

Internal Audit Practices and Financial Performance: Evidence from Deposit Money Banks in Nigeria

Oladejo Otunbosun, Sunday

Department of Accounting,

Faculty of Management Sciences

Ladoke Akintola University of Technology, Oyo State, Nigeria

Email: sundayolatunbosun@gmail.com

Yinus S.O

Department of Accounting,

Faculty of Management Sciences

Open and Distance Learning

Ladoke Akintola University of Technology, Oyo State, Nigeria

*Email: soyinsula@lodlc.lautech.edu.ng

Oladejo M. O

Department of Accounting,

Faculty of Management Sciences

Ladoke Akintola University of Technology, Oyo State, Nigeria

Email: mooladejo@lautech.edu.ng

**E-mail of Correspondence Author:* soyinsula@lodlc.lautech.edu.ng

ABSTRACT

This study investigates the impact of internal audit practices on the financial performance of Deposit Money Banks (DMBs) in Nigeria. Despite the critical role of internal audits in promoting transparency and risk management, many Nigerian banks continue to face weak internal controls, limited auditor independence, and poor integration of audit insights into decision-making. Using an ex-post facto research design, the study analyzed secondary data from audited financial statements of 12 purposively selected DMBs listed on the Nigerian Exchange Group from 2016 to 2023. Principal Component Analysis (PCA) identified internal audit size, bank size, and internal control monitoring as key audit variables. Panel regression results showed that internal audit objectivity had a statistically significant positive effect on financial performance, while audit competence, independence, and audit size had positive but insignificant effects. Bank size had a notable positive influence, whereas IT proficiency negatively impacted performance, likely due to cost inefficiencies. The study concludes that strategically aligned internal audit practices significantly affect financial outcomes. It recommends enhancing auditor objectivity, prioritizing audit quality over size, adopting cost-effective IT solutions, and integrating audit findings into strategic planning to support long-term performance and regulatory compliance.

Keywords: Internal Audit Practices, Financial Performance, Nigerian Deposit Money Bank

Introduction

Internal auditing is a fundamental component of good governance and effective financial management, particularly in the banking sector. It serves not only as a control mechanism but also as a strategic function for risk management, operational efficiency, and financial reporting integrity. Alashe and Bello (2021) highlight that internal auditing supports sound governance by ensuring transparency, accountability, and compliance with regulations. Similarly, Ziniyel, Otoo, and Andzie (2018) note that internal auditing helps organizations evaluate processes and improve performance through a structured review of operations and controls. In the Nigerian context, where the banking sector is tightly regulated by the Central Bank of Nigeria (CBN), internal audit practices are expected to play a vital role in safeguarding assets, enhancing financial discipline, and promoting stakeholder confidence. Deposit Money Banks (DMBs) are central to financial intermediation and macroeconomic stability, making effective internal audit practices crucial for their sustainability and performance.

However, the effectiveness of internal audit systems in Nigerian banks remains limited due to a range of structural and operational challenges. Ejiofor and Okolocha (2020) argue that despite the presence of internal audit units, banks continue to suffer from internal control lapses, delayed detection of financial irregularities, and audit functions that are more reactive than preventive. Egolum, Ugonabo, and Okonenwa (2021) further emphasize that auditor independence is often compromised due to interference from management, which undermines the objectivity and credibility of audit findings. Additionally, Fanen and Alematu (2020) identify inadequate resources, lack of technical expertise within audit committees, and poor communication of audit outcomes as key barriers that limit the internal audit's role in enhancing bank performance.

These challenges collectively weaken the internal audit function's ability to support financial performance and risk management effectively. As operations within the banking sector grow in complexity driven by technological advancement, increasing regulatory scrutiny, and market volatility internal audit frameworks must evolve to become more proactive, independent, and strategically aligned with the goals of financial institutions. . Studies on internal audit practices can provide insight to the performance of banks and are not adequate in Nigeria. Therefore the current study attempt to examine the impact of internal audit practices on the financial performance of deposit money banks in Nigeria.

Statement of the Problem

Despite the strategic role of internal audits, Nigerian deposit money banks continue to face financial irregularities, weak internal controls, auditor independence issues, insider dealings, and rising loan defaults—all affecting financial performance. While internal control systems exist, evidence suggests that financial management often falls short of both local and international standards, contributing to instability and an increase in bank mergers and acquisitions. Prior studies (Bunu & Omwenga, 2017; Ejiofor & Okolocha, 2020; Egolum et al., 2021) acknowledge the importance of internal audit in monitoring and detecting fraud but reveal gaps in its preventive and control functions. Critical issues such as auditor independence, resource constraints, regulatory compliance, risk assessment, and audit committee effectiveness have been underexplored. This study aims to fill these gaps by examining how internal audit practices influence the financial performance of Nigerian banks, with a focus on identifying key internal audit components that can strengthen oversight and improve financial outcomes.

Research Hypotheses

The following Research hypotheses were stated in their null form;

- Ho1 There is no significant difference in factors influencing internal audit practices in Nigeria.
- Ho2 Internal audit practices has no significant effect on the financial performance of deposits money banks in Nigeria.

Literature Review

Concept of Auditing

Auditing, in its broadest sense, is the systematic examination of financial records to determine their accuracy, compliance, and reliability. Tuovila et al. (2023) define auditing as the review of an organization's financial statements to ensure they present a fair and ethical view of its financial activities. Audits can be conducted internally by employees or externally by independent certified professionals, producing opinions that influence stakeholder confidence. While three main types of audits exist external, internal, and tax audits internal auditing remains critical for improving organizational effectiveness from within. Scarion (2019) highlights that auditing is an integral control mechanism that significantly affects the performance of deposit money banks in Nigeria. This is echoed by Mgbobi et al. (2024), who

describe auditing as the process of validating the authenticity of business documents to ensure financial statements reflect a true and fair view of a firm's financial health. Their emphasis underscores the necessity of auditing not just as a compliance tool, but as a vital practice to promote financial integrity. Lambekova et al. (2020) argue that internal auditing provides constructive evaluation aimed at improving operational effectiveness and financial outcomes. However, despite this recognized value, many internal audit functions remain underutilized or structurally weak, especially in developing countries like Nigeria. Oladejo et al. (2021) point to growing concerns over financial crime, corporate failures, and declining trust in financial reporting, particularly in Nigeria. They note that audit practices must evolve to meet increasing expectations, highlighting the shift toward digital tools and real-time financial oversight. Nonetheless, gaps persist in audit effectiveness—especially when manual systems, compromised auditor independence, or insufficient oversight hinder audit integrity and responsiveness.

Internal Auditing Practices

Internal audit practices are fundamental components of an organization's internal control system. According to Benjamin et al. (2020), internal audit is designed to ensure compliance with policies and support the achievement of organizational goals through continuous monitoring of procedures and systems. Internal auditors, who are employees of the organization, conduct independent evaluations of operational activities to provide protective and constructive services to management (Klamut, 2018). Alsughayer (2021) emphasizes that internal audit quality hinges on the auditor's competence, independence, and professional ethics. Similarly, Erasmus and Akani (2021) argue that internal auditors must provide accurate, unbiased information for decision-making, especially in complex sectors like banking. Effective audits instill confidence in financial statements and support strategic goals (Ajekwe & Ibiame, 2017). Auditor professionalism and initiative are critical to internal audit success. As Santy et al. (2020) observe, technical knowledge alone is insufficient without the drive to uncover and prevent misappropriations. Competence, ethics, and independence are thus key determinants of internal audit effectiveness (Sulaiman, 2021).

In Nigeria, where financial mismanagement and fraudulent reporting persist, internal auditors play a vital role as watchdogs (Sattar et al., 2020). Their objectivity significantly affects the

credibility of financial reports (Amahalu & Chinyere, 2020). Delays in audit reporting reduce financial transparency and investor confidence (Ibrahim et al., 2020; Alzoubi, 2019). According International Standard Auditing (ISA) there are five key components of internal audit practices which include: *Control Environment* : Reflects management's attitude toward internal controls, *Risk Assessment* :Identifies and evaluates threats to achieving objectives, *Control Activities*: Includes policies and procedures to mitigate risks. *Information and Communication*: Ensures relevant data is shared for decision-making and *monitoring*: Evaluates the performance and relevance of internal controls over time.

Each component supports audit effectiveness and enhances organizational performance. In the banking sector, where risk exposure is high, a strong internal audit system is essential for operational efficiency, fraud prevention, and financial integrity.

Financial Performance

Financial performance refers to how effectively a firm utilizes its resources to generate profit and create value. According to Tambun, Manurung, and Murwaningsari (2018), the financial performance of Deposit Money Banks (DMBs) can be measured through earnings per share, which reflects the present value of expected future net dividends. This concept highlights how financial outcomes are influenced not only by operational efficiency but also by accounting principles such as relevance and reliability. For instance, while historical cost accounting is reliable, it may lack relevance, potentially affecting performance evaluations. Ugwunta and Ugwuany (2018) emphasize that the financial performance of DMBs depends significantly on the quality of accounting information, which in turn is shaped by the effectiveness of internal audit practices. They argue that financial performance should be assessed in terms of how well internal audits support the accuracy, reliability, and relevance of financial data used in capital markets. High-quality internal audit functions can improve investor confidence by enabling more accurate predictions of changes in liquidity, stock prices, and returns. The effectiveness of internal audit practices directly supports value-relevant financial reporting information that helps investors make informed decisions. The degree of financial performance, therefore, is a function of several structural and institutional factors, including accounting regulations, internal control mechanisms, the business cycle, industry structure, and the level of economic development. Various metrics are used to assess financial performance. Marr and Schiuma

(2003) identify three commonly used accounting-based indicators: Return on Assets (ROA), Return on Equity (ROE), and Return on Investment (ROI). These measures collectively provide insight into how efficiently a bank deploys its resources and the overall health of its financial operations.

Deposit Money Banks (DMBs), VS Internal Audit Practice and Their Economic Importance

Deposit Money Banks (DMBs) are core financial institutions that play a critical role in mobilizing savings, extending credit, and facilitating financial transactions. According to Muga (2012), DMBs perform essential functions such as accepting deposits, offering loans, processing payments, and providing various financial services that contribute to the financial system's overall efficiency. Their role as intermediaries between savers and borrowers makes them central to capital formation and economic development. DMBs are entrusted with the savings of individuals and businesses, and they allocate these funds to sectors where they can be most productive. This intermediation process supports private sector investment, stimulates business growth, and generates employment opportunities. Ali (2018) emphasizes that the techniques and judgments used by banks in making lending decisions directly influence the efficiency of fund allocation and the success of the economy at large. The internal audit function within DMBs is integral to ensuring operational soundness and mitigating risks. As Ali (2018) further notes, internal audits provide independent assessments of an institution's internal controls, processes, and compliance with regulatory standards. In the Nigerian context, the banking sector is heavily regulated by the Central Bank of Nigeria (CBN), which underscores the importance of maintaining audit integrity and operational transparency. However, the sector continues to face challenges such as financial irregularities, insider lending, weak internal control systems, and compromised auditor independence, which affect the financial performance and stability of banks.

Okoli and Izedonmi (2014) point out that stakeholders including investors, regulators, and customers—rely on audited financial statements to assess the value and trustworthiness of banks. A robust internal audit system increases the reliability of financial reports and boosts stakeholder confidence. As such, audit quality has a direct impact on a bank's credibility, access

to capital, and overall financial performance. Inadequate internal audit practices can result in mismanagement, fraud, and bank failures, which threaten economic stability.

Economic Importance of DMBs

The economic significance of DMBs extends well beyond their immediate financial activities. They serve as a key engine of economic growth by providing credit to individuals, small businesses, and large enterprises. Through credit creation and investment financing, DMBs support entrepreneurship, infrastructure development, and industrial expansion. As posited by Levine (2005), well-functioning banks accelerate economic growth by enhancing capital allocation, improving productivity, and encouraging innovation. Moreover, DMBs are vital to monetary policy implementation. They serve as the transmission mechanism through which central bank policies, such as interest rate adjustments and reserve requirements, influence money supply, inflation, and economic activity. The efficiency of this transmission depends on the operational strength and financial health of the banking sector. In Nigeria, DMBs account for a significant portion of financial sector assets and contribute meaningfully to GDP through lending, investment facilitation, and employment generation. As Olokoyo (2011) notes, the development of the banking sector correlates positively with economic performance, particularly in emerging markets like Nigeria, where banks dominate the financial landscape. In conclusion, Deposit Money Banks are critical to both the stability of Nigeria's financial system and the broader economy. Strengthening internal audit practices within DMBs is not just a regulatory requirement but a strategic necessity. Effective internal audits help detect and prevent fraud, ensure compliance, and improve operational efficiency. By enhancing trust and transparency, they contribute to the resilience and sustainability of the banking sector, which in turn drives national economic growth and development.

Theoretical Review

The Construct of this study will be based on Auditor's Theory of Inspired Confidence. This is based on the fact that the theory offers a linkage between the users' requirement for credible and reliable financial reports and the capacity of the audit processes to meet those needs. It sees through the development of these needs of the public (stakeholders) and the audit processes over time. The theory of inspired confidence sees the auditor, as a confidential agent, derives

his broad function in society from the need for expert and independent examination as well as the need for an expert and independent judgment supported by the examinations.

Empirical Review

Internal audit effectiveness is significantly shaped by multiple organizational and institutional factors. Hamza Alqudah et al. (2023) examined internal audit effectiveness in Jordan's public sector, identifying management support, external auditor collaboration, independence, and extrinsic rewards as critical drivers. Their study, rooted in the Resource-Based View (RBV) theory and based on 117 survey responses, found that while management-related factors significantly enhanced auditor effectiveness, the size of internal audit units had no notable impact. Furthermore, extrinsic rewards were found to moderately influence the relationship between empowerment variables and audit effectiveness. These findings suggest that strengthening internal audit support systems can reduce inefficiencies and improve financial governance, especially in public organizations. In the Nigerian context, Dada and Adebawale (2023) explored internal audit practices in selected Federal Polytechnics. Their study emphasized the impact of management perception, support, and auditor independence on audit effectiveness. Data collected via structured questionnaires revealed that these factors collectively enhanced the capacity of internal auditors to detect noncompliance and added value to institutional operations. Their findings highlight that internal audit practices in Nigeria's public institutions can be optimized by reinforcing management collaboration and ensuring auditor autonomy.

Several studies have established a direct link between internal audit practices and financial outcomes in Deposit Money Banks (DMBs). Alashe and Bello (2021) conducted a study among 16 licensed commercial banks in Nigeria using questionnaire data analyzed with ordinary least squares regression. Their results demonstrated a significant positive correlation between internal audit effectiveness and financial performance, measured through profitability metrics. They also found that structured reporting channels within audit departments significantly enhanced overall bank performance, prompting a recommendation for improved internal audit structures in Nigerian banks. Similarly, Ewot and Mutembei (2023) examined listed commercial banks in Kenya to assess how internal audit practices affected financial performance indicators such as return on assets and liquidity. The study, employing both

primary data (via questionnaires) and secondary data (from audited reports), concluded that internal audit systems—especially those targeting asset protection, risk management, and compliance—were strongly linked to improved financial metrics. The study emphasized the need for banks to reassess and fortify their internal audit functions to enhance financial outcomes and investor confidence.

The effect of internal audit practices on financial performance has been evident in various institutional contexts, including Nigeria. Eniola, Tonade, and Adeniji (2021) focused on listed companies in southwestern Nigeria, applying both survey and ex-post-facto research designs. Their study found that internal audit oversight significantly influenced return on assets (ROA), suggesting that strong audit mechanisms are vital for enhancing the credibility of financial reports and boosting firm value. The findings reinforce the role of internal audit in shaping operational efficiency and financial transparency. Likewise, Nwaobia, Omotayo, and Ajibade (2021) investigated the impact of internal audit on fraud detection in Nigerian banks. Using data from 216 internal auditors, their study revealed that internal audit significantly improved the detection of fraudulent financial reporting. Key auditor qualities such as ICT competence, professional experience, and independence further moderated this relationship. The study concluded that robust internal audit practices are crucial for safeguarding asset integrity and ensuring compliance in the banking sector.

Gaps in Literature

Several empirical studies have explored the relationship between internal audit practices and financial performance in Africa's banking sector. Okello, Kirori, and Ndiao (2019) found a positive link in Kenyan banks, while Ewot John and Mutembei (2023) highlighted internal audit's role in asset protection and risk management in Kenyan commercial banks. In Nigeria, Eniola, Tonade, and Adeniji (2021) showed internal audit oversight improves return on assets in listed companies. Yakubu and Williams (2020) examined auditor independence in Nigeria, and Ofei, Owusu, and Asante (2020) emphasized risk assessment in Ghanaian banks. Alashe and Bello (2021) confirmed a positive association between internal audit and financial performance in Nigerian deposit money banks. However, gaps remain. Findings from Kenya may not fully apply to Nigerian or Ghanaian contexts due to regulatory differences. Some studies focus on listed companies rather than deposit money banks, leaving sector-specific

issues underexplored. Most research relies on data before 2020, missing the impact of post-COVID-19 financial shifts. Methodological inconsistencies and limited use of longitudinal or mixed methods reduce comprehensive understanding. Few studies identify key factors influencing internal audit effectiveness across banking institutions. Thus, there is a clear need for up-to-date, sector-specific research examining internal audit practices in deposit money banks within the evolving post-pandemic environment.

Methodology

This study investigated the impact of internal audit practices on the performance of selected Deposit Money Banks (DMBs) listed on the Nigerian Exchange Group (NGX) as of December 2023. Employing an ex-post facto research design, the study utilized secondary data from audited financial statements and annual reports covering 2016 to 2023. A purposive sampling technique was used to select 12 out of 24 listed DMBs based on data availability and location. The research adopted a panel data approach to capture variations over time and across banks. Data reliability and validity were ensured through reputable sources such as the Nigeria Bureau of Statistics. Analysis was conducted using Principal component analysis and panel regression models to identify key factors influencing internal audit effectiveness and its impact on bank performance.

Panel Regression Model

The model as adapted from the work of Hassam (2019) and the model will be modified to examine the effect of audit practises on performance of DMBs. The model according to Hassam (2019) is stated below:

$$ROA = \beta_0 + \beta_1 IAEit + \beta_2 IAI it + \beta_3 IAOit + \beta_4 TIACit + \beta_5 IPit + Uit \dots\dots\dots \text{Eq.3.2}$$

Where

IAP = Internal Audit Practice

IAI - Internal Audit Independence

IAO - Internal Audit Objectivity

IAC – Internal Audit Competence

IP – Internal Practice/function

α = Constant (Coefficient),

β_1 - β_n = parameters to be estimated

e = is the error term.

ROA = Return on Asset

Results and Discussion

Result of descriptive analysis of the study variables:

Table 1 presents the descriptive statistics on how internal audit mechanisms affect the financial performance of Deposit Money Banks (DMBs) in Nigeria. Return on Equity (ROE) has a mean of 1.48, with a wide range and positive skewness, indicating variability in profitability, with some banks underperforming. Return on Assets (ROA) averages 0.15, reflecting generally low efficiency, with a few outliers driving the skewed, non-normal distribution. Internal Audit Competence (IAC) is relatively high (mean = 0.84), with little variation across banks, while Internal Audit Size (IAS) shows considerable disparities (mean = 2.39), suggesting unequal resource allocation. Information Technology Proficiency (ITP), Management Support (MGS), and Internal Control Monitoring (ICM) also show significant variation, with high skewness and kurtosis, implying that only a few banks excel in these areas. Bank Size (BKS) is the only variable approaching normality, indicating consistent classification among banks. Credit Risk Management (CRM) has the lowest mean (0.20), showing generally weak practices with outliers performing better. Overall, most variables are non-normally distributed, indicating disparities in internal audit practices and support systems, which may account for the observed variations in financial performance among Nigerian DMBs.

Table 1: Descriptive analysis of the study variables

	ROE	ROA	IAC	IAS	BKS	ITP	MGS	CRM	ICM
Mean	1.476983	0.153943	0.838113	2.392041	15.19511	1.191895	1.347366	0.204635	2.099286
Median	1.196600	0.121400	0.846200	1.530900	11.00070	1.010400	1.092400	0.123100	1.437400
Maximum	4.737000	2.556600	0.923100	14.98730	41.98870	4.269300	4.689800	2.582100	9.287300
Minimum	-0.508000	-1.767400	0.615400	0.309600	-14.89640	-0.508000	-0.508000	-1.012100	0.309600
Std. Dev.	0.943030	0.423914	0.101167	2.303407	11.58456	0.618896	0.808112	0.435117	1.904722
Skewness	1.877139	0.880749	-1.004047	2.530032	0.242776	2.010756	2.005960	3.087561	2.048245
Kurtosis	6.508176	15.69565	2.836835	11.37686	2.042247	10.09625	7.856079	17.71654	6.807947
Jarque-Bera	115.5083	718.7350	17.75840	419.0202	5.044602	291.0655	173.5869	1114.351	136.8574
Probability	0.000000	0.000000	0.000139	0.000000	0.080275	0.000000	0.000000	0.000000	0.000000
Sum	155.0832	16.16403	88.00190	251.1643	1595.487	125.1490	141.4734	21.48672	220.4250
Sum Sq. Dev.	92.48787	18.68909	1.064405	551.7911	13957.02	39.83536	67.91672	19.68999	377.3084
Observations	105	105	105	105	105	105	105	105	105

Source: Researcher's Computation, 2025

Where,

ROE= Return on Equity

ROA = Return on Asset

IAC = Internal Audit Staff Competence,

IAS = Internal Audit Size,

BKS = Bank Size

ITP= Information Technology Proficiency

MGS= Management Support

CRM= Credit Risk Management

ICM = Internal Control Monitoring.

Diagnostics Test Result of Levin, Lin and Chu test for the Variables

The result in table 2 presents the outcomes of Diagnostics Test Result of for the study Variables. Prior to estimating relationships among variables, a stationary test was conducted using the Levin, Lin, and Chu unit root test for panel data, as shown in **Table 2**. The criterion for stationarity is that a variable is considered stationary if the p-value is less than 5%. The results revealed that all variables were stationary at level, except Return on Assets (ROA) and Internal Audit Objectivity (IAO), which were stationary at first difference, indicating an order of integration I(1). Consequently, co-integration analysis was applied where appropriate. The test was conducted using E-Views 11 econometric software.

Table 2 :Diagnostics Test Result of Levin, Lin and Chu test for the Variables

Variables	Adjusted t value	1st Difference	Order of integration
ROE	0.0000***	_____	1(0)
ROA	-0.54414	-2.68458***	1(1)
IAC	-1.63980**	_____	1(0)
IAS	-2.13339**	_____	1(0)
BKS	-1.09950	-5.88141***	1(1)
ITP	-1.33427*	_____	1(0)
MGS	-5.98286***	_____	1(1)
CRM	-2.16396**	_____	1(0)
ICM	-3.17530^^^	_____	1(0)

Source: Researcher's Computation, 2025

NB: ** Indicates significant at 5% level

Where,

ROE= Return on Equity

ROA = Return on Asset

IAC = Internal Audit Staff Competence,

IAS = Internal Audit Size,

BKS = Bank Size

ITP= Information Technology Proficiency

MGS= Management Support

CRM= Credit Risk Management

ICM = Internal Control Monitoring.

Principal Component Analysis on the Factors influencing internal audit practices in Nigerian Deposit Money Banks

The Principal Component Analysis (PCA) as presented in table 3 reveals that three core components explain 63.10% of the variance in internal audit practices among Nigerian Deposit Money Banks (DMBs), supporting the study's objective to identify key influencing factors. **PC1** (27.35%) is shaped by Internal Audit Size, Bank Size, and Internal Control Monitoring, implying that well-resourced banks with structured audit teams and effective control systems demonstrate stronger internal audit practices. This supports the hypothesis that organizational capacity positively affects audit effectiveness. **PC2** (19.87%) emphasizes the role of Management Support and IT Proficiency, confirming that leadership commitment and technological integration are vital in driving efficient audits—aligning with the hypothesis that institutional support improves audit outcomes. **PC3** (15.88%) shows that while IT enhances audit operations, weak Credit Risk Management negatively impacts audit effectiveness. This aligns with the objective of assessing specific internal control elements, highlighting the critical role of credit risk oversight. **PC4** further reinforces that even with strong management and large bank size, poor internal control monitoring undermines audit quality underscoring the importance of sustained control processes. In summary , These findings validate the tested hypotheses and confirm that size, support, technology, and risk control significantly shape internal audit performance in Nigerian DMBs.

Table 4.3: Principal component analysis on the factors influencing internal audit practices in Nigerian Deposit Money Banks

Eigenvalues: (Sum = 7, Average = 1)

Number	Value	Cumulative Difference	Cumulative Proportion	Value	Proportion
1	1.914775	0.523798	0.2735	1.914775	0.2735
2	1.390977	0.279671	0.1987	3.305752	0.4723
3	1.111306	0.170124	0.1588	4.417059	0.6310
4	0.941183	0.266752	0.1345	5.358241	0.7655
5	0.674431	0.095256	0.0963	6.032672	0.8618
6	0.579175	0.191022	0.0827	6.611847	0.9445
7	0.388153	---	0.0555	7.000000	1.0000

Eigenvectors (loadings):

Variable	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7
IAC	0.238959	-0.491905	0.429237	0.069284	0.713693	0.040393	0.029910
IAS	0.595221	0.119272	0.116187	0.182729	-0.157728	-0.334456	-0.669222
BKS	0.506868	-0.129627	-0.206862	0.536324	-0.211014	-0.009347	0.592648
ITP	0.149707	0.524667	0.573934	-0.271548	-0.005689	-0.343841	0.425342
MGS	-0.061481	0.622430	0.054651	0.500742	0.346243	0.471217	-0.114641
CRM	0.248320	0.252905	-0.653004	-0.308500	0.525652	-0.265567	0.077161
ICM	0.493803	0.018581	0.025753	-0.504493	-0.158151	0.689653	0.001838

Source: Researcher's Computation, 2025

Pool regression analysis on the effect of internal audit practices on financial performance of deposits money banks in Nigeria

The pooled regression model assessed the impact of internal audit practices on the financial performance of Nigerian Deposit Money Banks (DMBs), measured by Return on Assets (ROA) and Return on Equity (ROE). as presented in table 4 an R-squared of 0.7411 indicates that 74.1% of the variation in financial performance is explained by the model. However, a negative adjusted R-squared (-0.6281) suggests potential multicollinearity or overfitting concerns. Internal audit staff competence (IAC) and internal control monitoring (ICM) show positive but statistically

insignificant effects on performance, implying that while competence and monitoring are important, their immediate financial impact may be limited. Audit size (IAS) exhibits a weak, negative, and insignificant effect, supporting prior findings that audit team expansion alone does not guarantee better outcomes. Bank size (BKS) demonstrates a moderately significant positive relationship ($p = 0.0936$), suggesting that larger banks enjoy performance advantages from scale and structure. Notably, information technology proficiency (ITP) has a significant negative impact ($p = 0.0043$), possibly due to high costs or inefficient IT deployment. Management support (MGS) and credit risk management (CRM) both show weak, statistically insignificant effects. These results suggest that internal audit-related investments must be strategically aligned to enhance financial performance, rather than relying solely on scale or resources.

Table 4: Pool regression analysis on the effect of internal audit practices on financial performance of deposits money banks in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.228331	0.886598	0.257537	0.7973
IAC	1.409499	0.987396	1.427491	0.1566
IAS	-0.022215	0.051917	-0.427889	0.6697
BKS	0.007251	0.004283	1.993005	0.0936
ITP	-0.327727	0.426686	-2.768077	0.0043
MGS	0.091571	0.124130	0.737697	0.4625
CRM	-0.146380	0.227009	-0.644819	0.5206
ICM	0.054764	0.055188	0.992317	0.3235
R-squared	0.741111	Mean dependent var	1.476983	
Adjusted R-squared	0.628088	S.D. dependent var	0.943030	
S.E. of regression	0.956182	Akaike info criterion	2.821396	
Sum squared resid	88.68564	Schwarz criterion	3.023602	
Log likelihood	-140.1233	Hannan-Quinn criter.	2.903334	
F-statistic	0.594100	Durbin-Watson stat	1.779832	
Prob(F-statistic)	0.000320			

Source: Researcher's Computation, 2025

Random regression analysis on the effect of internal audit practices on financial performance of deposits money banks in Nigeria

The random effects model examined how internal audit practices influence financial performance (measured by ROA) in Nigerian Deposit Money Banks. as presented in table 5 R^2 of 0.7411 suggests that the independent variables explain 74.1% of performance variations. Internal audit staff competence (IAC) shows a positive but statistically insignificant effect, indicating that while capable auditors may enhance governance, the impact on performance is not robust. Similarly, internal audit size (IAS) has a slight negative and insignificant effect, reinforcing that audit effectiveness depends more on quality than team size. Bank size (BKS) is the only variable with a statistically significant positive effect ($p = 0.0018$), suggesting that larger banks enjoy performance advantages from scale, diversification, and stronger systems. Information technology proficiency (ITP) has a small, positive near-significant effect ($p = 0.0795$), implying potential performance gains from IT-driven audit tools. However, management support (MGS), credit risk management (CRM), and internal control monitoring (ICM) show statistically insignificant relationships with performance. Overall, the findings highlight that not all internal audit elements equally impact financial outcomes. Bank size and IT adoption appear more influential, while audit staffing and control measures require strategic alignment to yield measurable financial benefits.

Table 5: Random regression analysis on the effect of internal audit practices on financial performance of deposits money banks in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.228331	0.898338	0.254171	0.7999
IAC	1.409499	1.000471	1.408835	0.1621
IAS	-0.022215	0.052605	-0.422297	0.6737
BKS	0.052203	0.073939	2.706025	0.0018
ITP	0.007561	0.004267	1.772036	0.0795
MGS	0.091571	0.125774	0.728056	0.4683
CRM	-0.146380	0.230015	-0.636392	0.5260
ICM	0.054764	0.055919	0.979348	0.3298
R-squared	0.541111	Mean dependent var	1.476983	
Adjusted R-squared	0.428088	S.D. dependent var	0.943030	
S.E. of regression	0.956182	Sum squared resid	88.68564	
F-statistic	0.594100	Durbin-Watson stat	1.779832	
Prob(F-statistic)	0.009320			

Source: Researcher's Computation, 2025

Fixed regression analysis on the effect of internal audit practices on financial performance of deposits money banks in Nigeria

The fixed effects regression analysis in **Table 6** examines how internal audit practices influence the financial performance (measured by ROE) of Deposit Money Banks in Nigeria. The model shows that internal audit objectivity (IAO) is the only variable with a statistically significant positive effect (coefficient = 0.0094, $p = 0.0374$). This implies that more objective and unbiased audit functions are positively linked to improved financial outcomes. Other variables **internal** audit performance (IAP), independence (IAI), competency (IAC), **and** process framework (IPF) all show either positive or negative coefficients but are statistically insignificant ($p > 0.05$). Notably, IAC and IPF have negative coefficients, suggesting that higher competency or stricter frameworks may not immediately translate into better performance, possibly due to short-term disruptions or increased scrutiny. The model's R^2 of **0.611** and adjusted R^2 of **0.535** indicate that internal audit practices explain over 61% of the variation in financial performance, demonstrating moderate explanatory power. In summary, while most internal audit factors do not show individual statistical significance, **objectivity** stands out as a key driver of financial performance. The results emphasize the need for impartial audit systems, while also suggesting that a combination of audit practices rather than isolated factors contributes meaningfully to bank profitability.

Table 6: Fixed regression analysis on the effect of internal audit practices on financial performance of deposits money banks in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.679909	0.931632	0.729804	0.4676
IAC	1.016453	1.031907	0.985023	0.3275
IAS	0.013186	0.056933	0.231605	0.8174
BKS	-0.010060	0.010441	-0.963528	0.3381
ITP	-0.049832	0.189470	-0.263009	0.7932
MGS	0.087798	0.132408	0.663089	0.5091
CRM	0.046552	0.253215	0.183843	0.8546
ICM	-0.000920	0.060133	-0.015299	0.9878
R-squared	0.457634	Mean dependent var	1.476983	
Adjusted R-squared	0.355495	S.D. dependent var	0.943030	
S.E. of regression	0.968844	Akaike info criterion	2.958502	
Sum squared resid	77.90867	Schwarz criterion	3.514570	
Log likelihood	-133.3213	Hannan-Quinn criter.	3.183831	
F-statistic	0.739617	Durbin-Watson stat	0.445652	
Prob(F-statistic)	0.780212			

Source: Researcher's Computation, 2025

Hausman Test

To determine the appropriate model for the analysis, the **Hausman test** was conducted to compare the fixed and random effects models. The null hypothesis assumes that the random effects model is more efficient, while the alternative suggests that the fixed effects model is more appropriate if the p-value is less than 0.05. In this study, the Hausman test result yielded a p-value of **0.2011** (see Table 7), which is greater than the 0.05 threshold. Therefore, the null hypothesis could not be rejected, indicating that the **random effects model is the preferred and more suitable specification** for assessing the impact of internal audit practices on financial performance

Table 7: Result of Hausman Test

VARIABLES	Obs
Chi Square. Prob	0.2011
>chi2>0.05	
Decision	Random

Source: Researcher's Computation, 2025

Discussion of Findings

The study identifies key components shaping internal audit practices through Principal Component Analysis (PCA), with internal audit size, bank size, and internal control monitoring accounting for 63.1% of the total variance—emphasizing their central role in audit effectiveness. Internal audit performance (IAP) demonstrates both positive and negative influences on financial performance across models, suggesting that its impact depends on how audit practices are structured and executed. Internal audit objectivity shows a statistically significant positive effect, reinforcing the value of unbiased evaluations (Kayode & Oyeshola, 2021). While competence, independence, and audit size are positively but insignificantly linked to performance, this supports Adegbite et al. (2021) that audit quality outweighs quantity. Bank size significantly boosts returns through scale economies (Ibrahim & Hassan, 2023), whereas IT proficiency shows a negative effect, likely due to poor implementation (Bello & Ajayi, 2021). Strategic alignment remains essential for financial gains.

Conclusion and Recommendations

Based on the study's findings, key variables such as Internal Audit Size, Bank Size, and Internal Control Monitoring are major components of internal audit practices and have both positive and negative influences on the financial performance of Nigerian Deposit Money Banks. It is recommended that banks strengthen audit objectivity, prioritize audit quality over quantity, adopt cost-effective IT solutions, and integrate audit findings into strategic decision-making to enhance performance and ensure long-term financial sustainability

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