Research Paper

EPRA International Journal of Economic and Business Review-Peer Reviewed Journal
Volume - 13, Issue - 4, April 2025 | e-ISSN: 2347 - 9671| p- ISSN: 2349 – 0187

SJIF Impact Factor (2025): 8.862 || ISI Value: 1.433 || Journal DOI URL: https://doi.org/10.36713/epra2012

RESILIENCE IN THE INDIAN STEEL INDUSTRY: A STRATEGIC & COMPARATIVE FINANCIAL RATIO ASSESSMENT OF TATA STEEL VS. JINDAL STEEL & POWER DURING THE PRE-PANDEMIC AND PANDEMIC ERAS

Akashdeep Datta

B.Com (Gold Medalist), M.Com in Accounting and Finance, University of Calcutta, India
Independent Researcher

ABSTRACT **DOI No: 10.36713/epra21203** **Article DOI: https://doi.org/10.36713/epra21203**

The steel industry, linchpin of India's industrial growth and economic progress, plays a vital role in supporting the infrastructure development and broader societal advancement. In this context, performance analysis emerges as an indispensable tool for evaluating corporate resilience, particularly during periods of economic upheaval. This study undertakes a comparative assessment of two leading giants in Indian steel market, especially from private-sector steel manufacturers — Tata Steel and Jindal Steel—with the core objective of analysing their financial and operational performance across two distinct periods: the pre-global pandemic era and the pandemic phase. Utilizing a full-framework of multi-year dataset, the research applies a Comprehensive Ratio Analysis framework to key financial dimensions, including liquidity, solvency, capital structure, and capital efficiency. The findings of the study underscore a significant-variations in strategic adaptability and financial robustness between the two companies, offering critical insights into their capacity to withstand and recover from external shocks. This study not only provides a nuanced understanding of management behaviour under crisis conditions but also yields valuable implications for investors, policymakers, and industry stakeholders. It reinforces the essential role of strategic financial planning and sustainable growth models in ensuring long-term stability and competitive advantage amidst global uncertainty.

KEYWORDS: ***Performance Analysis, Financial Resilience, Steel Industry, Tata Steel, Jindal Steel, COVID-19 Impact, Ratio Analysis, Liquidity, Solvency, Capital Structure, Capital Efficiency, Strategic Financial Planning, Operational Performance, Private Sector, Economic Uncertainty***

I. INTRODUCTION

A. Background Information

The Indian steel sector, nearly a century old, holds significant economic importance due to rising demand from sectors like infrastructure, real estate, and automobiles, both domestically and internationally. The level of per capita steel consumption is a key determinant of the country's socio-economic development. The industry is divided into primary and secondary sectors. The primary sector includes large integrated steel producers that manufacture billets, slabs, and hot-rolled coils, while the secondary sector consists of smaller units focused on producing value-added products like cold-rolled coils and sponge iron. Both sectors cater to different market segments.

The Indian steel industry, with its vast market, faced significant challenges during the pandemic due to lockdowns and restrictions that halted industrial production and construction activities, leading to a drop in steel demand. This resulted in a surplus of steel and subsequent price declines. However, as restrictions ease, the market has begun to recover, with steel demand gradually picking up. In the post-pandemic era, the steel industry is likely to face several challenges, including the rising cost of raw materials such as iron ore and coking coal, which are essential for steel production. During this period of economic uncertainty, analysing the financial performance of steel companies is crucial to understanding their economic health. This study aims to identify how steel companies sustained themselves during the pandemic, the strategic decisions they made, and the challenges they faced, including financial crises, liquidity issues, and solvency problems. By carefully analysing these factors, the study seeks to provide insights that can help companies safeguard themselves against future pandemics and similar disruptions.

B. Companies Profile

Parameter	Tata Steel Limited	Jindal Steel and Power Limited (JSPL)
Year of Establishment	1907	1979
Founder	Jamsetji Tata	O.P. Jindal
Headquarters	Mumbai, Maharashtra	New Delhi (Registered office: Hisar, Haryana)
Leadership	Tata Group	Naveen Jindal
Key Steel Products	Hot-rolled, cold-rolled, galvanized steel, wire products	Sponge iron, structural steel, rails, plates, coils
Vertical Integration	Captive iron ore and coal mines	Integrated with mining and thermal power generation
Cost Efficiency	Among lowest-cost producers in Asia	Competitive with focus on energy self-sufficiency
International Presence	Europe, Southeast Asia, etc. (e.g., Tata Steel Europe)	India, Africa, Australia
Subsidiaries/Units	Tata Steel Europe, Tata Steel BSL	JSPL Steel, Power, Mining divisions
Major Expansion Project	Kalinga Nagar, Odisha (3 MTPA to 8 MTPA)	Capacity expansion and global outreach initiatives
Diversification	Primarily focused on steel and related products	Diversified into steel, power, mining, and infrastructure
Stock Listings	BSE, NSE	BSE, NSE
Sustainability Initiatives	Strong focus on green steel, ESG compliance	Emphasis on responsible energy use and sustainable growth
Strategic Alignment	Technology, sustainability, global leadership	Make in India, self-reliance, infrastructure development

C. Research Problem

The following main research questions to reach the academic and the industrial objective, have been formulated to guide the conducted research.

How did Tata Steel and Jindal Steel & Power Ltd. maintain financial sustainability and resilience during the COVID-19 pandemic?

financial and strategic measures helped Tata Steel and Jindal Steel & Power Ltd. maintain operations and competitiveness during the pandemic?

What areas should Tata Steel and Jindal Steel & Power Ltd. improve to strengthen their recovery and future resilience?

D. Objectives of the study

This study has been undertaken to explore the following significant areas.

- To examine the financial sustainability of Tata Steel and Jindal Steel & Power Ltd. during the COVID-19 pandemic, with a comparative analysis of their management strategies and overall resilience during this crisis.
- To evaluate the financial resilience of both companies through an in-depth analysis of liquidity, solvency, capital structure, and capital efficiency.
- To compare the growth patterns and financial health of Tata Steel and Jindal Steel & Power Ltd. in order to understand the nuances of their strategic financial management practices.
- To assess the overall sustainability of the two firms during the pandemic, identifying the reasons behind their performance, key strategic decisions taken to ensure survival, and the potential areas for further improvement.

II. LITERATURE REVIEW

- Singla (2015) conducted a comparative financial analysis of Tata Steel Ltd. and JSW Steel Ltd. over the period 2009–2014, using key financial ratios. The study concluded that Tata Steel outperformed JSW Steel in terms of quick assets, inventory and fixed asset turnover, gross profitability, return on capital employed, and dividend payout ratios. This foundational research demonstrates the utility of financial ratios in benchmarking inter-firm performance within the same industry.
- Gupta (2022) extended the scope to include SAIL and Bhushan Steel Ltd., analysing liquidity, solvency, and profitability ratios over 2015–2020. Gupta's study affirmed the relative profitability of Tata Steel and JSW Steel, while identifying weaker liquidity and profitability in Bhushan Steel. The study underscores the continued relevance of traditional ratio-based financial analysis in evaluating firm-level performance in the steel sector.
- Similarly, Brindha and Suseelamani (2018) adopted ratio analysis and multiple regression techniques to assess the financial performance of APL Apollo Tubes Ltd. over a ten-year period. The study highlighted that while total asset turnover negatively affected profitability, return on capital employed had a significant positive relationship with profit before interest and tax. This nuanced analysis provides a model for understanding how specific financial variables influence profitability.
- Das (2018) and Arab et al. (2015) utilized one-way ANOVA to evaluate the financial performance of selected steel companies, revealing statistically significant inter-company differences in liquidity, solvency, profitability, and operational efficiency. Notably, Arab et al.'s extended study over 2003–2013 found significant variability in financial dimensions across Tata Steel, JSW Steel, Jindal Steel &

Power, Bhushan Steel, and SAIL, affirming the need for firm-specific financial strategies in a competitive market.

- In contrast, Balakrishnan (2016) examined the correlation between profitability and operational metrics, highlighting that Surya Roshni and JSW Steel exhibited high inventory turnover, while Tata Steel maintained a superior net profit margin. The positive correlation between financial ratios and profitability pointed to the importance of strategic financial management in sustaining long-term performance.
- Beyond the steel industry, researchers have explored advanced financial models such as DuPont analysis to provide a more comprehensive understanding of firm performance. Kim (2016) emphasized the efficacy of the DuPont framework in the food distribution sector, noting that return on equity (ROE) and return on investment (ROI) are effective measures of profitability that integrate operational, investment, and financial dimensions. Similarly, Bhagyalakshmi and Saraswathi (2019) applied DuPont analysis in the automobile industry and found significant inter-company differences in financial performance metrics, with the net profit margin and asset turnover positively influencing ROE, whereas equity multiplier exhibited a weaker relationship.
- Earlier contributions by Acharya (2013) focused on the interplay between liquidity and profitability at Tata Steel Ltd. and SAIL, confirming that efficient liquidity management positively correlates with improved profitability. Popat (2012) evaluated the earning capacity of major steel firms, concluding that Tata Steel was the most consistent performer, while JSW and SAIL exhibited fluctuating trends. Sharma (2014) and Joshi & Ghosh (2012) investigated working capital management practices at Tata Steel and Cipla Ltd., respectively, linking efficient working capital utilization to stronger financial performance and liquidity stability.

III. RESEARCH METHODOLOGY

A. Research Design

This study focuses on evaluating the **financial resilience of the Indian steel industry** during the global COVID-19 pandemic, with a specific emphasis on the comparative performance of **Tata Steel** and **Jindal Steel & Power Ltd.** It adopts a **descriptive and analytical research design**, aimed at interpreting and comparing financial data across pre-pandemic and pandemic periods to assess the strategic responses and adaptability of the selected firms.

The research is grounded in **quantitative analysis**, utilizing key financial indicators such as **liquidity ratios, solvency ratios, capital structure metrics, and capital efficiency measures**.

The study is based entirely on **secondary data**, sourced from **audited annual financial reports, quarterly financial disclosures, investor presentations**, and other official publications of the respective companies. The time frame for analysis spans the financial years immediately preceding and during the pandemic (approximately FY2018–FY2022), allowing for a clear comparison of financial performance and resilience strategies.

To analyse and interpret the financial data, the following quantitative techniques were employed:

- Ratio Analysis: To assess profitability, liquidity, solvency, and efficiency indicators.

All calculations and analytical processes were conducted using Microsoft Excel, utilizing a combination of built-in functions and advanced add-ins to ensure precision and facilitate the graphical representation of data.

B. Sample Design

1. Sample Universe

The sample universe for the present study encompasses the entire Indian steel industry, representing a broad spectrum of steel manufacturing enterprises operating across varying scales and segments.

2. Sampling Technique

The study employs a judgmental (purposive) sampling method, a non-probability sampling technique wherein the selection of units is based on the researcher's informed judgment. This approach was deemed appropriate to ensure the inclusion of financially significant companies. Accordingly, market capitalization served as the principal criterion for selection, ensuring representation of leading players in the industry.

3. Sample Size and Units

A sample size of two firms has been selected for in-depth financial analysis:

- Tata Steel Limited
- Jindal Steel and Power Limited (JSPL)

These companies were selected on the basis of their market dominance, operational scale, and availability of comprehensive financial data. The primary units of analysis consist of audited financial statements, specifically:

- Profit and Loss Accounts
- Balance Sheets

4. Time Frame of the Study

The temporal scope of the study spans six financial years, from 2016–17 to 2021–22, strategically divided into two distinct periods:

- Pre-pandemic period: FY 2016–17 to FY 2019–20
- Pandemic period: FY 2020–21 to FY 2021–22

This division enables a comparative assessment of the firms' financial performance before and during the COVID-19 pandemic.

IV. FINDINGS & ANALYSIS

This study utilizes the Ratio Analysis tool to assess financial resilience during pre-pandemic and pandemic periods, as well as their recovery:

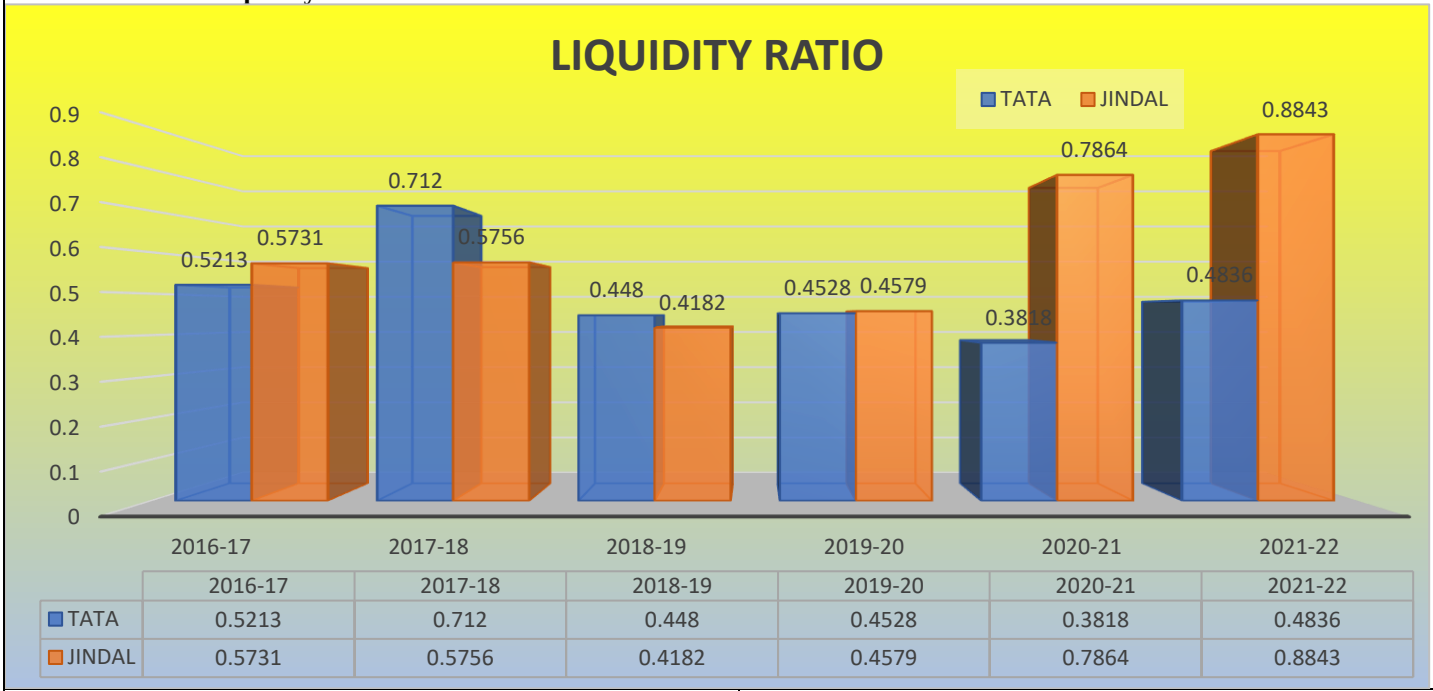
RATIO ANALYSIS

This study examines the financial performance of two companies over a six-year period, from 2016–17 to 2021–22, through the lens of ratio analysis. The primary objective is to evaluate how these companies navigated the challenges posed by the global pandemic and to assess their overall financial stability and operational efficiency during the analysis period.

To conduct a comprehensive and structured financial evaluation, twelve key financial ratios were selected. These ratios have been categorized into four analytical groups:

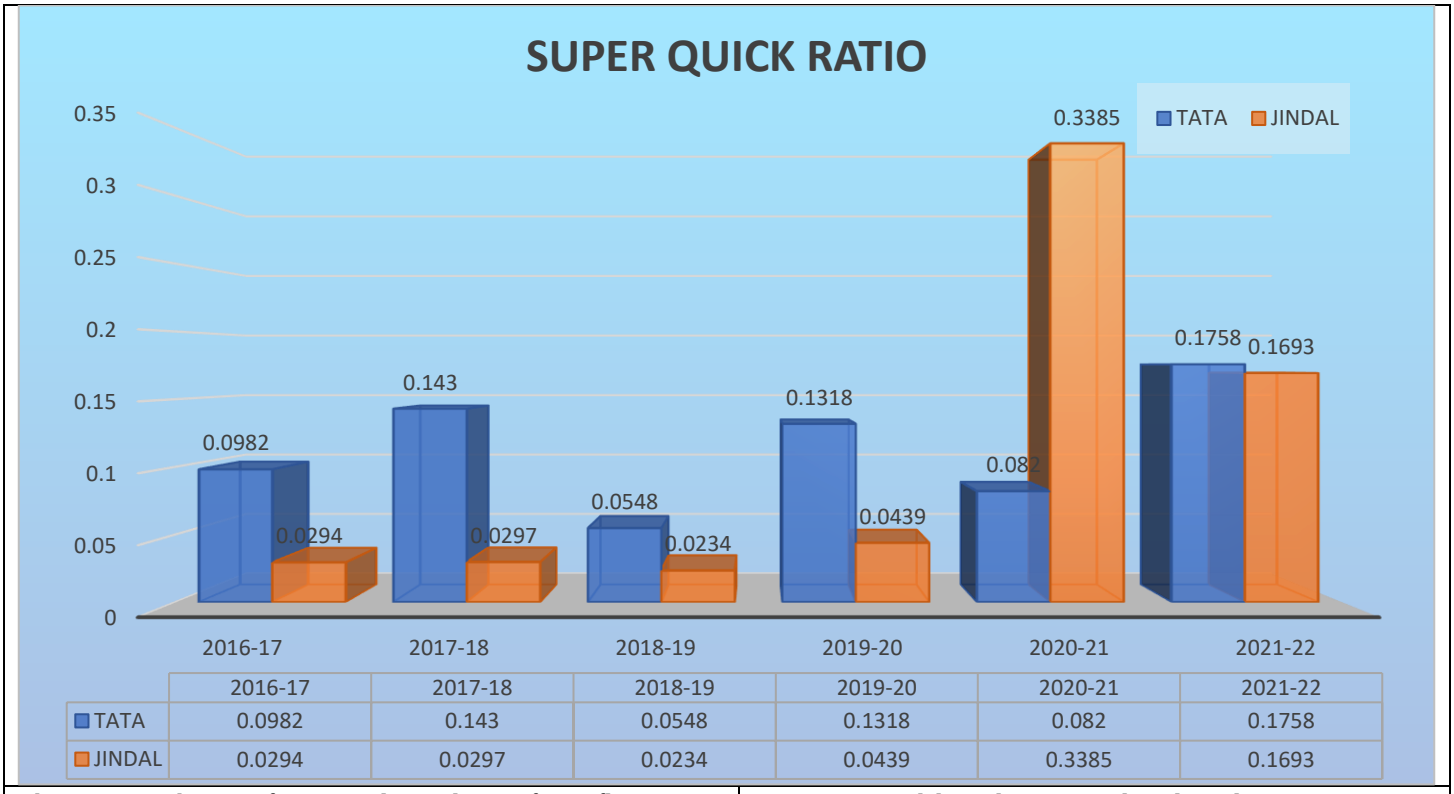
- Short-term Liquidity - Liquidity Ratio, Super Quick Ratio & Cash Position Ratio
- Long-term Solvency - Interest Coverage Ratio, Total Debt to Asset Ratio, Fixed Asset Ratio, Proprietary Ratio
- Capital Structuring - Capital Gearing Ratio, Debt-Equity Ratio, Total Debt to Capital Ratio
- Capital & Asset Efficiency- Fixed Asset Turnover Ratio & Working Capital Turnover Ratio

This classification framework allows for a focused yet holistic view of the companies' financial health by grouping relevant ratios under common performance dimensions. It also facilitates more insightful interpretations by aligning each ratio with the specific aspect of financial management it reflects.

TATA STEEL	JINDAL STEEL & POWER
In this section, analysis on the basis of short-term liquidity aspect of the firms, focusing on its ability to meet short-term obligations and cash requirements. The goal is to determine whether the company has sufficient liquidity to operate smoothly without facing liquidity shortages or holding excessive idle resources.	
1. Liquidity ratio	
	

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	0.5213	0.712	0.448	0.4528	0.3818	0.4836
JINDAL	0.5731	0.5756	0.4182	0.4579	0.7864	0.8843

Tata Steel's liquidity ratio has shown a declining trend over the six-year period, falling from 0.5213 in 2016–17 to 0.4836 in 2021–22. Tata steel maintained relatively stable but lower liquidity across the years.	Jindal Steel has shown significant improvement in liquidity post-2020, reaching 0.8843, suggesting better short-term financial health. Jindal shows a stronger and improving liquidity trend, especially after 2020, indicating better short-term solvency.
2. Super Quick Ratio	

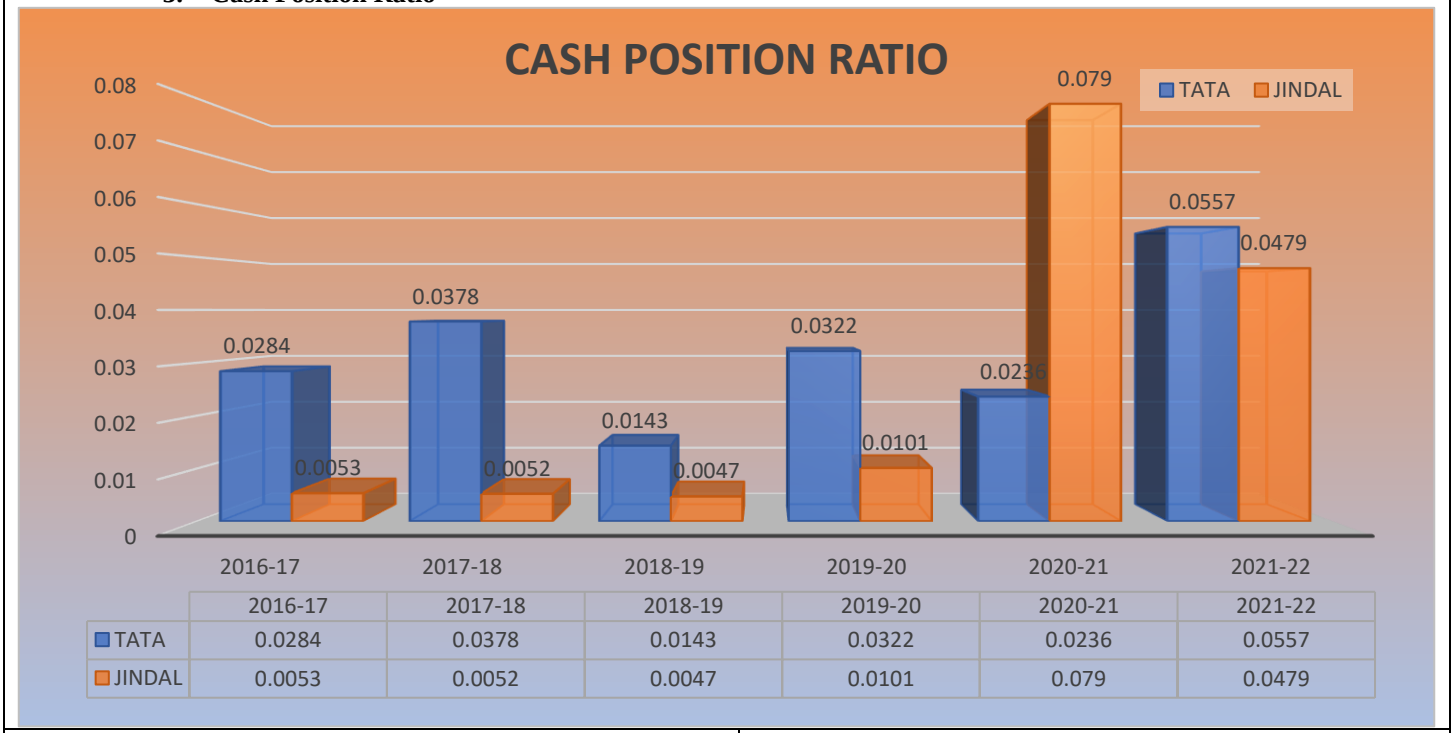


	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	0.0982	0.143	0.0548	0.1318	0.082	0.1758
JINDAL	0.0294	0.0297	0.0234	0.0439	0.3385	0.1693

The super quick ratio of Tata Steel reveals significant fluctuations between 2017 and 2022, with both increasing and decreasing trends. Notably, the company faced a liquidity crisis during the pandemic in 2020-21, but showed improvement in 2021-22.

In contrast, Jindal Steel maintained a relatively consistent super quick ratio, experiencing a minor decline during the pandemic but recovering strongly in 2021-22.

3. Cash Position Ratio



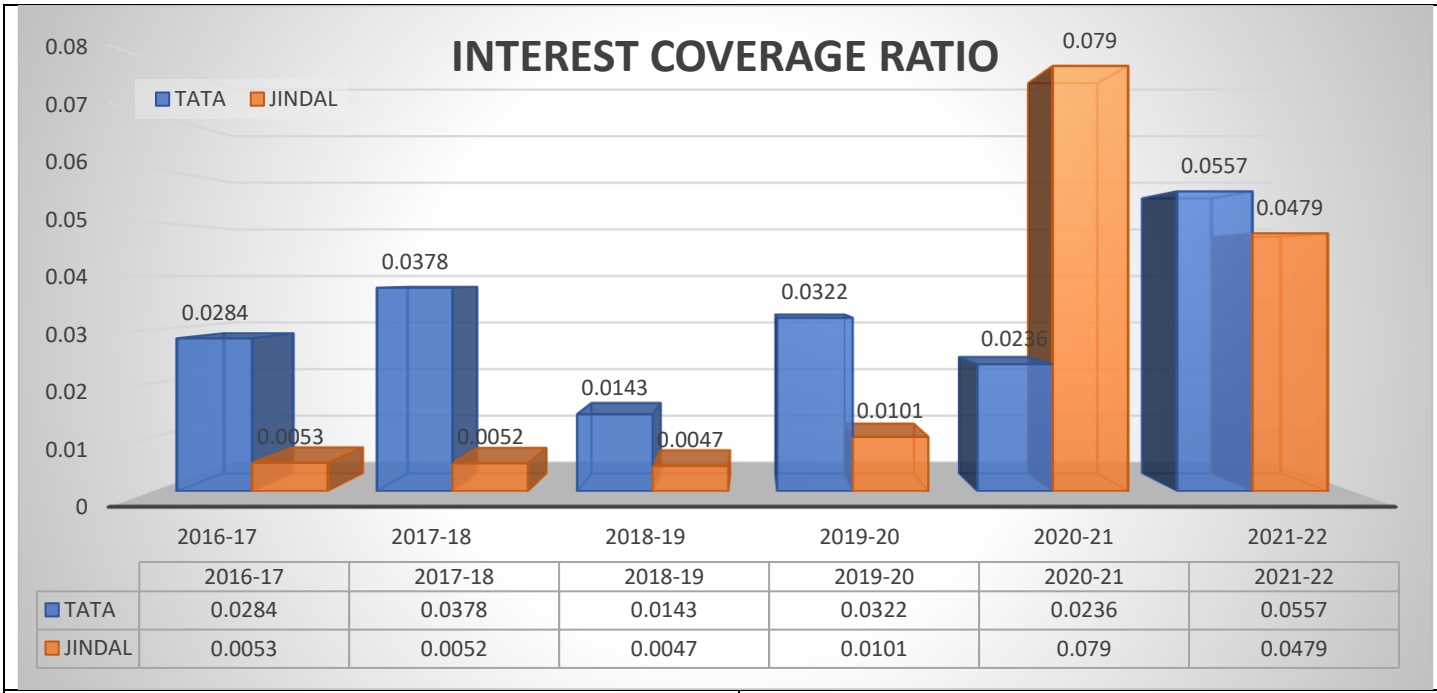
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	0.0284	0.0378	0.0143	0.0322	0.0236	0.0557
JINDAL	0.0053	0.0052	0.0047	0.0101	0.079	0.0479

Tata Steel's cash position ratio reveals a decreasing trend from 2016-17 to 2018-19. During the pandemic, the ratio further declined to 2.36% of total assets. However, the company demonstrated a strong recovery, with the ratio increasing to 5.57% in 2021-22.

Although Jindal Steel generally maintains a low cash position ratio, it notably held a high cash reserve of around 7.9% of assets in cash and cash equivalents during the pandemic year 2020-21.

In this section, analysis on the basis of long-term liquidity aspect of the firms assessing, their ability to meet long-term obligations. Solvency refers to a company's long-term financial viability, reflecting its capacity to cover debts and obligations.

4. Interest Coverage Ratio

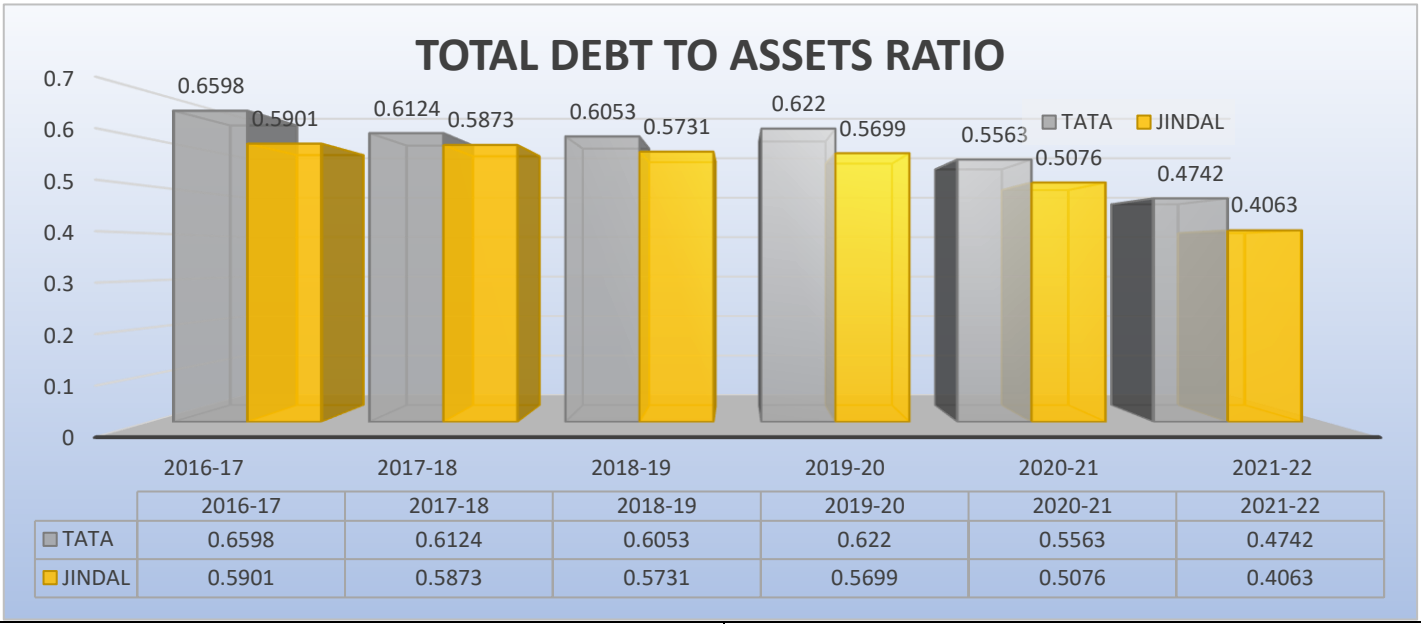


	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	0.0284	0.0378	0.0143	0.0322	0.0236	0.0557
JINDAL	0.0053	0.0052	0.0047	0.0101	0.079	0.0479

Tata Steel's interest coverage ratio showed a fluctuating trend from 2016-17 to 2018-19, followed by a decline in 2019-20. However, the company demonstrated a significant recovery over the next three years (2019-20 to 2021-22), despite the global pandemic

In contrast, Jindal Steel maintained a relatively stable interest coverage ratio with some fluctuations, exhibiting an increasing trend and a notable surge in 2021-22.

5. Total Debt to Asset

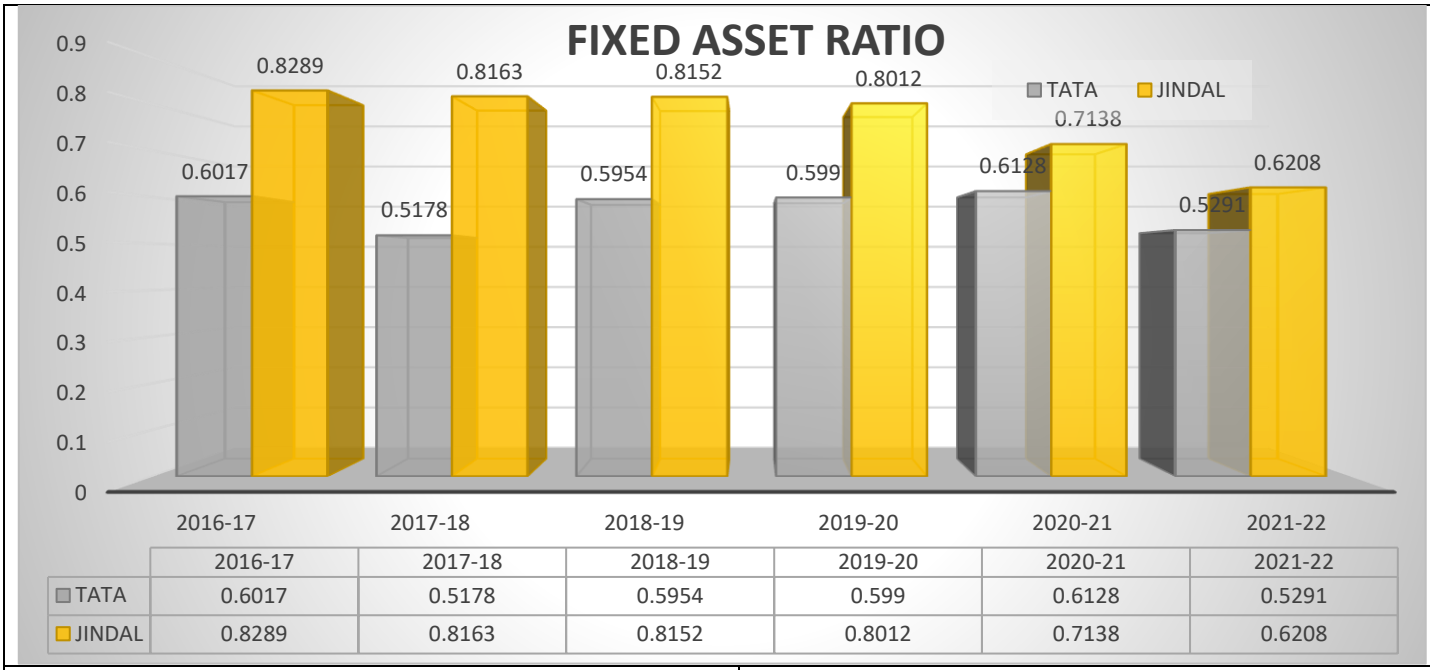


	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	0.6598	0.6124	0.6053	0.622	0.5563	0.4742
JINDAL	0.5901	0.5873	0.5731	0.5699	0.5076	0.4063

The total debt-to-asset analysis reveals that Tata Steel reduced its debt dependency, with the ratio decreasing from 0.66 to 0.47.

Similarly, Jindal Steel also decreased its debt dependency, with the ratio dropping from 0.59 to 0.41. Both companies are adapting to reduce debt reliance, but Jindal Steel maintains a slightly better asset-backed solvency position.

6. Fixed Asset Ratio

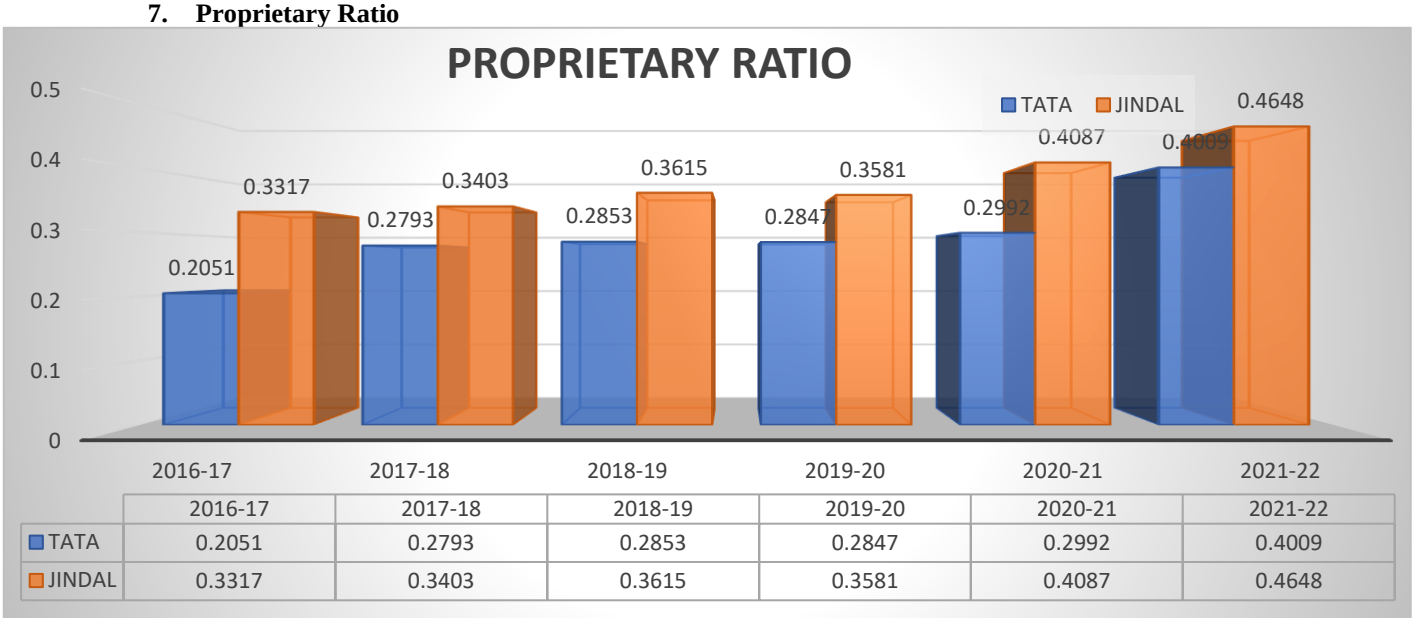


	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	0.6017	0.5178	0.5954	0.599	0.6128	0.5291
JINDAL	0.8289	0.8163	0.8152	0.8012	0.7138	0.6208

The fixed asset ratio analysis of Tata Steel reveals a fluctuation around 60% of its assets being classified as fixed assets.

In contrast, Jindal Steel typically exhibits a higher trend, with around 80-81% of its assets being fixed assets. However, Jindal Steel reduced its fixed asset proportion from 82% to 62% in 2021-22. This suggests that Jindal Steel historically held more fixed assets proportionally, but decreased its dependency during the pandemic, potentially as a strategy to improve cash flow, reduce risk, or adapt to changing business needs.

7. Proprietary Ratio



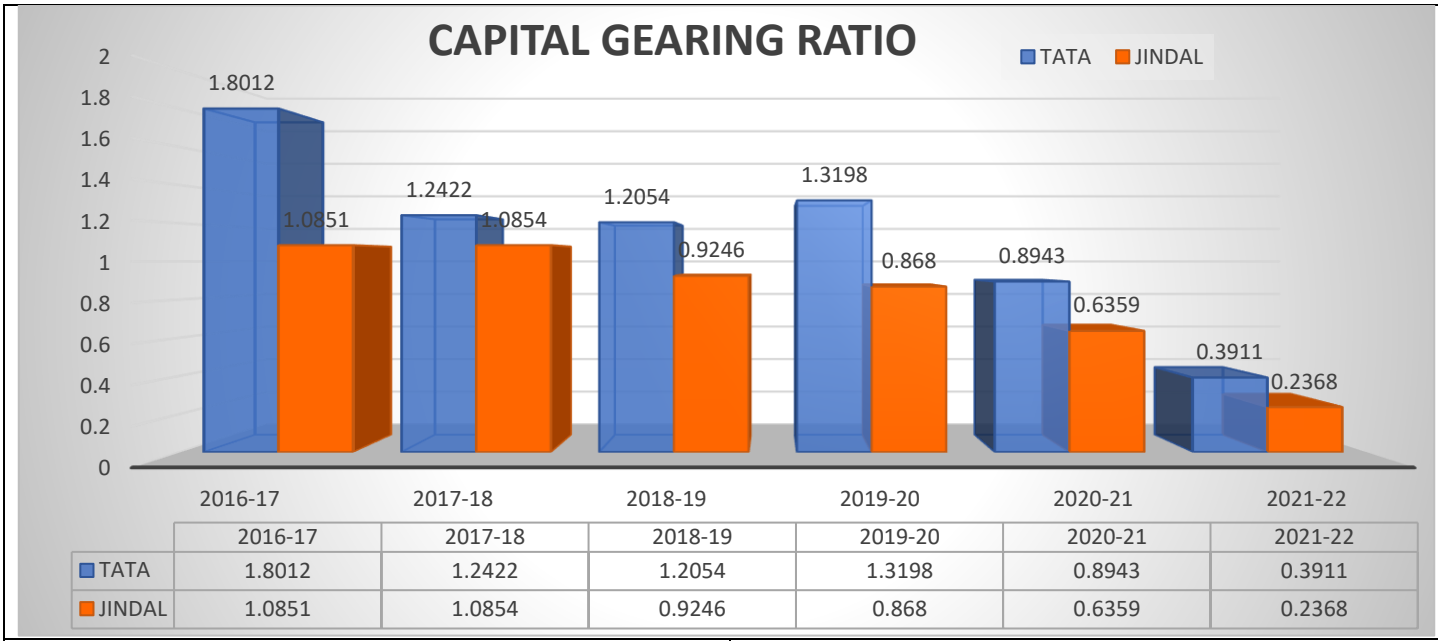
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	0.2051	0.2793	0.2853	0.2847	0.2992	0.4009
JINDAL	0.3317	0.3403	0.3615	0.3581	0.4087	0.4648

The proprietary ratio of Tata Steel reveals an increase from 0.21 to 0.40, indicating an improvement in its equity base over the years, although it was initially low.

In contrast, Jindal Steel consistently maintained a stronger equity base, showcasing greater long-term financial strength.

In this section, analysis on the basis of capital structuring, this study evaluates the capital structure of the firms, which indicates the mix of funds provided by owners and lenders to meet their capital requirements along with their associated risks.

8. Capital Gearing Ratio

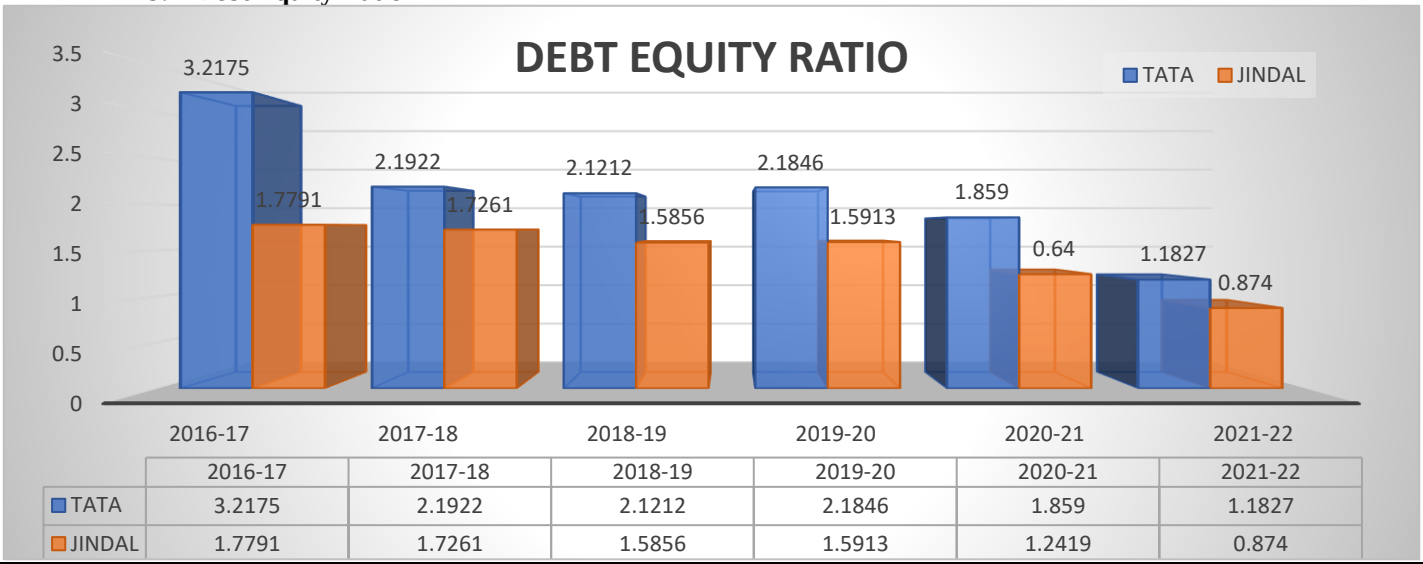


	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	1.8012	1.2422	1.2054	1.3198	0.8943	0.3911
JINDAL	1.0851	1.0854	0.9246	0.868	0.6359	0.2368

The capital gearing ratio analysis reveals that Tata Steel reduced its debt, transitioning from a higher debt level (1.80) to a lower debt level (0.39), indicating a more balanced capital structure.

Similarly, Jindal Steel decreased its debt level from 1.08 to 0.24. Both companies shifted towards a more secure financial position, with Jindal Steel remaining more conservatively geared than Tata Steel.

9. Debt Equity Ratio

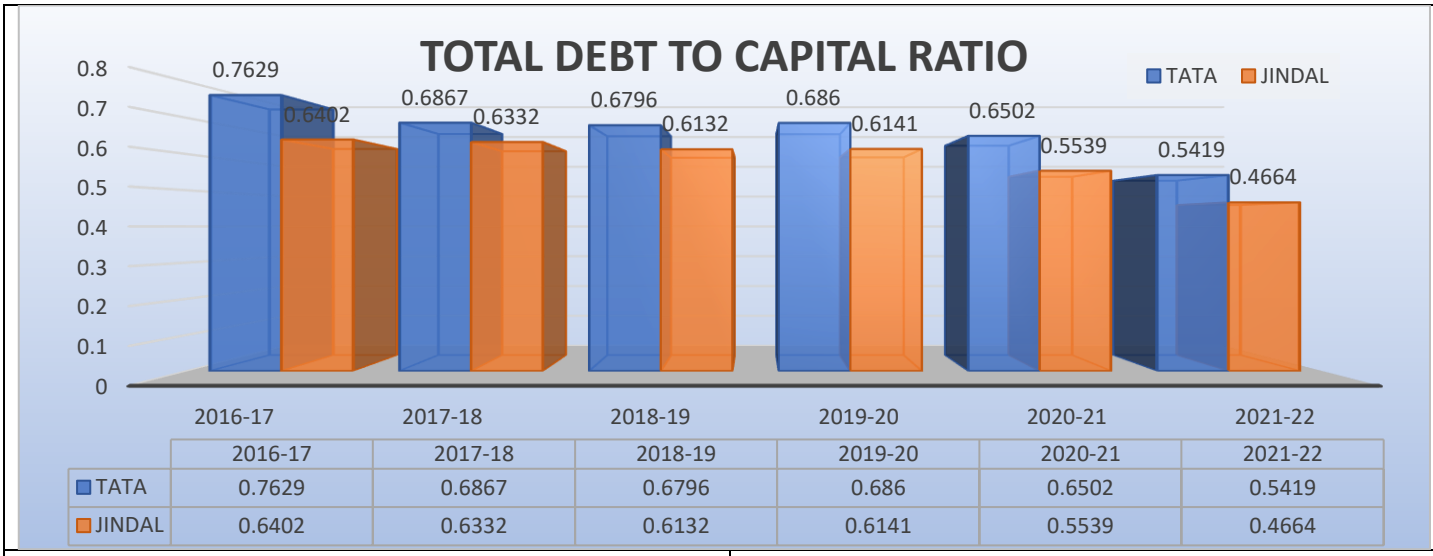


	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	3.2175	2.1922	2.1212	2.1846	1.859	1.1827
JINDAL	1.7791	1.7261	1.5856	1.5913	1.2419	0.874

The debt-equity ratio analysis reveals that Tata Steel reduced its ratio from 3.2 to 1.18, this indicates that Tata Steel has made significant strides in reducing its debt reliance, adopting a more aggressive approach.

while Jindal Steel decreased its ratio from 1.77 to 0.87, In contrast, Jindal Steel maintains a lower and steadier debt-equity balance, suggesting a more stable financial position.

10. Total Debt to Capital



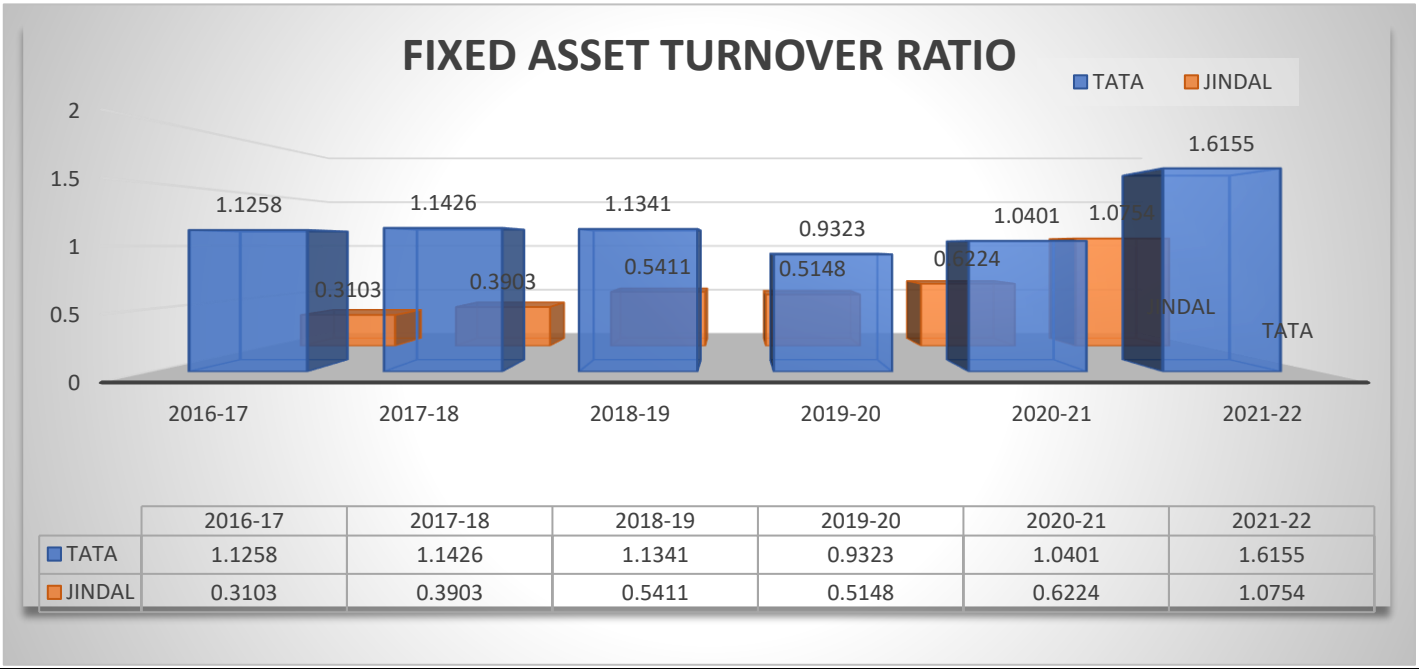
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	0.7629	0.6867	0.6796	0.686	0.6502	0.5419
JINDAL	0.6402	0.6332	0.6132	0.6141	0.5539	0.4664

The total debt-to-capital analysis reveals that Tata Steel's ratio decreased from 0.76 to 0.5, indicating improved long-term liquidit due to reduced debt.

Similarly, Jindal Steel's ratio dropped from 0.64 to 0.47. This suggests that both companies have reduced their debt levels, with Jindal Steel exhibiting a slightly more conservative and optimal capital structure.

In this section, analysis on the basis of capital and asset efficiency of the firms, focusing on how effectively they utilize their assets to generate revenue and maintain effective operation.

11. Fixed asset Turnover

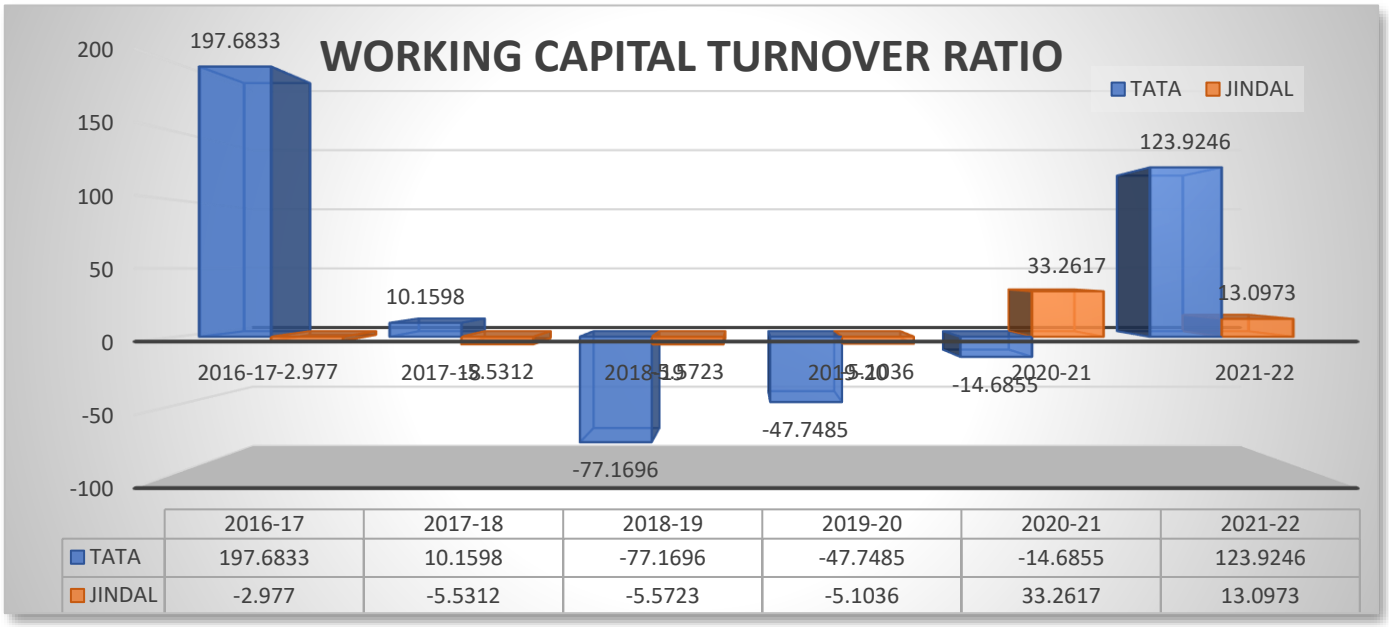


	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	1.1258	1.1426	1.1341	0.9323	1.0401	1.6155
JINDAL	0.3103	0.3903	0.5411	0.5148	0.6224	1.0754

Meanwhile, Tata Steel also showed improvement, increasing from 1.13 to 1.62. Notably, Tata Steel consistently outperformed Jindal Steel in utilizing its fixed assets efficiently.

The fixed asset turnover ratio analysis reveals that Jindal Steel significantly improved from 0.31 to 1.07.

12. Working Capital Turnover



	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
TATA	197.6833	10.1598	-77.1696	-47.7485	-14.6855	123.9246
JINDAL	-2.977	-5.5312	-5.5723	-5.1036	33.2617	13.0973

The working capital turnover ratio analysis of Tata Steel reveals high volatility, with peaks at 197.68 and 123.92, interspersed with negative values. While Tata Steel exhibits higher peaks, its performance is marked by extreme volatility. Tata Steel efficiently utilizes its working capital to generate turnover, but its performance is marked by severe volatility.

In contrast, Jindal Steel demonstrated improvement, transitioning from -2.98 to 13.10. Jindal Steel shows a more stable and positive trend. In contrast, Jindal Steel also uses its working capital efficiently, demonstrating stability even during the pandemic years

V. CONCLUSION

Tata Steel encountered moderate liquidity constraints during the pandemic period. However, the company demonstrated marked improvements across several key financial dimensions, signifying a robust post-crisis recovery trajectory:

- Tata Steel exhibited a notable increase in its interest coverage ratio, indicative of an improved capacity to service debt obligations and a strengthening of its financial solvency.
- Significant enhancements in profitability and operational efficiency underscore the company's ability to streamline operations and optimize cost structures.
- A substantial rise in the working capital turnover ratio reflects greater efficiency in utilizing short-term assets and liabilities to support revenue generation.

Tata Steel emerged as a more dynamic rebounder in the post-pandemic fiscal year, with particularly strong performance in areas critical to capital productivity:

- The firm demonstrated exceptional proficiency in capital allocation, achieving superior returns relative to invested capital.
- The marked improvement in working capital turnover underscores the company's capability to effectively leverage its current assets for revenue generation.

While certain metrics exhibited volatility—likely reflecting broader market uncertainties and sectoral dynamics—the overarching trend indicates a positive and resilient recovery path. Further empirical investigation into the nature and causes of this volatility could yield deeper insights into the firm's risk management practices and strategic adaptability.

In contrast, **comprehensive ratio analysis** reveals that Jindal Steel exhibited superior financial resilience and sustainability during the global pandemic. This conclusion is underpinned by several critical financial indicators:

- The firm's capacity to maintain a strong liquidity buffer facilitated the seamless management of operational disruptions and unforeseen exigencies arising from the pandemic.
- A conservative capital structure, characterized by lower financial leverage, effectively curtailed the firm's exposure to solvency risks.
- Optimal deployment and utilization of capital resources contributed to sustained operational efficiency and financial viability.

Collectively, these attributes reflect the company's strategic foresight and robust financial stewardship. Despite the adverse macroeconomic environment, Jindal Steel not only preserved its operational continuity but also transitioned from a loss-making position to a trajectory of profitability. The company's performance during this period exemplifies its institutional adaptability, sound financial governance, and long-term sustainability.

Based on the analysis, it is evident that JSW Steel have demonstrated resilience as better sustainer during the pandemic due to their stable liquidity positions, high cash reserves, and consistent working capital management. Their optimal debt-equity structure and ability to maintain financial discipline during the pandemic have contributed to their financial resilience. These companies have shown greater preparedness to withstand the challenges of the pandemic without significant deterioration in their liquidity or solvency.

Based on the analysis, it can be concluded that Tata Steel emerged as a strong rebounder in the post-pandemic period.

This is attributed to its sharp recovery in cash position, significant deleveraging, and remarkable asset efficiency, which enabled the company to generate substantial cash inflows from operations. Additionally, Tata Steel's improved interest coverage ratio reflects its enhanced financial health. The company's strong and aggressive rebound in financial performance demonstrates its ability to recover quickly and efficiently in the post-crisis period, showcasing its scalability and resilience

From the analysis of different financial matrices, we can conclude that the companies made strategic decisions during the global pandemic to sustain themselves in the industry

FIRM	Tata Steel	JSPL
Operating Cash Flow	Very strong recovery, with efficient utilisation of fixed assets and working capital	Steady improvement
Debt Management	Aggressive repayment	Moderate repayment – Conservative Approach
Investment Strategy	Capex restraint	Moderate and focused Current investments
Liquidity Position	Comfortable reserves	Strong buildup from low base
Assets management	Stability in Asset Acquisition & asset utilization	Reversing an overinvestment in Fixed assets
Overall Strategy	Deleveraging + Cash Preservation + efficient capital utilization	Liquidity Buffer + Operational Focus + Optimization of Debt-Equity base

VI. RECOMMENDATIONS

Following an analysis of various financial matrices assessing financial performance, the following recommendations are provided for both the management.

Recommendations for the Management of Tata Steel

To enhance resilience during downturns and avoid liquidity crises that may impact operations and creditworthiness, Tata Steel should focus on optimizing receivables and inventory management to maintain a healthy liquidity position and build a robust cash reserve. A stable working capital cycle will ensure uninterrupted operations, improve cost control, and enhance financial stability. Given the volatility in the working capital turnover ratio, including instances of negative sales, it is crucial for Tata Steel to strengthen its ability to meet immediate obligations without relying on inventory liquidation. The wide fluctuations in the quick ratio highlight the need for better liquidity management.

To achieve this, Tata Steel should adopt a balanced dividend policy and strive for an optimal capital structure. Over-reliance on equity or excessive debt can lead to underleveraging growth opportunities or increased financial risk. A balanced approach will enable Tata Steel to navigate market uncertainties while maximizing shareholder value

Recommendations for the Management of Jindal steel & Power

For Jindal Steel, it is crucial to exercise caution in investments in fixed assets. The company should aim to optimize its fixed asset efficiency, focusing on generating higher sales without expanding its asset base unnecessarily.

Additionally, Jindal Steel should strive to maintain an optimal liquidity position and cash reserve ratio, given the high volatility in its cash position and low cash reserves observed in the post-pandemic period. By doing so, the company can enhance its financial resilience and better navigate market uncertainties.

Tata Steel should prioritize **stabilizing liquidity and working capital performance**, while maintaining its efficient asset use and balanced deleveraging strategy.

Jindal Steel & Power should work on **improving fixed asset utilization** and strategically deploy its strong equity base for growth without compromising its solid liquidity position.

VII. LIMITATIONS

While this study presents a thorough analysis of the financial resilience of Tata Steel and Jindal Steel & Power Ltd. during the COVID-19 pandemic, it is important to recognize certain limitations that may affect the depth and scope of the findings:

1. The study primarily uses data from annual reports, which focus on quantitative and financial metrics. As a result, it lacks detailed qualitative insights into internal decision-making processes, managerial perspectives, and organizational culture, which are crucial for a holistic analysis.
2. The six-year study period (covering pre-pandemic and pandemic phases) provides a useful snapshot but may not fully capture long-term strategic shifts or post-pandemic recovery. A longer timeframe would enhance the comprehensiveness of trend analysis.
3. This research is based entirely on secondary data from publicly available audited financial reports and official sources. According to SA 200, the objective of an independent auditor is to provide reasonable assurance that the financial statements as a whole are free from material misstatements, whether due to error or fraud. Therefore, while the information and conclusions in this study are reliable, they may not capture all internal relevant information and may be subject to managerial bias in presentation.
4. Time limitations restricted the depth of the analysis, particularly in exploring complex financial ratios or detailed segmental performance. Nevertheless, the data analysed was sufficient to maintain the integrity and reliability of the core findings.
5. Due to organizational policies and confidentiality constraints, access to internal strategic documents and real-time data was limited, which may have affected the ability to assess real-time decision-making and crisis management tactics.

6. Future studies could apply advanced financial tools and efficiency ratios to assess how effectively both companies managed their operations during and after the pandemic. A detailed examination of the companies' strategic decisions in the **post-pandemic period** would provide valuable insights into their long-term recovery, adaptation to new market conditions, and resilience-building efforts.

VIII. REFERENCES

Books

1. *Sinha, G. (2010). Financial statement analysis (EEE ed.). Prentice Hall India Learning Private Limited.*
2. *Tulsian, P. C., Tulsian, B., & Tulsian, T. (2003). Analysis of financial statement (1st ed.). Tcom Prints.*
3. *Ghosh, J. (2021). Financial statement analysis (2nd ed.). Tee Dee Publications PRT LTD.*
4. *Subramanyam, K. R. (n.d.). Financial statement analysis (11th ed.). McGraw Hill.*
5. *Ramachandran, N., & Kakani, R. K. (2013). How to analysis financial statement (2nd ed.). McGraw Hill.*
6. *Lev, B. (1974). Financial statement analysis: A new approach (1st ed.). Prentice-Hall.*
7. *Foster, G. (1986). Financial statement analysis (2nd ed.). Prentice-Hall.*
8. *Ormiston, A., & Fraser, L. M. (2018). Understanding financial statements (11th ed.). Pearson.*
9. *Hanif, M., & Mukherjee, A. (2016). Financial accounting (Vol. 3, 1st ed.). McGraw-Hill Education.*

Journal Articles

1. *Tirkey, M. R., & Osamah, M. (2013). Ratio analysis used to compare the performance of Tata Steel and Jindal Steel: A comparative study. IOSR Journal of Business and Management, 13(5), 65–69.*
2. *Singla, V. (2015). A comparative study on financial performance of Tata Steel Ltd and JSW Steels Ltd. International Journal of Business and Management Invention, 4(5), 1–7.*
3. *Gupta, A. (2022). A study on the financial performance analysis of select steel companies in India. Journal of Business and Economic Studies, 10(3), 45–52.*
4. *Brindha, K., & Suseelamani, K. (2018). Financial performance of selected companies of iron and steel industry in India. International Journal of Financial Management, 6(4), 12–20.*
5. *Das, A. R. (2018). Financial performance of steel industry in India. Journal of Finance and Accounting, 9(2), 25–31.*
6. *Arab, R. O., Masoumi, S. S., & Barati, A. (2015). Financial performance of the steel industry in India: A critical analysis. Indian Journal of Commerce and Management Studies, 6(1), 18–25.*
7. *Balakrishnan, P. (2016). Financial performance of Indian steel companies: An empirical analysis. International Journal of Economics and Finance, 8(3), 78–86.*
8. *Sanny, A., & Yanti, E. D. (2019). DuPont analysis integrative approach to ratio analysis at PT Federal International Finance. International Journal of Research & Review, 6(11), 319–326.*
9. *Kim, S. (2016). A study of financial performance using DuPont analysis in food distribution market. Culinary Science and Hospitality Research, 22(6), 52–60.*
10. *Bhagyalakshmi, K., & Saraswathi, S. (2019). Analyzed the financial performance evaluation using DuPont analysis in select automobile companies. International Journal of Management, Technology and Engineering, 9(1), 354–362.*

Websites

- *www.tatasteel.com*
- *www.jindalsteel.com*
- *www.moneycontrol.com*
- *www.companiesinindia.net/top10-steel-companiesin-india.html.*
- *www.ibef.org/industry/steel*