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A QUANTITATIVE ANALYSIS OF TATA STEEL'S CAPITAL STRUCTURE

Authors

Dr. Binay Kumar Singh
Assistant Professor
Department of Commerce
Jamshedpur Co-operative College
Kolhan University

Gaurav Kumar
Research Scholar
Department of Commerce & Business Management
Kolhan University

ABSTRACT

India was the world's second-largest steel producer. Capital structure is currently a contentious topic. The capital structure of a company refers to the mix of debt and equity that it uses to finance its operations and growth. The choice of capital structure affects the cost of capital, the risk profile, the profitability, and the value of the company. This paper or report aims to analyse the capital structure of Tata Steel, one of the largest and oldest steel companies in India and the world. It uses various financial ratios, such as debt-equity ratio, interest coverage ratio, return on equity, and weighted average cost of capital, to assess the leverage, solvency, efficiency, and performance of Tata Steel. It also compares the capital structure of Tata Steel with other steel companies in India, such as SAIL, JSW Steel, Jindal Steel, and Essar Steel. The paper or report finds that Tata Steel has a moderate level of debt and a high level of equity in its capital structure, which reflects its conservative and flexible approach to financing. It also finds that Tata Steel has a lower cost of capital, a higher return on equity, and a better interest coverage ratio than its peers, which indicates its financial strength and competitive advantage. The paper or report concludes by suggesting some recommendations for improving the capital structure of Tata Steel in light of the changing business environment and market conditions.

Keywords: **-** Capital Structure, Performance, Ratio, Tata Steel.

INTRODUCTION

Capital structure refers to the composition of funds that a company obtains from different sources, mainly debt and equity. It means the proportion of debt and equity in the total capital that a company invests in its business for a long time. The financial structure of a company includes all the sources of funds that it uses, while the capital structure only includes the long-term sources of financing. The capital structure of a company consists of debt

and equity securities that finance its assets. Capital structure is the mix of long-term funds that a company uses. It includes long-term debt, preference shares, and shareholders' funds.

The company's choice of capital structure has evolved over time with various theories and factors. The capital structure consists of long-term debt, equity, and convertible securities. It depends on the nature and size of the business and the amount of capital employed. However, it is not easy to predict the financial structure of a company based on its country, as it is influenced by the economic and business cycles. The company's future plans depend on the expectations and confidence levels of the market, which affect its access and cost of capital. The global economy is uncertain and risky. The company has to be careful about the costs and risks that it adds to its portfolio by borrowing funds. The capital structure is determined by the combination of demand-side factors, such as the trade-off theory and pecking order theory, and supply-side factors, such as investor preferences and financial intermediation. Therefore, both demand-side and supply-side factors affect the financing decision of a company. There are various theories of capital structure that suggest the optimal debt-equity ratio for a company. A company raises funds from different sources to finance its operations. The capital structure of a company shows how these sources are combined.

OVERVIEW OF THE COMPANY

In India, the steel industry is rapidly expanding. Increased activity in the automotive, real estate, transportation, aviation, and shipbuilding sectors all contribute to demand for steel in India. India is the world's second-largest steel producer. The Tata Group's Indian steel manufacturing unit, Tata Steel Limited Iron and Steel Company Limited (previously Tata Iron and Steel Company Limited (TISCO)), is located in Mumbai, Maharashtra, India.

In 1907, India's Tata Steel became Asia's first fully private, integrated steelmaking enterprise. This led to the development of Jamshedpur, India, the country's first major industrial center. At the moment, they are among the world's top steel producers. In FY21, they produced INR 91,037 crore in revenue and had a raw steel production capacity of about 20 MnTPA across all of their Indian operations. In 2016, they opened a 3 MnTPA greenfield steel factory in the eastern state of Odisha, with future expansion plans to 8 MnTPA.They also own and operate deep mines, guaranteeing a steady supply of raw materials to keep production costs low and output high. This allows them to maintain their position as Asia's lowest-cost steel manufacturer.

In addition to cars and specialized products, India also produces manufactured goods, exports its wares, sells name-brand merchandise in its retail stores, and provides a variety of services. The business provides a wide range of products, including hot-rolled and cold-rolled steel, galvanized metal, branded solution packages, and more. One of Europe's largest steel producers, Tata Steel has a raw steel production capacity of roughly 12.4 MnTPA. They established a presence in Europe with the purchase of Corus in 2007. The Netherlands and the United Kingdom have primary steel production facilities, whereas the latter countries host downstream businesses in the steel industry. The European facilities produce a wide array of high-quality strip steel products for use in a wide range of industries, such as building, transportation, storage, and delivery, packaging, and engineering, and more.

As of March 31, 2021, Tata Steel Ltd. has the following capital structure, according the Economic Times:-

Capitalization allowed: Rs 2100 Crore

Capitalization at Inception: Rs 1,223.4 Crore

Cash in hand for shares of stock: Rs. 1,222.1 crore

Total number of shares outstanding: 122,212,042

Each share has a Rs. 10 face value.

How much and what kinds of money a business has raised from investors, debt holders, and other stakeholders is reflected in its capital structure. Equity capital, which reflects the shareholders' ownership position, has been a primary source of funding for Tata Steel. Permanent and adaptable, equity capital comes with the drawback of dividing up earnings and power with the shareholders.

Through its subsidiaries Tata Steel Long Products Limited and Tata Steel Mining Limited2, Tata Steel has bought many other steel firms in India, including Neelachal Ispat Nigam Limited, Stork Ferro and Mineral Industries Private Limited, and Rohit Ferro-Tech Limited. Tata Steel's manufacturing capacity, product range, and access to raw resources and markets in India have all been bolstered as a result of these purchases.

REVIEW OF LITERATURE

Kumari (2015), analysed the four major Indian automakers from 2005 to 2014 in terms of the relationship between financial leverage and capital structure determinants: Tata Motors Ltd, Mahindra & Mahindra Ltd, Maruti Suzuki India Ltd, and Hero MotoCorp Ltd. The variables that were analysed were tangibility, size, growth rate, profitability, and liquidity. According to the results of the study's multiple regression analysis and correlation analysis, growth rate is an independent variable with a positive connection with leverage, whereas liquidity and profitability are shown to have a negative association with capital structure.

Dasilas (2015), Between 2005 and 2010, researchers looked at the connection between SME and large Greek listed company corporate governance, credit ratings, and capital structure. Based on a panel regression study conducted during the crisis years (2008-2010), the authors conclude that corporate governance frameworks and credit ratings are important elements of the capital structure of Greek listed enterprises. Factors like as size, profitability, asset structure, and growth potential were evaluated. Researchers found less evidence that corporate governance characteristics affected the capital structure of SMEs compared to big businesses. This is because the expense to shareholders of employing monitoring agents is mitigated by the owners' participation in the administration of SMEs.

Bashir (2016), explored the economic success of eight Pakistani textile companies between 2009 and 2013. Tangibility of assets, profitability, firm size, growth potential, liquidity, and leverage were all taken into consideration. A regression model was used to examine the information. Leverage was shown to have a positive relationship with expansion. A negative correlation was found between the leverage of Pakistani textile companies and the capital structure of the companies themselves. In the years 2008-2012.

Anitha and Harini (2018), According to the results of their analysis, the optimal capital structure is one that minimizes the cost of capital for the business while still providing maximum return for the shareholders. The financial health of a company is profoundly affected by current changes in its capital structure. Companies' capital structure patterns include debt and equity financing, according to the study's findings. They should, however, strike a balance between debt finance and equity financing. Tata Steel Company's debt-to-equity ratio and return on equity are both good. This means that debt-to-equity ratios have had an impact on Tata Steel. This project's research of Tata Steel firm Limited's capital structure reveals that the firm has been meeting expectations. In the next years, the company should prioritize profit generation by paying attention to both internal and external issues. In the first four years of schooling, the financial support system is robust, but in the fifth and final year, it begins to weaken. The firm has a solid foundation for the future, but it must also place a premium on its near-term financial preparations.

OBJECTIVES OF THE STUDY

Objectives of the study are as follows: -

- To comprehend the Tata Steel Company's Capital Structure.
- To investigate the profitability and capital structure ratios.
- To determine what variables, affect the company's financial success.

RESEARCH METHODOLOGY

This study is based on empirical evidence, so the researcher has adopted a scientific approach to design the research methodology for the investigation. The researcher has used secondary data as the source of information for this research, such as the Annual Reports, websites, and other publications. The study covers a period of five years from 2012 to 2017. The researcher has chosen the last five financial years for the analysis.

SOURCE OF THE DATA

The study relies on secondary sources of data that are obtained from the financial statements of Tata Steel, both published and unpublished, and relevant websites such as moneycontrol.com. The study also uses supplementary data from books, journals, annual reports, and various newspapers.

DATA ANALYSIS

- **Return on Assets**

ROA stands for return on assets, which is the ratio of net income (after taxes) to the total assets used by the firm. This ratio shows how well the firm uses its assets to generate profit.

$$\textbf{Return on Assets} = \frac{\text{Net Profit After Tax}}{\text{Average Total Tax}}$$

Table: - 1 Return on Assets Ratio

Year	Ratio
2016-2017	3.09%
2017-2018	3.33%
2018-2019	7.66%
2019-2020	4.48%
2020-2021	9.46%

Sources: - Secondary Data

This table shows the return on assets ratio for a firm over five years, from 2016-2017 to 2020-2021. The ratio is calculated by dividing the net income (after taxes) by the total assets of the firm. The table indicates that the firm's profitability in relation to its assets has increased over time, except for a slight decline in 2019-2020. The highest ratio was achieved in 2020-2021, at 9.46%, which means that the firm earned 9.46 cents for every dollar of assets it used. The lowest ratio was in 2016-2017, at 3.09%, which means that the firm earned only 3.09 cents for every dollar of assets it used.

- **Total Debt Equity Ratio**

The debt-equity ratio, also called the external-internal ratio, measures the proportion of funds that come from outsiders and shareholders. Outsiders funds are external equities that consist of all kinds of debts or liabilities owed to external parties, such as debentures, bonds, mortgages, or bills, with any maturity period. Shareholders funds are internal equities that include equity share capital, preference share capital, and various reserves, such as capital reserves, revenue reserves, and reserves for contingencies, sinking funds, or accumulated losses and surpluses.

$$\textbf{Total debt equity ratio} = \frac{\text{outsiders fund}}{\text{outsiders fund}}$$

Table: - 2 Total Debt/Equity ratio

Year	Ratio
2016-2017	0.56%
2017-2018	0.41%
2018-2019	0.38%
2019-2020	0.53%
2020-2021	0.34%

Sources: - Secondary Data

This table shows the total debt/equity ratio for a firm over five years, from 2016-2017 to 2020-2021. The ratio is calculated by dividing the total debt by the total equity of the firm. The ratio indicates the degree of financial

leverage of the firm, or how much it relies on debt to finance its operations. A lower ratio means that the firm has more equity than debt, and a higher ratio means that the firm has more debt than equity. The table shows that the firm's debt/equity ratio has fluctuated over time, reaching the highest level in 2019-2020, at 0.53%, and the lowest level in 2020-2021, at 0.34%. This means that the firm increased its debt relative to its equity in 2019-2020, but reduced it in 2020-2021.

- **Total Asset Turnover Ratio**

The Asset Turnover Ratio compares net sales to average total assets to provide an efficient assessment of a company's capacity to turn its assets into a return on investment.

$$\textbf{Total Assets Turn Over Ratio} = \frac{\text{Net Sales}}{\text{Average Total Assets}}$$

Table: - 3 Assts Turnover ratio

Year	Ratio
2016-2017	43.05%
2017-2018	47.64%
2018-2019	51.35%
2019-2020	40.18%
2020-2021	0.51%

Sources: - Secondary Data

This table shows the assets turnover ratio for a firm over five years, from 2016-2017 to 2020-2021. The ratio is calculated by dividing the sales revenue by the total assets of the firm. The ratio indicates the efficiency of the firm in using its assets to generate sales. A higher ratio means that the firm is able to generate more sales with less assets, and a lower ratio means that the firm is using more assets to generate less sales. The table shows that the firm's assets turnover ratio has varied over time, reaching the highest level in 2018-2019, at 51.35%, and the lowest level in 2020-2021, at 0.51%. This means that the firm was most efficient in using its assets to generate sales in 2018-2019, but least efficient in 2020-2021.

- **Interest Coverage Ratio**

A company's interest-paying capacity is quantified using a metric called the Interest Coverage Ratio. The Interest Coverage Ratio is calculated by dividing the EBIT for a certain period of time (often one year) by the interest expenditures for that same year.

$$\textbf{Interest Coverage Ratio} = \frac{\text{Ebit}}{\text{Interest Expenses}}$$

Table: - 4 Interest Coverage Ratio

Year	EBIT	Interest Expense	Interest Coverage Ratio
2018-2019	228.3	76.601	3.0
2019-2020	83.927	75.807	1.1
2020-2021	194.9	76.067	2.6

Sources: - Secondary Data

This table shows the interest coverage ratio for a firm over three years, from 2018-2019 to 2020-2021. The ratio is calculated by dividing the earnings before interest and taxes (EBIT) by the interest expense of the firm. The ratio indicates the ability of the firm to pay its interest obligations from its operating income. A higher ratio means that the firm has more operating income than interest expense, and a lower ratio means that the firm has less operating income than interest expense. The table shows that the firm's interest coverage ratio has changed over time, reaching the highest level in 2018-2019, at 3.0, and the lowest level in 2019-2020, at 1.1. This means that the firm was most capable of paying its interest obligations from its operating income in 2018-2019, but least capable in 2019-2020.

CONCLUSION

The optimal capital structure is the one that maximizes the value of the firm for the shareholders by choosing the best combination of debt and equity that minimizes the cost of capital. The capital structure decisions of a firm have a significant impact on its financial performance. The study reveals that Tata Steel uses both debt and equity financing in its capital structure, but it needs to maintain a proper balance between them. The study also shows that Tata Steel's return on equity is influenced by its debt-equity ratio, which indicates its financial leverage and risk. The study suggests that Tata Steel has performed well in its capital structure management in the first four years of the analysis, but it has deteriorated in the last year. Therefore, the firm should focus on improving its profitability and efficiency by considering the internal and external factors that affect its capital structure. The firm should also pay attention to its short-term capital planning, as well as its long-term capital structure.

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