

# EVALUATING THE FINANCIAL PERFORMANCE OF INDIAN OVERSEAS BANK PRE- AND POST-MERGER: AN EAGLE MODEL ANALYSIS

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## Abstract

**Introduction:** Bank mergers are transformative events that significantly affect all stakeholders. This study investigates how the merger impacted Indian Overseas Bank's financial well-being.

**Objectives:** This research analyzes the financial performance of Indian Overseas Bank before and after the merger, employing the EAGLE framework as the analytical lens.

**Methods:** This study assesses the merger's impact on Indian Overseas Bank's financial health by analyzing secondary data within the EAGLE framework.

**Results:** The merger's impact on Indian Overseas Bank was mixed. Earnings and liquidity improved, but asset quality declined due to decreases in total assets and non-performing assets. Loan growth saw minimal change, while deposits increased. Specifically, the post-merger return on assets boosted earnings, but interest income didn't rise. The decline in both total and non-performing assets negatively affected asset quality. Deposit growth was steady, but loan growth was marginal. The merger benefited the bank's liquidity.

**Conclusions:** The merger yielded a positive impact on liquidity and earnings. However, the bank should prioritize strategies to improve asset quality and effectively leverage the growth in deposits to ensure long-term success.

**Keywords:** Indian Overseas Bank, merger, financial performance, EAGLE framework, asset quality, liquidity, earnings, deposits, loans

## INTRODUCTION

For decades, bank mergers have reshaped the financial world, both domestically and internationally. These transformative events create complex dynamics and significant consequences for everyone involved – banks, customers, shareholders, and regulators. Merger motivations are diverse, from seeking greater efficiency to strategically expanding into new markets. However, the real impact on a bank's financial health is often intricate and demands thorough investigation. This study aims to provide a comprehensive understanding of the financial effects of bank mergers by examining the case of Indian Overseas Bank.

The Indian Overseas Bank merger offers a unique opportunity to explore the transformative impact of such strategic decisions. This study will provide a thorough assessment of the bank's financial performance before and after the merger, using the well-established EAGLE framework. The goal is to determine how well the merger achieved its objectives and to uncover any unintended consequences.

## REVIEW OF LITERATURE

This section reviews existing research on bank performance evaluation, particularly focusing on studies employing the EAGLE model or its variants.

### EAGLE Model Applications in Banking:

Several studies have utilized the EAGLE model to assess the financial performance of banks across different contexts. Sathavara and Christian analyzed the performance of five leading private sector banks in India using the EAGLE model over a ten-year period (Sathavara & Christian, 2021). Their findings revealed variations in performance across different banks and highlighted areas for improvement. AlAli compared the financial soundness of Islamic and conventional banks in Kuwait using the EAGLES model (an extended version of EAGLE) (2019). This study found that conventional banks generally outperformed Islamic banks, although Islamic banks showed faster improvement in certain areas. Vaidya employed the EAGLES model to evaluate Nepalese commercial banks, finding that newer banks with aggressive growth strategies tended to rank higher (n.d.). [Kumari and Venkat, 2017] used the EAGLES model to compare the performance of public and

private sector banks in India, revealing significant performance differences between the two groups. Finally, Nagarajan(PA S, 2012) applied the EAGLE model to assess rural banks in the Philippines. These studies demonstrate the versatility of the EAGLES framework in assessing bank performance across diverse banking systems and geographic contexts.

### KEY THEMES AND FINDINGS

These studies demonstrate the EAGLE model's adaptability in assessing bank performance across various geographies and banking sectors. A recurring theme is the importance of earnings, asset quality, growth, liquidity, and equity (or stability) in determining a bank's overall financial health. Several studies reveal notable performance differences between bank types (e.g., private vs. public, Islamic vs. conventional), suggesting that ownership structure and operating principles can significantly influence financial outcomes. The research also underscores the need to consider broader contextual factors, such as market expansion strategies, regulatory compliance, and prevailing economic conditions, when evaluating bank performance.

### GAPS AND OPPORTUNITIES

While existing research offers valuable insights into bank performance evaluation, opportunities for further investigation remain. Exploring the EAGLE model's application in diverse contexts and comparing its effectiveness to other performance evaluation models would enhance our understanding of its strengths and limitations. Additionally, future research could examine the impact of specific events, like mergers and acquisitions, on bank performance within the EAGLE framework. This study contributes to this area by analyzing the performance of Indian Overseas Bank before and after its merger.

### RESEARCH OBJECTIVES

This study has three main goals:

1. **Evaluate the merger's impact on Indian Overseas Bank's financial health.** We'll use the EAGLE framework to assess key financial metrics before and after the merger to get a complete picture of its effects.
2. **Explore the factors driving post-merger performance.** We'll go beyond simply measuring performance and analyze the specific elements that contributed to any observed changes after the merger. This will help us understand how the merger influenced the bank's operations and financial outcomes.
3. **Pinpoint key changes in performance trends.** We'll identify any statistically significant shifts or trends in the bank's financial performance after the merger, comparing them to the pre-merger period. This will help us determine if the merger led to lasting improvements or declines in crucial performance indicators.

### RESEARCH METHODOLOGY

#### Data Sources

Our analysis primarily relies on secondary data. We extracted financial data for Indian Overseas Bank, spanning the pre-merger (FY 2017-18 to 2019-20) and post-merger (FY 2020-21 to 2022-23) periods, from the bank's annual reports. The merger date of April 1, 2020, demarcates these periods. To provide context and support our analysis, we also consulted various secondary sources, including academic journals, periodicals, working papers, and other relevant publications on the Indian banking sector and merger-related financial performance.

#### Data Collection and Analysis

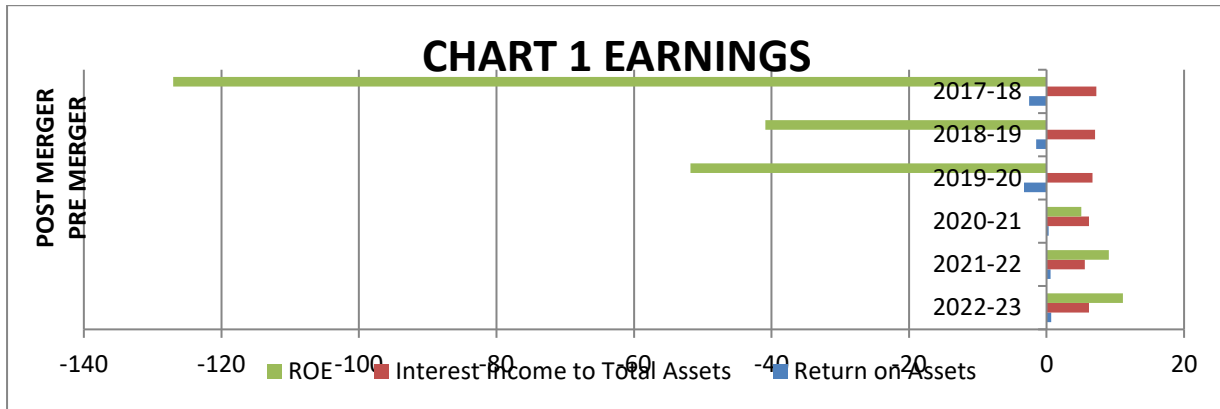
We systematically collected relevant financial information from the annual reports, focusing on key metrics defined by the EAGLE model. We then analyzed this data using appropriate statistical techniques, including comparative and trend analyses, to assess the merger's impact on Indian Overseas Bank's financial performance. Specific statistical methods employed will be detailed in the data analysis section.

### RESULTS AND DISCUSSION

This section presents the findings of our analysis, exploring the financial performance of Indian Overseas Bank before and after the merger. We'll interpret the results within the context of the EAGLE model, focusing on Earnings, Asset Quality, Growth, Liquidity, and Equity. We'll compare pre- and post-merger data, analyze trends, and use statistical methods to determine the significance of any observed changes. The results will be presented clearly with accompanying explanations, often using tables and figures to illustrate key findings. We'll also discuss the implications of these findings for the bank and the broader financial sector.

Part.	Post				Pre			
	2022-23'	21-22'	20-21'	Aveg	2019-20'	18-19'	17-18'	Aveg
ROA	0.66	0.57	0.30	0.51	-3.27	-1.49	-2.54	-2.43

Interest Inc to Total Assets	6.18	5.58	6.19	5.98	6.67	7.05	7.22	6.98
ROE	11.10	9.04	5.05	8.39	-51.8	-40.88	-127	-73.22



Analysis of Indian Overseas Bank's earnings reveals a nuanced impact of the merger. Table 1 presents the bank's earnings ratios for the pre-merger (2017-2020) and post-merger (2021-2023) periods. This analysis assesses the bank's earnings quality, focusing on profitability and long-term earnings sustainability. Chart 1 (not provided) visually represents the changes in earnings quality between the pre- and post-merger periods. Key indicators used to measure earnings quality include Return on Assets, Interest Income to Total Assets, and Return on Equity. Post-merger, the bank's ROA improved significantly, rising from -3.27% in 2019-2020 to 0.30% in 2020-2021. However, interest income as a percentage of total assets decreased from 6.67% in 2019-2020 to 6.19% in 2020-2021, eventually reaching 6.18% in 2022-2023. This represents an average decline of 0.40% from the pre- to post-merger period. Conversely, ROE showed a substantial positive shift, increasing from -51.8% in 2019-2020 to 11.10% in 2022-2023. The pre-merger period exhibited fluctuating profitability, with instances of positive ROE despite some negative values. In contrast, the post-merger period, particularly after 2019, demonstrated a marked improvement in profitability relative to shareholder equity.

#### ASSETS QUALITY

Part.	Post				Pre			
	2022-23'	21-22'	20-21'	Aveg	2019-20'	18-19'	17-18'	Aveg
Gross NPA	7.44	9.82	11.69	9.65	14.78	21.97	25.28	20.67
Net NPA	1.83	2.65	3.58	2.68	5.44	10.81	15.33	10.52
Total Invest to Total Assets ratio	30.01	32.79	34.85	32.55	30.45	26.77	27.68	28.3
ROA	0.68	0.59	0.31	0.52	-2.95	-1.35	-2.33	-2.21

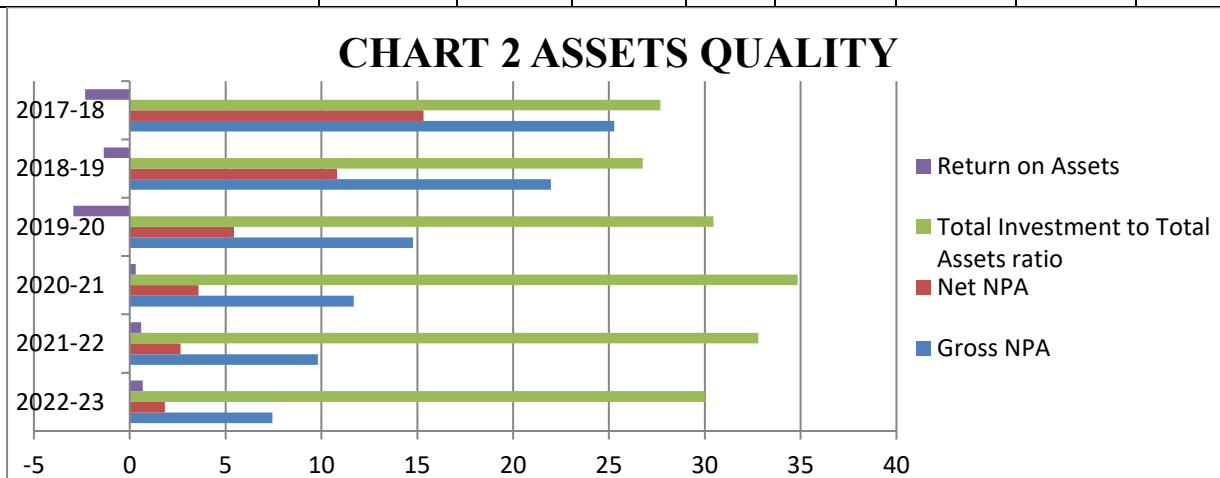


Table 2 summarizes Indian Overseas Bank's asset quality for the pre-merger (2017-2020) and post-merger (2021-2023) periods. Asset quality reflects an asset's resilience to credit risk. Chart 2 (not provided) visually

depicts the changes in asset quality during these periods. Four key indicators—Gross Non-Performing Assets, Net NPA, Total Investment to Total Assets Ratio, and Return on Assets—were used to assess asset quality. A high asset quality suggests both strong yields and low default risk. Following the merger, Indian Overseas Bank demonstrated improved asset health, with Gross NPA gradually decreasing from 14.78% in 2019-2020 to 11.69% in 2020-2021, and further to 7.44% in 2022-2023. Net NPA also declined from 5.44% in 2019-2020 to 3.58% in 2020-2021, ultimately reaching 1.83% in 2022-2023, indicating a positive impact from the merger. The ratio of total investments to total assets saw an initial increase from 30.45% in 2019-2020 to 34.85% in 2020-2021, before decreasing to 30.01% in 2022-2023. ROA also improved, rising from -2.95% in 2019-2020 to 0.68% in 2022-2023.

**GROWTH**

Part	Post				Pre			
	2022-23'	21-22'	20-21'	Aveg	2019-20'	18-19'	17-18'	Aveg
Growth of Deposits'	-0.48	9.10	7.77	4.02	0.18	2.62	2.59	1.79
Growth of Advances'	23.43	12.93	5.26	13.87	-8.49	0.08	-5.67	-4.69

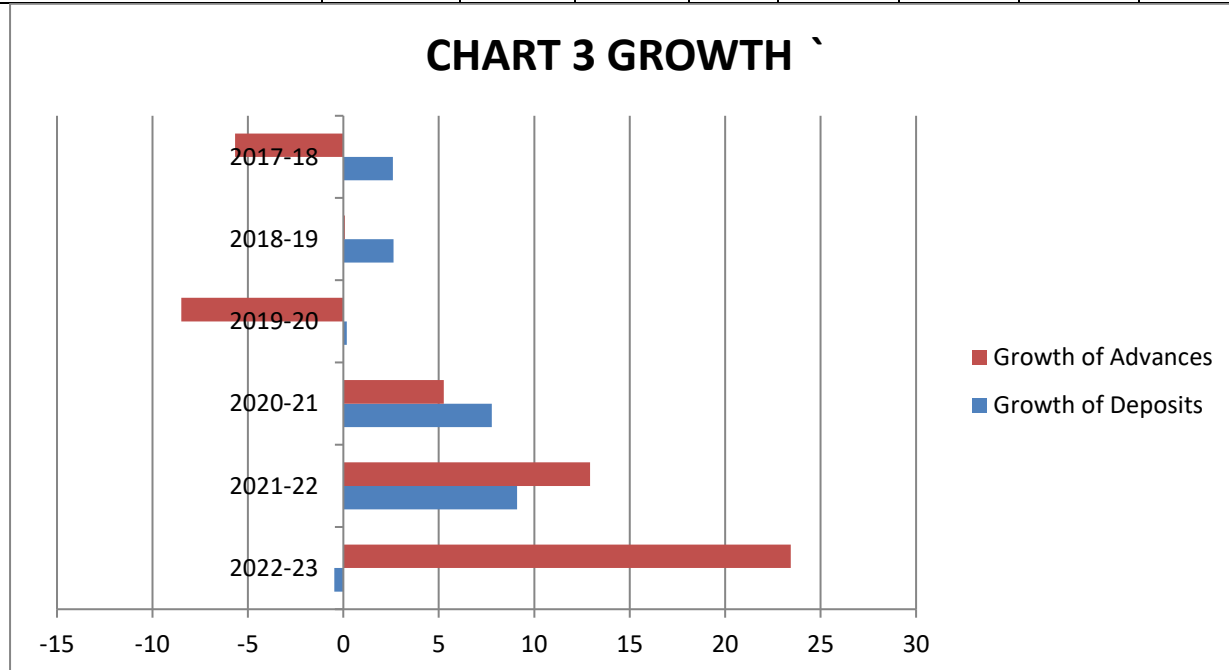


Table 3 presents an overview of Indian Overseas Bank's growth during the pre-merger (2017-2020) and post-merger (2021-2023) periods. Chart 3 (not provided) visually represents the growth variations between these two periods. Growth is measured using two indicators: Growth of Deposits and Growth of Advances. Following the merger, deposit growth at Indian Overseas Bank fluctuated significantly. It rose from 0.18 times in 2019-2020 to 7.77 times in 2020-2021, before declining to -0.48 times in 2022-2023. Similarly, the growth of advances exhibited volatility, moving from -8.49 times in 2019-2020 to 5.26 times in 2020-2021, and then sharply increasing to 23.43 times in 2022-2023.

**LIQUIDITY**

Part.	Post				Pre			
	2022-23'	21-22'	20-21'	Aveg	2019-20'	18-19'	17-18'	Aveg
LDR	68.24	55.02	53.15	58.80	54.42	59.58	61.10	58.36

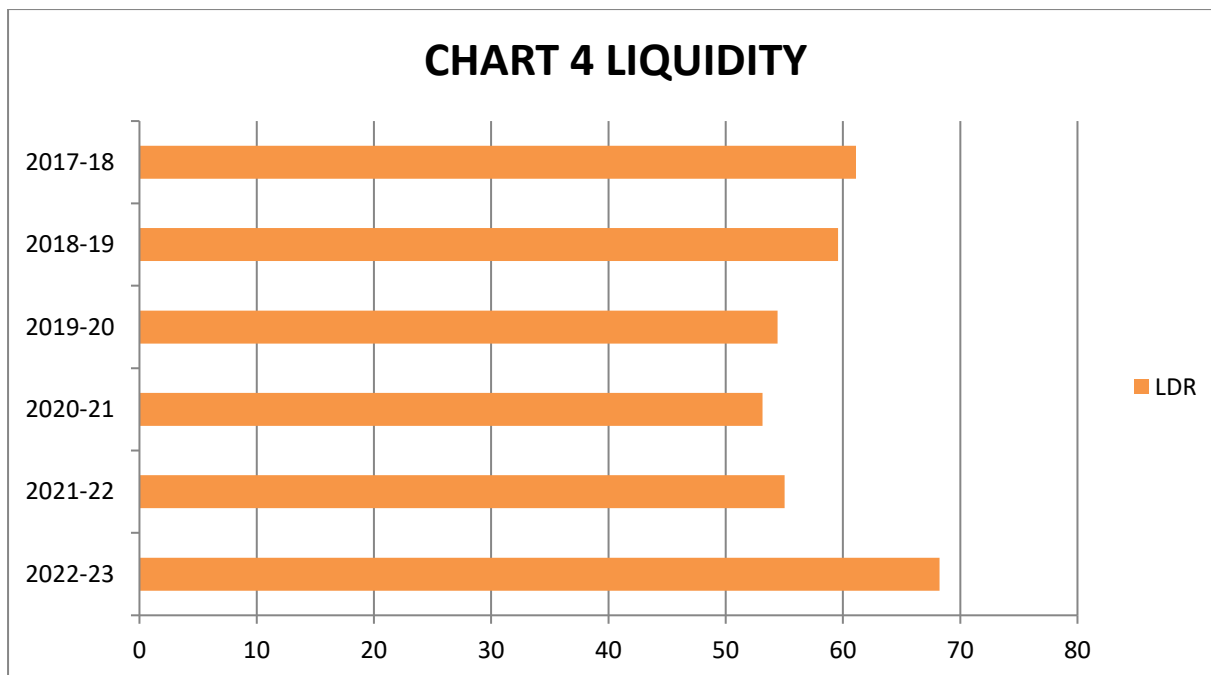


Table 4 summarizes Indian Overseas Bank's liquidity for the pre-merger (2017-2020) and post-merger (2021-2023) periods. Banks face the challenge of balancing liquidity and profitability. Utilizing available liquidity for loans can enhance profitability, but it also increases vulnerability to liquidity crunches. Conversely, a lower loan-to-deposit ratio suggests a more conservative lending policy, potentially at the expense of profit maximization. Indian Overseas Bank's liquidity trends indicate a conservative approach to loan expansion, prioritizing liquidity over potential profit gains. The bank maintained a moderate average loan-to-deposit ratio.

#### EQUITY

Part.	Post				Pre			
	2022-23'	21-22'	20-21'	Aveg	2019-20'	18-19'	17-18'	Aveg
CAR	16.10	13.83	15.32	15.08	10.72	10.21	9.25	10.06
Adv. to Total Assets	56.75	48.18	46.61	50.51	46.53	53.03	53.42	-4.69

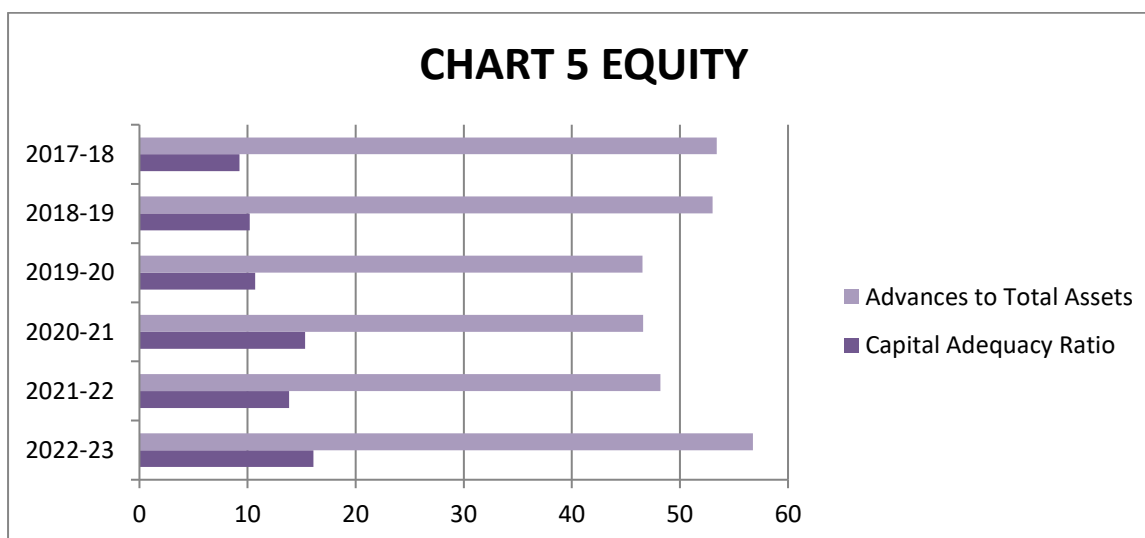


Table 5 summarizes Indian Overseas Bank's equity ratio for the pre-merger (2017-2020) and post-merger (2021-2023) periods. Chart 5 (not provided) visually represents the changes in the equity ratio during these

periods. Two key indicators are used in liquidity assessment: the Capital Adequacy Ratio and the Advances to Total Assets ratio. Capital adequacy is crucial for bank stability. The Basel II international guidelines stipulate a minimum capital requirement of 8% of risk-adjusted assets. Many banks face restrictions on opening new branches unless they meet these minimum capital requirements. The Capital to Risk-Weighted Assets Ratio helps ensure that banks can absorb potential losses during operations and assesses their loss-bearing capacity. Indian Overseas Bank demonstrated a higher capital adequacy ratio, suggesting a greater ability to withstand financial downturns. Post-merger, the bank's CAR increased from 10.72% in 2019-2020 to 15.32% in 2020-2021, and further to 16.10% in 2022-2023. The Advances to Total Assets ratio also rose after the merger, from 46.53% in 2019-2020 to 46.61% in 2020-2021, and then to 56.75% in 2022-2023.

#### STRATEGY

Table 6 Strategy

Part.	Post				Pre			
	2022-23'	21-22'	20-21'	Aveg	2019-20'	18-19'	17-18'	Aveg
Interest Earned / Net operating cost.	3.02	3.06	3.05	3.04	3.39	3.96	3.20	3.51
Net Interest Marg.	2.63	2.10	2.15	2.29	2.03	2.11	2.20	2.11

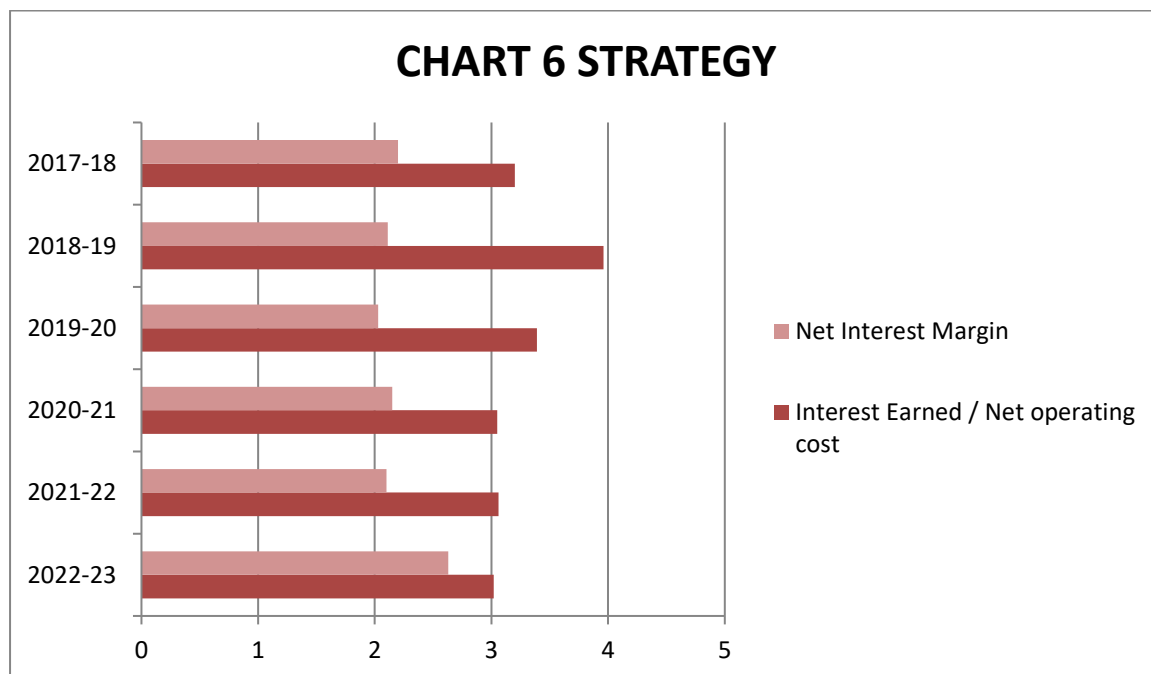


Table 6 summarizes the strategic ratios of the bank for the pre-merger (2017-2020) and post-merger (2021-2023) periods. Chart 6 (not provided) visually illustrates the changes in these ratios between the two periods. A key indicator of effective bank strategy management is the Strategic Response Quotient. This ratio assesses management's effectiveness in lending, deposit generation, fee-based income acquisition, and operating cost management. The optimal balance among these core banking activities depends on the specific strategy of the bank. Generally, a higher SRQ, coupled with robust risk controls, indicates better strategic management.

#### CONCLUSION

This study investigated the impact of the merger on Indian Overseas Bank's financial performance using the EAGLE framework, focusing on earnings, asset quality, growth, liquidity, and equity. The findings reveal a mixed picture.

#### KEY FINDINGS:

- **Earnings:** While the bank's return on assets improved after the merger, suggesting enhanced profitability, interest income did not see a corresponding rise. This highlights the need for strategies to boost revenue generation.

- **Asset Quality:** A decline in total assets and an increase in non-performing assets post-merger indicate a deterioration in asset quality. Improving loan underwriting and strengthening recovery efforts are crucial for the bank's long-term health.
- **Growth:** The bank experienced moderate growth in advances and steady improvement in deposits after the merger. Leveraging this increased deposit base for profitable lending is essential for sustained growth.
- **Liquidity:** The merger appears to have strengthened the bank's liquidity, ensuring it has sufficient cash to meet its obligations. Maintaining this healthy liquidity is vital for stability and navigating market volatility.
- **Equity:** The bank maintained adequate capital levels post-merger, reducing financial distress risk and contributing to overall financial system stability.

#### IMPLICATIONS AND RECOMMENDATIONS:

This study's findings offer valuable insights for Indian Overseas Bank's management and policymakers. The bank should prioritize strategies to enhance interest income and improve asset quality. Leveraging the expanded deposit base for profitable lending and maintaining healthy liquidity are also crucial. While capital adequacy is currently satisfactory, ongoing monitoring and proactive measures are essential for long-term financial stability. Further research could explore the specific drivers of observed trends and the merger's long-term effects on the bank's performance. This study contributes to our understanding of merger impacts on bank performance in India and offers valuable lessons for other banks undergoing similar transformations.

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