A STUDY ON CAPITAL STRUCTURE ANALYSIS OF TATA MOTORS COMPANY

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ABSTRACT:
The capital structure of a company plays a vital role in determining its financial stability, risk management, and long-term growth. This study focuses on the capital structure analysis of Tata Motors, one of India's leading automobile manufacturers, to evaluate its financial performance using key financial ratios. By analyzing Tata Motors' financial data over multiple years, the study identifies trends, strengths, and areas for improvement in its capital structure. The findings highlight the company's financial challenges, debt dependency, and asset utilization efficiency, providing insights for investors and stakeholders on its financial sustainability and future growth strategies.
KEYWORDS: Capital Structure, Financial Performance, Automobile Industry.

INTRODUCTION:

Tata Motors, one of India's leading automobile manufacturers and a global player in the automotive industry, has a dynamic capital structure influenced by market conditions, debt financing strategies, and equity capital management. As a part of the Tata Group, the company has adopted various financing strategies to sustain its domestic and international operations, including acquisitions, technological advancements, and expansion into electric Vehicles (EVs).

Capital structure plays a crucial role in determining the financial stability and growth potential of a company. It refers to the financial instruments used by a firm to finance its operations and expansion. A well-balanced capital structure ensures financial flexibility, minimizes risk, and enhances shareholder value by optimizing the cost of capital. Tata Motors strategically allocates capital for future growth. It also utilizes hybrid financing methods like convertible bonds and long-term loans to support major projects and acquisitions.

A well-managed capital structure strengthens market position and investor confidence, allowing the company to secure funding through equity offerings, corporate bonds, and strategic partnerships. This study aims to analyze the capital structure of Tata Motors, evaluating its debt-equity ratio, financial leverage, and cost of capital over recent years. By assessing these financial metrics, the study will provide insights into how Tata Motors manages its financial obligations, balances debt and equity, and ensures long-term sustainability in a competitive automobile sector. The research will also explore the impact of global economic conditions, interest rate fluctuations, and company-specific strategies on Tata Motors' capital structure decisions.

REVIEW OF LITERATURE:

Sathyanarayana and Nagesh Malavalli (2014) analyzed the determinants of capital structure in the Indian automobile, IT, and hotel sectors by examining a sample of 15 companies listed on the BSE from 2004 to 2013. The study used financial leverage as the dependent variable, while tangibility, growth rate, size, NDTS, and business risk were considered independent variables. A multiple regression model was applied to identify the key factors influencing capital structure. The findings indicated both negative and positive relationships between tangibility, earnings, growth, size, NDTS, business risk, and financial leverage.

Sekar, Gowri and Ramya (2014) conducted research on the capital structure and leverage of Tata Motors.The study employed ratio analysis to determine the factors affecting the company's capital structure. Firm value was taken as the dependent variable, while return on equity, debt capacity, trading on equity, cost of capital, and tax were considered independent variables. The research

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revealed a negative relationship between return on equity, value of equity, value of debt, and the overall value of the firm.

Bindu (2019) examined the capital structure of Indian automobile companies, identifying asset tangibility and interest coverage as key determinants. The study found a negative impact of capital structure on return on equity and return on assets. It also revealed that capital structure had no significant influence on firm value, except in the two and three-wheeler segment. The research emphasized the need for segment-specific capital structure decisions. Overall, the findings help financial managers optimize shareholder value.

Hemaprasanna and Karthikeyani (2023) analyzed the capital structure of the Indian automobile industry. The study highlighted its capital-intensive nature and key financial determinants. It examined the impact of economic fluctuations on financial stability. The research provided insights for optimizing financing strategies. The findings aid in improving financial management in the sector.

Aishwarya, Sudharani and Suresh (2020) conducted a study titled "A Study on Impact of Capital Structure on Profitability of Companies Listed in the Indian Stock Exchange with respect to the Automobile Industry." The research examined the impact of capital structure on return on capital employed (RoCE), return on net worth (RoNW), and return on assets (ROA) using fixed effect and random effect models.The study, based on 10 years of financial data from 17 automobile companies, concluded that a well-balanced debt-equity ratio significantly influences profitability, and firms should maintain an optimal mix of debt and equity for better financial performance.

STATEMENT OF THE PROBLEM :

The automobile industry is a key driver of economic growth in India, with Tata Motors being a leading player in the passenger, commercial, and electric vehicle segments. Managing an optimal capital structure is crucial for the company to balance debt and equity, ensuring financial stability while supporting expansion and innovation. An imbalanced capital structure can lead to higher financial risks, reduced profitability, and lower investor confidence. To address these challenges, this study aims to analyze Tata Motors' capital structure. By examining financial statements and key ratios, the study will identify trends, strengths, and areas for improvement in Tata Motors' capital management strategy. This analysis will help in understanding how the company can optimize its capital structure to achieve financial stability, risk minimization, and sustainable growth, ensuring a competitive edge in the evolving automobile industry.

OBJECTIVES OF THE STUDY:

- To analyse the Profitability and liquidity position of Tata Motors.
- To assess the Solvency Position of Tata Motors.

RESEARCH METHODOLOGY:

The TATA MOTORS Company is used for the study. The required amounts of data were collected from capital line database. Other data are getting from the Annual Reports, Journals etc. The Secondary data also made available through trade magazines, books, Internet etc. The aim of data collection is to gain familiarity and to achieve new insights into the financial performance of TATA MOTORS.

TOOLS USED :

- Ratio Analysis
- Mean
- Standard Deviation
- Coefficient of Variation

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LIMITATIONS OF THE STUDY:

- The study focuses only on Tata Motors and the findings may not be applicable to the entire automobile industry or other companies with different capital structures.
- The study is based on data from a specific period, and financial performance may change due to economic conditions, market trends, and policy changes beyond the study period.

ANALYSIS & INTERPRETATION :

CURRENT RATIO

Current Ratio = Current Assets / Current Liabilities

YEARS	CURRENT ASSETS	CURRENT LIABILITIES	RATIO
2020	7,688.52	19,550.46	0.393
2021	11,491.58	28,426.38	0.404
2022	45,347.32	36,094.36	1.256
2023	60,478.25	46,517.28	1.300
2024	77,214.72	60,493.26	1.276
Total	202,220.39	191,081.74	4.629
Mean	--	--	0.926
SD	--	--	0.431
CV	--	--	46.53

The mean current ratio (0.926) indicates that, on average, current assets were insufficient to fully cover current liabilities. The standard deviation (0.431) and CV (46.53%) show significant fluctuations in liquidity over the years. The higher ratios in 2022–2024 suggest improved financial stability, while earlier years indicate weaker short-term solvency.

QUICK RATIO:

Quick Ratio = Quick Assets / Current Liabilities

YEARS	QUICK ASSETS	CURRENT LIABILITIES	RATIO
2020	1622.33	19,550.46	0.082
2021	1420.69	28,426.38	0.499
2022	30832.63	36,094.36	0.854
2023	41015.14	46,517.28	0.882
2024	50666.68	60,493.26	0.837
Total	125,557.47	191,081.74	3.154
Mean	--	--	0.631
SD	--	--	0.308
CV	--	--	48.81

The mean Quick Ratio (0.631) suggests moderate liquidity, indicating the company's ability to cover short-term liabilities with quick assets. The standard deviation (0.308) and CV (48.81%) highlight significant fluctuations in liquidity over time. The sharp increase in 2022–2024 suggests improved financial flexibility, whereas 2020–2021 reflected weaker liquidity.

GROSS PROFIT RATIO :

Gross Profit = (Gross Profit / Net Sales) * 100

YEARS	GROSS PROFIT	NET SALES	RATIO
2020	679.99	3065.14	22.184
2021	1297.00	3255.62	39.838

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2022	1324.79	4303.56	30.783
2023	1655.01	6180.24	26.779
2024	2156.61	8042.49	26.815
Total	7,113.40	24,847.05	146.399
Mean	--	--	29.28
SD	--	--	5.94
CV	--	--	20.29

The Gross Profit Ratio has a mean of 29.28%, indicating a stable profitability trend. The standard deviation of 5.94 suggests moderate fluctuations in the ratio over the years. The coefficient of variation (CV) of 20.29% reflects a relatively stable gross profit margin with limited variability. This signifies consistent profitability management, though some fluctuations exist across the years.

NET PROFIT RATIO :

Net Profit Ratio = (Net Profit / Net Sales) * 100

YEARS	NET PROFIT	NET SALES	RATIO
2020	276.10	3065.14	9.00
2021	561.11	3255.62	17.235
2022	818.18	4303.56	19.011
2023	1085.5	6180.24	17.557
2024	1360.72	8042.49	16.919
Total	4101.61	24847.05	79.722
Mean	--	--	15.94
SD	--	--	3.55
CV	--	--	22.24

The Net profit enables one to measure the relationship between sales and net profit. It is clear from the table that in all years except in the year 2021 the ratio has increased from 9.00 in 2020 to 2024. The overall analysis of this ratio shows the ability of the company to understand competition during the study period. The net profit ratio of the company is satisfactory. Growth of net profit ratio among 5 years shows both positive & negative growth.2023 and 2024 shows negative growth and other 3 years shows positive growth.

RETURN ON ASSETS RATIO:

Return on Asset = Net Income / Total Assets

YEARS	NET INCOME	TOTAL ASSETS	RATIO
2020	1,903.18	39478.33	0.05
2021	1,637.11	37863.42	0.04
2022	541.09	37863.42	0.01
2023	-1,177.95	36200.13	-0.03
2024	-4,418.72	38387.99	-0.12
TOTAL	-1515.29	120185.29	-0.05
MEAN	--	--	0.03
SD	--	--	0.08
CV	--	--	240.77

The company's net income shows high volatility, with a significant negative trend from 2022 to 2024. The ratios indicate declining profitability, particularly in 2024. The coefficient of variation (CV) is extremely high, reflecting instability in earnings and asset management efficiency.

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Vol-15, Issue-03, No.04, March: 2025

INTEREST COVERAGE RATIO :

Interest Coverage Ratio = EBIT/Interest

YEARS	EBIT	INTEREST	RATIO
2020	4940.99	1383.70	3.57
2021	4166.39	1218.62	3.42
2022	3380.31	1387.76	2.44
2023	2397.68	1353.18	1.77
2024	240.18	1611.68	0.15
TOTAL	15125.55	6954.94	11.35
MEAN	--	--	4.10
SD	--	--	3.06
CV	--	--	74.70

The company's EBIT shows a decreasing trend, especially in 2024, while interest expenses remain relatively stable. The declining ratio reflects reduced ability to cover interest, with a high CV indicating significant volatility in the company's earnings and financial performance over time.

PROPRIETARY RATIO:

Proprietary Ratio = Share holder's funds / Total Asset

YEARS	SHARE HOLDER'S FUNDS	TOTAL ASSETS	RATIO
2020	3905.53	28,711.87	0.1360
2021	4539.92	37,436.32	0.1212
2022	6833.39	50,850.67	0.1343
2023	7980.76	65,66.79	0.1215
2024	9464.79	83,693.69	0.113
Total	32,724.39	266,359.34	0.626
Mean	--	--	0.125
SD	--	--	0.0097
CV	--	--	7.76

The mean ratio of 0.125 indicates that shareholder's funds constitute approximately 12.5% of total assets on average. The standard deviation of 0.0097 shows minimal fluctuations over the years, and the coefficient of variation (7.76%) suggest low variability, indicating financial stability in shareholder equity relative to total assets.

FIXED ASSETS TURNOVER RATIO:

Fixed Asset Turnover Ratio = Net Sales/Fixed Asset

YEARS	NET SALES	FIXED ASSETS	RATIO
2020	3065.14	213.36	14.366
2021	3255.62	427.65	7.6128
2022	4303.56	425.61	10.111
2023	6180.24	449.97	13.734
2024	8042.49	464.42	17.317
Total	24,847.05	1,981.01	63.14
Mean	--	--	12.63
SD	--	--	3.80
CV	--	--	30.08

The average fixed asset turnover ratio is 12.63, with 30.08% variability, indicating moderate

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fluctuations. The standard deviation of 3.80 reflects inconsistent asset utilization. The lowest ratio in 2021 (7.61) and the highest in 2024 (17.32) show changes in efficiency. Variations may be due to shifts in investment or sales growth.

LONG TERM DEBT TO TOTAL FIXED ASSETS RATIO :

Long Term Debt to Total Fixed Assets Ratio = Debt / Fixed Assets

YEARS	DEBT	FIXED ASSETS	RATIO
2020	15990.73	19,989.11	0.80
2021	15880.57	19,343.91	0.82
2022	16798.95	19,111.53	0.88
2023	15052.8	19,153.78	0.79
2024	22134.41	14,839.72	1.49
MEAN	--	--	0.92
SD	--	--	0.26
CV	--	--	28.28

The company's debt ratio has fluctuated, peaking in 2024, indicating higher reliance on debt. The ratio's volatility is moderate, with a CV of 28.28. Fixed assets have decreased, suggesting potential challenges in asset utilization. The company's debt level is increasing compared to fixed assets.

FINDINGS :

- The mean current ratio of 0.926 indicates that Tata Motors' current assets, on average, were insufficient to cover its current liabilities. However, the ratio improved significantly from 2022 onwards, suggesting better short-term solvency in recent years.
- The mean quick ratio of 0.631 indicates moderate liquidity, with significant fluctuations over the years. The sharp increase in 2022-2024 reflects improved financial flexibility, but the earlier years showed weaker liquidity.
- The mean gross profit ratio of 29.28% indicates stable profitability, with moderate fluctuations over the years. This suggests consistent management of production costs and revenue generation.
- The ROA ratio shows a declining trend, with negative values in 2023 and 2024, indicating reduced profitability and inefficiency in asset utilization. The high coefficient of variation (CV) of 240.77% reflects significant instability in earnings.
- The interest coverage ratio has been declining, especially in 2024, indicating a reduced ability to cover interest expenses from operating profits. This suggests increasing financial risk.
- The mean proprietary ratio of 0.125 indicates that shareholders' funds constitute approximately 12.5% of total assets, showing financial stability in terms of equity financing.
- The average ratio of 12.63 indicates moderate efficiency in utilizing fixed assets to generate sales. However, the variability (CV of 30.08%) suggests inconsistent asset utilization over the years.
- The ratio has been fluctuating, with a significant increase in 2024, indicating higher reliance on debt compared to fixed assets. This suggests potential challenges in asset utilization and increasing financial leverage.

SUGGESTIONS:

- Maintain a current ratio above 1 to ensure strong liquidity and improve cash flow management.
- Optimize quick ratio by reducing inventory dependency and improving receivables collection.

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- Implement cost-cutting strategies to enhance gross profit margins and profitability.
- Reduce interest burden by refinancing high-cost loans and improving earnings before interest and taxes (EBIT).
- Diversify revenue streams through exports, new product lines, and digital mobility services.
- Optimize working capital management by balancing short-term liabilities and cash reserves.
- Strengthen internal reserves to support long-term business expansion and reduce financial risk.
- Enhance investor confidence through transparent financial disclosures and a stable dividend policy.
- Focus on reducing long-term debt dependency by increasing retained earnings and issuing convertible bonds.

CONCLUSION :

Tata Motors, as a leading player in the Indian automotive industry, has shown both strengths and weaknesses in its capital structure and financial performance. While the company has improved its liquidity position in recent years, it faces challenges in profitability, asset utilization, and debt management. The declining profitability, particularly the negative ROA and interest coverage ratio, indicates increasing financial risk, especially in a highly competitive and capital-intensive industry. To ensure long-term sustainability and financial stability, Tata Motors needs to focus on improving its profitability, optimizing asset utilization, and managing its debt levels more effectively. By adopting a more balanced capital structure and investing in strategic growth areas, the company can enhance its financial performance, reduce risk, and maintain its competitive edge in the evolving automotive industry.

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