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“A COMPARATIVE STUDY ON THE FINANCIAL PERFORMANCE OF TATA MOTORS AND MAHINDRA & MAHINDRA MOTORS”

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ABSTRACT :

The Indian automobile sector plays a crucial role in driving the country's economic growth, with Tata Motors and Mahindra & Mahindra being two of its leading players. This study compares their financial performance by analyzing key metrics like revenue growth, profitability, liquidity, and solvency using secondary data from annual reports and market surveys. Important financial ratios such as ROA, ROE, Debt-to-Equity Ratio, and EPS are used to assess their financial strength and operational efficiency. Additionally, external factors like market trends, competition, and government policies are considered. The results indicate that while Tata Motors benefits from its global presence and high revenues through Jaguar Land Rover (JLR), Mahindra & Mahindra maintains a solid position in the domestic tractor and SUV segment with a robust financial structure. This analysis helps investors, policymakers, and industry experts understand the financial standing and strategic outlook of these two auto giants.

Keywords: Tata Motors, Mahindra & Mahindra, financial performance, profitability, liquidity, solvency.

Introduction :

The Indian automobile industry is a key contributor to the country's economic growth, fostering global competitiveness, employment generation, and technological advancements. Two of the sector's most influential players, Tata Motors and Mahindra & Mahindra (M&M), have established strong market positions with diverse product offerings and strategic expansions. Tata Motors, a part of the Tata Group, has expanded its global footprint significantly through its acquisition of Jaguar Land Rover (JLR). Meanwhile, Mahindra & Mahindra has solidified its leadership in the utility vehicle, tractor, and electric vehicle segments, focusing on sustainability and strong rural market penetration.

In a rapidly evolving corporate environment, financial analysis plays a crucial role in assessing a company's overall health and operational efficiency. This study provides a comparative evaluation of the financial performance of Tata Motors and Mahindra & Mahindra over the past three years (2022-2024). By analyzing key financial ratios, the study offers valuable insights into their profitability, liquidity, and stability. Understanding these financial indicators helps stakeholders, including investors and policymakers, make well-informed business and investment decisions.

Problem Statement:

This study aims to assess the financial performance of Tata Motors and Mahindra & Mahindra by examining their profitability, liquidity, and stability. By identifying the financial strengths and weaknesses of these companies, the analysis will provide valuable insights for stakeholders, helping them navigate business and investment decisions effectively.

Objectives

The primary objectives of this study include:

- Evaluating the short-term solvency position of Tata Motors and Mahindra & Mahindra over the last three years.
- Identifying financial strengths and weaknesses in both companies.
- Analyzing the profitability trends of both companies over the past three years.
- Assessing the efficiency of Tata Motors and Mahindra & Mahindra based on key financial metrics.

Hypotheses

Null Hypotheses (H₀):

1. H₀₁: There is no significant difference in profitability between Tata Motors and Mahindra & Mahindra.

2. H₀₂: Tata Motors and Mahindra & Mahindra do not differ significantly in financial leverage.
3. H₀₃: Liquidity levels of Mahindra & Mahindra are not significantly different from Tata Motors.
4. H₀₄: The return on equity (ROE) of Tata Motors and Mahindra & Mahindra does not show significant variation.
5. H₀₅: There is no major difference between the financial performance of electric vehicle (EV) investments by the two companies.

Alternative Hypotheses (H₁):

- H₁₁: Profitability levels between Tata Motors and Mahindra & Mahindra differ significantly.
- H₁₂: Tata Motors has higher financial leverage compared to Mahindra & Mahindra.
- H₁₃: Mahindra & Mahindra demonstrates better liquidity than Tata Motors.
- H₁₄: The ROE of Tata Motors and Mahindra & Mahindra exhibits significant differences.
- H₁₅: Mahindra & Mahindra's investments in electric vehicles have yielded better financial performance compared to Tata Motors.

Literature Review :

The automobile sector plays a crucial role in shaping a nation's economy, contributing significantly to industrial growth, employment, and technological advancement. In India, Tata Motors and Mahindra & Mahindra Motors are two of the leading automobile manufacturers, competing in various segments, including passenger vehicles, commercial vehicles, and electric mobility. Their financial performance has been a subject of interest among researchers, policymakers, and industry experts due to its implications for market competitiveness, investor confidence, and corporate sustainability.

Financial performance analysis is essential for assessing a company's profitability, liquidity, efficiency, and solvency. According to Pandey (2015), financial ratio analysis is a fundamental tool used to evaluate a firm's operational effectiveness. Researchers like Sharma & Gupta (2018) emphasize that a company's revenue, profit margins, return on assets (ROA), return on equity (ROE), and debt-equity ratio are key indicators of financial health.

Agarwal (2019) highlights that in the automobile industry, financial performance is influenced by market demand, cost structures, supply chain efficiency, and government policies. For instance, fluctuations in fuel prices, foreign exchange rates, and taxation policies directly impact automobile manufacturers' revenues and profit margins. The shift towards electric vehicles (EVs) and sustainability measures further add a layer of complexity to financial decision-making in this sector.

Tata Motors, a subsidiary of the Tata Group, is one of India's most prominent automotive companies with a global presence. According to a study by Mehta & Sharma (2020), Tata Motors' financial performance has seen fluctuations due to its investments in subsidiaries such as Jaguar Land Rover (JLR). The company's revenue structure is diversified, with a strong foothold in both domestic and international markets.

Despite its global reach, Tata Motors has faced challenges such as high debt levels and cyclical demand. Jain & Verma (2021) indicate that the company's debt-to-equity ratio has remained high due to capital-intensive projects. However, the firm has managed to improve its operating margins through cost-cutting measures and strategic investments in electric mobility.

Mahindra & Mahindra Motors, a key player in India's utility vehicle and tractor segment, has demonstrated strong financial resilience. According to Srivastava & Khanna (2019), the company has maintained a stable financial structure due to its diversified portfolio, including passenger cars, commercial vehicles, farm equipment, and two-wheelers.

Mahindra's financial stability is attributed to its lower debt levels and strong operating margins. Additionally, Rajan (2022) highlights that the company has successfully leveraged its research and development (R&D) capabilities to introduce innovative vehicle models, including electric SUVs and hybrid technology. However, Mahindra faces challenges related to global supply chain disruptions, increasing competition, and regulatory changes.

A comparative financial performance analysis of Tata Motors and Mahindra & Mahindra highlights key differences in their business models, investment strategies, and profitability. Tata Motors has a stronger global presence with significant contributions from JLR, whereas Mahindra has a dominant market share in utility vehicles and tractors in India.

According to an industry report by IBEF (2023), Tata Motors has experienced revenue volatility due to global market dependence, whereas Mahindra has shown relatively stable revenue growth due to its diverse portfolio. While Tata Motors has reported higher revenue figures, Mahindra exhibits better financial stability with a more controlled debt ratio.

Chakraborty (2023) states that both companies have heavily invested in electric vehicles, with Tata Motors leading in EV market penetration. Mahindra, on the other hand, is focusing on hybrid technology and expanding its rural market reach. These strategies reflect their financial priorities and future growth prospects.

Research methodology:

Research Design

This study follows an analytical research approach, incorporating various quantitative metrics to assess the financial performance of Tata Motors and Mahindra & Mahindra Motors. The primary method used for evaluation is ratio analysis, which helps in understanding key financial aspects such as profitability, liquidity, and efficiency.

Data Collection Method

The study is based on financial data spanning three years (2021–2023), sourced from the annual reports and financial statements of Tata Motors and Mahindra & Mahindra Motors. Additionally, secondary data has been collected from credible financial websites, including Moneycontrol, Wikipedia, Screener, and the official websites of Tata Motors and Mahindra & Mahindra Motors.

Population of the Study

The research focuses on companies operating in the Indian automotive sector, specifically manufacturers of passenger, commercial, and electric vehicles. While the study considers the entire industry, Tata Motors and Mahindra & Mahindra Motors have been selected for in-depth analysis due to their significant market presence, extensive product portfolios, and influence in both domestic and international markets. This approach provides a well-rounded perspective on their financial standing and overall performance.

Sampling Method

A purposive sampling technique is used to focus specifically on Tata Motors and Mahindra & Mahindra Motors. These companies were chosen due to their leadership roles in the Indian automotive sector, strong market influence, and global expansion strategies. Additionally, they share similarities in terms of market size, product offerings, and geographical reach, making them ideal candidates for comparative analysis. This non-random sampling approach ensures that the research remains relevant to the study's objectives.

Sampling Frame

The scope of the study includes:

1. Financial data from the years 2021 to 2023.
2. Data extracted from company annual reports, regulatory filings, and financial databases.
3. Industry insights and market benchmarks from reputed sources like SIAM, McKinsey reports, and Deloitte studies.

Data Collection Instrument

To ensure accuracy and efficiency, a structured data extraction template is utilized. The template is designed to systematically capture key financial and market performance metrics, including:

- **Company Performance Indicators:** Revenue, net profit, operating profit, expenses, and key financial ratios.
- **Market Analysis Factors:** Market share, sales volume, segment-wise performance (passenger vehicles, commercial vehicles, electric vehicles), and growth trends.

This structured methodology provides a comprehensive financial and strategic assessment of the two companies, aiding in a meaningful comparative analysis.

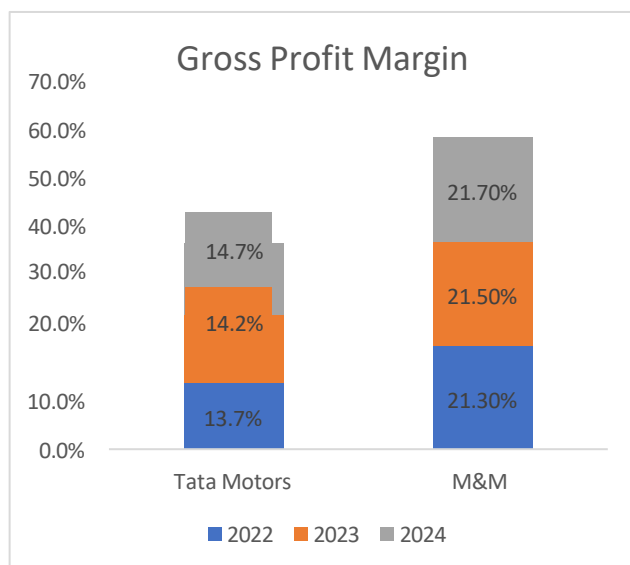
Results and Discussion:

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.

Ratio analysis can mark how a company is performing over time, while comparing a company to another within the same industry or sector.

1. Profitability Ratios:

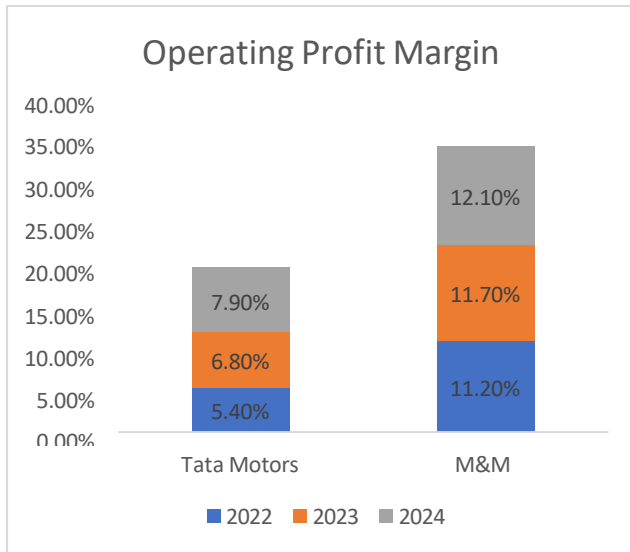
- a) **Gross Profit Margin:** $\text{Gross Profit Margin} = (\text{Gross Profit} / \text{Revenue}) \times 100$



Interpretation:

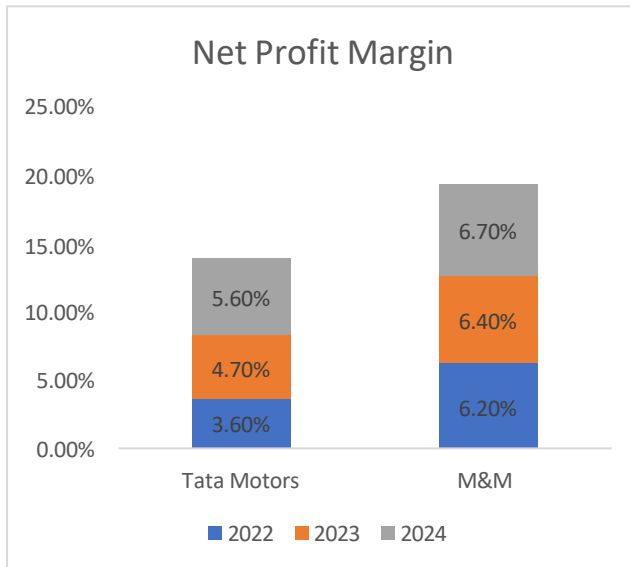
M&M has consistently outperformed Tata Motors in terms of gross profit margin. This suggests that M&M benefits from better cost management, which could be due to efficient cost structures or better pricing strategies. Tata Motors, on the other hand, has shown progress but has not yet matched M&M's performance.

b) Operating Profit Margin: $= (\text{Operating Profit} / \text{Revenue}) \times 100$



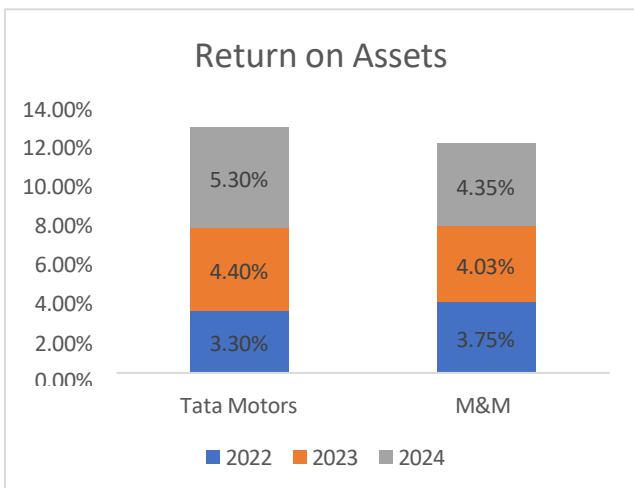
Interpretation:
 M&M has a higher operating profit margin, which reflects its superior efficiency in managing operational expenses. This indicates that M&M is better at controlling costs compared to Tata Motors. Although Tata Motors is making progress, M&M has maintained a more consistent and higher operating profit margin.

c) Net Profit Margin: $= (\text{Net Profit} / \text{Revenue}) \times 100$



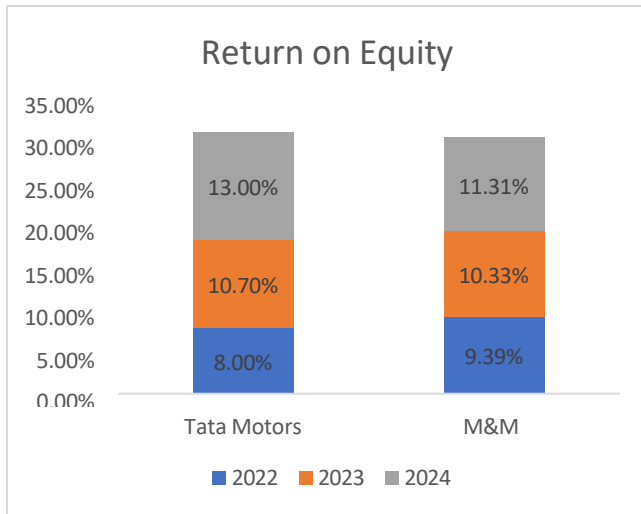
Interpretation:
 M&M maintains a stronger net profit margin, which points to better overall profitability and cost control. Tata Motors has shown growth in net profit, but it still has a gap to fill in order to match M&M's profitability levels.

d) Return on Assets (ROA): $(\text{Net Income} / \text{Total Assets}) \times 100$



Interpretation:
 Tata Motors outperforms M&M in 2024 in terms of Return on Assets (ROA). This suggests that Tata Motors has been more effective at utilizing its assets to generate earnings. It indicates efficient asset management, resulting in higher earnings relative to its assets.

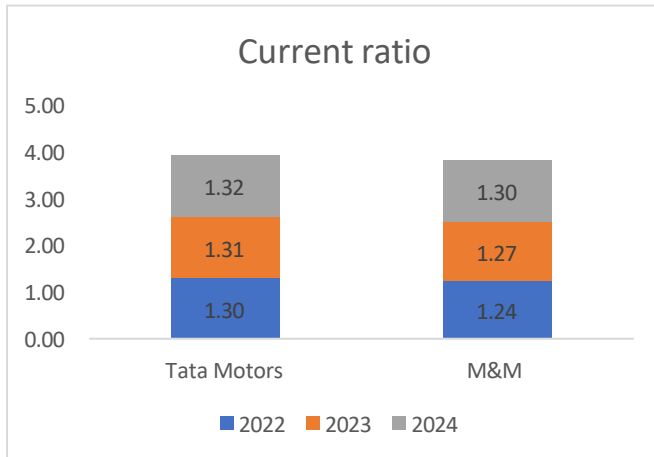
e) **Return on Equity (ROE):** = (Net Income / Shareholder's Equity) × 100



Interpretation:
 Tata Motors shows higher Return on Equity (ROE) than M&M, suggesting that it is generating better returns for shareholders. This could be due to more effective utilization of equity or higher profitability.

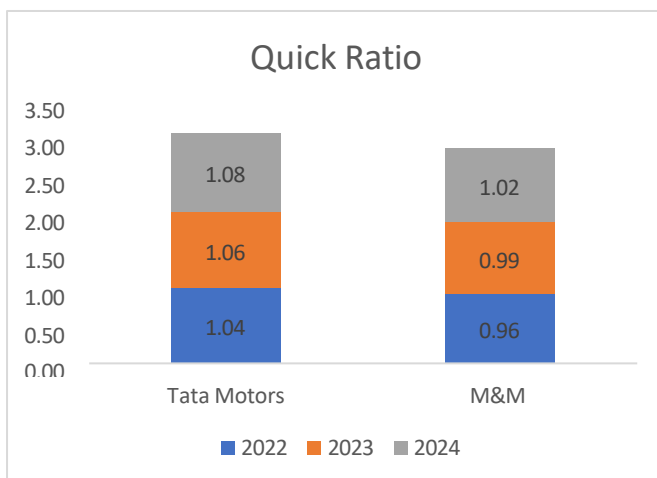
2. **Liquidity Ratios**

f) **Current Ratio:** = Current Assets / Current Liabilities



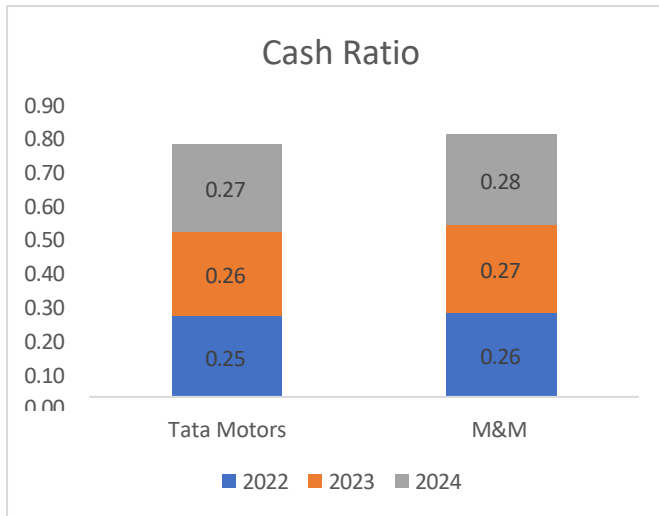
Interpretation:
 Tata Motors has a slightly higher current ratio, reflecting its ability to settle short-term liabilities more effectively than M&M. Both companies show stable liquidity positions, indicating solid financial stability and the ability to meet short-term obligations.

g) **Quick Ratio:** = (Current Assets - Inventory) / Current Liabilities



Interpretation:
 Tata Motors has a higher quick ratio, suggesting a stronger ability to meet its short-term liabilities with its most liquid assets. This is an important indicator of financial flexibility.

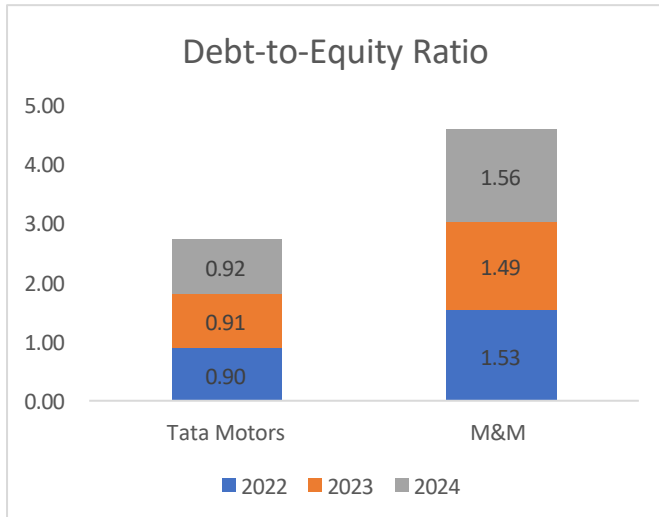
h) Cash Ratio: = Cash & Cash Equivalents / Current Liabilities



Interpretation:
 M&M has a slightly higher cash ratio, indicating that it has a greater cash buffer to cover short-term obligations. This gives M&M a slight edge in terms of cash liquidity.

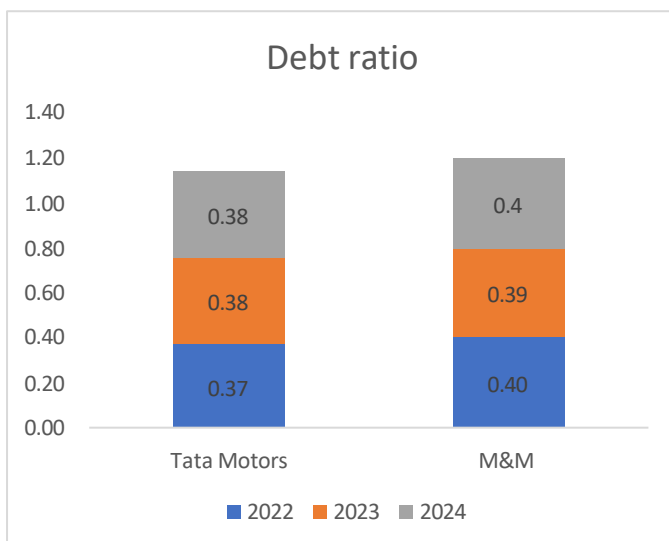
3. Leverage Ratios

i) Debt-to-Equity Ratio: = Total Debt / Total Equity



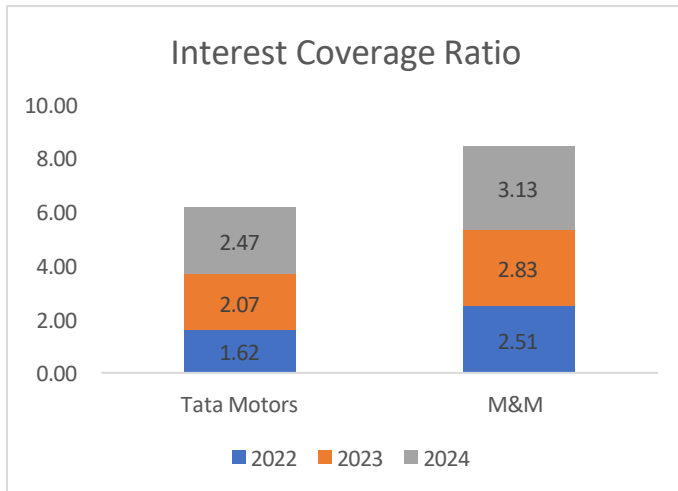
Interpretation:
 Tata Motors maintains a lower debt-to-equity ratio, indicating that it is less reliant on debt for financing compared to M&M. A lower ratio is generally preferred by investors as it suggests lower financial risk.

j) Debt Ratio: = Total Debt / Total Assets



Interpretation:
 Both Tata Motors and M&M maintain moderate levels of debt, providing stability while supporting growth. The ratio suggests that neither company is excessively reliant on debt, and both have balanced capital structures.

k) Interest Coverage Ratio: = EBIT / Interest Expense

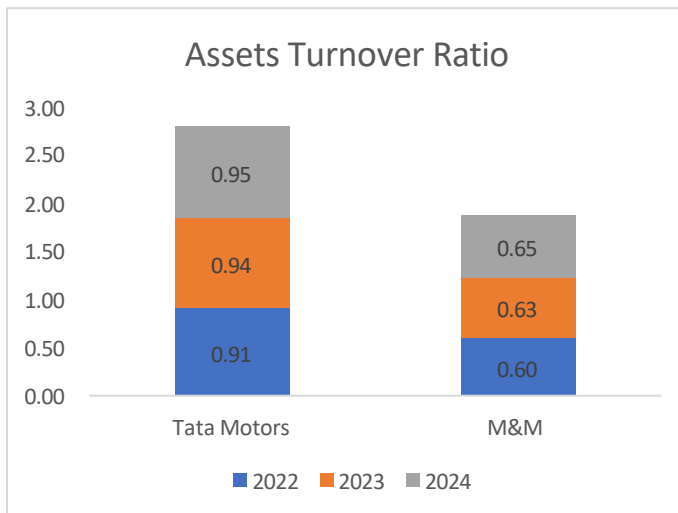


Interpretation:

M&M’s higher interest coverage ratio shows better ability to service its debt and interest payments compared to Tata Motors. This suggests that M&M is in a stronger position to manage its debt obligations.

4. Efficiency Ratios

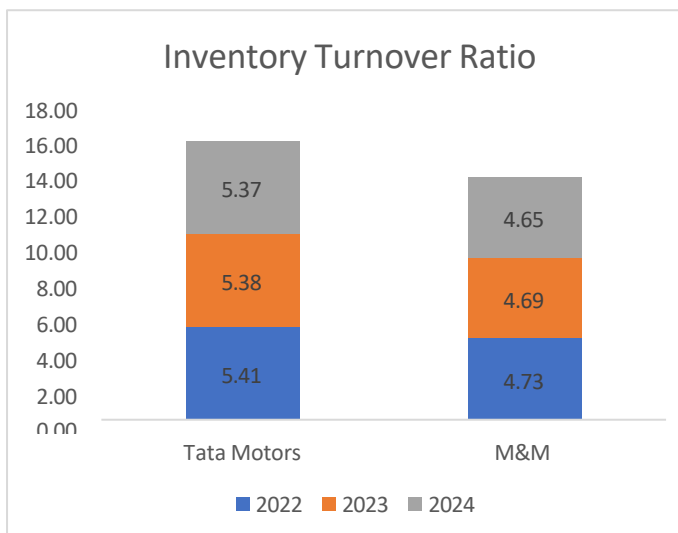
l) Asset Turnover Ratio: = Revenue / Total Assets



Interpretation:

Tata Motors has a higher asset turnover ratio, reflecting greater efficiency in utilizing its assets to generate revenue. This shows that Tata Motors is more effective in converting its assets into sales compared to M&M.

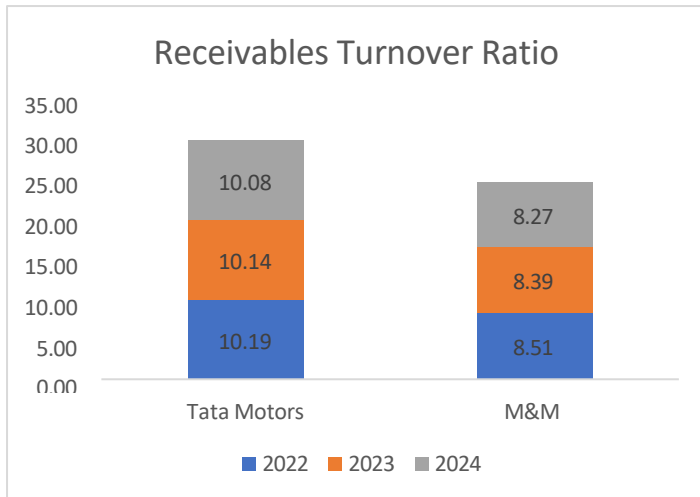
m) Inventory Turnover Ratio: = Cost of Goods Sold / Average Inventory



Interpretation:

Tata Motors has a higher inventory turnover ratio, meaning it is able to sell and replace its inventory more quickly than M&M. This indicates that Tata Motors manages its inventory efficiently.

n) Receivables Turnover Ratio: = Revenue / Accounts Receivable

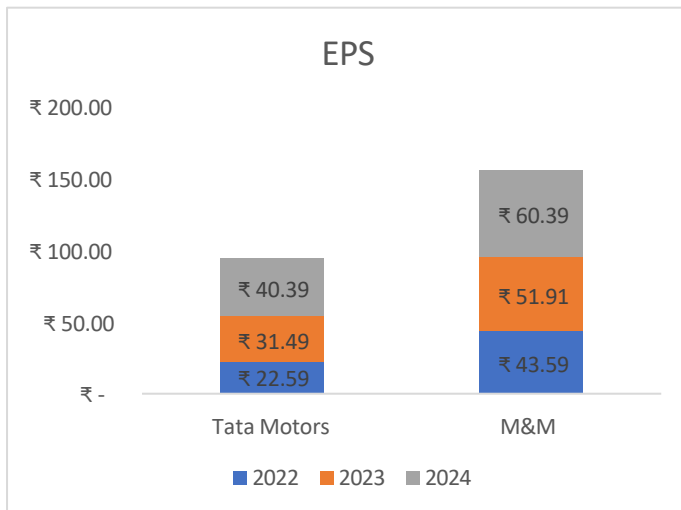


Interpretation:

Tata Motors performs better in terms of receivables turnover, suggesting that it is more effective in collecting payments from customers. This indicates a strong ability to manage receivables.

5. Market Ratios

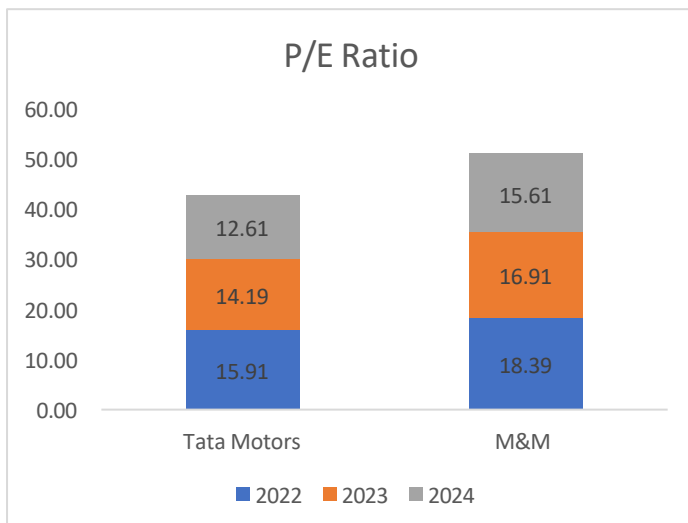
o) Earnings Per Share (EPS): = Net Income / Number of Outstanding Shares



Interpretation:

Tata Motors shows rapid growth in its earnings per share (EPS), indicating strong profitability improvement. While M&M has a higher EPS, Tata Motors is catching up with a faster growth rate. Investors looking for growth may find Tata Motors appealing, while those seeking steady returns might prefer M&M.

p) Price-to-Earnings (P/E) Ratio: = Market Price per Share / Earnings per Share



Interpretation:

Tata Motors' declining P/E ratio suggests that its stock may be becoming undervalued, making it a more attractive investment option. This decline may reflect the company's improving earnings, making the stock more appealing to investors.

Results and Findings :

An analysis of Tata Motors and Mahindra & Mahindra Motors' financial performance from 2022-2024 reveals significant improvements in various metrics for both companies. Tata Motors has shown growth in profitability, asset utilization, and liquidity, catching up to M&M in areas like ROA and ROE but still lagging behind in profitability margins. M&M, on the other hand, outperforms Tata Motors in profitability, debt management, and market valuation, maintaining a stronger financial position and conservative debt management.

Tata Motors is making strides in profitability and efficiency, especially in asset utilization, with potential for growth but needs to improve operating and net profit margins compared to M&M. While Tata Motors' declining P/E Ratio indicates attractiveness for high-growth potential, M&M is viewed as a stable choice for consistent returns and lower risk by investors.

Limitation and suggestion:

The study on Tata Motors and Mahindra & Mahindra's financial performance has limitations, overlooking qualitative factors like brand perception and sustainability efforts. It also lacks context and industry-wide benchmarking. The study also overlooks the dynamic nature of the automotive industry, including technological advancements, consumer demands, and geopolitical developments. The lack of a deeper exploration into these factors limits the study's ability to capture the full scope of their future growth potential. A more nuanced approach would provide a better understanding of their position.

Furthermore, the global operations of Tata Motors and Mahindra & Mahindra, and external factors like government policies and market conditions, are not fully explored. These limitations highlight the need for a more comprehensive approach in future research.

At this time of lower valuations in Tata Motors, an investor can build up a position in the company.

Mahindra & Mahindra has consistently outperformed its peers albeit at a slower rate of growth.

Conclusion and Future Scope:

This study provides a comprehensive analysis of the financial performance of Tata Motors and Mahindra & Mahindra, highlighting their resilience in the competitive automotive sector. Tata Motors benefits from its global operations, particularly through Jaguar Land Rover, while Mahindra & Mahindra has carved a strong presence in agriculture and utility vehicles. Both face challenges related to the shift toward electric vehicles (EVs) and changing consumer preferences. Despite strong recent financial performance, the lack of industry benchmarking and macroeconomic consideration limits the understanding of their competitive positioning.

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