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MERGER AND ACQUISITION AND OPERATIONAL PERFORMANCE OF SELECTED DEPOSIT MONEY BANKS IN NIGERIA

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ABSTRACT: *This study investigates the impact of Revenue Growth (RG), Cost Efficiency Ratio (CER), and Asset Growth (AG) as indicators of merger and acquisition on the financial performance of selected Nigerian banks, measured by Return on Assets (ROA), Return on Equity (ROE), and Return on Capital Employed (ROCE). The study explored selected deposit banks in Nigeria from 2005-2023 using E-views to analyze the data. The results revealed that Revenue Growth (RG) positively influenced ROA with a coefficient of 0.017 (p-value = 0.030), highlighting its significant impact. In contrast, Cost Efficiency Ratio (CER) showed a negative but insignificant relationship with ROA (coefficient = -0.001, p-value = 0.874), and Asset Growth (AG) also negatively impacted ROA (coefficient = -0.016, p-value = 0.048). For ROE, only AG exhibited a negative relationship (coefficient = -0.018, p-value = 0.085). In the ROCE model, CER had a significant positive effect (coefficient = 16.652, p-value < 0.001), while other variables showed limited impact. The study recommended that banks should focus on improving revenue growth by investing in high-yield opportunities, enhance cost management strategies to boost operational efficiency, and optimize asset utilization to improve financial performance.*

KEYWORDS: Revenue growth, cost efficiency ratio, asset growth, return on assets, return on equity.

INTRODUCTION

Background to the Study

Merger and acquisition are now important strategies for deposit money banks expansion in this era of competitive global marketplace. This initiative has been helpful in promoting stability, increase capital adequacy and improving operational performance in deposit money banks in Nigeria (Orazalin et al., 2019). The number of deposit money banks decreased from 89 to 25 due to the series of mergers and acquisitions orchestrated by Central Bank of Nigeria in their 2004 consolidation strategy which increased the minimum capital requirements for banks (Arogundade & Adegbie, 2024). The goal of this consolidation was to establish more robust and effective banks that might aid in Nigeria's economic growth.

Numerous studies have examined the connection between mergers & acquisitions and operational performance. Ujunwa and Salami (2020) assert that banks can obtain economies of scale, decrease operational redundancies, and pool resources through mergers and acquisitions (Ibrahimi & Meghouar, 2019). Better financial indicators including profitability, asset quality, and cost effectiveness can result from these synergies. Nevertheless, M&A efforts don't always have positive results. According to certain research, managerial disputes, cultural differences, and post-merger integration difficulties may impede the expected performance gains (Oh & Johnston, 2021).

The operational success of deposit money banks following mergers is particularly noteworthy in the Nigerian setting. Profitability, liquidity and efficiency are few of the many that make up operational performance. Some banks evident gains in their profitability and risk management following mergers and acquisition whereas other banks experience difficulties with integration and operational inefficiencies (Owolabi & Obida, 2021; Gallo, 2023). These conflicting results highlight the necessity of a more thorough investigation into the precise elements that affect M&A success or failure in the Nigerian banking industry (Otieno & Jepkosgei, 2024).

Furthermore, merging organizations face new chances and problems due to Nigeria's changing economic climate. The significance of strong risk management procedures and strategic alignment both during and after mergers and acquisitions is highlighted by such external shocks (Huang et al., 2024). The impact of technological integration in improving the operational performance of combined banks has also been demonstrated by empirical research. According to Ogundipe et al (2024), technological developments, such as automated procedures and digital banking platforms, can increase productivity and boost client satisfaction.

Merger and acquisition hold significant potential for improving the operational performance of deposit money banks in Nigeria. The importance of this requirement involves planning, effective integration and a proactive approach to addressing both internal and external challenges. This study seeks to add to the existing body of knowledge by evaluating the effect of merger and acquisition on operational performance of selected deposit money banks in Nigeria.

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Statement of the Problem

The Nigerian banking industry has experienced changes in which merger and acquisition are frequently used as tactical fixes to problems like inadequate capital, ineffective operations and unpleasant financial results. Even with mergers and acquisitions, the deposit money banks have not consistently seen the expected gains in the operational performance (Dev et al., 2020). Poor profitability, excessive operating expenses, and non-performing loans are still problems that many banks face (Agrawal & Magar, 2023). These enduring difficulties cast doubt on M&A's efficacy as a means of improving deposit money banks' operational performance.

Though it is anticipated that mergers and acquisitions will result in economies of scale, reduced redundancies, and synergies, post-merger realities frequently show managerial conflicts, integration difficulties, and cultural clashes that negate these advantages (van Oorschot et al., 2023). The operational environment for combined banks is further complicated by outside variables including economic volatility and strict regulatory requirements.

The inconsistent results of M&A activities highlight a serious knowledge gap regarding the elements that support or undermine operational effectiveness in the post-merger phase. To provide insights into how Nigerian banks may use the advantages of mergers and acquisitions to achieve sustained operational efficiency and growth, it is imperative that this gap be filled.

Objective of the Study

The main objective of this study is to examine the effect of merger and acquisition on the operational performance of selected deposit money banks in Nigeria. The specific objective of the study is to:

i. Determine the effect of merger and acquisition on return on assets of selected deposit money banks in Nigeria.

ii. Evaluate the effect of merger and acquisition on return on equity of selected deposit money banks in Nigeria.

iii. Access the effect of merger and acquisition on return on capital employed of selected deposit money banks in Nigeria.

Research Questions

The researcher has been guided by the following research question while carrying out this study.

i. What is the effect of merger and acquisition on return on assets (ROA) of selected deposit money banks in Nigeria?

ii. How does the merger and acquisition have effect on return on equity (ROE) of selected deposit money banks in Nigeria?

iii. To what extent does merger and acquisition have effect on return on capital employed (ROCE) of selected deposit money banks in Nigeria?

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Research Hypotheses

The hypotheses that provided a greater insight into the research work are as follows:

Ho_1: Merger and acquisition have no significant effect on return on assets (ROA) of selected deposit money banks in Nigeria.

Ho_2: There is no significant relationship between merger and acquisition and return on equity (ROE) of selected deposit money banks in Nigeria.

Ho_3: Merger and acquisition have no significant effect on return on capital employed (ROCE) of selected deposit money banks in Nigeria.

LITERATURE REVIEW

Conceptual Review

Merger and Acquisition

Strategic business actions like mergers and acquisitions (M&A) are done to boost competitiveness, expand the company's reach, or solve operational issues. In a merger, two or more businesses come together to form a single organization, frequently to create synergies like lower costs and a larger market share. On the other hand, an acquisition happens when a business buys out another, taking over its assets and operations (Chirico et al., 2020). In industries like banking, where attaining economies of scale and capital sufficiency is crucial for sustainability, these tactics are crucial.

A wave of mergers and acquisitions (M&A) in the banking industry was spurred by the Central Bank's 2004 recapitalization program in Nigeria, which decreased the number of banks while enhancing their financial stability (Gallo, 2023). But even though M&A can increase productivity and profitability, there are drawbacks including integration issues and cultural differences that can prevent the expected gains from materializing (Basso et al., 2019).

Revenue Growth

Revenue growth is a key indicator of a company's ability to increase its income over a specific period. It is often used to assess the financial performance of a bank post-merger or acquisition. In the context of mergers and acquisitions (M&A), revenue growth can indicate the success of the combined entities in expanding their market share, enhancing their product offerings, or penetrating new geographic areas (Lan, 2023). It can also reflect the realization of synergies, such as cross-selling opportunities and operational efficiencies, that arise from the merger (Čirjevskis, 2020).

Banks typically report revenue growth in their annual reports by comparing the current year’s revenue with that of the previous year or the year before the merger (Darayseh, & Alsharari, 2023). A higher growth rate post-merger suggests that the integration of resources, customer bases, and markets has been successful. However, it is essential to differentiate between organic revenue growth and growth driven by the M&A transaction itself (Hajiyev et al., 2024).

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Cost Efficiency Ratio

Cost efficiency ratio (CER) is a key financial indicator used to assess the operational efficiency of a bank, especially after a merger or acquisition. It measures the proportion of a bank's expenses relative to its income. A lower cost efficiency ratio indicates better cost efficiency, meaning the bank can generate more income for every unit of cost incurred (Khalifaturofi'ah, 2023). In the context of mergers and acquisitions, the cost efficiency ratio can reflect the synergies achieved through cost reductions, such as streamlined operations, shared services, or workforce optimization (Sivakumar & Kumar, 2019).

Post-merger, an improved cost efficiency ratio suggests that the bank is managing its combined resources efficiently, while an increase in cost efficiency ratio may indicate challenges in integration or excessive costs (Ullah et al., 2023). Banks often disclose cost efficiency ratio in their financial statements, and it serves as a key metric for investors assessing the success of the merger or acquisition. Thus, it is crucial for evaluating the long-term benefits of M&A transactions (Caiazza et al., 2021).

Asset Growth

Asset growth is an important financial metric used to measure the increase in a bank’s assets over a specific period. In the context of mergers and acquisitions, asset growth indicates the expansion of the bank's financial base, which can result from the consolidation of resources, acquisition of new assets, and expanded customer portfolios (Shim, 2019). Post-merger asset growth often signifies the successful integration of the acquired entity’s assets and resources into the existing operations, thus enhancing the bank’s market position and financial strength (Zhao et al., 2019).

Banks typically report asset growth in their financial statements, comparing the increase in total assets from one year to the next (Khalifaturofi'ah, 2023). High asset growth following a merger suggests that the merger has led to a stronger asset base, improving the bank’s capacity to lend, invest, and expand operations. However, excessive growth without proportional profitability or risk management may indicate operational inefficiencies (Shim, 2019).

Operational Performance

Operational performance assesses how well and efficiently a company can accomplish its strategic goals. It includes non-financial variables like customer retention, staff satisfaction, and operational efficiency in addition to financial metrics like profitability, return on assets (ROA), and liquidity (Abdullahi et al, 2021). A company's capacity to adjust to changing market conditions, satisfy stakeholders, and maintain a competitive edge in its sector is reflected in its high operational performance.

One of the most important metrics for assessing the effectiveness of mergers and acquisitions (M&A) is organizational performance. Increasing market share, achieving financial synergies, and improving operational efficiency are frequently the objectives of M&A. The post-merger performance of Nigerian banks has been uneven, nevertheless. While some banks have experienced obstacles like operational inefficiencies, integration issues, and cultural misalignments, others have claimed increased profitability, expanded client reach, and lower expenses Prasad (2024).

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The performance of organizations after a merger is also greatly impacted by external factors, such as competition, legal restrictions, and macroeconomic volatility. To achieve long-term performance gains, Nigerian banks must be able to successfully integrate operations, coordinate goals, and take advantage of synergies. For M&A to be successful, strategic planning and ongoing observation are therefore essential (Vinocur et al., 2023).

Return on Assets (ROA)

A financial indicator called return on assets (ROA) measures how well a business uses its resources to produce a profit. It is computed as a percentage by dividing net income by total assets. Better asset utilization management efficiency is indicated by a greater ROA (Akinleye & Dadepo, 2019).

ROA is a crucial measure of financial success in Nigerian banks, especially following mergers and acquisitions (M&A). Research indicates that through improving operational effectiveness and cutting redundancies, M&A can have a favorable impact on ROA; yet integration issues may impede these benefits (Vaghela, 2024).

Return on Equity (ROE)

A financial performance information called return on equity (ROE) gauges how profitable a business is in relation to the equity held by its shareholders. It measures how effectively a business uses its equity to turn a profit and is computed by dividing net income by shareholders' equity (Choiriyah, 2020).

ROE is a crucial indicator of post-merger performance for Nigerian banks since it shows how well combined companies provide returns for shareholders. Although economies of scale and expanded market reach can be achieved through mergers and acquisitions, integration and management issues can have a detrimental impact on ROE (Rahiminezhad et al., 2021).

Return on Capital Employed (ROCE)

A financial ratio called return on capital employed, or ROCE, evaluates how well a business can make money off its capital. It is computed by dividing total capital used (debt + equity) by earnings before interest and tax (EBIT). More effective use of capital to produce returns is indicated by a higher ROCE (Saputra, 2022).

ROCE is a crucial measure of operational effectiveness for Nigerian banks, particularly following mergers and acquisitions (M&A). Through improved asset usage and capital structure optimization, M&A activities should raise ROCE. However, these advancements may be jeopardized by integration issues (Farmery et al., 2021).

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Theoretical Review

Synergy Theory

The Synergy Theory was propounded by Michael Porter in 1985, suggesting that the combined value of two firms in a merger or acquisition will be greater than the sum of their individual values due to the synergies created. According to this theory, firms can achieve enhanced operational efficiency, increased market share, and access to new resources, ultimately improving profitability and creating value beyond what each firm could accomplish independently. The assumption behind the theory is that the merging firms will integrate effectively, realizing these synergies to increase shareholder value.

Supporters of the synergy theory argue that mergers allow companies to benefit from economies of scale, cost reductions, and enhanced competitiveness (Farmery et al., 2021). For example, firms can pool resources, eliminate redundancies, and streamline operations to reduce operational costs.

However, critics argue that the anticipated synergies are often overestimated. Studies have shown that many mergers fail to deliver the expected benefits due to integration challenges, cultural clashes, and poor strategic alignment (Bashan & Armon, 2019). These difficulties may negate the potential synergies and even lead to value destruction, particularly if firms fail to manage post-merger integration effectively. Despite its potential, the theory's applicability depends on successful execution and alignment of strategic goals (Volk & Zerfass, 2020).

Market Power Theory

The market power theory was first introduced by Joe S. Bain in 1956, emphasizing that firms engage in mergers and acquisitions (M&A) primarily to increase their market power and reduce competition. According to this theory, when firms combine, they can exert greater control over pricing, improve their bargaining power with suppliers, and ultimately increase profitability. The assumption is that firms seek to dominate the market, reduce competition, and thus secure a competitive advantage that leads to higher returns (Anand & Giraud-Carrier, 2020).

Supporters of the market power theory argue that mergers and acquisitions enable companies to increase their market share and influence, which can result in higher pricing power and cost efficiency. The reduction in competition allows firms to charge higher prices, benefiting from economies of scale and maximizing profits (Yuanita, 2019).

However, critics argue that the increased market power from mergers may lead to monopolistic behavior, potentially harming consumers and other market participants. Additionally, anti-trust regulations in many countries, including Nigeria, seek to prevent excessive concentration in industries (Okiche & Okiche, 2020). Critics also point out that increased market power does not always result in efficiency gains, as larger firms may become less innovative or responsive to market changes (Chan et al., 2019).

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Resource-Based View Theory

The Resource-Based View (RBV) Theory was primarily developed by Jay Barney in 1991. The theory posits that a firm's resources and capabilities are the key drivers of its competitive advantage and organizational performance. According to RBV, firms can achieve superior performance by utilizing valuable, rare, inimitable, and non-substitutable resources (VRIN criteria). These resources can include tangible assets, such as technology and financial capital, and intangible assets, such as organizational culture and intellectual property (Ocak & Fındık, 2019). The assumption behind RBV is that resources are heterogeneously distributed among firms, and the unique combination of these resources leads to sustainable competitive advantages.

Supporters of RBV argue that a firm’s internal resources, rather than external market conditions, are the primary determinants of long-term success. These resources, when leveraged effectively, enable firms to innovate, enhance productivity, and differentiate themselves from competitors (Adama et al., 2024).

However, critics argue that RBV may overemphasize internal factors and neglect the role of external factors, such as market dynamics and competition, in shaping organizational performance (Amadasun & Mutezo, 2022). Additionally, critics contend that the theory’s emphasis on resource acquisition can lead firms to overlook strategic opportunities in the external environment, limiting their ability to adapt and innovate in response to market changes.

Empirical Review

In a study by Shenoy and Shailashri, (2021), that examine the impact of mergers on the cost efficiency of Indian commercial banks, Time-series cross sectional data of commercial banks in India for the period, 1990 - 1991 to 2007 - 2008 were used to evaluate how mergers helped banks in India to reducing operating cost. A total of 1055 observations were recorded from the random sampled commercial banks. The study employs Analysis of Variance (ANOVA), mean and median for testing the hypotheses, efficiency distributions, and efficiency’ measurement. The findings from the study showed that over the entire study period average efficiency cost of public sector banks was found to be 73.4% and private banks was 76.3%. The result reveals that mergers implementation has been successful in Indian banking sector in the period under study. It also indicates that mergers led to higher profitability and a higher level of cost efficiency for the merging firms.

Similarly, in a published research work by Junni, and Teerikangas (2019) on Mergers and Acquisitions, seeking to explore the behavior of banks in the Nigerian Consolidation Programme; Secondary data of all the 89 banks operating in Nigeria during the period, 2001 - 2005 were used. These data were drawn from the banks’ statement of account and annual financial reports of the period under study. The study uses descriptive statistics to analyze the pre-consolidation, consolidation and post-consolidation performance of commercial banks in Nigeria. The result also reveals that Central Bank of Nigeria’s assistance was highly influential in preventing bank failures; and for banks that benefitted, the assistance increased their probability of being merged or acquired. The study found no evidence suggesting that prevailing macroeconomic conditions and industry-specific factors had influenced the exit behavior of banks during the consolidation exercise.

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In a study by Patel (2019) on effect of mergers and acquisitions on shareholders' wealth in Nigerian banking industry, an exploratory research design was adopted. Fifteen (15) out of twenty-five (25) consolidated banks as at 1st January 2006 were selected through stratified sampling techniques. The study made use of primary data collected by administering questionnaires to sample respondents. Data was analyzed using Multiple Regression tool in the Statistical Package for Social Sciences (SPSS) software. This was adopted to test hypotheses, predict and describe the outcome of the model. The findings of study showed that there was a significant relationship between shareholders wealth and capital base, market share, and bank revenue. The major implication of the finding is that new capital brought in by shareholders of merged banks because of consolidation policy triggered increase in banks operations in post consolidation era, it increased size of merged banks total assets.

Bolouppremo and Ogege (2019) carried out research on mergers and acquisitions and banks performance in Nigeria. Using simply linear regression analysis for the review between 2003-2008 on two banks, the result revealed that all the two groups produced in addition to operational and relational synergy, financial gains and net assets appreciate far more than the synergistic effects. Ratio technique and inferential statistical tools were used to highlight synergistic effects on the merging banks.

Gaps in Literature

Despite extensive research on mergers and acquisitions (M&A) in various sectors, a notable gap exists in understanding the specific impacts of M&A on organizational performance within the Nigerian banking sector. While studies have explored general M&A outcomes globally, limited research has been conducted on how these transactions specifically affect financial metrics such as Return on Assets (ROA), Return on Equity (ROE), and Return on Capital Employed (ROCE) in Nigerian banks. Additionally, while the role of mergers in enhancing operational efficiencies and market power has been widely discussed, the unique challenges and outcomes faced by Nigerian banks post-merger remain underexplored (Malik et al., 2023).

The lack of comprehensive studies focusing on the long-term effects of M&A in Nigerian banks presents a critical gap in the literature. Previous studies often focus on short-term outcomes, neglecting the complexities involved in the integration process and the cultural and structural adjustments that banks undergo post-merger. Moreover, the influence of external factors such as regulatory changes and economic volatility in the Nigerian context has not been adequately addressed in M&A research (Degbey et al., 2021). This study seeks to bridge this gap by providing a detailed analysis of the effects of M&A on operational performance in Nigerian deposit money banks, with a focus on both financial and operational outcomes.

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METHODOLOGY

Research Design

This study adopted ex-post facto research design, which is used to refer to studies which investigate possible cause and effect relationships by observing an existing condition or state of affairs. It was concerned with determining cause and effect relationship and to understand which variable is dependent and which is independent. This research design was the best in explaining if two variables are related or if they vary. In this method of research design, independent variables cannot be manipulated (Onwumere, 2009). It aimed to explore the effect of merger and acquisition on operational performance in Nigerian deposit money banks and the empirical evidence that help answer the research objectives.

Population of the Study

The population of this study consisted of all deposit money banks on the floor of the Nigerian Exchange (NGX). For this study, three prominent deposit money banks were selected. This was census survey where secondary data was collected from the audited financial statement of selected deposit money banks in Nigeria.

Method of Data Collection

The study used secondary source of data collection, and the instrument used for the collection of the data is through Annual Reports and Accounts. The secondary data used were extracted from the annual report of Ecobank Nigeria Plc, Stanbic IBTC Holding Plc and Access Bank Plc. The data was for the period of nineteen (19) years ranging from 2005-2023. Secondary data is considered appropriate given the fact that the study is correlational in nature and is attempting to establish implication (effect) or lack of it under the study variables.

Parent Company	Acquired or Merger Company	Year
Ecobank Nigeria Plc	Oceanic Bank International Plc	2011
Stanbic IBTC Holding Plc	IBTC Chartered Bank Plc	2007
Access Bank Plc	Intercontinental Bank Plc	2013

Method of Data Analysis

Descriptive statistics and multiple regressions were used to analyze the data to establish effects between the variables. Descriptive statistics were used in this study because they help to describe the basic features of the data in a study. They provide simple summaries about the population and samples. The multiple regression is considered appropriate since it shows the cause-and-effect relationship between one dependent variable, and two or more independent variables. The Econometric Views (E-views) was used for the estimation. Panel data models are used in this study because they easily measure the degree of confidence that the true relationship is close to the estimated relationship by estimating the fixed and random effect model.

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Model Specification

The relationship between merger and acquisition and operational performance of selected deposit banks in Nigeria are correlated. We need to derive the first equation that says:

Y=f(X)

Y= Dependent variable

X= Independent variable

We have a main objective and three specific objectives, and they can be represented mathematically thus:

FP = f (DP)

Y = Dependent variable (Operational Performance)

X = Independent variable (Merger and Acquisition)

X and Y are broken down as follows

$Y = (y_1, y_2, y_3)$

$X = (x_1, x_2, x_3)$

Where:

y_1 = Return on Assets (ROA)

y_2 = Return on Equity (ROE)

y_3 = Return on Capital Employed (ROCE)

x_1 = Revenue Growth (RG)

x_2 = Cost Efficiency Ratio (CER)

x_3 = Asset Growth (AG)

Then the linear regression model for each variable is developed to determine the relationship between the variables.

$ROA_{it} = \beta_0 + \beta_1 RG_{it} + \beta_2 CER_{it} + \beta_3 AG_{it} + \mu_{it}$ ………………….1

$ROE_{it} = \beta_0 + \beta_1 RG_{it} + \beta_2 CER_{it} + \beta_3 AG_{it} + \mu_{it}$ ………………….2

$ROCE_{it} = \beta_0 + \beta_1 RG_{it} + \beta_2 CER_{it} + \beta_3 AG_{it} + \mu_{it}$ …………………3

Where:

β = Constant
$\beta_{1-}\beta_3$ = Co-efficient
μ= error term

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PRESENTATION AND DISCUSSION OF RESULTS

Descriptive Statistics

	ROA	ROE	ROCE	RG	CER	AG
Mean	0.052	0.120	23.287	0.696	1.596	0.496
Median	0.014	0.115	34.618	0.059	1.253	0.093
Maximum	0.509	0.542	889.651	10.858	64.699	12.028
Minimum	-0.012	-0.116	-1357.668	-1	-62.778	-1
Std. Dev.	0.101	0.124	237.584	2.276	12.528	2.140
Skewness	2.642	1.109	-2.796	3.232	-0.091	4.597
Kurtosis	9.988	4.772	24.383	12.856	24.451	23.799
Jarque-Bera	182.361	19.155	1160.288	329.977	1093.019	1228.299
Probability	2.515	6.926	1.113	2.219	4.506	1.896
Sum	2.977	6.848	1327.381	39.675	91.003	28.280
Sum Sq. Dev.	0.576	0.864	3161001.76	290.309	8789.544	256.472
Observations	57	57	57	57	57	57

Source: *Output from E-views*

The dataset provides statistical insights into key financial indicators for a sample of 57 observations. The Return on Assets (ROA) has a mean of 0.052, suggesting that, on average, the sampled entities generate 5.2% profit for every unit of assets employed. However, the standard deviation of 0.101 highlights significant variation, with values ranging from -0.012 to 0.509. Similarly, Return on Equity (ROE) has an average of 0.120, reflecting a 12% return on shareholders' equity, with a slightly lower variability of 0.124. The skewness and kurtosis values for both metrics indicate non-normal distributions, as seen in their high Jarque-Bera probabilities, suggesting deviations from normality.

Return on Capital Employed (ROCE) has an extreme range, from -1357.668 to 889.651, with a high mean of 23.287 and significant variability (standard deviation of 237.584). The data is negatively skewed and highly leptokurtic, implying rare but extreme values. For Revenue Growth (RG), the mean of 0.696 indicates moderate growth, though large outliers inflate the maximum to 10.858 and skewness to 3.232. Similarly, Cost Efficiency Ratio (CER) and Asset Growth (AG) exhibit considerable dispersion and skewness, as shown by their high standard deviations and extreme minimum and maximum values.

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DISCUSSION OF FINDINGS

Hypotheses Testing

Ho1: Merger and acquisition have no significant effect on return on assets (ROA) of selected deposit money banks in Nigeria.

Dependent Variable: ROA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.048	0.013	3.515	0.001
RG	0.017	0.007	2.220	0.030
CER	-0.001	0.001	-0.159	0.874
AG	-0.016	0.008	-2.020	0.048

R-squared	0.0940	Mean dependent var	0.052
Adjusted R-squared	0.0427	S.D. dependent var	0.101
S.E. of regression	0.0992	Akaike info criterion	-1.714
Sum squared resid	0.5223	Schwarz criterion	-1.570
Log likelihood	52.853	Hannan-Quinn criter.	-1.658
F-statistic	1.8330	Durbin-Watson stat	0.496
Prob(F-statistic)	0.1523		

Source: *Output from E-views (2025)*

The analysis examined the impact of revenue growth (RG), cost efficiency ratio (CER), and asset growth (AG) on Return on Assets (ROA). The constant term had a coefficient of 0.048, which was statistically significant. This indicated that when all other variables were zero, the baseline ROA was positive at 4.8%.

Revenue growth had a positive effect on ROA, with a coefficient of 0.017 and a significant p-value of 0.030. This suggested that an increase in revenue growth led to an increase in profitability, showing that higher revenue growth positively contributed to the bank's performance.

Cost efficiency ratio had a coefficient of -0.001, but it was not statistically significant. This meant that cost efficiency, as represented in the model, did not have a meaningful relationship with ROA. Asset Growth, on the other hand, negatively affected ROA, with a coefficient of -0.016 and a marginally significant p-value of 0.048. This implied that higher asset growth slightly reduced profitability, potentially due to the costs of managing and utilizing new assets effectively.

The model explained only 9.4% of the variation in ROA, indicating that other factors not included in the model may have played a larger role. Additionally, the low Durbin-Watson statistic suggested potential issues with autocorrelation, which should have been addressed in future analyses.

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Ho2: There is no significant relationship between merger and acquisition and return on equity (ROE) of selected deposit money banks in Nigeria

Dependent Variable: ROE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.120	0.017	6.949	5.444
RG	0.011	0.001	1.215	0.229
CER	0.000	0.001	0.174	0.862
AG	-0.018	0.010	-1.750	0.085

R-squared	0.054	Mean dependent var	0.120
Adjusted R-squared	0.001	S.D. dependent var	0.124
S.E. of regression	0.124	Akaike info criterion	-1.266
Sum squared resid	0.817	Schwarz criterion	-1.123
Log likelihood	40.103	Hannan-Quinn criter.	-1.211
F-statistic	1.027	Durbin-Watson stat	0.806
Prob(F-statistic)	0.388		

Source: *Output from E-views (2025)*

The analysis evaluated the impact of Revenue Growth (RG), Cost Efficiency Ratio (CER), and Asset Growth (AG) on Return on Equity (ROE). The constant term had a coefficient of 0.120 and was statistically significant, indicating that when all other variables were zero, the baseline ROE stood at 12%.

Revenue growth had a positive coefficient of 0.011 but was not statistically significant, with a p-value of 0.229. This suggested that revenue growth did not have a meaningful impact on ROE in the model. Similarly, Cost Efficiency Ratio had a coefficient of 0.000 and an insignificant p-value of 0.862, indicating no substantial relationship with ROE. Asset Growth negatively influenced ROE, with a coefficient of -0.018 and a marginally significant p-value of 0.085. This indicated that increased asset growth might have slightly reduced equity returns, potentially due to challenges in managing or utilizing the additional assets efficiently.

The model explained only 5.4% of the variation in ROE, as shown by the R-squared value, suggesting that other factors not included in the model played a significant role. The low F-statistic and its corresponding p-value of 0.388 indicated that the model, as a whole, was not statistically significant. Additionally, the Durbin-Watson statistic of 0.806 suggested potential autocorrelation issues.

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Ho3: Merger and acquisition have no significant effect on return on capital employed (ROCE) of selected deposit money banks in Nigeria.

Dependent Variable: ROCE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.557	16.301	-0.279	0.780
RG	1.264	9.200	0.137	0.891
CER	16.652	1.245	13.373	1.278
AG	0.762	9.791	0.077	0.938

R-squared	0.771	Mean dependent var	23.287
Adjusted R-squared	0.758	S.D. dependent var	237.584
S.E. of regression	116.681	Akaike info criterion	12.424
Sum squared resid	721571.	Schwarz criterion	12.567
Log likelihood	-350.094	Hannan-Quinn criter.	12.480
F-statistic	59.726	Durbin-Watson stat	1.873
Prob(F-statistic)	5.190		

Source: *Output from E-views (2025)*

From the above analysis, the constant term had a coefficient of -4.557, which was not statistically significant, with a p-value of 0.780. This suggested that when all independent variables were at zero, the baseline ROCE was negative but not meaningful.

Revenue growth had a positive coefficient of 1.264 but was not significant, with a p-value of 0.891. This indicated that revenue growth had no substantial effect on ROCE. Similarly, asset growth had a coefficient of 0.762 and an insignificant p-value of 0.938, showing no meaningful relationship with ROCE. The cost efficiency ratio had a substantial positive coefficient of 16.652. However, the high standard error and the unrealistic t-statistic suggested potential issues in the data or model specification.

The R-squared value was 0.771, implying that the model explained 77.1% of the variance in ROCE, a strong explanatory power. However, the F-statistic of 59.726 and a non-standard p-value raised concerns about model reliability. The Durbin-Watson statistic of 1.873 indicated no significant autocorrelation issues in the residuals, supporting the model's robustness.

IMPLICATION OF THE FINDINGS

The findings of this study provided significant insights into the determinants of financial performance, emphasizing the relationships between Revenue Growth (RG), Cost Efficiency Ratio (CER), Asset Growth (AG), and key performance indicators such as Return on Assets (ROA), Return on Equity (ROE), and Return on Capital Employed (ROCE). RG positively influenced ROA but had limited impacts on ROE and ROCE, reflecting inconsistencies in revenue utilization. CER displayed a mixed effect, highlighting potential inefficiencies in cost management. AG had a significant yet varying influence, suggesting room for improvement in asset optimization. Overall, the findings underscored the need for strategic enhancements in

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operational efficiency, resource allocation, and cost control to bolster overall financial performance. This study's implications extend to policymakers and banking executives, emphasizing the importance of aligning growth strategies with effective cost and asset management for sustainable performance in the banking sector.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study concluded that financial performance in the banking sector is influenced by key indicators such as revenue growth (RG), cost efficiency ratio (CER), and asset growth (AG), with varying impacts on return on assets (ROA), return on equity (ROE), and return on capital employed (ROCE). While the cost efficiency ratio showed significant influence in specific models, revenue growth and asset growth exhibited inconsistent effects, suggesting inefficiencies in revenue and asset utilization. These findings highlighted the need for enhanced cost management, strategic resource allocation, and efficiency improvements. The study underscored the importance of aligning operational strategies to optimize financial performance and ensure long-term sustainability.

Recommendations

This study recommended the following:

Banks should enhance revenue utilization by investing in high-yield projects and improving operational efficiency. By strategically allocating resources to profitable ventures, banks can ensure better returns on their investments. Additionally, improving the Cost Efficiency Ratio (CER) through effective cost management mechanisms will help reduce operational costs while maintaining service quality.

Furthermore, banks should optimize asset allocation to maximize their contribution to financial performance. Ensuring effective utilization of assets will lead to improved Return on Assets (ROA) and Return on Capital Employed (ROCE). By streamlining asset management practices, banks can achieve better financial outcomes and sustainable growth.

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