pandey, I.M. (2019). *Financial Management*. Vikas Publishing House.
3. Chandra, Prasanna. (2021). *Fundamentals of Financial Management*. Tata McGraw-Hill Publishing.
4. Bhole, L.M., & Mahakud, J. (2017). *Financial Institutions and Markets: Structure, Growth and Innovations*. Tata McGraw-Hill Education.

RESEARCH ARTICLES

- Sekar et al. (2014) examined Tata Motors' capital structure during 2003–04 to 2012–13 through EBIT–EPS analysis.
- They found that increased debt and equity levels directly influenced the debt-to-equity ratio, highlighting the importance of balancing financing sources to optimize profitability
- **Mittal & Kumari (2015)** analyzed a decade (2005–2014) of financial data from top Indian auto companies, including Tata Motors.
- Applying regression analysis, they found that **profitability**, **growth rate**, and **liquidity** significantly influence leverage decisions
- This study spans 2011–2021 and investigates correlations between capital structure components (debt–equity ratio, debt–assets ratio, etc.) and financial performance.
- It concludes that while debt can enhance returns, excessive leverage impairs firm stability. Optimal capital structure must balance performance and risk
- Reviews capital structure and profitability indicators over five years.
- Shows a direct relationship between debt–equity ratio and EPS, demonstrating the impact of leverage choices—and contrasting Tata Motors with a key peer

ISSN 2319-5991 www.ijerst.com

Vol. 21, Issue 2, 2025

- **Aishwarya et al. (2022)** covers 17 Indian auto companies over 2010–2019.
- It highlights significant positive relationships between profitability (ROCE, ROE) and capital structure variables (debt–equity, interest coverage), affirming the importance of optimal leverage

Websites:

1. <https://www.tatamotors.com> – Official Website of Tata Motors Ltd.
2. <https://www.moneycontrol.com> – Financial Data and Market Reports
3. <https://www.nseindia.com> – National Stock Exchange of India
4. <https://www.bseindia.com> – Bombay Stock Exchange of India
5. <https://www.investopedia.com> – Financial Definitions and Concepts
6. <https://economictimes.indiatimes.com> – Economic and Business News
7. <https://www.rbi.org.in> – Reserve Company of India Reports and Guidelines