

## EFFECT OF MERGER ON THE PERFORMANCE OF PUBLIC SECTOR BANKS IN INDIA

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### Abstract

India has the potential to emerge as a prominent global financial center, with the banking industry playing a crucial role in enabling this transition. Following the implementation of liberalization policies, the industry has witnessed a substantial increase in the occurrence of mergers and acquisitions within the country. In order to generate value, mergers and acquisitions must result in enhanced financial performance for the merged entities. The objective of this study is to examine whether there has been a discernible enhancement in the CAMEL components of the banks under study following the merger. This study examines banks that have retained their identities subsequent to a merger instigated by the government of India. The merger in question was a component of the effort that was officially declared on August 30, 2019, and subsequently executed on April 1, 2020. The financial institutions under investigation in this research are Punjab National Bank and Canara Bank. The research indicates that there has been no significant improvement in the performance of banks under study subsequent to the merger.

**Keywords:** Merger, Public Sector Banks, Performance, CAMEL Framework.

### INTRODUCTION

The post-liberalization phase in India has witnessed significant growth in the banking system, accompanied by a notable increase in merger and acquisition activities (Gandhi, 2020). The banking sector plays a crucial role in fostering economic development and stability, particularly as India emerges as a potential global financial hub (Gandhi, 2020). Given the immense significance of the banking sector in driving economic growth, it becomes imperative to periodically observe and analyze the performance of banks using effective methodologies (Pandey, 2021).

The CAMEL method, as described by (Mohapatra,2022), is a technique that has been devised to assess the performance of banks. The acronym CAMEL represents the key dimensions of Capital Adequacy, Asset Quality, Management Efficiency, Earnings Quality, and Liquidity. This approach assesses the operational effectiveness of banks based on five distinct dimensions. The concept of capital adequacy pertains to a bank's capacity to absorb unforeseen losses and fulfill the need for supplementary capital without causing disruption to its regular operations (Thisaranga, 2021). A higher level of capital adequacy serves as a preventive measure against liquidity crises and contributes to the maintenance of depositors' confidence in the banking system (Reddy, 2011), (Prasad, 2012). Asset quality refers to the evaluation of the loan portfolio offered by a bank to its customers (Vijayakumar, 2012). This study examines the composition of Non-Performing Assets (NPAs) within the bank's portfolio and its impact on the overall performance of the bank, as discussed by (Kumar et al. 2012) and (Lakhtaria,

2013). Management efficiency refers to the capacity of the management team to effectively identify, monitor, and mitigate risks associated with the banking sector (Lad, 2022). This particular element is centered on enhancing staff productivity, establishing management objectives, and implementing requisite policies to effectively attain these objectives (Vijayakumar, 2012). The fourth component, known as Earnings Quality, pertains to the bank's capacity to generate consistent and increasing profits in the foreseeable future (Lad, 2022). The aforementioned source (Thisaranga, 2021) presents an analysis of the bank's activities in relation to its efforts to enhance its future earning potential. Liquidity, as defined by (Pandey, 2021) and (Pandit, 2021), pertains to a bank's capacity to promptly fulfill its immediate financial liabilities and satisfy its depositors' financial demands by efficiently procuring funds as needed.

The CAMEL framework was established in the United States during the 1980s with the purpose of classifying the comprehensive state of a bank by considering five overarching dimensions (Pandit, 2021). The aforementioned framework facilitated the supervisory authorities in developing a standardized evaluation method to assess the state of banks based on many supervisory criteria (Reddy, 2012). The adoption of this approach in India occurred subsequent to the recommendation put up by the Padmanabhan Working Group (1995) committee. The committee made a recommendation for the adoption of the CAMELS model for performance evaluation in commercial banks, and the CALCS model (Capital Adequacy, Asset Quality, Liquidity, Compliance, and System and Controls) for foreign banks operating in India (Mishra, n.d.), (Lad, 2022). The evaluation of banks' overall performance via the CAMEL framework often occurs on an annual basis. Nevertheless, it is possible to enhance the frequency of assessment in order to facilitate more comprehensive and improved observation (Pandey, 2021).

## LITERATURE REVIEW

The subsequent literature in the Indian context has employed the CAMEL framework to evaluate the financial stability of banks.

In a study conducted by (Gandhi, 2020), a comprehensive examination of the prior and post-merger performance of ICICI Bank was undertaken. The study examined the mergers with Bank of Madhura (2001), ICICI Limited (2002), Sangli Bank (2008), and Bank of Rajasthan (2011). The merger with Sangli Bank resulted in a notable enhancement of the Capital Adequacy metric, whilst the merger with Bank of Rajasthan resulted in a large increase in Asset and Earnings Quality. The merger between Bank of Madhura and ICICI Limited has led to a notable enhancement in the dimension of management efficiency. Nevertheless, the overall performance of ICICI Bank following the merger did not demonstrate much enhancement. In a study conducted by (Gupta, 2008), the performance of 10 private sector banks was examined over a span of 5 years, specifically from 2003 to 2007. Similarly, (Mohapatra, 2022) conducted a comparative analysis of 8 private sector banks over a period of 10 years, ranging from 2010 to 2020. According to (Gupta, 2008), Karur Vyasa Bank achieved the highest rating, while City Union Bank secured the second rank. Conversely, (Mohapatra, 2022) reported that City Union

Bank attained the top place, with Karur Vyasa Bank securing the second position. This demonstrates that both of these financial institutions have exhibited a continuous pattern of strong performance over an extended period of time. According to (Gupta, 2008), the Bank of Rajasthan was identified as the bank with the poorest performance. Similarly, (Mohapatra, 2022) found that Dhanalaxmi Bank exhibited the lowest performance score.

The financial performance of Public Sector Banks was investigated by (Gupta, 2014) and (Lad, 2022) over two distinct time periods: 2009-2013 and 2015-2019, respectively. According to the findings of (Gupta, 2014), Andhra Bank achieved the highest ranking, with Bank of Baroda following closely after. The United Bank of India secured the final ranking. According to (Lad, 2022), the Bank of Maharashtra demonstrated the highest overall performance, while IDFC First Bank exhibited the lowest performance.

A comparative analysis was conducted by (Kumar, et al., 2012), (Banu, 2021), (Parvin, 2021), (Kulshrestha, 2022) to assess the performance of public sector and private sector banks. Their findings indicated that private sector banks exhibit superior performance compared to public sector banks. However, (Pandey, 2021) reported contrasting results, suggesting that public sector banks outperform private banks. According to the study conducted by (Kumar et al., 2012), the three leading positions in the banking sector were held by HDFC bank, ICICI bank, and Axis Bank, in that order. Additionally, the research indicated that public sector banks demonstrated somewhat lower economic soundness. In a study conducted by (Banu, 2021), a comparative analysis was performed to assess the performance of public sector banks in relation to private sector banks. The public sector banks included in the analysis were State Bank of India (SBI) and Syndicate Bank, while the private sector banks considered were ICICI Bank and HDFC Bank. The results indicated that private sector banks exhibited superior performance in terms of Capital Adequacy and Asset Quality, whereas public sector banks shown better performance in terms of liquidity. According to (Kulshrestha, 2022), the favourable performance of private banks may be attributed to the successful execution of banking reforms, the use of advanced technology, and the establishment of an effective loan recovery process.

(Mishra, n.d.), (Mathur, n.d.), and (Gaikwad, 2020) conducted an investigation of the financial stability of the State Bank Group. According to (Mishra, n.d.), the State Bank of Bikaner and Jaipur and the State Bank of Patiala emerged as the leading institutions in terms of Capital Adequacy. The State Bank of Bikaner and Jaipur achieved the highest ranking in terms of asset quality. The State Bank of Travencore, State Bank of Mysore, and State Bank of India demonstrated superior performance in the areas of management efficiency, earnings quality, and liquidity characteristics, respectively. According to (Gaikwad, 2020), the study revealed that the Capital Adequacy and Liquidity criteria of the State Bank of India (SBI) did not undergo any significant changes following the merger. However, there was a slight improvement observed in the Asset Quality, Managerial Efficiency, and Earnings Quality, albeit to a limited extent. According to (Mathur, 2021), an examination of the performance of the State Bank of India (SBI) subsequent to its merger during the period of 2014-15 to 2018-19 revealed that the merger resulted in enhancements in the bank's performance with regards

to management efficiency, earnings quality, and liquidity. The effects of the merger between the State Bank of India (SBI) and its five associate banks, as well as Bharatiya Mahila Bank, was analyzed by (Aghakarimi, n.d.). The study found that the absence of dividend payments to shareholders in the three years following the merger had a detrimental effect on the earnings quality of SBI.

(Reddy, 2011) and (Singh, 2017) conducted analyses on the performances of Regional Rural Banks. In a study conducted by (Reddy, 2011), a comparison was made between the financial performance of Andhra Pragathi Grameena Bank (APGB) and Saphthagiri Grameena Bank (SGGB). The findings revealed that APGB exhibited superior performance in terms of Capital Adequacy and Earnings Quality when compared to SGGB.

In terms of asset quality, SGGB exhibited superior performance compared to APGB. In terms of overall performance, it was seen that APGB exhibited superior performance compared to SGGB. (Singh, 2017) conducts a study to assess the impact of mergers and acquisitions on financial performance. The author compares the financial performance before and after the amalgamation period to determine the effectiveness of these activities. The research findings indicate that the mere consolidation of banks does not suffice to enhance the performance of Regional Rural Banks.

The existing literature reveals a notable gap in the research regarding the evaluation of financial stability of different public sector banks using the CAMEL framework. Specifically, there is a lack of pre and post-merger analysis for banks that have undergone mergers as part of the government of India's mega-merger initiative for the chosen time period. Hence, by the utilization of the CAMEL model to analyse the performance of banks involved in this specific merger event within the selected time period, this study contributes to the current body of knowledge.

### **Research Objective**

The primary aim of this research is to investigate whether there has been an improvement in the CAMEL components of the banks under examination subsequent to the merger. The study focuses on banks that have maintained their individual identities following a merger initiated by the government of India. This merger was part of the initiative announced on August 30, 2019, and implemented on April 1, 2020. The banks examined in this study are Punjab National Bank and Canara Bank.

### **Data Source and Period of Study**

The research will utilize secondary sources of data. The necessary data has been acquired from the databases of the National Stock Exchange and the Bombay Stock Exchange, as well as from the annual reports of the banks being examined. The study will investigate the period from 2017 to 2023, with a specific focus on the window period of 2020. This time frame is selected due to the occurrence of mergers during this period. The study will analyze the three years preceding the mergers as well as the three years after the merger.

## Research Hypotheses

The following research hypotheses can be formulated:

H<sub>0</sub>: There has been no improvement in the CAMEL components of the banks post-merger.

H<sub>1</sub>: There has been improvement in the CAMEL components of the banks post-merger.

## Tools and Techniques

**CAMEL Model:** The acronym CAMEL represents the key components of a comprehensive assessment framework namely Capital Adequacy, Asset Quality, Management Efficiency, Earnings Quality, and Liquidity. The framework under consideration was created within the United States throughout the 1980s with the purpose of classifying the comprehensive state of a bank, drawing upon five overarching perspectives (Pandit, 2021). The framework facilitated the supervisory authorities in implementing a standardized evaluation approach to assess the state of banks based on many supervisory criteria (Reddy, 2012). The next section provides a discussion of the five components of CAMEL.

1. **Capital adequacy:** It refers to the capacity of a bank to absorb unanticipated losses and fulfil the need for supplementary capital without causing disruption to its regular operations (Thisaranga, 2021). A higher level of capital adequacy serves as a preventive measure against liquidity crises and contributes to the maintenance of depositors' confidence in the banking system (Reddy, 2011), (Prasad, 2012).
2. **Asset Quality:** The aspect of Asset Quality pertains to the evaluation of the loan portfolio maintained by the bank in terms of its overall quality and the creditworthiness of the borrowers (Vijayakumar, 2012). This study examines the composition of Non-Performing Assets (NPAs) within the bank's portfolio and evaluates its impact on the overall performance of the bank.
3. **Management Efficiency:** It refers to the capacity of the management to effectively identify, monitor, and mitigate risks associated with the bank (Lad, 2022). This component is centred around enhancing staff productivity, establishing management objectives, and adopting appropriate policies to effectively attain these objectives (Vijayakumar, 2012).
4. **Earnings quality:** It refers to the bank's capacity to generate consistent and increasing profits in the foreseeable future (Lad, 2022). The aforementioned source (Thisaranga, 2021) presents an analysis of the bank's activities in relation to the development of its future earning potential.
5. **Liquidity:** It refers to the bank's capacity to promptly fulfil its short-term liabilities and meet its financial commitments to depositors by efficiently procuring cash as needed (Pandey, 2021), (Pandit, 2021).

The ratios that measure each of these components are given in the table below.

**Table 1: Ratios measuring each component of CAMEL framework**

Sl. No	Components	Ratios
1	Capital adequacy	Capital Adequacy Ratio (CAR)
		Debt / Equity Ratio (D/E)
		Total Advances / Total Asset Ratio (TAd/TAs)
		Government Securities / Total Investment Ratio (GS/TI)
2	Asset Quality	Gross NPA / Net Advances Ratio (GNPA/NAd)
		Net NPA / Net Advances Ratio (NNPA/NAd)
		Total Investment / Total Asset Ratio (TI/TAs)
		Net NPA / Total Asset Ratio (NNPA/TAs)
3	Management Efficiency	Total Advances / Total Deposit Ratio (TAd/TD)
		Return on Net Worth (RONW)
		Business per Employee (B/E)
		Profit per Employee (P/E)
4	Earnings quality	Operating Profit / Average Working Capital Fund (OP/AWCF)
		Interest Income / Total Income (II/TI)
		Net Interest Margin (NIM)
		Return on Asset (ROA)
5	Liquidity	Liquid Asset / Total Asset Ratio (LAs/TAs)
		Government Securities / Total Asset Ratio (GS/TAs)
		Liquid Asset / Demand Deposit Ratio (LAs/DD)
		Liquid Asset / Total Deposit Ratio (LAs/TD)

Source: Compiled by the author.

The ratios selected for this study were picked in an unbiased manner from the existing literature, based on the frequency with which they are reported. The prevalence of a ratio across various research underscores its importance in determining its component head. The average values for each ratio that define the CAMEL components are determined for both the pre- and post-merger periods. The mean difference is determined by comparing the average value before the merger with the average value after the merger. The primary objective of calculating the mean difference is to determine whether there has been a significant enhancement in financial performance subsequent to a merger (Gandhi, 2020). Following the determination of the average discrepancy of each ratio for every bank, the statistical significance is assessed through the utilization of a paired sample t-test at a significance level of 5% ( $\alpha = 0.05$ ) (Gandhi, 2020), (Gandhi, 2020). If the ratio demonstrates statistical significance, it is assigned a score of '1'; otherwise, it is assigned a value of '0'. The allocation of weights is determined by the relative relevance and significance of each ratio in assessing the financial stability of the bank (Reddy, 2012). The subsequent step involves determining the weighted score, which is derived by multiplying the allocated scores with their respective weights. The Cumulative Weighted Score (CWS) for each component of every bank are obtained by summing the weighted scores of each ratio under a specific component head. According to (Reddy, 2012), if the calculated CWS is equal to or more than 0.5, it can be concluded that the component has experienced a significant improvement. According to Gandhi (2020), each component of the bank is assigned

an equal weight of 20%, indicating the equitable significance of all components in contributing to the overall financial performance of a bank. Once the CWS (Component Weighted Score) for each component has been acquired, the score achieved by each component is multiplied by the prescribed weights for each component in order to determine the Cumulative Weighted Score of the Model (CWSM). According to Reddy (2012), when the estimated CWSM reaches a value of 0.5 or higher, it indicates that the merger has had a beneficial effect on the bank. This positive influence is reflected in a considerable improvement in the bank's financial performance.

## RESULTS AND DISCUSSION

The tables provided below contain the calculated ratios for each component of CAMEL for each bank.

**Table 2: Punjab National Bank**

Components	Ratios	Period	Mean value	Mean diff	P value	Significance	Score	Weights	Weighted score
Capital Adequacy	Capital Adequacy	Pre	11	3.8	8.90%	NS	0	0.25	0
		Post	14.8						
	Debt/Equity Ratio	Pre	14.8	-2.1	32.10%	NS	0	0.25	0
		Post	12.7						
	Total Adv/ Total Asset	Pre	58.4	-2.5	15.00%	NS	0	0.25	0
		Post	55.9						
Gov Sec/T. Investment	Pre	81.1	7.1	6.80%	NS	0	0.25	0	
	Post	88.2							
<b>Cumulative Weighted Score</b>									<b>0</b>
Asset Quality	Gross NPA/Net Advances	Pre	17.6	-5.1	1.40%	S	1	0.25	0.25
		Post	12.5						
	Net NPA/Net Advances	Pre	7.86	-3.44	8.90%	NS	0	0.25	0
		Post	4.42						
	T.Investment / T.Asset	Pre	27.6	1.9	45.20%	NS	0	0.25	0
		Post	29.5						
Net NPA/ T. Asset	Pre	4.5	-2.08	7.90%	NS	0	0.25	0	
	Post	2.42							
<b>Cumulative Weighted Score</b>									<b>0.25</b>
Management Efficiency	T.Advances/ T.Deposits	Pre	67.5	-4.3	7.60%	NS	0	0.25	0
		Post	63.2						
	Return on Net Worth	Pre	-17.2	21.79	14.50%	NS	0	0.25	0
		Post	4.59						
	Business per Employee	Pre	16.6	3.4	1.60%	S	1	0.25	0.25
		Post	20						
Profit per Employee	Pre	0.07	-0.04	87.80%	NS	0	0.25	0	
	Post	0.03							
<b>Cumulative Weighted Score</b>									<b>0.25</b>
Earnings	Operating Profit to Avg Working Capital Fund	Pre	1.56	0.07	68.90%	NS	0	0.25	0
		Post	1.63						
	Interest Income to T.Income	Pre	85.9	0.8	52.10%	NS	0	0.25	0
		Post	86.7						
	Net Interest Margin	Pre	2.29	0.59	5.60%	NS	0	0.25	0
		Post	2.88						

	ROA	Pre	-	1.134	15.20%	NS	0	0.25	0
		Post	0.937						
<b>Cumulative Weighted Score</b>									<b>0</b>
<b>Liquidity</b>	Liquid Asset/T.Asset	Pre	10.13	-0.59	73.30%	NS	0	0.25	0
		Post	9.54						
	Gov Sec/T.Asset	Pre	21.7	3.6	23.60%	NS	0	0.25	0
		Post	25.3						
	Liquid Asset/ Demand Deposit	Pre	191	-19	66.90%	NS	0	0.25	0
		Post	172						
	Liquid Asset/T.Deposit	Pre	12.4	-1.1	61.80%	NS	0	0.25	0
		Post	11.3						
<b>Cumulative Weighted Score</b>									<b>0</b>

Source: Calculated by the author.

Based on the provided table, it is evident that no significant change is observed in any of the ratios pertaining to the Capital Adequacy, Earnings, and Liquidity components. Hence, the Cumulative Weighted Score (CWS) achieved by each of these components is zero. As for Asset Quality, the post-merger period witnessed a significant decrease in Gross NPA to Net Advances, resulting in a weighted score of 0.25. However, given that there are no notable changes observed in the other ratios that define Asset Quality, the CWS for this particular component remains at 0.25. In the context of the Management Efficiency component, it is noteworthy that the sole indicator exhibiting a substantial enhancement during the post-merger phase is the Business per Employee ratio. Hence, the Management Efficiency component achieved a CWS of 0.25. According to the model, a component is considered to have seen a substantial improvement only when its computed CWS reaches a value of 0.5 or higher. Given that none of the components have achieved a CWS of 0.5, it may be inferred that there has been no significant improvement in any of the components following the merger. The table presented below displays the Cumulative Weighted Score of the Model (CWSM) for Punjab National Bank.

**Table 3: CWSM of Punjab National Bank**

Components	Cumulative weighted score	Significance	Score	Weights	Weighted score
Capital Adequacy	0	NS	0	0.2	0
Asset Quality	0.25	NS	0	0.2	0
Management Efficiency	0.25	NS	0	0.2	0
Earning	0	NS	0	0.2	0
Liquidity	0	NS	0	0.2	0
<b>CWSM</b>					<b>0</b>

Source: Calculated by the author.

The analysis of the Cumulative Weighted Score (CWS) indicates that there has been no significant improvement observed in any of the components. Consequently, the weighted score for each component is determined to be zero. Therefore, the computed CWSM value is 0. According to the model, it is asserted that the merger has had a beneficial effect on the bank



when the computed CWSM reaches a value of 0.5 or above. Given that the computed CWSM is zero, it is not possible to draw the conclusion that the merger has resulted in a substantial enhancement in the bank's financial performance.

**Table 4: Canara Bank**

Components	Ratios	Period	Mean Value	Mean Diff	P Value	Significance	Score	Weights	Weighted Score
<b>Capital Adequacy</b>	Capital Adequacy	Pre	12.9	2	18.90%	NS	0	0.25	0
		Post	14.9						
	Debt/Equity Ratio	Pre	15.9	0.3	76.30%	NS	0	0.25	0
		Post	16.2						
	Total Adv/ Total Asset	Pre	61.4	-3.3	24.40%	NS	0	0.25	0
		Post	58.1						
Gov Sec/T. Investment	Pre	84.1	2.9	2.40%	S	1	0.25	0.25	
	Post	87							
<b>Cumulative Weighted Score</b>									<b>0.25</b>
<b>Asset Quality</b>	Gross NPA/Net Advances	Pre	10.06	-2.43	5.30%	NS	0	0.25	0
		Post	7.63						
	Net NPA/Net Advances	Pre	5.69	-2.96	1.40%	S	1	0.25	0.25
		Post	2.73						
	T. Investment/ T.Asset	Pre	24.9	0	98.10%	NS	0	0.25	0
		Post	24.9						
Net NPA/ T. Asset	Pre	3.48	-1.92	2.40%	S	1	0.25	0.25	
	Post	1.56							
<b>Cumulative Weighted Score</b>									<b>0.5</b>
<b>Management Efficiency</b>	T. Advances/ T.Deposits	Pre	71.1	-4.9	26.70%	NS	0	0.25	0
		Post	66.2						
	Return on Net Worth	Pre	-7.8	20.87	5.00%	S	1	0.25	0.25
		Post	13.07						
	Business per Employee	Pre	16.5	3.7	2.50%	S	1	0.25	0.25
		Post	20.2						
Profit per Employee	Pre	-0.0333	0.1066	6.70%	NS	0	0.25	0	
	Post	0.0733							
<b>Cumulative Weighted Score</b>									<b>0.5</b>
<b>Earnings</b>	Operating Profit to Avg Working Capital Fund	Pre	1.59	0.36	21.40%	NS	0	0.25	0
		Post	1.95						
	Interest Income to T.Income	Pre	84	-8.3	7.40%	NS	0	0.25	0
		Post	75.7						
	Net Interest Margin	Pre	2.45	0.39	10.60%	NS	0	0.25	0
		Post	2.84						
ROA	Pre	-0.337	0.844	6.00%	NS	0	0.25	0	
	Post	0.507							
<b>Cumulative Weighted Score</b>									<b>0</b>
<b>Liquidity</b>	Liquid Asset/T.Asset	Pre	8.48	4.42	11.70%	NS	0	0.25	0
		Post	12.9						
	Gov Sec/T.Asset	Pre	20	1	23.10%	NS	0	0.25	0
		Post	21						
	Liquid Asset/ Demand Deposit	Pre	249	87	15.00%	NS	0	0.25	0
		Post	336						
Liquid Asset/ T.Deposit	Pre	10.5	5	14.00%	NS	0	0.25	0	
	Post	15.5							
<b>Cumulative Weighted Score</b>									<b>0</b>

Source: Calculated by the author.

Based on the provided table, it is evident that the Government Securities to Total Investment ratio exhibits a notable alteration in the post-merger period, resulting in a weighted score of 0.25 for the Capital Adequacy component. Given that there is no substantial change observed in any of the other ratios, it can be concluded that the Capital Adequacy component has achieved a CWS of 0.25. The post-merger period had a noteworthy decrease in Asset Quality, as seen by the reductions in Net NPA to Net Advances and Net NPA to Total Asset. These indicators earned a weighted score of 0.25 each. Hence, the CWS derived from the Asset Quality component is 0.5. The post-merger period witnessed a significant enhancement in Management Efficiency, as seen by the substantial improvement in both the Return of Net worth and Business per Employee ratios. These indicators achieved a weighted score of 0.25 each, further highlighting the positive impact of the merger on the company's overall performance. Hence, the Management Efficiency component yields a CWS value of 0.5. Regarding the components of Earnings and Liquidity, it is seen that none of the ratios have displayed a substantial alteration subsequent to the merger. Therefore, the cumulative weighted score (CWS) achieved by each of these components is zero. The CWS, representing the performance of Asset Quality and management efficiency, has demonstrated a notable enhancement following the merger. This is evidenced by its value of 0.5. However, the remaining components do not exhibit the same characteristic, as their CWS values are below 0.5.

**Table 5: CWSM of Canara Bank**

Components	Cumulative weighted score	Significance	Score	Weights	Weighted score
Capital Adequacy	0.25	NS	0	0.2	0
Asset Quality	0.5	S	1	0.2	0.2
Management Efficiency	0.5	S	1	0.2	0.2
Earning	0	NS	0	0.2	0
Liquidity	0	NS	0	0.2	0
<b>CWSM</b>					<b>0.4</b>

Source: Calculated by the author.

The CWS analysis reveals notable enhancements in Asset Quality and Management Efficiency following the merger. However, there is limited evidence of significant improvement in Capital Adequacy, Earnings, and Liquidity subsequent to the merger. The computed value of the CWSM is 0.4. Given that the observed value is below the threshold of 0.5, it is not possible to draw a definitive conclusion regarding the merger's influence on the bank's financial performance.

## CONCLUSION

The CAMEL framework was devised as a means of evaluating the comprehensive state of a financial institution, with a focus on five key dimensions: Capital Adequacy, Asset Management, Management Efficiency, Earnings, and Liquidity. This system facilitates the assessment of banks' performance and financial stability by supervisory bodies at regular intervals. The findings of the study indicate that while certain ratios have displayed notable

enhancements, the overall performance of the banks, as indicated by the CWSM score, does not appear to have experienced much improvement subsequent to the merger. Hence, the null hypothesis, which posits that there has been no improvement in the CAMEL components of the banks post-merger cannot be rejected. Given that banks play a crucial role in supporting the economy and their performance significantly influences a nation's overall growth, it is imperative for the banks under examination to implement effective strategies aimed at enhancing their CAMEL score.

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