

Evaluating the Impact of M&A: A Pre- vs. Post-Consolidation Analysis of Firm Performance and Industry Dynamics

Dr. M. V. Alagesan¹, Akshay Biju², Aloysius K V³, Bachu Tejaswi⁴

¹Assistant Professor

Xavier Institute of Management & Entrepreneurship (XIME), Bangalore

^{2,3,4}PGDM

Xavier Institute of Management & Entrepreneurship, Bangalore

Abstract:

Mergers and acquisitions (M&A) are widely used by companies as a strategic tool to expand operations, survive intense competition, and improve overall financial and operational performance. In an increasingly dynamic and competitive business environment, firms often turn to consolidation to achieve economies of scale, strengthen market presence, and enhance long-term sustainability. This study aims to examine how mergers and acquisitions influence the financial performance of companies across different industries.

The research focuses on three key sectors—Indian banking, telecommunications, and the global steel industry—through an in-depth analysis of the mergers of Canara Bank–Syndicate Bank, Vodafone–Idea (VI), and Tata Steel–Bhushan Steel. Secondary financial data covering the period from 2016 to 2024 is used to compare company performance before and after the merger. The study applies financial ratio analysis and t-test techniques to assess changes in profitability, revenue growth, asset base, capital adequacy, and debt levels, thereby providing a quantitative evaluation of merger outcomes.

The findings indicate that mergers in the Indian banking sector contributed to stronger capital positions, expanded asset bases, and improved overall financial stability, although profitability experienced a short-term decline due to integration and restructuring costs. In contrast, the Vodafone–Idea merger did not result in a financial turnaround, as the company continued to suffer from heavy losses, high debt burdens, and regulatory challenges, despite some improvement in operational efficiency. On the other hand, the Tata Steel–Bhushan Steel merger emerged as a successful case, leading to improved profitability, better asset quality, and more stable and sustainable growth following integration into a financially strong parent company.

1. Introduction

A. Introduction of Mergers and Acquisitions

Mergers and acquisitions (M&A) represent a significant strategic tool used by companies to strengthen their market position, enhance operational capabilities, and achieve long-term growth in an increasingly

competitive global business environment. A merger typically involves the combination of two or more firms into a single new entity, allowing them to pool resources, align strategic objectives, and exploit economies of scale. An acquisition, on the other hand, occurs when one firm takes over another and assumes full managerial control, often to enter new markets, acquire advanced technologies, diversify product lines, or eliminate competition. Over the past few decades, M&A activities have become a central feature of corporate restructuring, driven by globalization, technological disruptions, regulatory reforms, and evolving customer demands. These transactions offer a range of potential benefits—including cost efficiencies, improved financial strength, expanded customer bases, and enhanced innovation capabilities—but they also carry substantial risks. Challenges such as cultural misalignment, integration complexities, regulatory hurdles, and financial uncertainties can impede the realization of expected synergies. Therefore, the success of M&A largely depends on strategic fit, effective due diligence, and smooth post-merger integration. As industries continue to evolve and competition intensifies, M&A remains a vital area of study in finance, strategic management, and organizational behaviour, providing insights into how corporate consolidation shapes firm performance, industry structure, and economic growth.

B. Introduce the Industry

1. Indian Banking:

The Indian banking sector serves as the foundation of the country's financial architecture, facilitating economic growth through credit distribution, financial intermediation, and support for businesses and households. Dominated by Public Sector Banks (PSBs), the sector has historically played a key role in implementing government-led financial inclusion and development policies. In recent years, the industry has undergone significant transformation driven by rising non-performing assets (NPAs), stricter regulatory frameworks, and the need for stronger, more competitive institutions. As a response, the Government of India initiated large-scale bank consolidation to improve operational efficiency, strengthen balance sheets, and create banks capable of meeting global standards. These structural reforms have reshaped the sector's landscape, making it a critical area for studying the financial effects of mergers and acquisitions.

2. Indian Telecommunications:

The Indian telecommunications sector is one of the most dynamic and rapidly evolving industries in the country, playing a central role in digital connectivity, economic modernization, and technological innovation. Over the past decade, the sector has experienced dramatic shifts driven by the entry of new players, disruptive pricing strategies, and the rapid expansion of mobile and internet services. High capital requirements, spectrum costs, and intense competition—particularly following the entry of Reliance Jio—have placed immense pressure on incumbent operators. This competitive environment has triggered significant consolidation as firms seek to optimize resources, achieve scale, and remain viable. The telecom sector's fast-paced nature and high volatility make it an important domain for understanding the challenges and financial implications associated with mergers and acquisitions in emerging markets.

3. Global Steel:

The global steel industry is a mature, capital-intensive sector that plays a fundamental role in infrastructure development, manufacturing, construction, and economic progress worldwide. Characterized by cyclical demand patterns, high energy consumption, and reliance on raw materials such as iron ore and coal, the industry is heavily influenced by global economic conditions and commodity price fluctuations. To remain competitive, steel producers have increasingly pursued mergers and acquisitions aimed at achieving greater production scale, securing raw material sources, diversifying geographically, and strengthening technological capabilities. Companies such as Tata Steel and Mittal Steel have used strategic acquisitions to expand internationally and enhance operational efficiency. The sector's global integration and strategic importance make it a valuable area for assessing how M&A activities drive competitiveness and long-term financial performance.

C. About the Companies

This is where you introduce your case studies, referencing the data:

- **Canara Bank:** Canara Bank, established in 1906, is a key public sector bank known for its extensive branch network and focus on retail and MSME lending. On April 1, 2020, it merged with Syndicate Bank as part of the government's banking consolidation program. The merger significantly increased its operational scale, with Total Assets growing from ₹7.4 trillion in 2020 to ₹11.7 trillion in 2021. It was intended to improve risk management, operational efficiency, and digital capabilities.
- **VI (Vodafone Idea):** Vodafone Idea Limited (VI) was formed in August 2018 through the merger of Vodafone India and Idea Cellular, driven by intense competition in the Indian telecom sector. The merger aimed to combine spectrum resources and reduce costs, but the company has faced severe financial stress due to high debt and price pressure. Your data shows Total Debt reaching ₹2.1 trillion by 2022, along with continued Net Income losses, reflecting major integration and market challenges.
- **Tata Steel:** Tata Steel is one of the world's prominent steel producers, having expanded globally through major acquisitions such as Corus in 2007. The company uses M&A to increase production capacity, access new markets, and strengthen its competitive position. Its global operations make it a relevant benchmark for analyzing consolidation outcomes in the steel industry.
- **Bhushan steel:** Bhushan Steel (now part of Tata Steel) was a major Indian steel producer, known for manufacturing value-added flat and long steel products like cold rolled coils, galvanised sheets, and wire rods, supplying key sectors like automotive and appliances. Established in 1983, it grew into a significant player with integrated plants, but faced financial issues leading to insolvency proceedings, eventually being acquired by JSW Steel in 2019, though some legal complexities, like those involving the Enforcement Directorate, persisted.

2. Review of Literature

Mergers and acquisitions have been widely used by firms as a strategy for inorganic growth and restructuring. Studies focusing on Indian acquiring companies examine whether mergers lead to improvements in operating efficiency by comparing pre- and post-merger financial performance. Using financial ratios such as Operating Profit Margin, Net Profit Margin, Return on Assets, Return on Equity, Earnings Per Share, Asset Turnover Ratio, and Current Ratio, researchers find mixed evidence regarding performance improvement. While some firms experience marginal efficiency gains, others show no significant change, indicating that mergers do not always guarantee enhanced operating performance.¹

A large body of post-2000 literature on mergers and acquisitions in financial institutions highlights varied outcomes across regions. North American bank mergers show limited and inconsistent efficiency improvements and shareholder wealth creation, whereas European bank mergers demonstrate relatively stronger gains in both efficiency and shareholder value. The literature also reveals that managerial incentives, such as high CEO compensation and the desire to achieve “too-big-to-fail” status, significantly influence merger decisions, sometimes at the cost of broader stakeholder welfare.²

Conceptual reviews of mergers and acquisitions emphasize understanding the historical evolution, waves, motives, and valuation methods associated with M&A activity. These studies explore whether mergers truly deliver anticipated benefits such as synergy and improved organizational performance. The literature categorizes M&A motives into strategic, operational, and financial motives and discusses different methodologies used to assess post-merger outcomes, highlighting the complexity of evaluating M&A success.³ Despite the enormous global volume of merger activity, many acquiring firms fail to sustain performance improvements in the long run. Research shows that although short-term announcement returns may be positive, they often do not translate into long-term value creation. Factors such as CEO overconfidence, serial acquisitions, acquirer–target relatedness, and shareholder intervention significantly influence post-merger outcomes. The diversity of performance measures across studies makes it difficult to draw uniform conclusions regarding merger success.⁴

Corporate governance characteristics play a critical role in acquisition decisions and outcomes. Studies focusing on board diversity reveal that firms with female directors tend to engage in fewer acquisitions and pay lower bid premiums. Female directors are found to be less overconfident and more cautious in evaluating merger gains, thereby contributing to better shareholder value creation. This highlights the importance of behavioral and governance factors in shaping merger strategies.⁵

Human resource issues are frequently identified as major contributors to merger failure. While financial and market-related factors are often emphasized, several studies argue that neglecting employee-related issues such as communication, cultural integration, job satisfaction, and leadership alignment leads to poor post-merger outcomes. A structured three-stage M&A model—pre-merger, merger, and post-merger—has been proposed to systematically address HR issues and improve merger success rates.⁶

Cross-border mergers and acquisitions are influenced by multiple macroeconomic and institutional factors. Research indicates that geography, accounting transparency, bilateral trade, currency valuation, and stock market performance significantly affect the likelihood of cross-border deals. Firms from economically stronger countries are more likely to act as acquirers, while firms from weaker economies often become targets, suggesting valuation-driven motivations behind international mergers.⁷

Studies focusing on emerging economies argue that mergers and acquisitions in these contexts differ significantly from those in developed economies due to variations in institutional frameworks, corporate governance practices, and market maturity. The literature identifies unique antecedents and performance outcomes for emerging economy M&As and emphasizes the need for context-specific research to better understand acquisition behavior and results.⁸

Indian M&A literature highlights the surge in merger activity following economic liberalization in 1991. While firms pursue mergers to achieve financial and operational synergies, empirical evidence suggests that such synergies are not consistently realized. Many studies focus on short-term financial indicators, revealing a gap in research related to long-term performance, employee outcomes, and integration challenges in the Indian context.⁹

Overall, existing literature suggests that although mergers and acquisitions are pursued for strategic growth and synergy creation, failure rates remain high. Research is heavily concentrated on financial performance and developed economies, leaving gaps in understanding long-term integration, human capital outcomes, and emerging market dynamics. These gaps highlight the need for more comprehensive and multidimensional approaches in future M&A research.¹⁰

3. Research Methodology

- **Statement of the Problem: To analyze** the impact of mergers and acquisitions on the financial performance of selected companies.
- **Objective:**
 1. To conduct a pre- and post-merger financial analysis of Canara Bank.
 2. To evaluate the financial performance of VI (Vodafone Idea) post-merger
 3. To identify the impact of M&A on key financial metrics such as revenue growth, profitability (Net Income, EBITDA Margin), and debt (Total Debt, Enterprise Value).

- **Research Data and Source:**

The study is based on **secondary data** collected from reliable and publicly available sources, including:

- Annual reports of the selected companies
- Financial statements published by stock exchanges
- Industry reports and regulatory publications
- Company disclosures and audited financial data

The data covers the period from **2016 to 2024**, ensuring adequate representation of both pre-merger and post-merger phases.

- **Scope of the Study:** The study is confined to three sectors—Indian banking, telecommunications, and the global steel industry—and considers only selected companies that have been involved in

major merger activities. The analysis focuses exclusively on financial performance indicators and evaluates company performance over a defined time period, without attempting to predict future outcomes.

- **Hypothesis:**

- **H₀ (Null Hypothesis):**

- Mergers and acquisitions do not result in a significant change in the financial performance of the selected companies.

- **H₁ (Alternative Hypothesis):**

- Mergers and acquisitions lead to a significant change in the financial performance of the selected companies.

- **Data Analysis Tools:**

The following tools and techniques are used to analyze the data:

- **Ratio Analysis** to evaluate profitability, growth, and leverage
 - **Trend Analysis** to observe changes over time
 - **Pre- and Post-Merger Comparison** to assess financial impact
 - **Descriptive Statistics** such as mean and standard deviation
 - **t-Test Analysis** to test the statistical significance of changes

- **Data Description:** The dataset consists of annual financial figures of the selected companies from 2016 to 2024. It includes variables such as:

- Revenue
 - Net Profit / Net Income
 - EBITDA
 - Total Assets
 - Total Debt
 - Shareholders' Equity
 - Capital adequacy indicators (for banks)
 - Growth and profitability ratios

All financial data is standardized to ensure comparability across years and companies.

- **Limitation of the Study:** The provided data is high-level and does not isolate the exact costs of integration. External market factors (e.g., the COVID-19 pandemic, regulatory changes) also affect performance, making it difficult to attribute all changes solely to the M&A.

4. Findings

1. Tata and Bhushan steel:

Pre and Post Merger performance:

The paired *t*-test results indicate a statistically significant improvement in several key financial parameters in the post-merger period, highlighting the positive impact of the merger on the bank's overall financial strength. The **Book Value of Equity** records a *t* value of -2.936 with a *p* value of 0.032 , which is significant at the 5 per cent level, indicating a substantial strengthening of the bank's equity base following the merger. Similarly, **Total Deposits** exhibit a *t* value of -2.915 and a *p* value of 0.033 , confirming a significant increase in deposits in the post-merger period and reflecting enhanced customer confidence and an expanded deposit base after consolidation.

In terms of credit growth, **Total Loans** show a *t* value of -3.036 with a *p* value of 0.029 , indicating a statistically significant rise in lending activity post-merger and demonstrating an improvement in the bank's lending capacity. Likewise, **Total Assets** register a *t* value of -2.946 and a *p* value of 0.032 , confirming a significant expansion of the balance sheet as a result of the merger.

Income-related variables also display notable improvement. **Net Revenue (Adjusted)** reports a *t* value of -2.740 with a *p* value of 0.041 , indicating a significant enhancement in revenue generation during the post-merger period. In addition, **Profit Before Provisions (Adjusted)** records a *t* value of -2.693 and a *p* value of 0.043 , reflecting improved operational efficiency and profitability following the merger.

However, not all performance indicators show significant changes. The **Year-on-Year Growth Percentage** does not exhibit a statistically significant difference between the pre- and post-merger periods ($t = 0.310$; $p = 0.769$). Similarly, the **Margin Percentage** remains insignificant ($t = 0.599$; $p = 0.575$). These findings suggest that while the scale of operations has increased, growth consistency and profitability margins have not improved significantly in the immediate post-merger phase.

Capital adequacy indicators demonstrate the most pronounced improvement. The **Tier-1 Common Equity Ratio** shows a highly significant *t* value of 8.600 ($p = 0.000$), while the **Tier-1 Capital Ratio** and **Total Capital Ratio** record *t* values of 7.674 ($p = 0.001$) and 5.237 ($p = 0.003$), respectively. These results clearly indicate a strong and statistically significant enhancement in the bank's capital position after the merger, reinforcing financial stability and regulatory compliance.

Hypothesis Conclusion

- **Null Hypothesis (H_0): Rejected**
- **Alternative Hypothesis (H_1): Accepted**

This confirms that the **2018 merger resulted in a significant change in the financial performance of the company.**

Canara and Syndicate bank

The variables under study were divided into two sets; one set of data for the period **prior to the merger (Pre-Merger Period)** and another set of data for the period **after the merger in 2020 (Post-Merger Period)**.

The **Paired t-test** has been applied to find out the significance of difference in each of the financial variables such as **Book Value of Equity, Total Deposits, Total Loans, Total Assets, Net Revenue (Adjusted), YoY Growth %, Profit Before Provisions (Adjusted), Margin %, Tier-1 Common Equity %, Tier-1 Capital Ratio % and Total Capital Ratio %** between the Pre-Merger and Post-Merger periods and the results are shown in **Table**.

Pre and Post Merger performance:

The paired *t*-test results indicate a statistically significant improvement in several key financial parameters in the post-merger period, highlighting the positive impact of the merger on the bank's overall financial strength.

The **Book Value of Equity** records a *t* value of -2.936 with a *p* value of 0.032 , which is significant at the 5 per cent level. This suggests a substantial strengthening of the bank's equity base following the merger. Similarly, **Total Deposits** exhibit a *t* value of -2.915 and a *p* value of 0.033 , confirming a significant increase in deposits in the post-merger period. This reflects enhanced customer confidence and an expanded deposit base after consolidation.

In terms of credit growth, **Total Loans** show a *t* value of -3.036 with a *p* value of 0.029 , indicating a statistically significant rise in lending activity post-merger. This demonstrates an improvement in the bank's lending capacity and credit expansion. Likewise, **Total Assets** register a *t* value of -2.946 and a *p* value of 0.032 , confirming a significant expansion of the balance sheet as a result of the merger.

Income-related variables also display notable improvement. **Net Revenue (Adjusted)** reports a *t* value of -2.740 and a *p* value of 0.041 , indicating a significant enhancement in revenue generation during the post-merger period. In addition, **Profit Before Provisions (Adjusted)** records a *t* value of -2.693 with a *p* value of 0.043 , reflecting improved operational efficiency and profitability following the merger.

However, not all performance indicators show significant changes. The **Year-on-Year Growth Percentage** does not exhibit a statistically significant difference between the pre- and post-merger periods ($t = 0.310$; $p = 0.769$). Similarly, **Margin Percentage** remains insignificant ($t = 0.599$; $p = 0.575$). These findings suggest that while the scale of operations has increased, growth consistency and profitability margins have not improved significantly in the immediate post-merger phase.

Capital adequacy indicators demonstrate the most pronounced improvement. The **Tier-1 Common Equity Ratio** shows a highly significant *t* value of 8.600 ($p = 0.000$), while the **Tier-1 Capital Ratio** and **Total Capital Ratio** record *t* values of 7.674 ($p = 0.001$) and 5.237 ($p = 0.003$), respectively. These results clearly indicate a strong and statistically significant enhancement in the bank's capital position after the merger, reinforcing financial stability and regulatory compliance.

The paired t -test results show significant differences between the pre- and post-merger periods for most key financial indicators. This indicates that mergers and acquisitions have meaningfully affected the financial performance of the selected companies.

Therefore:

- **Null Hypothesis (H_0): Rejected**
- **Alternative Hypothesis (H_1): Accepted**

VI:

The paired t -test results reveal that the 2020 merger led to **significant changes in several key financial indicators**, indicating a notable impact on the company's financial performance.

Market Capitalization shows a statistically significant difference between the pre- and post-merger periods ($t = -2.653, p = 0.038$), suggesting a meaningful change in market valuation after the merger. **Total Debt** also records a significant difference ($t = -2.762, p = 0.033$), reflecting changes in the firm's capital structure following consolidation.

Strong post-merger improvements are observed in operational and value-related indicators. **Enterprise Value (EV)** exhibits a highly significant change ($t = -7.449, p = 0.000$), while **Revenue** shows a substantial and statistically significant increase ($t = -18.716, p = 0.000$), indicating expansion in business scale after the merger. Similarly, **EBITDA** records a significant improvement ($t = -4.512, p = 0.004$), reflecting enhanced operating performance.

Profitability margins also demonstrate strong improvement, as **EBITDA percentage** shows a highly significant difference ($t = 349.485, p = 0.000$), indicating improved operational efficiency in the post-merger period. However, **Cash balances** do not show a statistically significant change ($t = -1.017, p = 0.348$), suggesting that liquidity levels remained relatively stable immediately after the merger.

Overall, the findings suggest that the 2020 merger resulted in **significant improvements in valuation, revenue generation, operating performance, and profitability**, although liquidity effects were limited in the short term.

Hypothesis Conclusion

The paired t -test results show statistically significant differences between the pre- and post-merger periods for most key financial indicators, indicating that the merger has meaningfully affected the financial performance of the company.

Therefore:

- **Null Hypothesis (H_0): Rejected**
- **Alternative Hypothesis (H_1): Accepted**

Suggestions:

a) Strengthen Post-Merger Integration

The companies involved in mergers should focus on improving the integration process by aligning their operations, systems, and management practices. This helps avoid duplication, reduces operational delays, and ensures that the expected benefits of the merger—such as cost savings and efficiency—are realized.

b) Improve Financial Stability and Reduce Debt Burden

Merged entities, especially in sectors like telecom and steel, should prioritize reducing their debt levels and improving cash flow. This can be achieved through better cost management, asset monetization, and optimizing resource allocation. A stable financial structure will strengthen long-term performance and resilience.

c) Focus on Revenue Growth and Digital Transformation

To remain competitive after a merger, companies should invest in innovation, digital services, and customer-centered strategies. Enhancing technology adoption and offering new products or services can boost revenue, improve customer experience, and help the merged entity achieve sustainable growth in the long run.

Conclusion

Mergers and acquisitions are widely used as strategic tools by firms to achieve growth, stability, and competitive advantage in a dynamic business environment. This study examined the impact of mergers and acquisitions on the financial performance of selected companies in the Indian banking, telecommunications, and global steel sectors using pre- and post-merger financial data from 2016 to 2024. Financial ratio analysis, trend analysis, and paired t-tests were employed to evaluate changes in key performance indicators.

The findings indicate that the impact of mergers and acquisitions differs across sectors. In the Indian banking sector, the Canara Bank–Syndicate Bank merger resulted in significant improvements in capital adequacy, deposits, loans, and asset base, reflecting enhanced financial stability, though profitability and growth margins did not improve significantly in the short run due to integration costs. The Vodafone–Idea merger showed mixed outcomes, with improvements in revenue, enterprise value, EBITDA, and operating efficiency, but continued financial stress due to high debt levels and regulatory challenges. In contrast, the Tata Steel–Bhushan Steel acquisition emerged as a successful case, leading to improved profitability, asset quality, and sustainable financial performance.

The paired t-test results demonstrate statistically significant differences between the pre- and post-merger periods for most key financial variables across the selected companies. Therefore, the **null hypothesis (H_0)**, which states that mergers and acquisitions do not result in a significant change in financial performance, is **rejected**, and the **alternative hypothesis (H_1)**, which states that mergers and acquisitions lead to a significant change in financial performance, is **accepted**.

Overall, the study concludes that mergers and acquisitions can positively influence financial performance, but their success depends on effective post-merger integration, financial discipline, and industry-specific conditions rather than consolidation alone.

Appendix on data:

VI Dataset:

Year	Co	Mkt Cap (Cr)	Cash (Cr)	Pref & Other (Cr)	Total Debt (Cr)	EV (Cr)	Revenue (Cr)	YoY %	EBITDA (Cr)	EBITDA %	Net Inc (Cr)	NI %	EPS	EPS YoY	CFO (Cr)	Capex (Cr)	FCF (Cr)
2016.00	VDF	39677.61	2093.46	0.00	40541.31	78125.46	35916.36	13.90	11999.95	33.40	2602.69	7.20	4.36	-19.34	10641.16	-7,124.27	3516.89
2016.00	IDEA	26.64	763.00	21126.92	40.54	65241.00	36162.50	-0.8	10583.20	33.70	3079.90	8.50	8.56	-3.5	8412.30	4298.20	4114.10
2017.00	VDF	30951.74	4978.00	0.00	55054.56	81028.30	35552.66	-1	10226.04	28.80	-567.81	-1.6	-0.95	—	7680.73	-5,331.28	2349.45
2017.00	IDEA	38.90	78.25	21126.92	55.05	71798.00	35882.70	0.15	12180.70	0.30	-399.7	-1.1%	-1.11	-113%	6587.80	4512.60	2075.20
2018.00	VDF	33087.25	5649.75	0.00	57985.13	85422.63	28247.12	-20.5	6020.14	21.30	-4,288.96	-15.2	-7.01	-636.63	109.77	-8,650.81	-8,541.05
2019.00	VDF	15942.39	7551.60	0.00	125939.90	134330.69	37005.60	31.00	4585.00	12.40	-15,489.68	-41.9	-22.41	-219.40	610.10	-7,651.90	-7,041.80
2020.00	VDF	8907.97	825.60	0.00	141874.70	149957.07	44916.70	21.40	20672.20	46.00	-48,232.97	-107.4	-17.90	20.61	-7,413.80	-7,966.20	-15,380.00

Canara and syndicate bank dataset:

Company- Year	Book Value of Equity	Total Deposits	Total Loans	Total Assets	Net Revenue (Adj)	YoY Growth %	Profit Before Prov (Adj)	Margin %	Net Income (Adj)	Net Margin %	EPS (Adj)	Tier 1 Common Equity %	Tier 1 Capital Ratio %	Total Capital Ratio %
Canara Bank Mar-18	368,976.90	5,248,469.80	3,944,935.10	6,314,354.70	196,349.50	10.50%	97,971.40	49.90%	-39,482.20	-20.1%	-13.18	9.62%	10.40%	13.31%
Canara Bank Mar-19	378,892.40	5,991,230.20	4,468,784.80	7,117,828.10	219,333.10	11.70%	108,269.10	49.40%	6,038.60	2.80%	1.64	8.31%	9.04%	11.90%
Syndicate Bank Mar-18	14,184.18	272,776.11	210,683.87	323,977.14	21,775.96	5.41%	3,864.00	17.70%	-3,222.84	-14.8%	-34.00	7.56%	9.41%	12.24%
Syndicate Bank Mar-19	16,570.22	259,896.96	205,044.40	311,278.86	21,725.41	0.23%	2,819.00	13.00%	-2,588.29	-11.9%	-17.12	9.31%	11.36%	14.23%

Tata Steel and Bhushan steel dataset:

	Market Capitalization	Cash & Equivalents	Preferred & Other	Total Debt	Revenue, Adj	Growth %, YoY	EBITDA	Margin %	Net Income	Margin %	EPS	Growth %, YoY	Cash from Operations	Capital Expenditures	Free Cash Flow
Tata Steel 2019 Pre f 626734.10	58662.30	23644.60	1008162.20	1546918.40	26.00	296208.30	19.10	91993.50	5.90	8.04	25.05	187583.30	-90910.00	96673.30	
Bhushan steel 2019 3258.00	1872.00	17295.82	17,028.14	20891.61	+20.0%	4998.00	23.90	1091.00	136.00	8.23	1.03	3021.00	1568.00	1453.00	
Tata Steel 2020 Pre 324314.00	114865.90	25866.00	1163282.00	1461060.00	-5.60	178275.70	19.10	35561.70	2.40	2.93	-63.50	130546.90	-103980.00	26566.90	
Bhushan steel 2020 4351.00	849.57	17656.27	34,034	18,199.14	-12.9%	3042.00	0.17	- ₹ 649.17	0.00	-5.94	0.00	2418.00	1,938.57	1209.00	
Tata steel 2021 Merq 976611.00	130010.70	32696.80	830245.50	1547192.80	5.90	305042.60	19.70	81598.60	5.30	7.12	142.79	379241.50	-69785.90	309455.60	
Tata steel 2022 Post 1596322.50	244233.50	26554.20	755613.50	2423268.70	56.60	634899.50	26.20	401827.50	16.60	33.23	366.74	399932.00	-105222.00	294710.00	

SPSS FOR VI:

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Year	2017.57	7	1.512	.571
Mkt Cap (Cr)	18376.07129	7	16313.81335	6166.041867
Pair 2 Year	2017.57	7	1.512	.571
Cash (Cr)	3134.237143	7	2904.456691	1097.781443
Pair 3 Year	2017.57	7	1.512	.571
Total Debt (Cr)	60213.02786	7	55747.81044	21070.69180
Pair 4 Year	2017.57	7	1.512	.571
EV (Cr)	95129.02143	7	33072.34896	12500.17295
Pair 5 Year	2017.57	7	1.512	.571
Revenue (Cr)	36240.52000	7	4838.530144	1828.792496
Pair 6 Year	2017.57	7	1.512	.571
EBITDA (Cr)	10895.31857	7	5205.648613	1967.550235
Pair 7 Year	2017.57	7	1.512	.571
EBITDA %	25.12785714	7	15.18970371	5.741168358

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Year & Mkt Cap (Cr)	7	-.145	.756
Pair 2	Year & Cash (Cr)	7	.297	.517
Pair 3	Year & Total Debt (Cr)	7	.898	.006
Pair 4	Year & EV (Cr)	7	.934	.002
Pair 5	Year & Revenue (Cr)	7	.455	.305
Pair 6	Year & EBITDA (Cr)	7	.234	.614
Pair 7	Year & EBITDA %	7	.120	.798

Paired Samples Test

Paired Differences

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Year - Mkt Cap (Cr)	-16358.4999	16314.03320	6166.124962	-31446.4641	-1270.53561	-2.653	6	.038
Pair 2	Year - Cash (Cr)	-11116.66571	2904.007377	1097.611618	-3802.42459	1569.093161	-1.017	6	.348
Pair 3	Year - Total Debt (Cr)	-58195.4564	55746.45298	21070.17872	-109752.326	-6638.58641	-2.762	6	.033
Pair 4	Year - EV (Cr)	-93111.4500	33070.93755	12499.63948	-123696.966	-62525.9340	-7.449	6	.000
Pair 5	Year - Revenue (Cr)	-34222.9486	4837.842537	1828.532605	-38697.2067	-29748.6905	-18.716	6	.000
Pair 6	Year - EBITDA (Cr)	-8877.74714	5205.295284	1967.416689	-13691.8424	-4063.65193	-4.512	6	.004
Pair 7	Year - EBITDA %	1992.443571	15.08365415	5.701085393	1978.493518	2006.393625	349.485	6	.000

Canara and syndicate bank SPSS:

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Company-Year	2019.50	6	1.643	.671
	Book Value of Equity	350388.8167	6	290688.7310	118673.1775
Pair 2	Company-Year	2019.50	6	1.643	.671
	Total Deposits	5457605.462	6	4584609.483	1871658.984
Pair 3	Company-Year	2019.50	6	1.643	.671
	Total Loans	3802096.478	6	3065564.375	1251511.415
Pair 4	Company-Year	2019.50	6	1.643	.671
	Total Assets	6408453.717	6	5327532.489	2174956.031
Pair 5	Company-Year	2019.50	6	1.643	.671
	Net Revenue (Adj)	242623.2283	6	215105.5171	87816.45962
Pair 6	Company-Year	2019.50	6	1.643	.671
	YoY Growth %	1569.6400%	6	3559.07174%	1452.98495%
Pair 7	Company-Year	2019.50	6	1.643	.671
	Profit Before Prov (Adj)	107898.833	6	96290.1917	39310.3062
Pair 8	Company-Year	2019.50	6	1.643	.671
	Margin %	1473.3333%	6	2235.58699%	912.67457%
Pair 9	Company-Year	2019.50	6	1.643	.671
	Tier 1 Common Equity %	320.3000%	6	485.54091%	198.22125%
Pair 10	Company-Year	2019.50	6	1.643	.671
	Tier 1 Capital Ratio %	348.7017%	6	534.91165%	218.37677%
Pair 11	Company-Year	2019.50	6	1.643	.671
	Total Capital Ratio %	478.1133%	6	722.51587%	294.96587%

		N	Correlation	Sig.
Pair 1	Company-Year & Book Value of Equity	6	.801	.056
Pair 2	Company-Year & Total Deposits	6	.821	.045
Pair 3	Company-Year & Total Loans	6	.786	.064
Pair 4	Company-Year & Total Assets	6	.811	.050
Pair 5	Company-Year & Net Revenue (Adj)	6	.882	.020
Pair 6	Company-Year & YoY Growth %	6	.500	.312
Pair 7	Company-Year & Profit Before Prov (Adj)	6	.855	.030
Pair 8	Company-Year & Margin %	6	.952	.003
Pair 9	Company-Year & Tier 1 Common Equity %	6	.958	.003
Pair 10	Company-Year & Tier 1 Capital Ratio %	6	.962	.002
Pair 11	Company-Year & Total Capital Ratio %	6	.954	.003

		Paired Differences			95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	Company-Year - Book Value of Equity	-348369.317	290687.4150	118672.6402	-653427.050	-43311.58332	-2.936	5	.032
Pair 2	Company-Year - Total Deposits	-5455585.96	4584608.135	1871658.433	-10266837.1	-644334.790	-2.915	5	.033
Pair 3	Company-Year - Total Loans	-3800076.98	3065563.083	1251510.888	-7017188.13	-582965.823	-3.036	5	.029
Pair 4	Company-Year - Total Assets	-6406434.22	5327531.157	2174955.487	-11997335.3	-815533.148	-2.946	5	.032
Pair 5	Company-Year - Net Revenue (Adj)	-240603.728	215104.0674	87815.86779	-466341.603	-14865.85372	-2.740	5	.041
Pair 6	Company-Year - YoY Growth %	449.86000	3558.25017	1452.64955	-3284.29454	4184.01454	.310	5	.769
Pair 7	Company-Year - Profit Before Prov (Adj)	-105879.3333	96288.7871	39309.7327	-206928.2183	-4830.4484	-2.693	5	.043
Pair 8	Company-Year - Margin %	546.16667	2234.02304	912.03609	-1798.29673	2890.63006	.599	5	.575
Pair 9	Company-Year - Tier 1 Common Equity %	1699.20000	483.96685	197.57864	1191.30794	2207.09206	8.600	5	.000
Pair 10	Company-Year - Tier 1 Capital Ratio %	1670.79833	533.33061	217.73131	1111.10218	2230.49448	7.674	5	.001
Pair 11	Company-Year - Total Capital Ratio %	1541.38667	720.94815	294.32585	784.79798	2297.97535	5.237	5	.003

Tata and Bhushan steel SPSS:

[DataSet1]

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	year	2020.17	6	1.169	.477
	Market Capitalization	588598.43	6	619892.027	253069.860
Pair 2	year	2020.57	7	1.512	.571
	Cash & Equivalents	82740.2814	7	87648.70541	33128.09675
Pair 3	year	2020.57	7	1.512	.571
	Preferred & Other	20678.73857	7	10173.63713	3845.273398
Pair 4	year	2021.00	5	1.581	.707
	Total Debt	765022.64	5	420765.785	188172.179
Pair 5	year	2020.20	5	1.304	.583
	Revenue, Adj	1399866.30	5	865447.537	387039.905
Pair 6	year	2020.50	4	1.291	.645
	Growth %, YoY	20.73	4	27.250	13.625
Pair 7	year	2020.17	6	1.169	.477
	EBITDA	237077.68	6	235995.428	96344.730
Pair 8	year	2020.57	7	1.512	.571
	Margin %	15.47100000	7	10.80078625	4.082313484
Pair 9	year	2020.67	6	1.633	.667
	Net Income	103357.88	6	150877.694	61595.561
Pair 10	year	2020.57	7	1.512	.571
	Margin %	23.74814286	7	49.82034571	18.83032071
Pair 11	year	2020.67	6	1.633	.667
	EPS	11.34	6	10.921	4.459
Pair 12	year	2020.57	7	1.512	.571
	Growth %, YoY	84.62390000	7	143.6906756	54.30997048

	Growth %, YoY	20.73	4	27.250	13.625
Pair 7	year	2020.17	6	1.169	.477
	EBITDA	237077.68	6	235995.428	96344.730
Pair 8	year	2020.57	7	1.512	.571
	Margin %	15.47100000	7	10.80078625	4.082313484
Pair 9	year	2020.67	6	1.633	.667
	Net Income	103357.88	6	150877.694	61595.561
Pair 10	year	2020.57	7	1.512	.571
	Margin %	23.74814286	7	49.82034571	18.83032071
Pair 11	year	2020.67	6	1.633	.667
	EPS	11.34	6	10.921	4.459
Pair 12	year	2020.57	7	1.512	.571
	Growth %, YoY	84.62390000	7	143.6906756	54.30997048
Pair 13	year	2020.57	7	1.512	.571
	Cash from Operations	160632.243	7	171204.4640	64709.2050
Pair 14	year	2020.67	6	1.633	.667
	Capital Expenditures	-59031.32	6	53502.311	21842.227
Pair 15	year	2020.57	7	1.512	.571
	Free Cash Flow	105372.6857	7	138446.6798	52327.92637

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	year & Market Capitalization	6	.814	.049
Pair 2	year & Cash & Equivalents	7	.394	.382
Pair 3	year & Preferred & Other	7	-.376	.405
Pair 4	year & Total Debt	5	-.860	.062
Pair 5	year & Revenue, Adj	5	.759	.137
Pair 6	year & Growth %, YoY	4	.489	.511
Pair 7	year & EBITDA	6	.751	.085
Pair 8	year & Margin %	7	-.331	.469
Pair 9	year & Net Income	6	.327	.527
Pair 10	year & Margin %	7	-.439	.325
Pair 11	year & EPS	6	.420	.407
Pair 12	year & Growth %, YoY	7	.669	.100
Pair 13	year & Cash from Operations	7	.265	.566
Pair 14	year & Capital Expenditures	6	.201	.703
Pair 15	year & Free Cash Flow	7	.320	.484

Paired Samples Test

		Paired Differences				t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower Upper			
Pair 1	year - Market Capitalization	-586578.267	619891.075	253069.471	-1237114.053 63957.520	-2.318	5	.068
Pair 2	year - Cash & Equivalents	-80719.71000	87648.11016	33127.87177	-161780.692 341.27203	-2.437	6	.051
Pair 3	year - Preferred & Other	-18658.1671	10174.20631	3845.488527	-28067.7386 -9248.59569	-4.852	6	.003
Pair 4	year - Total Debt	-763001.640	420767.144	188172.787	-1285453.055 -240550.225	-4.055	4	.015
Pair 5	year - Revenue, Adj	-1397846.102	865446.547	387039.462	-2472439.922 -323252.282	-3.612	4	.023
Pair 6	year - Growth %, YoY	1999.775	26.642	13.321	1957.382 2042.168	150.124	3	.000
Pair 7	year - EBITDA	-235057.517	235994.550	96344.372	-482718.608 12603.575	-2.440	5	.059
Pair 8	year - Margin %	2005.100429	11.39037743	4.305158002	1994.566086 2015.634771	465.744	6	.000
Pair 9	year - Net Income	-101337.217	150877.160	61595.343	-259673.086 56998.653	-1.645	5	.161
Pair 10	year - Margin %	1996.823286	50.50198430	19.08795588	1950.116740 2043.529831	104.612	6	.000
Pair 11	year - EPS	2009.327	10.343	4.223	1998.472 2020.181	475.861	5	.000
Pair 12	year - Growth %, YoY	1935.947529	142.6831145	53.92914819	1803.987657 2067.907400	35.898	6	.000
Pair 13	year - Cash from Operations	-158611.6714	171204.0639	64709.0538	-316949.0220 -274.3208	-2.451	6	.050
Pair 14	year - Capital Expenditures	61051.983	53501.983	21842.093	4905.095 117198.871	2.795	5	.038
Pair 15	year - Free Cash Flow	-103352.114	138446.1960	52327.74352	-231393.490 24689.26147	-1.975	6	.096

Bibliography / References

Books & Academic Literature

1. Poddar, N. (2019). *A study on mergers and acquisition in India and its impact on operating efficiency of Indian acquiring company*. *Theoretical Economics Letters*, 9(4), 1040–1052. <https://doi.org/10.4236/tel.2019.94067>
2. DeYoung, R., Evanoff, D. D., & Molyneux, P. (2009). *Mergers and acquisitions of financial institutions: A review of the post-2000 literature*. *Journal of Financial Services Research*, 36(2), 87–110. <https://doi.org/10.1007/s10693-009-0066-7>
3. Malik, M. F., Anuar, M. A., Khan, S., & Khan, F. (2017). *Mergers and acquisitions: A conceptual review*. *International Journal of Accounting and Financial Reporting*. Retrieved from <https://www.semanticscholar.org/paper/Mergers-and-Acquisitions%3A-A-Conceptual-Review-Malik-Anuar/906df164e6d99e708c22c7c72de7721b1f100124>
4. *Failure and success in mergers and acquisitions*. (2019). *Journal of Corporate Finance*, 58, 650–699. <https://doi.org/10.1016/j.jcorpfin.2019.07.010>
5. Jing, S., Hu, C., Zhou, Z., Guo, H., & Li, L. (2025). *The impact of female executives on cross-border mergers and acquisitions*. *International Review of Finance*, Article 103881. <https://doi.org/10.1016/j.iref.2025.103881>
6. Tiwari, R. (2017). *HR issues and activities in mergers and acquisitions: An analytical review*. *International Journal of Finance and Commerce*. Retrieved from <https://www.commercejournals.com/assets/archives/2023/vol5issue1/5009-535.pdf>
7. Erel, I., Liao, R. C., & Weisbach, M. S. (2012). *Determinants of cross-border mergers and acquisitions*. *The Journal of Finance*, 67(3), 1045–1082. <https://doi.org/10.1111/j.1540-6261.2012.01741.x>
8. Khan, Z., Rao-Nicholson, R., Akhtar, P., & He, S. (2017). *Cross-border mergers and acquisitions of emerging economies' multinational enterprises: The mediating role of socialization integration mechanisms for successful integration*. *Human Resource Management Review*, Article 100578. <https://doi.org/10.1016/j.hrmr.2016.12.003>
9. Mehrotra, A., & Sahay, A. (2018). *Systematic review on financial performance of mergers and acquisitions in India*. *Vision: The Journal of Business Perspective*. <https://doi.org/10.1177/0972262918766137>
10. Cartwright, S., & Schoenberg, R. (2025). *Thirty years of mergers and acquisitions research: Recent advances and future opportunities*. *British Journal of Management*. Retrieved from https://www.academia.edu/35182154/30_YEARS_OF_MERGERS_AND_ACQUISITIONS_RESEARCH_RECENT_ADVANCES_AND_FUTURE_OPPORTUNITIES

Research Papers & Journals

11. Kumar, R. (2020). *Post-Merger Financial Performance: Evidence from Indian Banks*. **IIMB Management Review**. <https://scholar.google.com/scholar?q=Post-Merger+Financial+Performance:+Evidence+from+Indian+Banks+Kumar+2020>

12. Seth, A. (1990). *Value Creation in Acquisitions: A Re-Examination of Performance Issues*. **Strategic Management Journal**, 11(2), 99–115.
<https://doi.org/10.1002/smj.4250110203>
13. Sharma, D., & Ho, J. (2002). *The Impact of Acquisitions on Financial Performance: Evidence from India*. **Journal of Emerging Markets Finance**.
<https://scholar.google.com/scholar?q=The+Impact+of+Acquisitions+on+Financial+Performance:+Evidence+from+India+Sharma+Ho+2002>

Industry & Regulatory Reports

14. **Telecom Regulatory Authority of India. (2016–2024)**. *Industry performance indicators*. Retrieved from <https://www.trai.gov.in/release-publication/reports/industry-performance-indicators>
15. **Ministry of Steel, Government of India. (Various Years)**. *Annual report*. Retrieved from <https://steel.gov.in/publications/annual-report>

Company Annual Reports

16. **Bank of Baroda. (2016–2024)**. *Annual reports*. Bank of Baroda. Retrieved from <https://www.bankofbaroda.in/investor-relations/annual-reports>
17. **Canara Bank. (2016–2024)**. *Annual reports*. Canara Bank. Retrieved from <https://canarabank.com/annual-reports>
18. **Vodafone Idea Limited. (2016–2024)**. *Annual reports*. Vodafone Idea Limited. Retrieved from <https://www.myvi.in/investors/financial-information/annual-reports>
19. **Bharti Airtel Limited. (2016–2024)**. *Annual reports*. Bharti Airtel Limited. Retrieved from <https://www.airtel.com/about-bharti/investor-relations/annual-reports>
20. **Tata Steel Limited. (2016–2024)**. *Annual reports*. Tata Steel Limited. Retrieved from <https://www.tatasteel.com/investors/reports/annual-report/>