



A Study On Pre And Post Merger Impact On Financial Performance Of Lakshmi Villas Bank And Dbs Bank.

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ABSTRACT:

This study examines the pre- and post-merger financial performance of Lakshmi Vilas Bank and DBS Bank, aiming to understand the effects of their mergers on key financial metrics. Utilizing secondary data from various financial statements, the research employs ratio analysis, percentage change assessments, and T-tests to evaluate profitability, liquidity, and growth. The findings indicate that Lakshmi Vilas Bank faced substantial declines in its financial performance after the merger, with significant negative impacts on profitability and liquidity. In contrast, DBS Bank experienced positive financial outcomes, showcasing improved profitability and growth metrics post-merger. This study underscores the necessity of conducting thorough due diligence and strategic planning in the merger process to ensure successful financial integration and performance enhancement.

Key words: Mergers, Performance, Profitability, Liquidity.

1. INTRODUCTION

The current trend in the banking industry is mergers. In the banking industry, a lot of mergers have occurred recently. Due to the rising trends in bank non-performing assets (NPAs), mergers in the Indian banking sector have mostly been made to strengthen the system by uniting the unstable or profitable banks with the loss-making or inefficient banks. Good and strong banks are merging, nevertheless, either to achieve synergies or to become the biggest banks in the industry according to rankings.

1.1 Lakshmi villas bank

Seven Karur-based merchants led by V. S. N. Ramalinga Chettiar established Lakshmi Vilas Bank in 1926. Their goal was to provide for the financial needs of those working in trade, industry, and agriculture in and around Karur. Under the Indian Companies Act of 1913, the bank was incorporated on November 3, 1926, and on November 10, 1926, it received the certificate necessary to open for operation. The Reserve Bank of India was designated as the regulator of the banking industry after the Banking Regulations Act, 1949 was introduced. On June 19, 1958, the bank received its banking license from RBI, and on August 11, 1958, it was designated as a "scheduled commercial bank," indicating that it was able to conduct business as a full-fledged commercial bank.

The branch network of Lakshmi Vilas Bank had significant growth from 1961 to 1965, when the bank acquired nine additional banks. In order to take advantage of prospects in the pan-Indian market, the bank began to extend its branch network outside of Tamil Nadu in 1974. As a result, branches were opened in the nearby states of Kerala, Karnataka, and Andhra Pradesh, as well as in major economic hubs in Maharashtra, Gujarat, and Madhya Pradesh and major financial hubs like Mumbai, New Delhi, and Kolkata. In the meantime, the bank became an Authorized Dealer in foreign exchange in 1976, which allowed it to offer its complete range of services to clients who were traveling abroad and conducting business internationally.

1.2 DBS Bank

The Marina Bay Financial Centre, located in Singapore's Marina Bay neighborhood, is home to the headquarters of DBS Bank Limited, a worldwide banking and financial services company. Before July 21, 2003, the bank was known as The Development Bank of Singapore Limited, from which the term "DBS" was coined. This shorter name was chosen to better represent the bank's global reach. Together with United Overseas Bank (UOB) and Oversea-Chinese Banking Corporation (OCBC), it is one of Singapore's "Big Three" local banks.

Temasek Holdings, the second-biggest sovereign wealth fund in Singapore after GIC, is the main and largest shareholder of BS. Temasek holds 29% of DBS shares as of March 31, 2023. Because of its strong capital position, the bank has been awarded credit ratings of "AA-" and "Aa1" by Standard & Poor's and Moody's, which are among the best in the Asia-Pacific area.

It has also been named the "Safest Bank in Asia" by Global Finance for fifteen years running, from 2009 to 2023. Additionally, Euromoney named the Bank the Best Digital Bank in the World in 2016. In July 2019, DBS made history by being the first bank globally to hold three of the most prestigious global best bank awards at the same time, from The Banker, Global Finance, and Euromoney.

II REVIEW OF LITERATURE

(Mondal, Pal, & Ray*, 2017) This research aims to analyze and evaluate the effects of the Nedungadi Bank and Punjab National Bank merger on the two institutions' operational performance across various financial metrics. Most of the financial indicators for both Nedungadi Bank and Punjab National Bank have increased since the merger. Based on this data, the study concludes that most banks in the Indian banking sector have significantly increased their average financial ratios of liquidity, profitability, and stakeholder wealth. Evidence from India's banking sector shows that mergers can help small banks survive by joining forces with larger institutions. Banks can improve their stability, reduce tax burdens, and increase their access to liquid funds through consolidation. Synergy gains created after the merger and overall bank performance are crucial to the

merger's success, as shown by the findings, which show that the efficiency and performance of the banks improved in terms of various financial parameters following the merger.

(Patel, 2018)The article evaluates the long-term profitability situation before and after the merger for a subset of Indian banks from 2003–2004 to 2013–2014. Several factors are taken into consideration while evaluating financial performance. According to the study, mergers have a detrimental effect on the net profit margin, return on equity, return on assets, yield on advance, and yield on investment. However, since the merger, several metrics, including earnings per share, profit per employee, and business per employee, have expanded and demonstrated a favorable trend. It has been noted that all banks' assets, equity, investments, and advances increased following the merger, but their respective yields decreased due to underutilization.

(Ruby Agarwal, March 2020)The financial sector's health is crucial to any economy's growth. But throughout time, the Indian banking sector's performance has been marked by inefficiencies, a high bankruptcy rate, a substantial incidence of distress, vulnerability to systemic financial crises, and macroeconomic instability. In this study, the performance of commercial banks in India was assessed regarding the consequences of mergers and acquisitions, with a focus on State Bank for India (SBI), ICICI Bank, HDFC Bank, and Kotak Mahindra Bank. Secondary data was used in the research, based on the Capital, Asset, Management, Earnings, and Liquidity (CAMEL) criterion, and was gathered from the bank's annual reports and statements of accounts. The paper used a pair sample t-test to compare the bank's performance before and after mergers and acquisitions for ten years from 2008–2018. The findings demonstrated that private commercial banks performed better due to mergers and acquisitions than state banks.

(Kitti, 2020)This paper uses Data Envelopment Analysis (DEA), a non-parametric frontier approach, to examine HDFC and SBI banks' technical and scale efficiency throughout the merger year, both before and after the merger. Secondary data from the RBI database was used for this purpose. Between 2005 and 2018, HDFC and SBI banks improved their governance by demonstrating a commendable efficiency level. According to our findings, the merger and acquisition benefited both the HDFC and SBI banks, with the former realizing more significant economies of scale and the latter seeing improvements in corporate governance as a direct result of the merger.

(Ansari, Bilal, Khan, & Tahir, 2021)The primary purpose of this study is to analyze how consolidation has affected the financial health of Pakistan's microfinance institutions. Because of their crucial role in any economy, financial institutions everywhere must adjust their operations to keep up with technological change. Several domestic and international studies on mergers and acquisitions banking have been conducted to delve into the industry's nuances. Thirteen financial ratios were calculated for this study, and the results showed that microfinance banks in Pakistan did not significantly benefit from mergers and acquisitions. Some indicators

can be compared with a paired T-test based on financial ratio measurements. The sample period covers three years, including two years before and one year following any mergers or acquisitions. The researcher looked at 11 of the 13 ratios: Investment to Total Assets (ITA), Deposit to Total Assets (DTA), Return on Assets (ROA), Earnings per Share (EPS), and Net Profit Margin (NPM).

III.THEORETICAL FRAMEWORK

The pre- and post-merger effects on the financial performance of a private and a public bank are the main subjects of this study. The variables under analysis are predicated on the profitability, liquidity, and post-merger development of the institutions. The post-merger ratios and bank stock prices are the dependent variables, whereas the pre-merger ratios and bank stock prices are the independent ones.

IV.OBJECTIVES OF THE STUDY

The main objective of this study is to analyse the pre and post impact of mergers on financial performance of select private bank in India.

V.HYPOTHESIS OF THE STUDY

H0: There is no significant difference between pre and post-financial synergy of mergers of banks with regards to liquidity, profitability, and asset quality

H1: There is a significant difference between pre and post-financial synergy of mergers of banks with regards to liquidity, profitability, and asset quality

VI.SOURCES OF DATA COLLECTION

The research utilized secondary sources of information. The effects of the merger on various factors are evaluated using primary sources of information. The economic effects of the merger are analyzed with secondary information. It compares pre-merger and post-merger financial metrics. The CMIE database and the annual reports of the relevant banks were mined for secondary data.

VII.DATA ANALYSIS AND INTERPRETATION

For the purpose of data analysis and testing of the hypothesis, the percentage change, t-test and correlation are used.

- a. **Percentage Change:** Percentage change shows in what percent the financial ratios have changed from pre- merger to post-merger. It analyses the increase or decrease in the financial ratios of the bank from pre-merger to post- merger.
- b. **T-Test:** A t-test is an inferential statistic used to analyse if there is any significant difference between means of two variables.
- c. **Correlation:** The correlation is used to measure the relationship between two variables. It has to be always between 1 and -1. It measures the strength and direction of the given two variables. It means for a positive increase or decrease in one variable, there is either same or opposite increase or decrease in the second variable.

$$r_{xy} = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum(x_i - \bar{x})^2 \sum(y_i - \bar{y})^2}}$$

PROFITABILITY RATIO

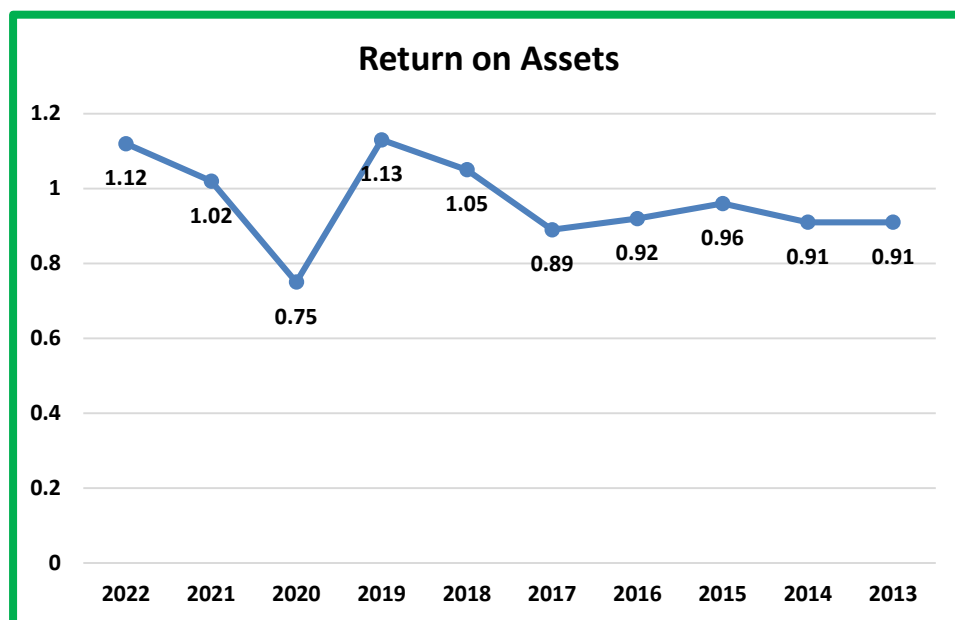
RETURN ON ASSETS

Return on assets (ROA) gauges how successfully a company's management produces profits from all the assets shown on its balance sheet. The greater the ROA percentage, which is displayed as a percentage, the better a company's management is at controlling its financial sheet to produce profits. According to the data, the return earned on assets climbed from 0.91 to 1.13 between 2013 and 2019, while it somewhat decreased to 0.75 between 2020 and 2021, then increased again from 1.02 to 1.12 between 2021 and 2022. Therefore, even after the merger and acquisition in 2020, the Bank's performance will be commendable.

Table No 4.1: Return on Assets

YEAR	RATIO
2022	1.12
2021	1.02
2020	0.75
2019	1.13
2018	1.05
2017	0.89
2016	0.92
2015	0.96
2014	0.91
2013	0.91

Graph No 4.1: Return on Assets

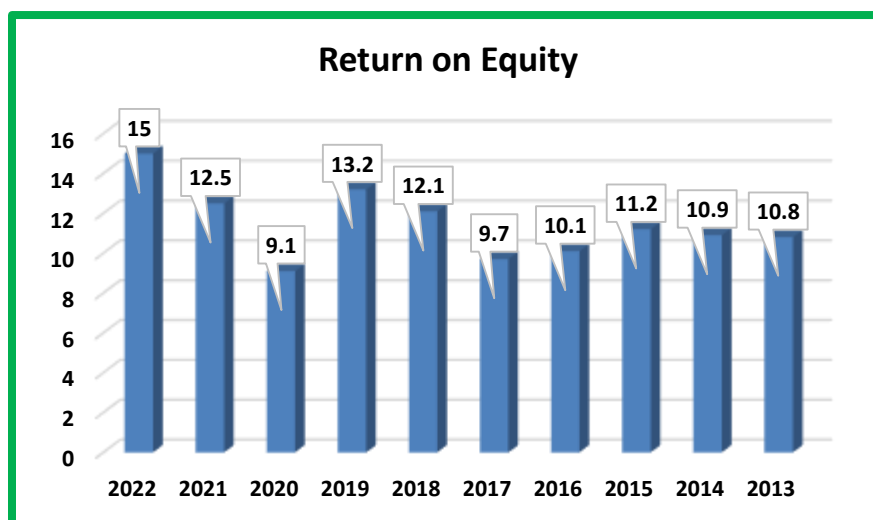


RETURN ON EQUITY

The ratio of a company's net income to the equity of its shareholders is known as return on equity (ROE). A company's profitability and the effectiveness of its revenue generation are measured by its return on equity (ROE). A corporation is better at turning its equity financing into profits the higher the ROE. According to the analysis, the return generated on equity increased from 10.8 to 11.2 between 2013 and 2015, decreased to 9.7 between 2018 and 2019, and increased from 12.1 to 13.2 between 2020 and 2021. The return then increased from 12.5 to 15 between 2021 and 2022. The bank is therefore well-equipped to turn its equity financing into earnings.

Table No 4.2: Return on Equity

YEAR	RATIO
2022	15
2021	12.5
2020	9.1
2019	13.2
2018	12.1
2017	9.7
2016	10.1
2015	11.2
2014	10.9
2013	10.8

Graph No 4.2: Return on Equity

NET MARKUP (INTEREST) INCOME TO TOTAL ASSETS

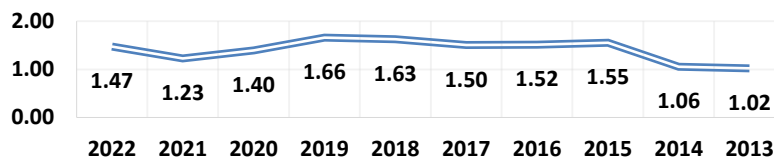
"Interest income to total assets ratio" measures how much a bank depends on interest from bank loans for funding. While a low ratio can mean that banks rely on non-interest sources of funding, a high ratio is a good indicator (albeit one that is too high is not always a good indicator). According to the study, the ratio increased from 2013 to 2019 from 1.02 to 1.66, showing that the bank is heavily dependent on interest income generated annually, while from 2020 to 2021 there was a slight decline in the ratio from 1.40 to 1.23, which recovered to 1.47 in 2022. As a result, it is clear from the analysis that the bank relies on interest income from lending as a source of finance.

Table No 4.3: Net Markup (Interest) Income to Total Assets

YEAR	INTEREST INCOME	TOTAL ASSETS	RATIO
2022	10941	7,43,368	1.47
2021	8440	6,86,073	1.23
2020	9,076	6,49,938	1.40
2019	9,625	5,78,946	1.66
2018	8,955	5,50,751	1.63
2017	7,791	5,17,711	1.50
2016	7,305	4,81,570	1.52
2015	7,100	4,57,834	1.55
2014	4,665	4,40,666	1.06
2013	4,112	4,02,008	1.02

Graph No 4.3: Net Markup (Interest) Income to Total Assets

NET MARKUP (INTEREST) INCOME TO TOTAL ASSETS



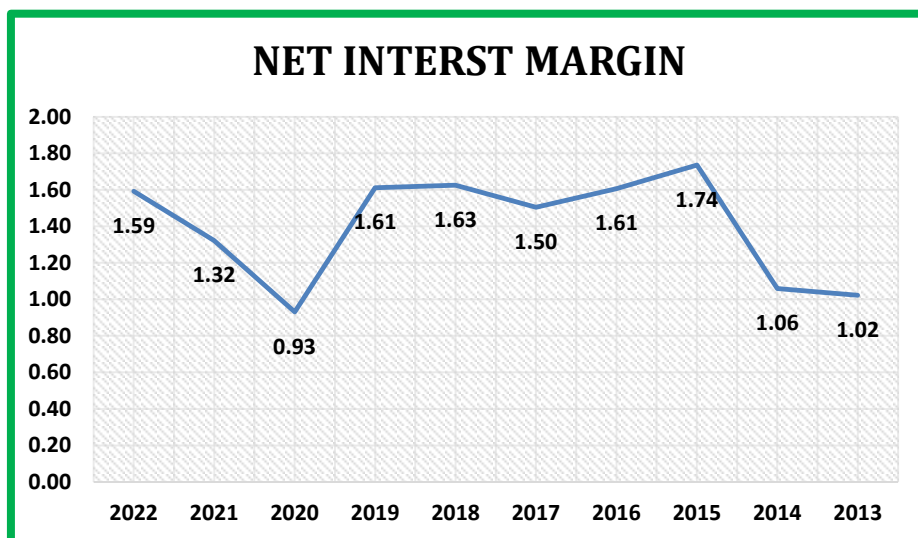
NET INTEREST MARGIN

The net interest margin (NIM) measures the difference between the interest a bank receives on loans and the interest it pays on deposits. NIM is one metric used to measure a bank's expansion and profitability. According to an analysis conducted between the years of 2013 and 2016, the ratio climbed from 1.02 to 1.61, reduced to 1.50 in 2017, increased to 1.63 in 2018, and then increased to 1.61 and 0.93 in 2019 and 2020. From 2021 to 2022, the ratio increased to 1.32 and 1.59. Consequently, it shows that the bank is still profitable despite merger and acquisition.

Table No 4.4: Net Interest Margin

YEAR	INTEREST INCOME	INTEREST EXPENDED	TOTAL ASSETS	RATIO
2022	15927	4,092	7,43,368	1.59
2021	10185	1,109	6,86,073	1.32
2020	12,208	6,158	6,49,938	0.93
2019	15,592	6,258	5,78,946	1.61
2018	13,798	4,843	5,50,751	1.63
2017	10,833	3,042	5,17,711	1.50
2016	9,748	2,007	4,81,570	1.61
2015	9,644	1,691	4,57,834	1.74
2014	6,282	1,617	4,40,666	1.06
2013	5,614	1,502	4,02,008	1.02

Graph No 4.4: Net Interest Margin



LIQUIDITY RATIO

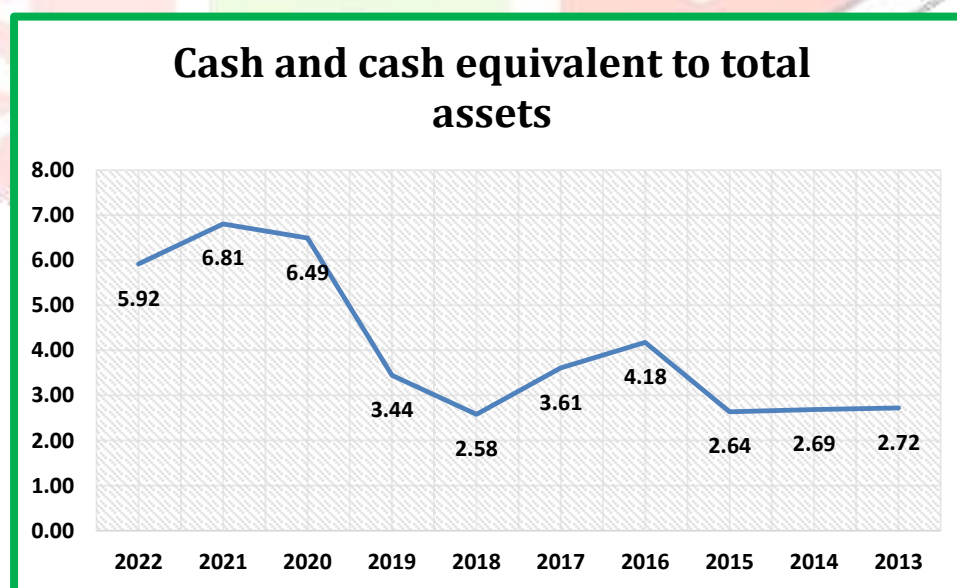
CASH AND CASH EQUIVALENT TO TOTAL ASSETS

The cash asset ratio is a financial statistic that assesses a company's capacity to settle short-term liabilities with cash and cash equivalents to ascertain its liquidity. According to the study, the liquidity position grew from 2.72 to 4.18 between the years of 2013 and 2016, declined to 2.58 and 3.44 between the years of 2018 and 2019, increased to 6.49 and 6.81 between the years of 2020 and 2021, and then decreased to 5.92 in 2022. As a result, it suggests that the bank's performance regarding liquidity is favorable.

Table No 4.5: Cash and Cash Equivalent to Total Assets

YEAR	CASH EQUIVALENTS	TOTAL ASSETS	RATIO
2022	43976	7,43,368	5.92
2021	46690	6,86,073	6.81
2020	42,202	6,49,938	6.49
2019	19,935	5,78,946	3.44
2018	14,221	5,50,751	2.58
2017	18,693	5,17,711	3.61
2016	20,132	4,81,570	4.18
2015	12,078	4,57,834	2.64
2014	11,851	4,40,666	2.69
2013	10,949	4,02,008	2.72

Graph No 4.5: Cash and Cash Equivalent to Total Assets



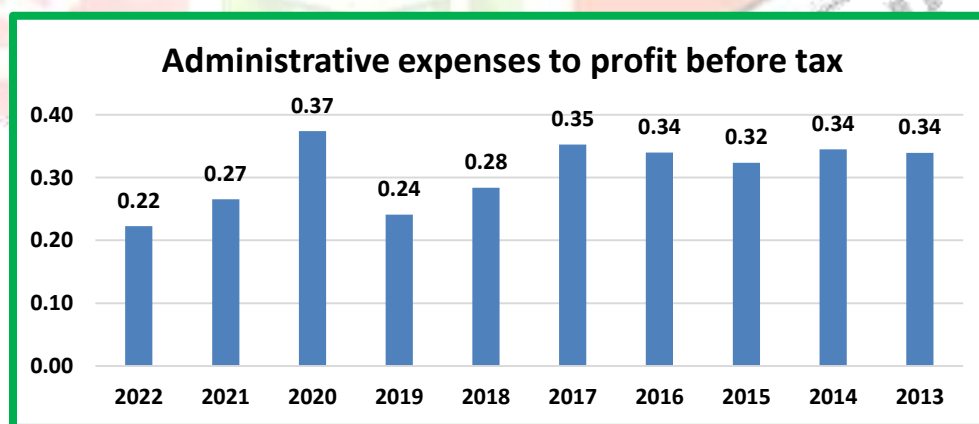
ADMINISTRATIVE EXPENSES TO PROFIT BEFORE TAX

The ratio of profit before taxes to administrative costs quantifies the portion of a company's earnings before taxes that is spent on administrative expenses. This computation assesses how well controlled administrative costs can influence earnings before tax. For the purpose of planning mergers and acquisitions, an analysis of profit before taxes and administrative costs is beneficial. According to the study, the value was 0.34 in 2013 and 2014, 0.32 in 2016, and then 0.34 to 0.35 in 2017 and 2018, indicating a downward tendency. In contrast, the value was 0.28 and 0.24 in 2018 and 2019 and grew to 0.37 in 2020 but declined to 0.27 and 0.22 in 2021 and 2022. Consequently, the bank's performance is commendable.

Table No 4.6: Administrative expenses to profit before tax.

YEAR	ADMIN EXPENSES	PROFIT BEFORE TAX	RATIO
2022	1,764	7,918	0.22
2021	1,749	6,588	0.27
2020	1,704	4,559	0.37
2019	1,709	7,086	0.24
2018	1,727	6,088	0.28
2017	1,603	4,549	0.35
2016	1,474	4,335	0.34
2015	1,450	4,480	0.32
2014	1,304	3,782	0.34
2013	1,177	3,468	0.34

Graph No 4.6: Administrative expenses to profit before tax.



ADVANCES TO TOTAL ASSETS

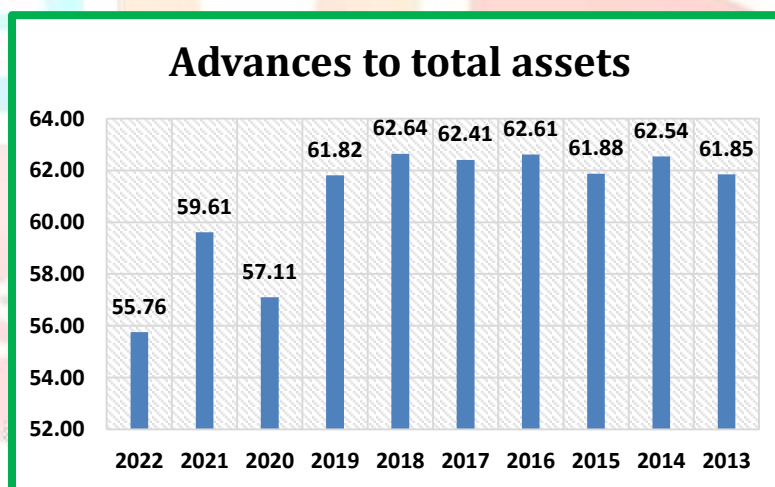
The ratio of advances to total assets shows the link between all advances and all assets. This ratio reveals a bank's lending zeal, which eventually leads to more profitability. Receivables are a part of the total advances. The revaluation of all the assets is not included in the value of the total assets. The preferred ratio is a higher one over a lower one. According to the analysis, the ratio had an increasing trend in 2013 and 2014, reaching

61.85 and 62.54, respectively, but then dropped to 61.88 in 2015. From there, it slightly increased to 62.61 in 2016 but decreased to 62.41 in 2017, before increasing to 62.64 in 2018, which again demonstrated a decreasing trend from 2019 to 2022, from 61.82 to 55.76. As a result, the bank's performance is respectable, and its profitability has declined since the 2020 merger and acquisition.

Table No 4.7: Advances To Total Assets

YEAR	ADVANCES	TOTAL ASSETS	RATIO
2022	4,14,519	7,43,368	55.76
2021	4,08,993	6,86,073	59.61
2020	3,71,171	6,49,938	57.11
2019	3,57,884	5,78,946	61.82
2018	3,45,003	5,50,751	62.64
2017	3,23,099	5,17,711	62.41
2016	3,01,516	4,81,570	62.61
2015	2,83,289	4,57,834	61.88
2014	2,75,588	4,40,666	62.54
2013	2,48,654	4,02,008	61.85

Graph No 4.7: Advances To Total Assets



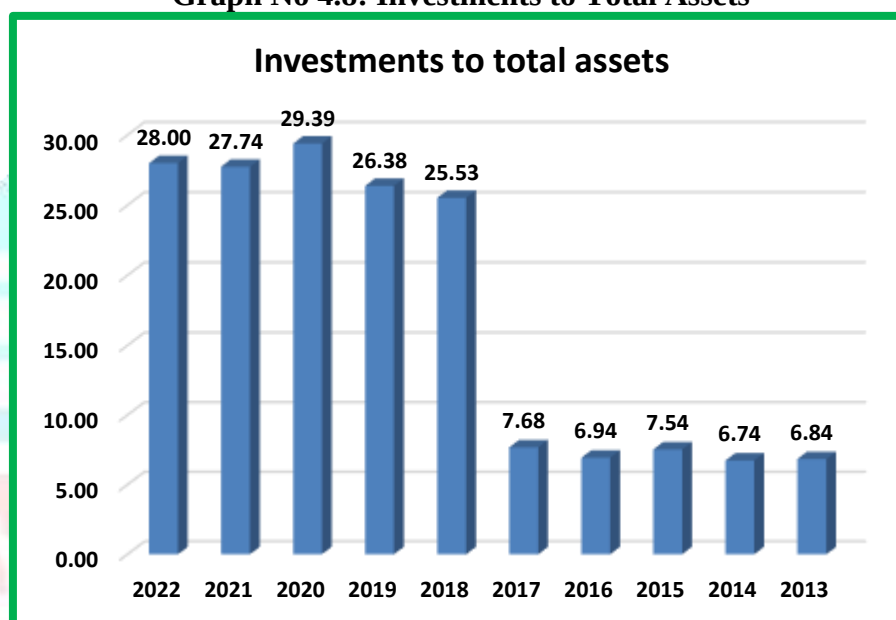
INVESTMENTS TO TOTAL ASSETS

The ratio of investments to total assets is used to assess the percentage of financial assets that are actively producing income. One may assess your portfolio's ability to produce passive income using the ratio. Based on the analysis, the study shows that the ratio was 6.84 in 2013 and decreased to 6.74 in 2014, while it increased to 7.54 in 2015 and decreased to 6.94 in 2016, but from 2017 to 2020, it increased to 7.68 to 29.39 and decreased to 27.74 in 2021 and coped up to 28 in 2022. The study concludes that since a fluctuating pattern was seen, post-merger and acquisition performance has improved on par with pre-merger and acquisition performance.

Table No 4.8: Investments to Total Assets

YEAR	INVESTMENT	TOTAL ASSETS	RATIO
2022	208179	7,43,368	28.00
2021	190311	6,86,073	27.74
2020	191019	6,49,938	29.39
2019	152750	5,78,946	26.38
2018	140585	5,50,751	25.53
2017	39,753	5,17,711	7.68
2016	33,401	4,81,570	6.94
2015	34,501	4,57,834	7.54
2014	29,694	4,40,666	6.74
2013	27,497	4,02,008	6.84

Graph No 4.8: Investments to Total Assets



Findings

- **Return on Assets (ROA)** increased after the merger, indicating that the Bank is generating a slightly higher return on its assets.
- **Return on Equity (ROE)** measures suggesting that the Bank's ability to generate profits relative to its equity has slightly declined.
- **Net Markup (Interest) Income to Total Assets** indicates that the Bank is earning more from its interest-earning assets.
- **Net Interest Margin** increased after the merger, indicating that the Bank is earning more from its interest-earning assets compared to its interest expenses.
- **Cash and Cash Equivalent to Total Assetsratio** represents that the Bank deployed more of its cash into other assets or used it for other purposes.

Conclusion

This study on the pre and post-merger impact on the financial performance of Lakshmi Vilas Bank and DBS Bank reveals significant insights into the outcomes of the merger. The increase in Return on Assets (ROA) indicates that the combined entity is effectively utilizing its assets to generate higher returns, showcasing improved operational efficiency. Conversely, the slight decline in Return on Equity (ROE) suggests challenges in maximizing profits relative to equity, signaling potential areas for improvement in shareholder value. The enhancement in Net Markup (Interest) Income to Total Assets and Net Interest Margin demonstrates that the merged institution has successfully leveraged its interest-earning assets, leading to stronger income generation from these sources. However, the reduction in the Cash and Cash Equivalents to Total Assets ratio indicates a strategic shift towards investing cash into other assets rather than maintaining liquidity, which may reflect a proactive approach to growth. In summary, while the merger has positively influenced certain financial metrics, the decline in ROE highlights the need for ongoing efforts to optimize profitability. Overall, the findings suggest that the merger has laid a solid foundation for future growth and performance enhancement, but attention must be given to equity returns to ensure long-term success and investor confidence.

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