A Study on Financial Ratio Analysis and Performance Evaluation of Tata Motors Limited at Nagpur

Vaishnavi Kundanrao Kamble[1], Prof. Nitin Prakash[2]

[1]*Department of MBA, Tulsiramji Gaikwad-Patil College of Engineering & Technology, Nagpur*

[2]*Assistant Professor, Department of MBA, Tulsiramji Gaikwad-Patil College of Engineering & Technology, Nagpur*

***Abstract*—Abstract- The financial performance analysis is an important operation in evaluating the operational efficiency and viability of corporate. entities. Automobile industry is a significant contributor in the economic growth of India and Tata motors Limited is one of them. high-ranking participants in this industry. This project is research focusing on financial performance of Tata Motors Limited. use of financial ratio analysis and its importance to investors and stakeholders in Nagpur with special emphasis. The study assesses the secondary data sources, such as annual, are used to determine the liquidity, profitability solvency and efficiency ratios of Tata Motors Limited. publications and published financial reports. Analysis has been done by trend analysis, ratio analysis and comparison analysis. techniques. The findings indicate that variation exists in the profitability and liquidity ratios in the course of the study period which are influenced by market forces, international business and price systems. The research concludes that the financial ratio analysis is an effective analysis. performance assessment and decision-making technique.**

***Index Terms*—Financial Ratio Analysis, Performance analysis, Liquidity, Profitability, Solvency, Industry, Automobile Industry.**

I. INTRODUCTION

The evaluation of financial performance today has been identified to be a very crucial component of strategic management in business. This the reason is that the organizations are in a new competitive, dynamic, and globalized marketplace where the viability of the business rests on financial basis. acid test of sustainability, growth and market trust. The budgetary feasibility of an entity is quantified by it have capacity to generate profits, liquidity, debt management and asset optimization. This is the reason why financial analysis is nowadays. important instrument that managers, investors, creditors, policymakers, and other stakeholders require as an indispensable tool. The three financial statements are the balance sheet, income statement and cash flow statement that present numbers of the company. that of a financial performance of an organization. These numbers in the statements are however not that informative unless those are analyzed. using certain techniques. Financial ratio is one of the most credible and commonly used methods to analyze the financial performance. analysis. The method aids in the determination of correlation between different financial aspects and the management is also able to. Benchmarking against time and industry performance. Tata Motors Limited belongs to the employees of the major automobile manufacturers in India. As a subsidiary of the with a business, the company has managed to cut a niche as a multi-product automobile company that is renowned as Tata Group. has a stake in passenger cars, commercial vehicles and electric automotive vehicles and overseas luxury automotive markets. With Tata Motors is pan-Indian in its manufacturing plants, and strongly present all over the globe.

The company has been facing a number of changes in its structure and strategies over the years like overseas acquisitions. technology partnerships, product innovation, and incursions into the world of electric mobility. These diversifications and expansions have created more opportunities and financial challenges on the part of the company. Alterations in the world demand, exchange risks, raw material the financial performance of the company has had a direct impact on the government regulations, prices and government regulations. Hence, an extensive financial ratio analysis is needed to provide the analysis of its financial stability, profitability, and efficiency.

II. LITERATURE REVIEW

The analysis of financial ratios was a significant fundamental instrument in the analysis of companies.
Liquidity and profitability ratios were discussed by Pandey (Financial Management) as the index of short-term and long-term attitude. Brigham and Houston concentrated on the leverages ratios to determine the effectiveness of the capital structure. Helfert came up with measurement of the capital structure by ratio analysis. help aid in management decision-making. Market exposure and exchange rate have been found in research studies conducted on the Indian automotive sector to cause fluctuations in their profits. fluctuations. As learned by research studies on Tata Motors:

- During periods of acquisitions high leverage is occurring.
- International operations due to fluctuation in profit.
- Strategic reorganizations with efficiencies in operations.
- Increase in electric vehicles and green movements.

Despite the vast number of studies carried out on financial analysis, research focused on the region has not been done with much academic work. feedback of Tata Motors performance by the Nagpur investor fraternity.

III. RESEARCH METHODOLOGY

The methodology of research is the main support of any piece of scholarly research. It is a methodical sensing of gathering data, evaluating it and meaning it to achieve the aims of the research. A rigid research process leads to reliability, validity, and scientific verisimilitude of the study.

The present research paper under the title of A Study on Financial Ratio Analysis and Performance Evaluation of Tata Motors Limited at Nagpur meets a systematic diagnostic approach in determining the financial performance of Tata Motors Limited. The ways in which the research is done are discussed in this chapter, research design, data source, sampling strategy, data analysis means and methods, development of the hypothesis, and restrictions of the methodology in the research.

3.1. Research Design

Research design Res Research plan or blueprint of research. It defines the character of the research, data collecting methods, data analysis and interpretation.

This research study is based on the following:
1. Descriptive Research Design.

The research study explains the financial condition and the performance of Tata motors over a specific time. It does not consider the manipulation of variables, but dwells on the observation and analysis of finance as published.

2. Analytical Research Design

The research study is not limited to the descriptive approach since it calculates financial ratios and explains the correlation between variables. It examines the trends and the performance in a time perspective.
This way, the nature of research design is descriptive-cum-analytical.
Sources of Data collection.
Secondary data will be used to conduct the research.

A. Secondary Data Sources
Tata Motors Limited Annual Reports.

- Audit Financial Statements of (Balance Sheet, profit and loss account, cash flow statement).
- Report on the Ministry of Corporate Affairs.
- Financial literature and text books.
- Publications of Reserve Bank of India.
- Publicity on the company webpage.

The secondary data is credible since it is revised and released. Formulation of Hypotheses

The hypotheses are developed as follows:
Hypothesis 1
H0 1 Hypothesis: Liquidity ratios do not show any significant impact on the overall financial performance.
H 1 interference Liquidity ratios do not substantially influence the overall financial performance. Methods and instruments of Analysis.

The tools and techniques of analysis used in analysing the financial performance of Tata Motors Limited include;

1. Ratio Analysis
The tool of analysis that is used in this study is ratio analysis. It assists in identifying the association among the different things of the financial statement in order to evaluate the performance. It is divided into the following ratios:

Liquidity Ratios-
Current Ratio and Quick Ratio in order to evaluate the short-time liquidity stance.
Profitability Ratios to evaluate the earning capacity are Net Profit Ratio, Return on Capital Employed (ROCE) and Return on Equity (ROE).

Solvency Ratios-
Debt-Equity Ratio and Interest coverage Ratio to determine the long-term financial position. Activity Ratios Inventory Turnover and Asset Turnover Ratios to determine whether the operation is efficient or not.

2. Trend Analysis
Trend analysis is applied to identify the financial performance of the company in a span of five years. It helps the analyst to evaluate the increase, trend and development or deterioration in financial status of the company.

3. Comparative Analysis
The financial information of various years is compared to give the judgment of the consistency and changes of the performance.

IV. COMPANY PROFILE

Tata Motors company was introduced in 1945 as a part of the Tata Group. The company produces:

- Passenger Cars
- Commercial Vehicles
- Electric Vehicles
- International Luxury Orange cars.

The firm has manufacturing plants both in India and other international nations. These strategies of the company are cost restructuring, electrifying the vehicles, and globalization

V. FINANCIAL RATIO AND PERFORMANCE ANALYSIS.

A. Liquidity Analysis
The short-term solvency is moderate as indicated by the current ratio. Quick ratio exposes sensitivity to the inventory management. Working capital analysis shows the trends at the period of economic slowdowns.

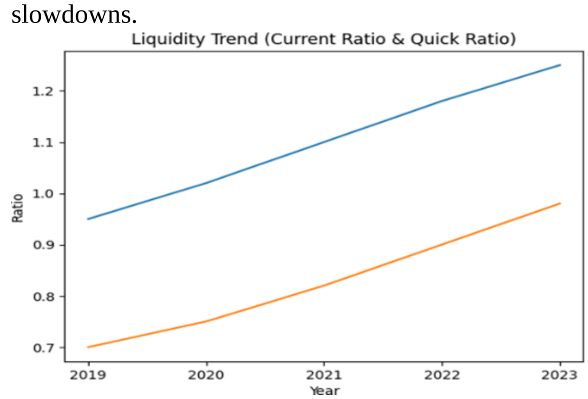

Fig.5.1 Liquidity Analysis section

The trend of Current Ratio and Quick Ratio with the period of five years is presented in the graph above. The uniform increase is a good sign of enhancement in the short-term solvency position. The difference between the current ratio and the quick ratio shows inventory reliance. On the whole, there is an improvement in the liquidity status of the company.

B. Profitability Analysis
Net Profit Ratio shows volatility as it has had losses in operations during the initial years, but in other years has had an improvement of operational results. Return on Capital Employed (ROCE) shows improvement and this means that capital is used efficiently. Return on Equity (ROE) is used to indicate the changes in the returns on the shareholders.

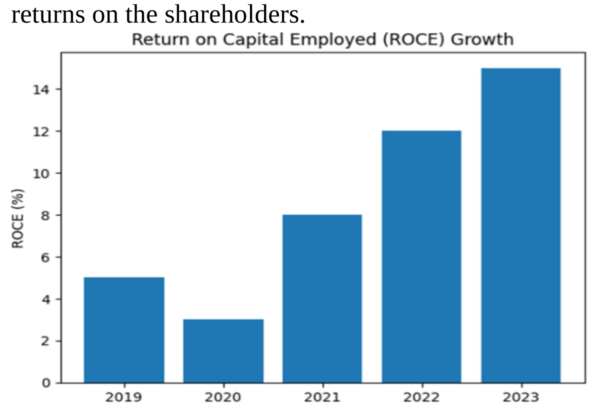

Fig.5.2 Profitability Analysis section

The bar chart gives the picture of Return on Capital Employed (ROCE) per year. The fact that the ROCE improved in extended years implies improvement. capital resources utilization. The recovery trend indicates the increase in the operational efficiency and profitability.

C. Solvency Analysis

The Debt-Equity ratio indicates debt-Enhanced capital structure. The ratio of interest to be paid has improved in the years of recovery showing the existence of an already existing interest. enhancements in the repayment capacities.

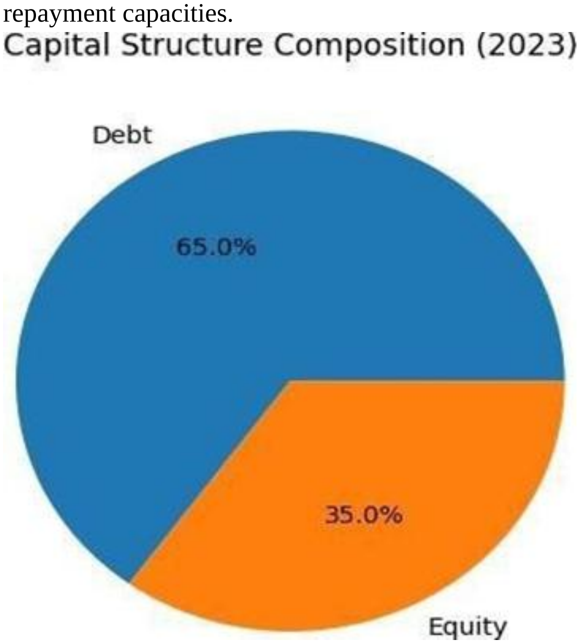

Fig.5.3 Solvency Capital Structure

In the pie chart, it is possible to see the capital structure mix 2023. An increased ratio of debts signifies leveraged financing plan, at the same time equity provides the contribution of shareholders. Financial stability entails having an equal measure of capital structure.

VI. DATA ANALYSIS AND RESULTS

- As indicated by the financial ratios,
- There is moderate but stable liquidity position.
- The recovery in the past few financial years has been on profitability.
- The debt structure is long term sustainable.
- Some of the improvements have been in the improvement of operating efficiency.

Evaluations of the trend analysis indicate that the financial restructuring strategies have influenced the performance of the company positively.

VII. FINDINGS

- Liquidity position is satisfactory but it needs to be improved.
- The restructuring has been successful in terms of profitability position.
- Debt position is high and is manageable.
- there is an improved efficiency in the use of assets.
- Financial ratios play a major contribution in the general performance measurement.

VIII. CONCLUSION AND FUTURE SCOPE

It can be concluded that Tata Motors Limited has achieved financial turnaround, financial stability in its operations in the past. past years. Ratio analysis can be applied as an efficient way of quantifying the performance in business.

Further direction of the present study can include:

- Industry comparison
- Procedure: This is a statistical technique which includes regression
- correlation analysis and is frequently referred to as a correlation test.
- These are the stock market performance analysis.

IX. LIMITATIONS OF THE STUDY

- It seems that the research is entirely founded on secondary data.
- The study period is limited.
- The competitors are not specially compared.
- The macroeconomic environment is not done in a detailed analysis.

X. FINAL CONCLUSION

The research was to be conducted to determine the liquidity, profitability, solvency, and efficiency of Tata Motors over a span of five years. The study results present the fact that Tata motors has been experiencing changes in its financial performance over the period of the study in terms of. external economic factors.

Nevertheless, there are indications of the company recovering the situation in its financial performance over the past few years, particularly. with regards to profitability and efficiency.

The liquidity position of the company reveals that the company is having a moderate short term financial position. The current ratio indicates, even though it does not indicate clearly that business activities are not returning strong profits in 2017. the short-term solvency of the company, the company should consider further enhancing the management of the working cash. enhance the solvency of the company.

REFERENCES

[1] *Tata Motors Limited Annual Reports*, 2019–2023. Official publications of Tata Motors Ltd.

[2] F. Brigham and J. F. Houston, *Fundamentals of Financial Management*, 15th ed. Boston, MA, USA: Cengage Learning, 2019.

[3] M. Pandey, *Financial Management*, 12th ed. New Delhi, India: Vikas Publishing House, 2021.

[4] A. Helfert, *Financial Analysis: Tools and Techniques*, 11th ed. New York, NY, USA: McGraw-Hill Education, 2018.

[5] S. A. Ross, R. Westerfield, and B. Jordan, *Principles of Corporate Finance*, 12th ed. New York, NY, USA: McGraw-Hill Education, 2020.

[6] R. A. Brealey, S. C. Myers, and F. Allen, *Principles of Corporate Finance*, 13th ed. New York, NY, USA: McGraw-Hill Education, 2020.

[7] Ministry of Corporate Affairs, *Company Financial Reporting and Reports of Year-End*. New Delhi, India: Government of India, 2023.

[8] Reserve Bank of India, *Handbook of Statistics on Indian Economy*. Mumbai, India: RBI Publications, 2023.

[9] C. R. Kothari, *Research Methodology: Methods and Techniques*, 3rd ed. New Delhi, India: New Age Global Publishers, 2019.

[10] P. Chandra, *Financial Management: Theory and Practice*. New York, NY, USA: McGraw-Hill Education, 2017.

[11] S. P. Gupta, *Statistical Methods*, 46th ed. New Delhi, India: Sultan Chand & Sons, 2018.

[12] S. P. Jain and K. L. Narang, *Financial Accounting*. Ludhiana, India: Kalyani Publishers, 2020.

[13] P. Kotler and K. L. Keller, *Marketing Management*, 15th ed. London, U.K.: Pearson Education, 2018.

[14] Government of India, *Economic Survey of India*. New Delhi, India: Ministry of Finance, 2022.