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# **Ratio Analysis: A Study on Financial Performance of Tata Motors**

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**Abstract**: Financial ratio analysis is the process of reviewing the financial position of the company. Ratio analysis is extensively used by firms as a technique to forecast the financial soundness of the company to build future growth. This study aims at analyzing the financial performance of Tata Motors by calculating financial ratios. The primary objective of this study is to evaluate the performance of Tata Motors during the last decade. The reference period taken for study is 5 years starting from 2016 to 2020. Five Ratios were calculated to serve the purpose of assessing the financial performance of the company that includes net profit margin, return on capital employed, inventory turnover ratio, asset turnover & current ratio. Secondary data was collected from annual reports of Tata Motors to derive relevant information. The results reveal that the company has performed reasonably well during the reference period. The company has shown a good potential by earning returns for their shareholders.

Key words: Earnings per Share, Financial Ratios, Annual Report, Financial performance

## 1. Introduction

Financial ratios are conventional yet powerful tool of analyzing the financial performance of the company. It facilitates the Investors, Creditors and Marketers to have insights on firm's performance. They are used to make predictions about the company's ongoing run and future growth. Primarily ratios are being used by the investors to make inter firm comparisons in order to maximize returns. The ratios are calculated by taking figures from the company's financials. Multiple ratios are calculated to ascertain the ability of an entity to pay debts, generate profits and maximize shareholders wealth. Ratios are broadly classified under five heads named as Profitability, Coverage, Turnover, Liquidity and stability ratios. Profitability ratios are used to estimate the overall profitability of the firm. Coverage ratios are used to ascertain the company's ability to meet their interest obligations. Turnover ratios indicates firm's capability to generate sales by utilizing their assets. Liquidity and stability ratios are calculated to judge the financial position of an entity from long-term and short-term solvency point of view.

Altman (1968) stated the significance of financial ratios in forecasting the performance of the company. His research also claims that conventional financial ratios are no longer used for assessing the financial performance of the company. Hence, in order to enhance the ability of technique a set of financial ratios were combined with discriminant analysis approach and the results were very encouraging further edmister (1972) tests the usefulness of financial ratios in predicting the performance of small enterprises and also stated that not all ratios contributes in forecasting the firm's performance. The research also highlights the ratios that can be useful in forecasting the bankruptcy and financial performance of the organizations. Ohlson (1980) concluded that the predictive power of any model depends on the choice of variables chosen and financial report available and secondly ratios have become robust measure for forecasting financial performance of the firms. So, it becomes necessary to combine this technique with some other models in order to achieve more precise and reliable results further Chen & Shimerda (1981) examined each ratios contains some unique and common factors. Therefore, the study recommends selecting the ratios that capture the common and unique characteristic of an entity and also that provides useful insights on financial performance of an organization. Barnes (1987) stated that financial ratios are used for various purposes. It can be, to ascertain the financial performance of an organization, to check the cash inflows and outflows within the organization, to check firm's ability to make appropriate investments etc. They often compared with established standards to have better idea on financial soundness of the company. Pandya (2012) examined the financial performance of TSL using some financial ratios and stated that the company has done fairly well on some grounds but there are few areas that require sheer attention by the Promoters. Delen, Kuzey & Uyar (2013) analyzed the ratios that are important to check the financial viability of an entity. Ratios like Net Profit Margin, Debt Equity, Asset Turnover, and Leverage Ratios have significant impact on firm's financial performance and also stated that two profitability ratios Earnings before Tax to Equity Ratio and NPM impacts companies performance the most.

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The study is descriptive in nature. Different ratios were calculated to ascertain the financial performance of the company. Data was collected from the secondary sources such as journals and annual report of Tata Motors of past five years. Bar charts were drawn on Excel to have a better understanding of company's financials over a period of five years.

The following objectives has been formulated for this study

- To ascertain the financial performance of the company.
- To compare the ratios with the established standards.



## 2. Data Analysis and Interpretation



The above chart depicts the firm's ability to generate returns by utilizing their capital. The company managed to earn fair returns by efficiently deploying their resources against investments. However, in 2020 they failed miserably in deploying their assets as the ROCE came out to be -7.18 which is matter of question on the firm's ability to choose effective investment policies.





The above chart depicts the firm managed to earn some profits out of sales with a maximum of 2.91 in 2019 and minimum of -16.59 in 2020. The average Net profit margin comes out to be -1.11 with a standard deviation of 2.70. The figures of 2020 raise a serious concern for the investors as company failed to ascertain profits due to decreasing demand.





The above chart depicts the company's ability to manage working capital to meet its short term obligations. Company has managed to keep its ratio from 0.58 to 0.63 which indicates the firm's ability to meet their short term loans efficiently. However, during 2020 the current ratio fell to 0.53 which indicates a shortage of cash to meet working capital requirements.

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The above chart depicts the company's ability to generate sales by utilizing their assets. Increasing ATR indicates the firm's ability to realize profits using their assets. It also indicates that the firm has efficiently utilized their assets to generate sales. However, there have been instances where the company failed miserably to generate sales out of their assets.



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### **3.** Conclusion and Recommendation

The results reveal that the company has performed very bad almost on all parameters as the Return on Capital Employed and Net worth went to an all-time low. Also, the results also highlights few areas that needs to be considered like current ratio can be a matter of concern for the investors as it directly impacts the company's financial performance. Also, the company has performed well in the 2019 before COVID-19 pandemic and the possible reasons could be the policies adopted by the company such as voluntary retirement scheme and sell-off non-core assets has worked well in favor of the company.

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