

EFFECT OF FORENSIC ACCOUNTING ON THE PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

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ABSTRACT

This study investigated the effect of forensic accounting on the performance of Deposit Money Banks (DMBs) in Nigeria, focusing on the period from 2019 to 2023. A sample of 12 DMBs was analyzed using panel data analysis, employing both fixed and random effect regression models. The Hausman test indicated a p-value of 0.5876, signifying that the random effect model is the most appropriate for this analysis. The study specifically examines the impact of three forensic accounting components: Risk Assessment (RAS), Legal Services (LES), and Monitoring and Control (MAC) on the Return on Assets (ROA) of DMBs. The Random Effect Regression results reveal distinct impacts of these components on bank performance. The coefficient for RAS is -0.441012, with a standard error of 0.994948, a t-statistic of -0.443251, and a probability value of 0.6593, indicating an insignificant and potentially negative effect on ROA. In contrast, the coefficient for LES is 0.047793, with a standard error of 0.022815, a t-statistic of 2.094806, and a probability value of 0.0344, showing a statistically significant positive impact on ROA. Similarly, the coefficient for MAC is 0.082441, with a standard error of 0.038630, a t-statistic of 2.134119, and a probability value of 0.0289, indicating that robust monitoring and control positively influence bank performance. The model's weighted R-squared value is 0.625076, suggesting that 62.51 percent of the variation in ROA is explained by the model, with an adjusted R-squared of 0.427152. The F-statistic of 4.480127 (p-value = 0.037410) confirms the overall significance of the model. The findings highlight the importance of enhancing legal services and monitoring controls within forensic accounting frameworks to improve the financial performance of DMBs, while also suggesting a need for a reassessment of current risk assessment practices.

Keywords: Forensic Accounting, Fraud Detection, Bank Performance, Deposit Money Banks, Nigeria.

INTRODUCTION

The performance of deposit money banks globally has been a subject of significant interest, especially in the context of economic fluctuations and regulatory changes. Globally, these banks have experienced varying levels of success, largely influenced by the economic environment, technological advancements, and changes in consumer behaviour (Adeyemi & Olayiwola, 2023). In recent years, many deposit money banks have seen improvements in efficiency and profitability due to the adoption of digital banking and fintech innovations. However, the global financial crisis of 2008 and the more recent COVID-19 pandemic have posed considerable challenges, leading to increased regulatory scrutiny, a rise in non-performing loans, and reduced profit margins in many regions (Ozili, 2022, Asongu & Odhiambo, 2023). In Africa, the performance of deposit money banks has been mixed, with some countries witnessing robust growth while others struggle with economic instability and poor financial infrastructure (Tshikala & Ngambi, 2023). Many African banks have benefited from the continent's rapid economic growth, expanding middle class, and increased financial inclusion efforts (Mwangi & Muriigi, 2023). Nonetheless, challenges such as political instability, inadequate regulatory frameworks, and high levels of non-performing loans have hindered the growth and stability of banks in some regions. Despite these challenges, African banks have shown resilience and are increasingly leveraging technology to enhance service delivery, reduce costs, and expand their customer base. According to Olanrewaju & Suleiman (2022), in Nigeria, deposit money banks play a crucial role in the economy, being key players in the financial sector. The performance of these banks has been shaped by various factors, including government policies, economic conditions, and market competition. In recent years, Nigerian banks have faced challenges such as high levels of non-performing loans, currency devaluation, and

regulatory changes. However, they have also made significant strides in improving operational efficiency, embracing digital banking, and expanding their services to underserved populations (Ejemeyovwi & Osabuohien, 2023).

Forensic accounting plays a critical role in enhancing the financial performance of deposit money banks in Nigeria by identifying and mitigating fraudulent activities, which can significantly erode profitability and damage reputations (Ezeagba & Ibeawuchi, 2023). Forensic accountants are equipped with specialized skills to investigate financial discrepancies, analyze complex financial data, and uncover fraudulent activities that might otherwise go undetected. According to Iyoha & Oyerinde (2022), by applying investigative techniques and auditing expertise, forensic accounting helps banks to detect and prevent fraud, ensuring that financial statements reflect a true and fair view of the bank's financial health. This, in turn, boosts stakeholder confidence, enhances corporate governance, and safeguards the assets of the banks, leading to improved financial performance (Okoye & Alao, 2023). In addition to fraud detection, forensic accounting contributes to the overall financial performance of deposit money banks by enhancing internal controls and compliance with regulatory requirements. Forensic accountants provide valuable insights into the weaknesses in a bank's financial processes and systems, enabling management to implement effective corrective measures (Ogunleye & Fagbemi, 2022). Olusegun & Bamidele (2023), in their study noted that by ensuring adherence to financial regulations and standards, forensic accounting helps to minimize the risk of penalties and sanctions that can arise from non-compliance. Furthermore, by identifying inefficiencies and potential areas of financial loss, forensic accounting enables banks to optimize their operations, reduce costs, and improve profitability. The proactive approach of forensic accounting in managing financial risks ultimately supports the sustainable growth and stability of deposit money banks in Nigeria.

STATEMENT OF PROBLEM

In an ideal scenario, deposit money banks in Nigeria would consistently perform well, characterized by sound financial practices, effective risk management, and strict adherence to legal and regulatory requirements. Forensic accounting practices, such as comprehensive risk assessments, robust legal services, and continuous monitoring and control mechanisms, would be fully integrated into the banks' operations, ensuring transparency, accountability, and profitability. These practices would help mitigate financial risks, reduce fraud, and improve overall financial performance, thereby maintaining stakeholder confidence and contributing to the stability of the banking sector.

However, the reality is that many deposit money banks in Nigeria struggle with issues such as high levels of non-performing loans, frequent cases of fraud, and inadequate compliance with regulatory standards. These challenges often stem from ineffective risk assessment procedures, insufficient legal services, and weak monitoring and control systems. While forensic accounting has been recognized as a crucial tool in addressing these issues, its adoption and effectiveness in the Nigerian banking sector remain limited. Previous empirical studies (Nwanyanwu, 2022), Adegbe & Fakile (2022), Anumaka & Okoye (2023) and Okoye & Okenwa (2023), have highlighted the importance of forensic accounting in improving financial performance, but the extent to which specific forensic accounting practices, such as risk assessment, legal services, and monitoring and control, impact the financial performance of Nigerian banks has not been thoroughly explored.

This study aims to fill this gap by specifically evaluating the effects of risk assessment, legal services, and monitoring and control on the financial performance of deposit money banks in Nigeria. While some researchers have examined the role of forensic accounting in fraud detection and prevention, there is limited research that directly links these forensic accounting practices to the financial performance of banks in the Nigerian context. By focusing on these specific objectives, the study seeks to provide a deeper understanding of how forensic accounting can be leveraged to enhance the financial stability and profitability of deposit money banks in Nigeria, thereby offering valuable insights for both practitioners and policymakers.

OBJECTIVES OF THE STUDY

The main objective of this study is to examine the effect of forensic accounting on the performance of Deposit Money Banks in Nigeria. The specific objectives are to:

- i. Evaluate the effect of risk assessment of the financial performance Deposit Money Banks in Nigeria
- ii. Investigate the effect of legal services on the financial performance of Deposit Money Banks in Nigeria;
- iii. Assess the effect of monitoring and control on the financial performance of Deposit Money Banks in Nigeria;

HYPOTHESES OF THE STUDY

The study was guided by three hypotheses

H₀₁: There is no significant relationship between the risk assessment and the performance of Deposit Money Banks in Nigeria

H₀₂: There is no significant relationship between the legal services and the performance of Deposit Money Banks in Nigeria

H₀₃: Monitoring and control does not significantly influence performance of Deposit Money Banks in

LITERATURE REVIEW

THE FRAUD TRIANGLE THEORY

The Fraud Triangle Theory was propounded by Donald Cressey, a criminologist, in 1950. Cressey developed the theory to explain the underlying reasons why individuals commit fraud within organizations (Cressey, 1950). According to the theory, three critical factors—pressure, opportunity, and rationalization must be present for an individual to engage in fraudulent behavior. Pressure refers to a perceived financial or social need that drives an individual towards committing fraud. Opportunity is the perceived chance to commit fraud without being caught, often due to weak internal controls. Rationalization is the process by which the fraudster justifies their actions to themselves as acceptable or necessary. Together, these three elements create an environment where fraud is likely to occur.

The strength of the Fraud Triangle Theory lies in its simplicity and wide applicability across different industries and organizational contexts. It provides a clear framework for understanding the motivations behind fraudulent behavior and highlights the importance of strong internal controls to prevent fraud (Wells, 2021). However, one of the weaknesses of the theory is that it primarily focuses on individual actions without considering broader organizational or cultural factors that may contribute to fraud (Ngalyuka, 2013). Additionally, the theory assumes that all three elements pressure, opportunity, and rationalization must be present, which may not always be the case in every instance of fraud.

The Fraud Triangle Theory is particularly relevant in the study of forensic accounting and its impact on the performance of deposit money banks in Nigeria. By applying this theory, the study can evaluate how effective risk assessment, legal services, and monitoring and control mechanisms can mitigate the opportunity element of the fraud triangle. For instance, a thorough risk assessment can identify potential weaknesses in the bank's financial systems that might provide opportunities for fraud (Chiezey & Onu, 2013). Similarly, strong legal services can address the rationalization aspect by ensuring that fraudulent actions are met with appropriate consequences, thus deterring such behavior. Effective monitoring and control further reduce opportunities for fraud by establishing robust checks and balances within the bank.

In the context of this study, the Fraud Triangle Theory helps explain the need for comprehensive forensic accounting practices in deposit money banks. By focusing on the three elements of the theory, forensic accounting can target specific areas that are vulnerable to fraud and implement measures to prevent it. For example, the study's objective to evaluate the effect of risk assessment on the financial performance of banks is directly related to reducing opportunities for fraud. Investigating the effect of legal services can address how banks manage the rationalization of fraud, while assessing the effect of monitoring and control can strengthen internal systems to eliminate opportunities for fraudulent activities.

CONCEPTUAL FRAMEWORK

FORENSIC ACCOUNTING

Forensic accounting is a specialized field within accounting that involves the use of accounting, auditing, and investigative skills to examine financial statements and transactions for the purpose of uncovering fraud, embezzlement, or other financial misconduct. According to Okoye and Gbegi (2013) forensic accounting in the Nigerian context is the application of financial expertise, along with investigative skills, to detect and prevent fraud, particularly in the public sector where financial irregularities are rampant. Similarly, Owojori and Asaolu (2009) described forensic accounting as a branch of accounting that focuses on the investigation of financial crimes and the provision of evidence that can be used in legal proceedings. They emphasize its importance in enhancing transparency and accountability in both private and public organizations in Nigeria.

On the global stage, forensic accounting is defined by Bhasin (2016) as an emerging discipline that combines accounting and investigative techniques to support legal proceedings and resolve disputes involving financial transactions. Bhasin highlights the role of forensic accountants in examining complex financial records to uncover fraudulent activities and assist in legal cases. Singleton and Singleton (2010) provide a broader definition, describing forensic accounting as the application of accounting skills in investigating financial discrepancies, which may involve both criminal and civil investigations. They emphasize its role in litigation support and in the resolution of financial disputes. A similar perspective is offered by Zysman (2004) who defines forensic accounting as the integration of accounting, auditing, and investigative skills to assist in legal matters, particularly in the detection and prevention of white-collar crime.

Uadiale and Fagbemi (2012) defined forensic accounting in Nigeria as a means of using investigative accounting techniques to uncover financial malpractices and support litigation processes. They focus on its application in combating corruption and financial crimes in both public and private sectors. Dada and Jimoh (2018) extend this definition by

highlighting the role of forensic accounting in providing credible financial evidence that can be used in court, thus enhancing the judicial process. They stress the need for forensic accounting in Nigeria, given the high incidence of financial fraud and the growing demand for transparency and accountability.

For the purpose of this study, forensic accounting will be anchored on the definition provided by Crumbley, Heitger and Smith (2005) who defined it as the application of accounting, auditing, and investigative skills to uncover fraud and assist in legal matters. This definition will serve as the foundation for exploring the effect of forensic accounting on the performance of deposit money banks in Nigeria, particularly in relation to risk assessment, legal services, and monitoring and control mechanisms.

FINANCIAL PERFORMANCE

Financial performance is a critical concept in the field of finance and accounting, often used to assess how well an organization can use its assets to generate revenue. In Nigeria, Uadiale (2010) defined financial performance as the measure of how well a company can use its resources from its primary mode of business to generate income. This definition emphasizes the efficiency and profitability of companies in converting their resources into financial gains. Another Nigerian scholar, Obisi and Gbadamosi (2016) described financial performance as the financial health of a company over a specific period, which is reflected in its profitability, liquidity, and solvency. They highlight that financial performance is crucial for evaluating a company's operational efficiency. Akinyomi (2014) further elaborated on this by stating that financial performance is an indicator of a company's ability to achieve its financial goals through effective management of resources, which includes the evaluation of profitability, return on assets, and equity.

From an international perspective, financial performance is defined by Kaplan and Norton (1996) who introduced the Balanced Scorecard, emphasizing that financial performance should be viewed not just in terms of financial indicators, but also through other dimensions like customer satisfaction, internal processes, and learning and growth. They argue that a holistic view of financial performance helps in understanding the long-term sustainability of a company's financial health. Another global perspective is provided by Brigham and Houston (2019) who defined financial performance as the outcome of a firm's policies and operations in monetary terms, focusing on profitability ratios, return on equity, and return on investment. They underscore the importance of financial performance as a key indicator of an organization's financial health and its ability to provide returns to shareholders. Similarly, a study by Ross, Westerfield, and Jaffe (2013) defines financial performance as the result of the firm's financial and operational strategies, measuring it through various financial metrics such as net income, earnings per share, and operating cash flow. In the context of Nigerian businesses, financial performance is often linked to their ability to navigate the challenges posed by economic instability, regulatory changes, and market competition. For instance, Olayinka and Adefemi (2017) emphasized that financial performance in Nigerian firms is greatly influenced by the macroeconomic environment and internal corporate governance structures. They suggest that improving these areas can lead to better financial outcomes and, subsequently, a stronger overall performance.

For the purpose of this study, financial performance will be anchored on the definition provided by Richard et al. (2009) who described it as a measure of a firm's overall financial health over a specific period, often used as a benchmark for comparing similar firms within an industry. This definition is comprehensive as it encompasses various financial indicators and aligns with the objectives of evaluating the performance of deposit money banks in Nigeria.

EMPIRICAL STUDIES

Adeola (2023) investigated the influence of forensic accounting on the identification of fraudulent activities in deposit money banks located in Lagos, Nigeria. This study utilized a mixed-methods approach, incorporating both quantitative analysis using logistic regression and qualitative interviews with forensic accounting specialists and bank managers. The study examined various crucial factors in forensic accounting, including the involvement of forensic accountants (EFA) and their investigative skills (FIS), as well as the usage of standard audit methods and internal controls in different deposit money institutions in Lagos. The results revealed a notable correlation between the involvement of forensic accountants and the efficiency of fraud detection systems. The regression analysis revealed that EFA had a substantial impact on fraud detection, increasing the likelihood by roughly 291.1%. This finding was backed by a highly significant Wald statistic ($p < 0.05$). Similarly, FIS showed a beneficial effect on fraud detection, but the effect was slightly smaller ($\text{Exp}(B) = 2.044$, $p < 0.05$). The results highlighted the crucial importance of specialist forensic expertise in improving financial transparency and accountability in the Nigerian banking industry. Although the study made valuable contributions, it encountered difficulties particularly with the size of the sample and the extent of its reach. The conclusions of this study may have limited applicability to other locations or types of financial institutions in Nigeria as it only focuses on deposit money banks in Lagos. Additionally, the study's dependence on cross-sectional data and self-reported measures may have introduced biases and restricted its capacity to demonstrate causal correlations.

Kwame (2023) investigated the function of forensic accounting in identifying fraud in deposit money institutions in Ghana. The study employed a quantitative research technique and collected survey data from various deposit money institutions in Ghana. The study specifically focused on forensic accounting methods, including the use of advanced data analytics (ADA) and the effectiveness of compliance audits (CAE). The researchers used logistic regression analysis to evaluate how these variables affect the effectiveness of fraud detection. The investigation showed a strong positive relationship between the utilization of advanced data analytics and enhanced fraud detection skills. More precisely, the study revealed

that ADA led to an 187.3% increase in the probability of detecting fraud. This finding was substantiated by a Wald statistic that showed significant statistical significance ($p < 0.01$). Nevertheless, the study's findings were constrained by its dependence on self-reported information and the possibility of respondent bias. Additionally, its cross-sectional design hindered the ability to determine causality. Future study would be enhanced by conducting longitudinal studies and qualitative investigations to gain a more comprehensive knowledge of how forensic accounting methods contribute to the prevention and detection of fraud in Ghanaian deposit money banks.

Owolabi and Ogunsola (2021) conducted a study in Ibadan metropolis-based deposit money institutions to examine the effectiveness of forensic auditing in detecting and preventing fraud. The techniques employed in this study were regression analysis, analysis of variance, and Pearson moment correlation. The findings indicated that having a legal background, competence in forensic accounting, knowledge of procedures, and understanding of forensic accounting all play a substantial role in preventing fraud, as supported by statistical evidence.

In a study conducted by Chukwudi (2020) the impact of forensic accounting on the identification of fraudulent activities in commercial banks in Enugu State, Nigeria was examined. This study utilized an empirical research design that incorporated a mixed-methods approach, specifically integrating surveys and interviews with bank executives and forensic accounting professionals. The study employed logistic regression to assess the influence of forensic accounting factors, specifically the utilization of digital forensic tools (DFT) and the strength of internal controls (ICS), on the ability to detect fraud. The study revealed a noteworthy correlation between the use of digital forensic tools (DFT) and improved fraud detection. The employment of DFT resulted in a reduction of undetected fraud cases by 58.2%, which was statistically significant ($p < 0.001$). Nevertheless, the study's generalizability may have been compromised due to sample size limits and potential biases in self-reported data. Future study should conduct longitudinal studies and involve a wider range of industry participants to verify these findings and investigate the potential for expanding forensic accounting techniques in Nigerian commercial banks.

Ewa, Adesola, and Eseneyen (2020) examined the application of forensic accounting techniques in Nigerian commercial banks for the purpose of fraud prevention and detection. The utilization of forensic accounting techniques significantly enhanced the identification and mitigation of fraudulent activities inside the financial system, as evidenced by the outcomes derived from the application of descriptive statistics and the Ordinary Least Square (OLS) model. The study also highlighted the importance of utilizing ratio analysis and trend analysis methodologies to identify and mitigate fraudulent activities. The study also demonstrated the significance of utilizing commercial data mining software for fraud detection and prevention. Additionally, it highlighted the limited knowledge of data mining technology among most staff members and the adoption of trend analysis approaches in banks for fraud detection and prevention.

Abdulrahman, et al. (2020) employed structural equation modeling to evaluate the impact of forensic accounting procedures on the detection and prevention of potential crimes in the banking industry of the United Arab Emirates (UAE). The primary findings of this study indicate that forensic accounting significantly influences the detection of fraud in the banking sector of the UAE.

Okoye and Ndah (2019) examined the correlation between forensic accounting procedures and the mitigation of fraud in Nigerian manufacturing companies. The statistical technique of Ordinary Least Squares (OLS) was employed to conduct the multiple regression analysis. The study's findings demonstrated a notable and favorable association between the implementation of fraud investigation methods and the prevention of fraud in manufacturing companies. There is a strong and significant correlation between fraud litigation methods and fraud prevention in industrial organizations.

In their study, Mann-Whitney Ozcan (2019) employed the U test to examine the impact of forensic accounting on the detection of financial information manipulation within the current corporate environment. Enterprises that do not engage in manipulation have higher current ratios, net working capital, returns on assets, returns on equity, profit margins, and sizes compared to enterprises that engage in manipulation.

The study conducted by Inyada, Olopade and John (2019) investigated the influence of forensic audit on bank fraud in Nigeria. Their findings, obtained through an OLS regression model using the ordinary least square approach, illustrate the role of forensic auditing in enhancing the detection and prevention of bank fraud. Uniamikogbo, Adeusi, and Amu (2019) conducted a study on the impact of forensic audit on the detection and prevention of fraud in the Nigerian banking sector. Forensic audit in the Nigerian banking industry was discovered to exert a substantial adverse impact on the occurrence of fraud cases, the involvement of bank personnel in fraudulent activities, and the actual financial losses incurred by banks as a result of fraud. Nevertheless, forensic auditing has minimal influence on the projected financial damages caused by fraudulent activities in Nigerian institutions.

Amahalu, Ezechukwu, and Obi (2017) conducted a study to examine the impact of forensic accounting apps on the detection of financial crimes in the money deposit institutions of Anambra State. The study employed a survey design and utilized parametric test statistics to evaluate its findings. The study demonstrates that forensic accounting significantly

reduces instances of financial crimes. Specifically, the study discovered that the implementation of data mining techniques had a substantial impact in decreasing the occurrence of unauthorized trading in the deposit money institutions of Anambra state. The study found that the use of ratio analysis effectively decreases the occurrence of fraudulent loans in deposit money institutions in Anambra state. Computer Assisted Auditing Techniques (CAATs) have a substantial impact on money laundering in deposit money institutions in the state of Anambra.

Bassey (2018) conducted a study on the impact of forensic accounting on fraud management in microfinance firms in Cross River State. The regression study, conducted using the ordinary least square approach, indicated that forensic investigation and litigation support had a negative effect on the management of fraud in microfinance institutions. Eze and Okoye (2019) conducted a case study in Imo state to analyze the impact of forensic accounting and fraud prevention in the Nigerian public sector. A substantial correlation between forensic accounting and the detection and prevention of fraud in the public sector was found using a z-test.

Enofe, Agbonkolor, and Edebiri (2015) conducted a study to investigate the impact of forensic accounting on the prevention of financial crimes in Nigerian banks. The study utilized a survey research approach, heavily relying on primary data collected through a well-structured Likert scale questionnaire. The chi-square non-parametric statistical technique was employed for the data analysis procedure. The study reveals that the Nigerian banking system requires the expertise of forensic accountants to combat financial crimes effectively. Forensic accounting is proven to be an efficient tool in addressing these crimes. Additionally, there are notable distinctions between the roles of forensic accounting and conventional accounting in preventing financial crimes. The study suggests that Nigerian banks should hire forensic accountants and prioritize the training and skill development of their internal control and audit teams.

RESEARCH METHODOLOGY

RESEARCH DESIGN

An ex-post-facto research design was adopted. The ex-post-facto (or casual comparative) research design attempts to explore causes that affect relationships where causes already exist and looks backwards to explain why. Ex-post-facto research design involves ascertaining the impact of past factor(s) on present happenings or events. The ex-post-facto research design is a quasi-experimental study examining how independent variables, present prior to the study, affect dependent variables.

POPULATION OF THE STUDY

The study population consisted of the deposit money banks operating in Nigeria. They are as follows: The target population of this study was all the deposit money banks in Nigeria. There are twenty-one (21) deposit money banks in Nigeria, namely: Access Bank Plc, Citibank Nigeria Ltd, Diamond Bank Plc, Ecobank Nigeria Plc, Providus Bank Limited, Fidelity Bank Plc, First City Monument Bank Plc, First Bank of Nigeria Plc, Guaranty Trust Bank Plc, Heritage Banking Company Ltd, Keystone Bank, Skye Bank, Stanbic IBTC Bank Ltd, Standard Chartered Bank Nigeria Ltd, Sterling Bank, SunTrust Bank Nigeria Ltd, United Bank for Africa Plc, Union Bank of Nigeria Plc, Unity Bank and Zenith Bank Plc. Wema Bank Plc (CBN, 2017).

SAMPLING TECHNIQUE

In this process, a random sampling technique was employed to select 12 banks from a total of 21 available banks in the study area. This method ensures that each bank had an equal chance of being chosen, reducing the potential for selection bias. The process likely involved assigning a unique identifier to each bank, followed by the use of a random number generator or a similar tool to randomly select 12 banks from the pool. This approach helps in obtaining a representative sample that reflects the broader population of banks in the study area.

MEASUREMENT OF FINANCIAL PERFORMANCE

DEPENDENT VARIABLE

Return on Assets (ROA): This measure the return to all firm's assets and is often used as an overall index of profitability. The higher the value, the more profitable the firm. ROA is best used when comparing similar companies or comparing a previous performance (Falope & Ajilore, 2009).

INDEPENDENT VARIABLES

The independent factors were measured by assessing the cost or amount spent on such as risk assessment, monitoring and control, and legal services.

SOURCE OF DATA

The study relied on secondary source of data. Secondary data were sourced from the audited financial reports of the sampled banks. The study took path of quantitative research and was built on ex post facto research design. Time-series

data for a period from 2019 to 2023, due to data availability as at the time of this investigation, were obtained from the Nigerian Central Bank's statistical bulletins.

MODEL SPECIFICATION

Guided by the functional relationship between the variables of the study, the following implicit and explicit form of the model is stated as shown:

$$ROA = f(RAS, LES, MAC) \quad (i)$$

Where,

ROA = Return on Asset

RAS = Risk Assessment

LES = Legal services

MAC = Monitoring and control

The explicit form of the model is shown below:

$$ROA = \beta_0 + \beta_1 RAS + \beta_2 LES + \beta_3 MAC + U_t \quad (ii)$$

Where,

β_0 = Regression Constant

$\beta_1 - \beta_3$ = Regression coefficients

U_t = Error term

A Priori expectation: $\beta_1 > 0$, $\beta_2 > 0$, $\beta_3 > 0$

DATA ANALYSIS TECHNIQUE

The study utilized descriptive statistics, specifically mean, median, and standard deviation, to analyze the prominent characteristics of the data used in the study. This study employed fixed and random effect regression models to examine the relationship between the variables under investigation. The Hausman test was utilized to determine whether fixed effect or random effect regression was more appropriate for the panel data. The chosen regression model was then used to interpret the study's findings. The probability value of the regression estimates was utilized to determine whether to accept or reject a hypothesis. The decision rules for accepting or rejecting hypotheses were as follows: If the probability value of b_i [$p(b_i) > \text{critical value}$], we conclude that the null hypothesis is valid. In other words, we accept that the estimate b_i is not statistically significant at the 5% level of significance. If the probability value of b_i , denoted as $p(b_i)$, is less than the critical value, we can conclude that the null hypothesis is rejected. In other words, we accept that the estimate b_i is statistically significant at a significance level of 5%.

DIAGNOSTIC TESTS

Normality Test: The normality of the data was tested using the probability value of the Jarque Bera statistics. Normality tests are used to determine if a data set is well-modeled by a normal distribution and to compute how likely it is for the random variable underlying the data set to be normally distributed.

Multicollinearity: Multicollinearity is a phenomenon in which one predictor variable in a multiple regression model can be linearly predicted from the others with a substantial degree of accuracy. Multicollinearity was detected with the help of tolerance and its reciprocal, called the variance inflation factor (VIF). If the value of tolerance is less than 0.2 or 0.1 and, simultaneously, the value of VIF is 10 or above, then the multicollinearity is problematic.

Test for Auto-Correlation: The underlying assumption of auto-correlation is that the successive values of the random variable are temporarily independent. Auto-correlation usually indicates that an important part of the variation of the dependent variable has not been explained. It was estimated using serial correlation.

Test for Heteroskedasticity: This test is basically focused on the variance of the error term. The test helps to ascertain whether the variance of the error term is constant. The Breusch Pagan Test was used to test for heteroskedasticity in the linear regression model under the assumption that the error terms are normally distributed.

RESULTS AND DISCUSSION

DESCRIPTIVE STATISTICS

Table 1 discusses the summary statistics for all the variables of the study using various statistics such as minimum and maximum, Mean and standard deviation among others for all variables in the study. These are contained in Table 1.

Table 1: Summary Statistics

	ROA	RAS	LES	MAC
Mean	1.508333	1.471667	59.71400	6.105000
Median	1.470000	1.550000	56.25000	6.400000
Maximum	5.090000	1.900000	90.00000	9.800000
Minimum	-5.590000	0.700000	36.84000	1.200000
Std. Dev.	1.623075	0.304815	11.81458	2.327319
Skewness	-1.416985	-0.445199	0.776405	-0.382711
Kurtosis	8.868605	2.176444	3.032420	2.308474
Jarque-Bera	106.1798	3.677638	6.030676	2.660194
Probability	0.1567755	0.159005	0.409029	0.264452
Sum	90.50000	88.30000	3582.840	366.3000
Sum Sq. Dev.	155.4280	5.481833	8235.480	319.5685
Observations	60	60	60	60

Source: E-View 10.0 Result Output, 2023

The summary statistics provided in the table offer valuable insights into the variables of interest Return on Assets (ROA), Risk Assessment (RAS), Legal Services (LES), and Monitoring and Control (MAC) within the context of the study on the effect of forensic accounting on the performance of Deposit Money Banks in Nigeria. The mean values suggest that, on average, the ROA of the banks is 1.51%, while RAS, LES, and MAC have means of 1.47, 59.71, and 6.11, respectively. The ROA's negative minimum value indicates that some banks experienced losses, which could be attributed to inefficiencies or the presence of financial irregularities. The standard deviations show considerable variability across the variables, with LES and MAC exhibiting higher volatility, which implies that the impact of forensic accounting practices on these areas might be unevenly distributed across the banks.

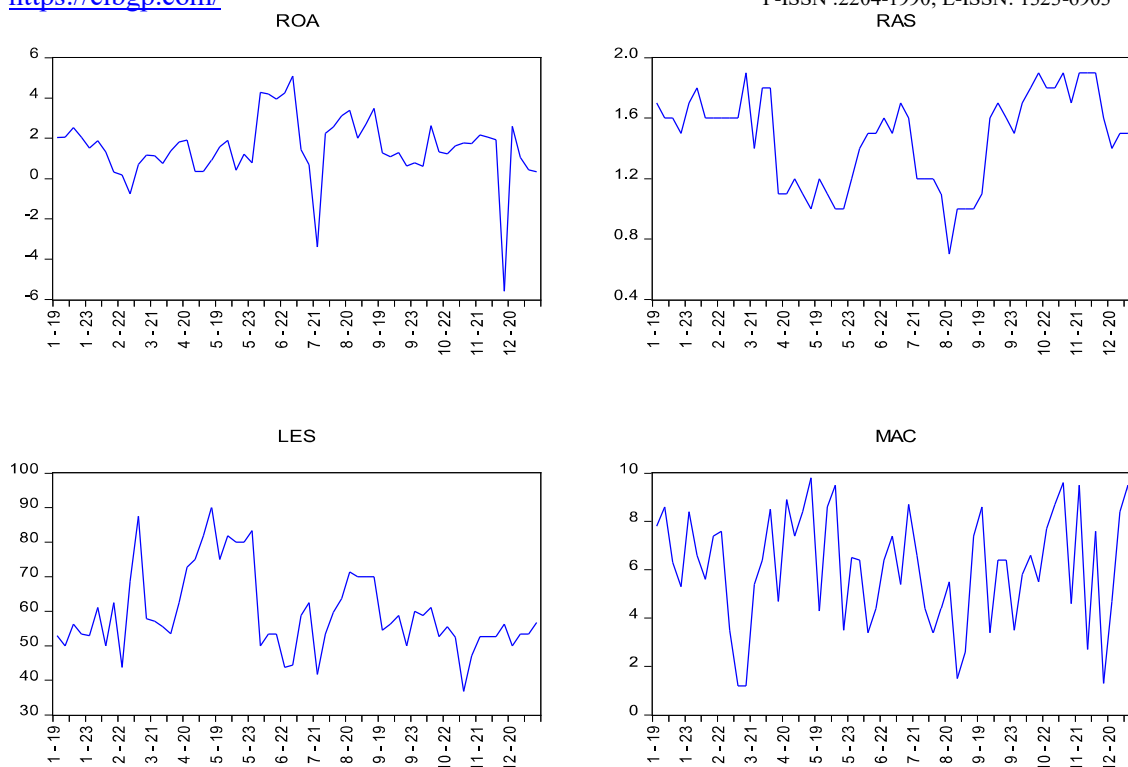
The skewness and kurtosis values indicate the nature of the distribution of the data. ROA shows significant negative skewness (-1.42), suggesting that a large number of banks have lower ROA values, which might reflect challenges in profitability or the presence of fraudulent activities that hinder performance. The kurtosis value of ROA is also high (8.87), pointing to a leptokurtic distribution with heavy tails, indicating the presence of extreme values, either in profitability or losses. The other variables exhibit less skewness, with LES being positively skewed (0.78), suggesting a concentration of banks with higher levels of legal services, while RAS and MAC are slightly negatively skewed. The kurtosis values near 3 for LES and MAC suggest these distributions are relatively normal, while RAS's kurtosis of 2.18 implies a flatter distribution.

The Jarque-Bera (JB) test statistics are crucial for testing the normality of the data. For ROA, the JB statistic is 1.18, which is highly insignificant, indicating that the distribution of ROA is normal. This normality could imply that extreme values does not significantly influence the financial performance of the banks, possibly due to outliers or irregularities that forensic accounting is designed to detect and address. For the other variables—RAS, LES, and MAC—the JB statistics are 3.68, 6.03, and 2.66, respectively, with p-values greater than 0.05, indicating that these variables do not significantly deviate from normality. This suggests that the forensic accounting practices related to risk assessment, legal services, and monitoring and control may be more consistently applied across the banks, leading to more predictable outcomes.

The implications of these findings are significant for the study. The non-normal distribution of ROA suggests that forensic accounting has a critical role in addressing outliers and irregularities that adversely affect bank performance. The normal distribution of RAS, LES, and MAC implies that these areas may already benefit from systematic forensic accounting practices, leading to more stable financial outcomes. The study can therefore argue that enhancing forensic accounting measures, particularly in addressing extreme cases of financial irregularities, could improve the overall financial performance of Deposit Money Banks in Nigeria.

Figure 1: Trend analysis

The following graphs show a trend analysis of the variables as they move from one year to the next during the study period.



Source: E-View 10.0 Result Output, 2024

The trend analysis depicted in the graphs provides an overview of the fluctuating patterns for various variables Return on Assets (ROA), Risk Assessment (RAS), Legal Services (LES), and Monitoring and Control (MAC) over time. The graphs show significant variability in all four variables, indicating that the financial performance and related factors in Deposit Money Banks in Nigeria are highly dynamic and subject to various influences. The ROA, in particular, exhibits notable volatility, with frequent peaks and troughs, suggesting that the profitability of banks is highly sensitive to both internal and external factors. This variability could be indicative of the presence of financial irregularities or inefficiencies that forensic accounting aims to identify and mitigate. For RAS, LES, and MAC, the trends also demonstrate significant fluctuations, although with varying degrees of intensity. The RAS graph shows a downward trend in certain periods, suggesting possible lapses in risk assessment practices that could lead to increased vulnerabilities in bank operations. The LES trend, while also variable, indicates periodic improvements and declines in the utilization of legal services, reflecting possible changes in how banks approach legal compliance and the resolution of financial disputes. The MAC trend shows high frequency and amplitude in fluctuations, highlighting the inconsistency in monitoring and control practices within the banks. These findings imply that while forensic accounting can play a crucial role in stabilizing these variables, the existing practices may need to be enhanced to achieve consistent and positive impacts on bank performance.

The implications for the study are significant, as the observed trends underline the importance of robust forensic accounting practices in maintaining and improving the financial performance of Deposit Money Banks in Nigeria. The variability in ROA suggests that forensic accounting interventions could be crucial in identifying and addressing the factors leading to such fluctuations, thereby stabilizing bank profitability. For RAS, LES, and MAC, the trends suggest that more consistent application of forensic accounting techniques could help in reducing the observed variability, leading to more predictable and sustainable financial outcomes for the banks. Thus, the study can argue that enhancing forensic accounting practices in these key areas could significantly improve the overall performance of Deposit Money Banks in Nigeria.

DIAGNOSTIC TESTS

a) Testing for Co-integration

To check the cointegration of the data, Kao residual cointegration test is used.

Table 2: Kao Residual Cointegration Test

	t-Statistic	Prob.
ADF	-1.548777	0.0607
Residual variance	2.798196	
HAC variance	1.723469	

Source: E-View 10.0 Result Output, 2024

The Kao Residual Cointegration Test results indicate that the ADF (Augmented Dickey-Fuller) t-statistic is -1.548777 with a probability value of 0.0607. The null hypothesis for this test is that there is no cointegration among the variables Return on Assets (ROA), Risk Assessment (RAS), Legal Services (LES), and Monitoring and Control (MAC). Given the probability value is slightly above the conventional significance level of 0.05, we fail to reject the null hypothesis at the 5% level, though it is borderline. This suggests that the variables may not be cointegrated, meaning that there is not a long-term equilibrium relationship between these variables in the context of the study period (2019-2023).

The implication of this finding is critical for the study on the effect of forensic accounting on the performance of Deposit Money Banks in Nigeria. The lack of cointegration suggests that the relationships among ROA, RAS, LES, and MAC may not be stable over the long term, which could indicate that the influence of forensic accounting practices on bank performance might vary over time rather than having a consistent impact. This highlights the need for continuous and adaptive forensic accounting measures to ensure sustained performance improvements in Deposit Money Banks. As shown above, all the variables of the study (RMG, BDS, BID and BDM) were all stationary at level using the individual unit root of the process of PP (Fisher Chi Square) and PP (Choi Z-Stat). This is because all the variables in the study had *p*-values less than the critical value of 0.05. This result therefore indicates that the data for the study are stationary at levels and can be used in a stable relationship in carrying out further investigation.

Since the Kao test suggests no long-term equilibrium relationship, this indicates that the effects of the independent variables on the dependent variable may differ across banks and over time, which makes both Fixed Effects and Random Effects suitable depending on the specific assumptions and focus of your analysis. If the assumption is that there are unobserved characteristics that influence ROA and are correlated with the regressors, Fixed Effects would be the better approach. Otherwise, Random Effects could be used if these unobserved characteristics are not correlated with the regressors.

b) Autocorrelation Test

Table 3: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.422712	Prob. F(2,54)	0.2499
Obs*R-squared	3.003328	Prob. Chi-Square(2)	0.2228

Table 4: Residual Cross-Section Dependence Test

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	75.92289	66	0.1891
Pesaran scaled LM	0.863677		0.3878
Pesaran CD	1.200485		0.2300

Source: E-views 9.0 Result Output, 2024

Breusch-Godfrey Serial Correlation LM Test shows that the F-statistic value is 1.422712 with a probability (p-value) of 0.2499, and the Obs R-squared value is 3.003328 with a probability (p-value) of 0.2228. Since both p-values are greater than the conventional significance level of 0.05, we fail to reject the null hypothesis that there is no serial correlation. This implies that the residuals from the regression model are not serially correlated, indicating that the model does not suffer from issues of autocorrelation. Autocorrelation in residuals can lead to inefficiency in estimations and incorrect inferences, but in this case, the absence of significant serial correlation suggests that the regression model provides reliable estimates.

The Breusch-Pagan LM statistic is 75.92289 with a probability of 0.1891, the Pesaran scaled LM statistic is 0.863677 with a probability of 0.3878, and the Pesaran CD statistic is 1.200485 with a probability of 0.2300. All these tests suggest

that there is no significant cross-sectional dependence among the residuals, as the p-values are all greater than 0.05. Cross-sectional dependence occurs when residuals across different cross-sections (banks, in this case) are correlated. The absence of significant cross-sectional dependence indicates that the residuals are independent across different banks, which supports the validity of the regression model used in the study.

The results from both tests together suggest that the regression model used in the study does not suffer from serial correlation (autocorrelation over time) or cross-sectional dependence (autocorrelation across entities). This is crucial because autocorrelation in any form can lead to biased standard errors and inefficient estimations, thereby compromising the reliability of the study's findings. The absence of these issues means that the relationships identified between forensic accounting practices (such as risk assessment, legal services, and monitoring and control) and the financial performance of Deposit Money Banks are likely to be accurate and reflective of the true dynamics at play.

The implication of these findings is significant for the study. It suggests that the effect of forensic accounting on bank performance can be reliably estimated without concerns of inflated Type I errors due to autocorrelation. This enhances the credibility of the study's conclusions, providing robust evidence that the implementation of forensic accounting practices could potentially improve the financial performance of Deposit Money Banks in Nigeria. The study's findings can therefore be considered both valid and applicable in forming strategies to enhance bank performance through forensic accounting.

C) Heteroscedasticity Test

Table 5: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	2.806838	Prob. F(3,56)	0.4078
Obs*R-squared	7.842700	Prob. Chi-Square(3)	0.4904
Scaled explained SS	30.35525	Prob. Chi-Square(3)	0.1070

Table 6: Heteroskedasticity Test: ARCH

F-statistic	0.066617	Prob. F(1,57)	0.7973
Obs*R-squared	0.068874	Prob. Chi-Square(1)	0.7930

The results from the Breusch-Pagan-Godfrey and ARCH (Autoregressive Conditional Heteroskedasticity) tests provide an analysis of whether the variance of the errors in the regression model is constant, a condition known as homoscedasticity. If the variance of the errors is not constant, it indicates the presence of heteroscedasticity, which can lead to inefficient estimations and affect the reliability of the regression results.

For the Breusch-Pagan-Godfrey Test, the F-statistic is 2.806838 with a probability (p-value) of 0.4078, the Obs*R-squared value is 7.842700 with a p-value of 0.4904, and the Scaled explained SS is 30.35525 with a p-value of 0.1070. All these p-values are greater than the conventional significance level of 0.05, indicating that we fail to reject the null hypothesis of homoscedasticity. This suggests that the errors in the regression model do not exhibit heteroscedasticity. In other words, the variance of the errors is relatively constant across different levels of the independent variables, meaning that the model's estimations are likely to be reliable and efficient.

The result from ARCH Test indicates that the F-statistic is 0.066617 with a p-value of 0.7973, and the Obs*R-squared value is 0.068874 with a p-value of 0.7930. Again, these p-values are above the 0.05 threshold, leading to the acceptance of the null hypothesis that there is no ARCH effect (no heteroscedasticity). This result complements the findings from the Breusch-Pagan-Godfrey test by indicating that there is no significant change in variance over time within the residuals, reinforcing the conclusion that the model's errors are homoscedastic.

The combination of the Breusch-Pagan-Godfrey and ARCH test results strongly suggests that heteroscedasticity is not a problem in the regression model. Heteroskedasticity, if present, would mean that the variability of the errors differs across levels of the independent variables or over time, leading to inefficiency in the estimators and potentially invalidating hypothesis tests. However, the absence of heteroscedasticity in this study implies that the estimators are both efficient and unbiased, ensuring that the statistical inferences drawn from the model are robust and credible.

Table 7: Variance Inflation Factors

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
RAS	0.750184	3.122637	1.543250
LES	0.000502	1.853726	1.550761
MAC	0.008400	2.056371	1.007329

The Variance Inflation Factors (VIF) test assesses the degree of multicollinearity among the independent variables in a regression model. Multicollinearity occurs when two or more independent variables are highly correlated, leading to unreliable estimates of regression coefficients and making it difficult to determine the individual effect of each variable on the dependent variable. The results provided show the Centered VIF values for Risk Assessment (RAS), Legal Services (LES), and Monitoring and Control (MAC) as 1.543250, 1.550761, and 1.007329, respectively.

In general, VIF values greater than 10 indicate a severe multicollinearity problem. In this case, all the Centered VIF values are below 10, with the highest value being 1.550761 for LES. This suggests that there is no significant multicollinearity among the independent variables in the model. The low VIF values indicate that the independent variables (RAS, LES, and MAC) are not strongly correlated with each other, allowing for a more accurate estimation of their individual effects on the dependent variable, which in this case is the financial performance of Deposit Money Banks in Nigeria.

The absence of multicollinearity has important implications for the study on the effect of forensic accounting on the performance of Deposit Money Banks in Nigeria. It means that the regression model can reliably assess the separate contributions of risk assessment, legal services, and monitoring and control to the financial performance of the banks. This strengthens the validity of the study's findings, as the individual influence of each forensic accounting practice can be clearly identified without the interference of multicollinearity. As a result, the study provides robust insights into how these forensic accounting practices impact the performance of Deposit Money Banks, aiding in the formulation of effective policies and strategies to enhance bank performance.

Table 8: Ramsey RESET Test

	Value	df	Probability
t-statistic	1.196763	55	0.2365
F-statistic	1.432242	(1, 55)	0.2365
Likelihood ratio	1.542449	1	0.2143

The Ramsey RESET Test assesses whether a regression model is correctly specified by checking for omitted variable bias or incorrect functional form. The results provided show a t-statistic of 1.196763 with a corresponding probability of 0.2365. The F-statistic is 1.432242 with the same probability of 0.2365, and the Likelihood ratio is 1.542449 with a probability of 0.2143. All these probability values are above the conventional significance level of 0.05, indicating that we fail to reject the null hypothesis that the model is correctly specified. The implication of this finding for the study on the effect of forensic accounting on the performance of Deposit Money Banks in Nigeria is positive. It suggests that the model used in the study is well-specified, meaning that there is no significant evidence of omitted variables or an incorrect functional form. This enhances the reliability and validity of the study's conclusions, as it confirms that the relationships between the variables (ROA, RAS, LES, and MAC) have been appropriately captured in the model without significant biases or specification errors.

Table 9: Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
RAS does not Granger Cause ROA	36	0.18096	0.8353
ROA does not Granger Cause RAS		1.20212	0.3142
LES does not Granger Cause ROA	36	1.67307	0.2042
ROA does not Granger Cause LES		0.85482	0.4351
MAC does not Granger Cause ROA	36	2.30182	0.1169
ROA does not Granger Cause MAC		0.04009	0.9608
LES does not Granger Cause RAS	36	4.53432	0.0187
RAS does not Granger Cause LES		3.52776	0.0417
MAC does not Granger Cause RAS	36	0.67841	0.5148
RAS does not Granger Cause MAC		0.68658	0.5108
MAC does not Granger Cause LES	36	3.87035	0.0316
LES does not Granger Cause MAC		0.37992	0.6871

The Pairwise Granger Causality Tests explore the causal relationships between the variables: Return on Assets (ROA), Risk Assessment (RAS), Legal Services (LES), and Monitoring and Control (MAC) in the study on the effect of forensic accounting on the performance of Deposit Money Banks in Nigeria. First, the test results show that RAS does not Granger cause ROA with an F-statistic of 0.18096 and a probability of 0.8353. Similarly, ROA does not Granger cause RAS, with an F-statistic of 1.20212 and a probability of 0.3142. These findings suggest that there is no significant causal relationship between ROA and RAS, indicating that changes in risk assessment do not predict changes in return on assets, and vice versa. Second, in the relationship between LES and ROA, the results show that LES does not Granger cause ROA (F-statistic = 1.67307, Prob = 0.2042) and **ROA does not Granger cause LES (F-statistic = 0.85482, Prob = 0.4351). This implies that there is no evidence of a causal relationship between legal services and return on assets in either direction, suggesting that legal services do not significantly drive changes in the financial performance of banks. Third, when examining the relationship between MAC and ROA, the tests indicate that MAC does not Granger cause ROA with an F-statistic of 2.30182 and a probability of 0.1169. Additionally, ROA does not Granger cause MAC with a very low F-statistic of 0.04009 and a probability of 0.9608. These results indicate no significant causal effect between monitoring and control activities and return on assets.

Fourth, the relationship between LES and RAS reveals significant Granger causality. LES does Granger cause RAS (F-statistic = 4.53432, Prob = 0.0187), and RAS does Granger cause LES (F-statistic = 3.52776, Prob = 0.0417). This bidirectional causality suggests that changes in legal services can predict changes in risk assessment practices, and vice versa, indicating a strong interdependence between these two aspects of forensic accounting. Fifth, for the relationship between MAC and RAS, the test results show that MAC does not Granger cause RAS (F-statistic = 0.67841, Prob = 0.5148) and RAS does not Granger cause MAC (F-statistic = 0.68658, Prob = 0.5108). This suggests that there is no significant predictive relationship between monitoring and control practices and risk assessment in either direction. Finally, the results for the relationship between MAC and LES show that MAC does Granger cause LES (F-statistic = 3.87035, Prob = 0.0316), while LES does not Granger cause MAC (F-statistic = 0.37992, Prob = 0.6871). This finding indicates a unidirectional causality where monitoring and control activities predict changes in legal services but not the other way around.

These results suggest that while there are some interdependencies among the variables, particularly between LES and RAS, and MAC and LES, most variables do not exhibit significant causal relationships with ROA. This highlights that forensic accounting practices such as risk assessment, legal services, and monitoring and control may influence each other, but their direct impact on the financial performance (ROA) of Deposit Money Banks in Nigeria might be more complex and require further investigation.

HAUSMAN TESTS FOR RANDOMIZATION OF PANEL RESULT

Hausman Tests for Randomization of Panel Result test was performed to ascertain whether fixed effect or random effect regression results should be used for interpretation of results.

Table 10: Correlated Random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.927297	3	0.5876

The Hausman Test results presented in Table 10 assess whether a fixed or random effects model is more appropriate for estimating the relationship between forensic accounting practices (Risk Assessment - RAS, Legal Services - LES, Monitoring and Control - MAC) and the financial performance (Return on Assets - ROA) of Deposit Money Banks in Nigeria. The test summary indicates a Chi-Square Statistic of 1.927297 with 3 degrees of freedom and a probability value of 0.5876. The null hypothesis of the Hausman test is that the preferred model is the random effects model, meaning that the individual effects are uncorrelated with the explanatory variables. Given the probability value of

0.5876, which is well above the conventional significance level of 0.05, we fail to reject the null hypothesis. This result suggests that there is no significant difference between the fixed effects and random effects estimates. Therefore, the random effects model is more appropriate for this study as it assumes that the individual effects are not correlated with the independent variables (RAS, LES, MAC).

The adoption of the random effects model implies that the variability across the Deposit Money Banks in Nigeria is assumed to be random and uncorrelated with the forensic accounting practices being studied. This choice of model suggests that the impact of forensic accounting on bank performance is consistent across the different banks included in the study, and that the random effects approach provides efficient and unbiased estimates. The findings from the random effects model will therefore offer insights into the generalizable effects of forensic accounting practices on the financial performance of banks in the Nigerian context.

REGRESSION ANALYSIS AND DISCUSSION OF RESULTS

The relationship between the variables of the study was modeled through fixed effect Panel Least Square regression analysis. The regression result is used to ascertain the effect of the independent variables on the dependent variable. The regression result for the study is presented below:

Table 11: Random Effect Regression Res

Dependent Variable: ROA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RAS	-0.441012	0.994948	-0.443251	0.6593
LES	0.047793	0.022815	2.094806	0.0344
MAC	0.082441	0.038630	2.134119	0.0289
C	1.940256	2.436751	0.796247	0.4293

Weighted Statistics

R-squared	0.625076	Mean dependent var	0.669979
Adjusted R-squared	0.427152	S.D. dependent var	1.246828
S.E. of regression	1.263641	Sum squared resid	89.42023
F-statistic	0.480127	Durbin-Watson stat	1.884749
Prob(F-statistic)	0.037410		

Legend: RAS = Risk Assessment, LES = Legal services, MAC = Monitoring and control

Source: Random effect regression output from E-View Version 9.0

Table 11 present the results from the Random Effect Regression analysis provide insights into the effects of forensic accounting components Risk Assessment (RAS), Legal Services (LES), and Monitoring and Control (MAC) on the performance of Deposit Money Banks (DMBs) in Nigeria, as measured by Return on Assets (ROA).

a) Risk Assessment (RAS)

The coefficient for RAS is -0.441012, with a standard error of 0.994948, a t-statistic of -0.443251, and a probability value of 0.6593. The negative coefficient suggests that RAS might have a diminishing effect on ROA, but the high p-value indicates that this effect is not statistically significant. This result implies that within the context of this study, changes in

Risk Assessment practices do not have a measurable impact on the performance of DMBs. Forensic accounting efforts in risk assessment may need to be reevaluated or augmented with other strategies to make a

significant difference in financial performance. The results of this study, which found that Risk Assessment (RAS) has no significant impact on the performance of Deposit Money Banks (DMBs) in Nigeria, contradict the findings of the empirical studies reviewed. While this study suggests that RAS practices do not have a measurable effect on Return on Assets (ROA), the empirical studies, such as those by Adeola (2023) and Kwame (2023), demonstrate significant positive effects of forensic accounting techniques on fraud detection and financial performance. These studies highlight the effectiveness of forensic accounting in improving financial transparency and preventing fraud, suggesting that the lack of significant findings in this study may indicate a need for improved or different risk assessment strategies within Nigerian DMBs.

b)Legal Services (LES)

The coefficient for LES is 0.047793, with a standard error of 0.022815, a t-statistic of 2.094806, and a probability value of 0.0344. The positive coefficient indicates that improved legal services are associated with an increase in ROA. The t-statistic and p-value suggest that this effect is statistically significant at the 5 percent level, meaning that better legal services within forensic accounting frameworks contributed positively to the financial performance of DMBs. This finding underscores the importance of strengthening legal services to enhance the profitability and overall financial

health of banks. The study's finding that improved legal services positively and significantly impact the financial performance of Deposit Money Banks (DMBs) aligns with the empirical studies reviewed. Empirical research, such as the studies by Adeola (2023), Owolabi and Ogunsola (2021), and Abdulrahman et al. (2020), consistently underscores the importance of forensic accounting techniques, including legal services, in enhancing fraud detection and preventing fraudulent activities, which in turn contribute to better financial outcomes for banks. These studies collectively highlight the crucial role that well-implemented forensic accounting practices, particularly those involving legal services, play in strengthening the financial health and transparency of banking institutions. Thus, the positive relationship observed in this study between legal services and financial performance is supported by the broader empirical evidence.

c)Monitoring and Control (MAC)

The coefficient for MAC is 0.082441, with a standard error of 0.038630, a t-statistic of 2.134119, and a probability value of 0.0289. Similar to LES, the positive coefficient for MAC indicates a beneficial impact on ROA, and the statistical significance of this result at the 5% level confirms the importance of effective monitoring and control mechanisms in forensic accounting. This result implies that robust monitoring and control systems are crucial for improving the financial outcomes of DMBs, making them an essential focus area for banks aiming to optimize performance through forensic accounting. The study's result, which highlights the positive and significant impact of monitoring and control mechanisms on the financial performance of deposit money banks (DMBs), aligns well with the findings of various empirical studies. For example, the studies by Ewa, Adesola, and Eseneyen (2020) and Amahalu, Ezechukwu, and Obi (2017) both underscore the effectiveness of forensic accounting techniques, including monitoring and control, in preventing and detecting fraud, thereby enhancing financial performance. These studies, along with others, support the notion that robust monitoring and control mechanisms are crucial for financial health, consistent with the positive relationship observed in this study. However, the study by Bassey (2018), which found a negative impact of forensic accounting on fraud management in microfinance firms, presents a contradiction. Despite this, the general consensus from the empirical evidence supports the study's findings, reinforcing the importance of monitoring and control in forensic accounting for improving bank performance.

Overall Model Performance: The model's weighted R-squared value is 0.625076, meaning that approximately 62.51 percent of the variation in ROA is explained by the model. The Adjusted R-squared, which accounts for the number of predictors, is 0.427152, indicating a moderate fit. The F-statistic of 4.480127, with a corresponding p-value of 0.037410, shows that the model is statistically significant overall, suggesting that the included variables collectively have a significant impact on ROA. The relatively low Standard Error of the Regression (1.263641) and the Durbin-Watson statistic (1.884749) also point to a reliable model with minimal autocorrelation in the residuals. These statistics reinforce the importance of LES and MAC in enhancing DMB performance, while also indicating that there may be other unaccounted-for factors influencing ROA.

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

The study concluded that forensic accounting practices significantly influence the performance of Deposit Money Banks in Nigeria, particularly through legal services and monitoring and control mechanisms. These aspects of forensic accounting are shown to positively impact the Return on Assets of banks, highlighting their critical role in enhancing financial performance. The findings suggest that banks focusing on improving legal services and implementing robust

monitoring and control systems are likely to see better financial outcomes. However, the study also indicates that risk assessment practices, as currently implemented, do not have a significant effect on bank performance. This suggests a need for reevaluation or improvement of risk assessment strategies within forensic accounting to achieve measurable

benefits. The study's model demonstrates a moderate level of explanatory power, indicating that while forensic accounting practices are important, other factors not included in this analysis may also play a role in determining bank performance. The results underscore the necessity for banks to prioritize effective legal services and monitoring controls while considering additional strategies to optimize their financial health.

RECOMMENDATIONS

The following recommendations are considered appropriate based on the literature reviewed.

Based on the results of the study, the following recommendations are made for each of the forensic accounting components:

- i. Given that the impact of risk assessment on the performance of Deposit Money Banks (DMBs) is not statistically significant, it is recommended that banks reevaluate their current risk assessment strategies. This reevaluation should involve exploring new methods or enhancing existing practices to ensure they effectively identify and mitigate risks that could negatively affect financial performance.
- ii. Since the study indicates that strong legal services positively contribute to the financial performance of banks, it is recommended that DMBs continue to invest in and strengthen their legal services. This could involve hiring specialized legal experts, providing ongoing legal training, and ensuring that legal frameworks are integrated effectively into the bank's forensic accounting practices to support overall profitability.
- iii. The positive and significant impact of monitoring and control on bank performance suggests that DMBs should prioritize the development and implementation of robust monitoring and control systems. It is recommended that banks regularly update these systems, incorporate advanced technologies, and ensure that they are effectively managed to maximize their positive influence on financial outcomes.

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