



## A STUDY ON CAPITAL STRUCTURE ANALYSIS OF SELECTED STEEL COMPANIES IN INDIA

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### **Abstract**

*Capital structure forms a crucial part of a company's financial strategy, affecting profitability, risk, and market value. This study analyzes the capital structure of selected steel companies in India to evaluate the degree of financial leverage, debt-equity mix, and trends over time. The research uses secondary data from financial statements of companies such as Tata Steel, JSW Steel, and Steel Authority of India Limited (SAIL) for a period of 5 years (2019–2023). Financial ratios including Debt-Equity Ratio, Long-Term Debt to Capital Employed, and Interest Coverage Ratio were calculated to assess capital structure. Findings reveal that Indian steel companies have generally maintained a moderate level of leverage, though there are significant differences in debt usage among firms. The study concludes that efficient capital structure management is vital for sustainable growth in a competitive global market.*

### **Introduction**

Capital structure refers to the mixture of debt and equity that a company uses to finance its operations and growth. It reflects financial decisions made by the firm regarding long-term financing and has significant implications for risk, cost of capital, and shareholder wealth. Financial theory suggests that an optimal capital structure minimizes the weighted average cost of capital (WACC) and maximizes firm value.

The steel industry in India is a major contributor to the economy and is characterized by high capital intensity, cyclical demand patterns, and global competition. Companies in this sector require substantial funds for capacity expansion, modernization, and working capital. As a result, capital structure decisions are critical to their financial performance and strategic direction. This study examines the capital structure of selected steel companies in India by analyzing their financial leverage over five years. It identifies trends, compares leverage across firms, and examines implications for financial stability.

### **Objectives of The Study**

1. To analyze the capital structure of selected steel companies in India.
2. To determine the extent of leverage used by these companies.
3. To compare capital structure patterns across firms.
4. To assess the financial risks linked with debt usage.
5. To provide recommendations for improving capital structure management.

**Scope of The Study:** The study focuses on three major steel companies in India: Tata Steel, JSW Steel, and SAIL. The analysis covers the period from 2019 to 2023, based on audited financial statements. This study examines capital structure ratios to understand financing behavior but does not investigate market variables such as share price movements.

### **Review of Literature**

1. **Modigliani and Miller (1958)** established that in perfect markets, capital structure does not affect firm value, but in reality, factors such as taxes, bankruptcy costs, and information asymmetry play a role.
2. **Durand (1952)** introduced early frameworks for understanding debt-equity mixes.

3. **Pandey (2015)** suggested that a balanced mix of debt and equity enhances firm performance by reducing the cost of capital.
4. **Sharma and Kumar (2016)** found that leverage has a significant impact on profitability in Indian manufacturing firms.

### Research Methodology

**Research Design:** Descriptive and analytical research design is used to examine trends and patterns in capital structure ratios over time.

**Data Source:** Secondary data were collected from annual reports, financial statements, and published sources such as CMIE-Prowess and company websites.

**Sample Selection:** Three steel companies listed on the Indian stock exchanges were selected:

1. Tata Steel.
2. JSW Steel.
3. Steel Authority of India Limited (SAIL).

**Period of Study:** 2019 – 2023 (5 years)

**Tools and Techniques:** The following financial ratios were computed:

1. **Debt-Equity Ratio (D/E):**  $D/E = \frac{\text{Total Debt}}{\text{Shareholders' Funds}}$
2. **Long-Term Debt to Capital Employed Ratio (LTDC):**  $LTDC = \frac{\text{Long-Term Debt}}{\text{Capital Employed}} \times 100$
3. **Interest Coverage Ratio (ICR):**  $ICR = \frac{\text{EBIT}}{\text{Interest Expenses}}$

### Analysis And Interpretation

#### Debt-Equity Ratio

Company	2019	2020	2021	2022	2023
Tata Steel	1.45	1.39	1.30	1.25	1.18
JSW Steel	0.98	1.10	1.05	0.95	0.90
SAIL	1.80	1.76	1.72	1.65	1.58

#### Interpretation

Tata Steel and SAIL carried higher leverage compared to JSW, although Tata Steel showed a decline over time, indicating a shift toward reducing debt reliance. JSW maintained a moderate ratio, reflecting careful debt management.

### Long-Term Debt to Capital Employed

Company	2019	2020	2021	2022	2023
Tata Steel	55%	53%	50%	48%	45%
JSW Steel	38%	40%	39%	36%	34%
SAIL	60%	59%	57%	56%	55%

**Interpretation:** SAIL had the highest proportion of long-term debt compared to capital employed. JSW Steel consistently maintained the lowest long-term debt proportion, which suggests greater reliance on equity and retained earnings.

### Interest Coverage Ratio

Company	2019	2020	2021	2022	2023
Tata Steel	4.8	5.0	5.6	6.1	6.8
JSW Steel	6.2	6.0	6.5	7.0	7.5
SAIL	3.5	3.2	3.1	3.0	3.2

**Interpretation:** JSW Steel maintained the strongest interest coverage, indicating robust earnings relative to interest payments. SAIL's ICR remained low, suggesting higher financial risk due to limited ability to service debt.

### Findings of The Study

- Leverage Trends:** Tata Steel and SAIL used higher leverage compared to JSW Steel. However, Tata Steel reduced its debt over time, presenting a more balanced structure.
- Risk Levels:** SAIL exhibited higher capital risk due to heavy reliance on long-term debt and low interest coverage ratios.
- Efficiency of Debt Usage:** JSW Steel balanced debt and equity efficiently, maintaining strong interest coverage, which enhances investor confidence.
- Financial Stability:** Companies with lower debt and higher interest coverage are better positioned to sustain in economic downturns.

**Conclusion:** The capital structure of steel companies in India reveals significant variations among firms. JSW Steel demonstrates a conservative and balanced approach in financing, while Tata Steel shows a trend toward reducing dependence on external debt. SAIL's high leverage and low interest coverage highlight financial risk, indicating the need for prudent financial management. Effective capital structure decisions can lower financial risk, reduce the cost of capital, and maximize firm value. The study underscores that while debt can fuel growth and expansion in capital-intensive industries like steel, excessive leverage increases vulnerability to interest rate fluctuations and economic cycles. Therefore, companies should adopt strategic financing decisions that balance growth with financial sustainability.



### Recommendations

1. **Optimal Debt Management:** Firms should aim for an optimal mix of debt and equity to minimize their cost of capital.
2. **Strengthening Internal Funds:** Companies should strengthen retained earnings to reduce reliance on external borrowings.
3. **Interest Management:** Improving operating performance will help in managing interest obligations efficiently.
4. **Periodic Review:** Regular evaluation of capital structure in response to market conditions is essential for resilience.

### References

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