



Growing Firms' Financial Performance Through Forensic Auditing: A Study of Nigeria Listed Banks

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Abstract

Forensic auditing in advancing firms' financial performance is key among listed companies in Nigeria; this study attempts to evaluate this relationship over a fifteen-year period, from 2010 to 2024. Precisely the influence of forensic audit quality, forensic audit frequency, and firm size, on returns on assets, which serves as the primary indicator of firms' performance was examined. The collected panel data from the annual reports of selected listed banks in Nigeria were analyzed using multiple regression techniques within a panel data framework, including fixed and random effects models, with model selection guided by the Hausman test. The empirical findings reveal that forensic audit quality and frequency have a significant positive effect on firm financial performance, indicating that firms with higher-quality and more frequent forensic audits tend to achieve better and higher returns on assets. Firm size also shows a significant positive relationship with returns on assets, suggesting that larger firms benefit more from forensic auditing practices. The study concludes that forensic auditing is a valuable tool in enhancing and advancing financial performance, particularly when it is implemented consistently and with high quality. The research recommends that corporate governance structures prioritize forensic auditing practices and invest in training auditors to improve audit quality. This study contributes to the growing body of literature on forensic auditing and provides practical insights for policymakers, regulators, and corporate managers aiming to strengthen financial accountability and transparency in Nigerian firms.

Keywords: Returns on Assets, Forensic Auditing, Financial Performance, Audit Quality, Audit Frequency, Corporate Governance, Nigeria.

JEL Classification: M41, M42

Introduction

Implementing effective security measures and fraud detection systems capable of identifying and preventing even the most sophisticated schemes is crucial. One such measure is forensic auditing, which is primarily applied in both public and private financial sectors due to the steadily increasing incidents of financial and economic fraud. However, fraud is constantly evolving, with new techniques and strategies emerging daily, influenced by changing social behaviors and environmental factors. Being a dedicated and specific technique of auditing centred on exploring and probing fraudulent activities, forensic auditing serves as a veritable tool for fighting financial crimes by providing courts and legal authorities with exhaustive facts and credible evidence that are tenable during legal proceedings and this supports a determination of whether or not fraud has occurred based on legal standards. Similarly referred to as forensic accounting; a practice carried out by forensic auditors, who are Certified Public Accountants (CPAs), trained in applying specific and precise techniques to discover and/or prevent criminal activity within organizations. Alkhalaileh *et al.*, (2024) see forensic audit as involving a meticulous examination and appraisal of a firm's or individual's financial accounts in order to originate proof that are tenable in a court of law or other legal proceedings. Forensic auditing is a specialty within accounting and only called to play when there is suspicion of fraud, embezzlement, or other financial crimes.

While regular audit reviews of financial records are for accuracy, forensic audits are specific and premeditatedly geared towards unearthing fraudulent activities; where in most cases, forensic auditors may serve as expert witnesses in potential court proceedings. Forensic audits help expose illegitimate activities and provide indispensable evidence that admissible to court in issues regarding fraud, embezzlement, or financial statement manipulation. Omucheyi et al (2025) opined that forensic auditors play vital roles in streamlining complex financial issues and justice assured; and that the saga and until the collapse of Enron which resulted the Sarbanes Oxley legislations, brought forensic auditing into public interest which further increase the demand for forensic accounting services.

In the words of Okoye, *et al.*, (2023), Forensic auditing is way beyond the old-fashioned financial audit since it scrutinizes the very nature of business transaction and with a view to detecting likelihood of any asset-theft by means of investigative techniques. Furthermore, Mircheska, *et al.*, (2020) argued that the essence of instituting and standardising robust forensic auditing practices in organizations to protect their economic wealth and discover irregularities effectively has become increasingly recognized globally and that away from simply complying with regulatory obligations, forensic auditing is pivotal to sustaining investors and shareholders trust and safeguarding the ethical values of the business.

In today's fast-paced business environment characterized by incessant monetary fraud risks, according to Awotomilusi and Johnson (2025) organizations ought to practice forensic auditing proactively in a way that detection of fraudulent activities through forensic auditing serves as a restraining mechanism to unscrupulous conduct within organizations. Hence Adekunle (2025) complementarily remarked that the upsurge of corporate scandals and regulatory pressures becomes inevitable, businesses should increasingly recognize and establish robust forensic auditing techniques to protect their economic resources and effectually unearth organisations financial peccadilloes.

Statement of Problem

The role of improving financial reporting through quality auditing by the audit departments has faced significant disparagement and discontentment. The accuracy and objectivity of financial statements usefulness; reflecting a company's condition and performance and subsequent decision-making, believed to be achievable through consistent audits have become derision; the effectiveness of independent audits has diminished over time, especially in light of recurring corporate failures. These shortcomings led to the creation of corporate board independent audit committees to deliver further oversight. Nonetheless, latest credit scandals involving Nigerian corporations have uncovered the frailty and flaws of these committees, casting doubt on their capability to safeguard stakeholders' interests and improve firm performance and this has likewise probed the effectiveness of forensic auditing as a veritable tool for combating fraud (Mosoti, 2025).

The current deluge in financial fraud has not only impacted negatively on Nigeria's image but also underscores the urgent need for stronger measures to curb fraud in the financial sector especially as law enforcement struggles to identify and prosecute offenders. Globally, corporate fraud is growing, as evident in widespread cases of bribery, corruption, embezzlement, money laundering, racketeering, false reporting, tax evasion, and forgery. Major accounting scandals, such as those involving Enron and WorldCom, have already brought about major changes in the accounting field. In response, forensic accounting has emerged, representing a new wave of professionals focused on fraud detection and prevention.

The growing trend of financial misdemeanors (frauds) in today's business poses a high risk to old-fashioned auditing practices coupled with the rise of ICT and internet access which has made it easier and faster to commit financial crimes which are harder to detect or prevent (Orji & Obua, 2025). Notwithstanding, Aina et al, (2025) posit that statutory audits intended to stimulate accountability and prevent fraud, especially in sectors like banking, have failed to instill public confidence and this has emphasized the statutory auditing's inactive and unreceptive role in resolving and tackling corruption and fraud. The central issue identified by this research is that conventional auditing has proven largely ineffective in preventing fraud and financial crimes within Nigeria's banking sector. (Orji & Obua, 2025)

Objectives of the Study

The main objective of this study is to evaluate the influence of forensic auditing on the financial performance of Nigeria listed banks.

Specifically, the study aims to:

1. To assess how forensic audit quality influence the growing of financial performance of listed banks in Nigeria.
2. To analyze the impact of forensic audit frequency in growing financial performance of listed banks in Nigeria.

Conceptual Review

Financial Performance

Firm performance is a complex concept that encompasses all aspects of a company's processes and procedures (Mosoti, 2025). It is a metrics that show companies capacity in utilizing its resources to generate profits and attain its goals (financial and non-financial). It is commonly measured using key financial indicators such as Returns on Assets (ROA),

Returns on Equity (ROE), net profit margin, etc. to assess the profitability, operational efficiency, and financial stability of organisations. The contemporary competitive business landscape demands high and sustainable performance achieved through unrelenting efforts aimed at sustainable growth, operational efficiency, and value creation for stakeholders. Firm performance reflects how effectively a company manages operations, and generates value for employees, customers, investors, and the broader community. Kaoje, *et al.*, (2020) posit that companies performance is key in determining its reputation and market share in its industry; as such, incessant performance monitoring, and identifying areas for improvement as well as taking proactive practical steps to improve overall effectiveness are essential for corporations.

Besides financial metrics, non-financial metrics also play essential role in evaluating performance (Dada, *et al.*, 2023). Non-financial metrics such as market share, brand reputation, customer satisfaction, and innovation capabilities are important. While financial metrics provide measurable insights into financial performance, the non-financial aspects offer a broader strategic viewpoint (Mosoti, 2025). Thus, a high profitability ratio might indicate strong financial performance, however it may not reveal long-term sustainability of it results from cost-cutting or unsustainable practices angle.

Returns on Assets (ROA)

The connection between returns on assets (ROA) and firm performance is well-documented in financial analysis. ROA is calculated by dividing net income with total assets to determine every Naira (profit) generated from assets (Mosoti *et al.*, 2022). A positive ROA generally correlates with strong financial indicators, like Net Profit Margin (NPM) and Return on Equity (ROE). A high ROA indicates effective asset management and operational efficiency, which positively influences overall performance (profitability) while a declining ROA suggests potential inefficiencies in deploying companies' assets (resources) which negatively impact the bank's financial health. These issues have been evident in the performance of commercial banks, particularly during periods of regulatory scrutiny and financial restatements (Boniface, 2024).

Forensic Auditing

Ajayi, (2022) defined the term "Forensic" as the application of systematic methods, techniques and procedures to investigate crime to obtain forensic evidence through detection of crime liable to prosecution while Adesina, *et al.*, (2020) saw forensic auditing as a technique requiring exhaustive investigation through spotting and halting fraudulent activities, and providing assistance (tenable evidences) for legal proceedings in court. Forensic auditing is being a specialty and branch of auditing incorporates accounting, investigative techniques, and financial crime analysis to detect fraudulent activities and improve corporate transparency (Afriyie, *et al.*, 2022; Okoye, *et al.*, 2019).

Forensic auditing is an essential instrument in boosting corporate transparency, standardizing and strengthening internal controls, and supporting the integrity of financial institutions. The combination of cutting-edge forensic practices and regulatory compliance frameworks not only helps organizations mitigate financial risks but also ensures accountability in corporate financial reporting (Okafor, *et al.*, 2025).

Forensic Audit Quality

Forensic Audit quality as explained by Hu, *et al.*, (2023) is the likelihood that a forensic auditor will both detect material misstatements in the financial statements and report them appropriately with a view to supporting litigation. It reflects the rigor and reliability of the forensic investigation process. The quality of an audit is directly related to an auditor's ability to detect accounting misstatements and their independence, as evaluated by the market. Audit quality reflects an auditor's ability to uncover and report financial irregularities, and maintaining high quality is essential for promoting transparency, ensuring compliance with accounting standards, and bolstering stakeholder and investor trust especially in the banking sector.

Nejad *et al.* (2024) emphasized that audit quality is a key factor in maintaining a company's financial performance. An objective, high-quality audit is vital for building trust in the integrity and credibility of financial reports, which is crucial for the proper functioning of markets and for enhancing financial performance. Thus, in the authors' opinion, forensic audit quality involves the capability of a forensic auditor to detect fraud (intentional material misstatement) in financial statement leading restatement.

Forensic Audit Frequency

Kelechi, *et al* (2025) reported that audit frequency refers to how often forensic audits are conducted within a specific time frame. Conducting audits frequently is vital for monitoring financial activities, identifying fraud, and ensuring regulatory compliance. Regular forensic audits help strengthen internal controls, prevent fraudulent behavior, and promote a culture of accountability and operational efficiency and this proactive strategy does not only protects assets but also improves financial performance metrics, such as returns on assets, and shareholders value; thus suggesting that frequent forensic audits serve as a strategic approach to fight fraud and improve financial health by significantly improving both the quality of bank assets and the overall performance of banks (Efenyumi & Obaro, 2025).

Conceptual Framework

This study's conceptualized that a strong statistical link exists between the independent variable (Forensic Auditing) proxied with forensic audit quality (FAQ) and forensic audit frequency (FAF) and the dependent variable (Financial Performance) measured by Returns on Assets (ROA) as depicted below:

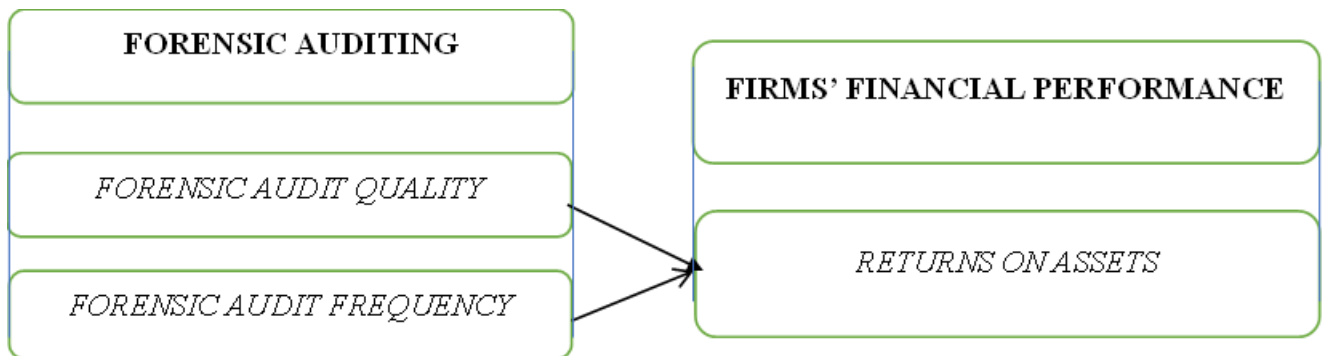


Figure 1: Conceptual Framework
Source: Author's Conceptualization (2025)

Theoretical Review

The Panopticism and the Agency theories formed the basis of theoretical review for this study.

Foucaultian Theory of Panopticism

The Panopticism theory was proposed by Jeremy Bentham in 1799 and subsequently advanced by Michel Foucault in 1975 in his work *Discipline and Punish*. It centred on constantly observing workers without them knowing whether they were being watched; interpreting it as social machinery where punitive power shapes conduct through the perception of constant observation. With this understanding, individuals control their own behavior because they anticipate that they are being monitored, even if direct observation does not occur. The individuals tend to act appropriately with the mere possibility of surveillance conditions thus underplaying disciplinary measures as superfluous. The theory underscores control as being internalized, creating self-regulation through awareness of potential observation. This theory underpins that when employees, as well as management and accountants, are uncertain of when and how they are being observed, they will regulate their behavior to avoid wrongdoing.

According to Mosoti (2025), this assumption implies that in organizational contexts, monitoring mechanisms encourage ethical behaviour, reduce financial anomalies, and ultimately improve financial performance. Through the perception of oversight and subsequent conditioning of behavior, firms can prevent, detect, and mitigate fraudulent activities while enhancing accountability.

Surveillance facilitates preventive measure as a detective tool, and a means of fostering self-discipline and public trust which serves as a deterrent. The consciousness of being monitored influences employees' behavior and reducing the possibility of involvement in financial misconduct. Accordingly, Panopticism theory underpins the application of fraud risk management within organizations, particularly in the Banking sector, by guiding strategies for monitoring and controlling activities to enhance financial performance (Mosoti, 2025).

Despite criticism, the theory nonetheless remains pertinent for understanding organizational approaches to fraud prevention and control. To this end, forensic auditors, need to judge the personal attributes of employees that may pose fraud risks by designing effective control strategies and ensure thorough oversight to safeguard organizational resources; and ultimately combatting fraud and improving performance in Nigeria listed banks is contingent on forensic investigators proactive risk-detecting skills and sound control practices capabilities.

Agency Theory

Agency theory proposes invaluable organizational behavioural insights on the principal-agent dynamic and in the context of deposit money banks, the shareholders and the principals, their focus is mainly on maximizing returns whereas the managers and the agents, may engage in risky ventures prioritizing their own gain over the shareholders and the principals interest. The key proposition of this theory hinges on developing strategies to align these divergent-interests and considering the banking sector, this could involve executive compensation systems, clear performance benchmarks etc. targeted at enhancing shareholders value in that its success has a direct impact on the financial performance and market valuation of banks (Dada, *et al.*, 2023).

Forensic auditing is pivotal within this theoretical context; as a monitoring tool that mitigates agency conflicts when effective governance mechanisms such as forensic audit is implemented, it helps lessen agency costs accompanying managerial self-interest, bolster and sustain investors' confidence, and improve corporate performance especially among listed banks and this reflects lower perceived risks and improved financial performance.

Empirical Review

The study of Enofe, et al., (2019) concluded that a significant negative correlation between forensic auditing and corporate fraud incidents and that organisations implementing forensic auditing practices experience fewer cases of corporate financial fraud and reduced fraudulent activities. In another development, Alao and Odum (2019) studied the role of forensic auditing in fraud detection within Nigeria's banking industry and their research found that banks utilizing forensic auditing practices reported lower occurrences of financial fraud indicating that forensic auditing significantly contributes to fraud prevention in the banking sector leading to the conclusion that implementing comprehensive forensic auditing procedures does not only boost fraud detection mechanisms, create and protect banks financial assets, but also help maintain customer and stakeholder confidence.

While Boniface, (2024) examining the influence of forensic auditing on organizational performance in Nigeria, specifically focusing on Nigeria Breweries Plc reported that auditors' independence does not have a significant effect on ROA at Nigeria Breweries Plc, whereas auditors' size does have a meaningful impact but auditors' remuneration showed no significant correlation with ROA; the earlier works of Mvunabandi (2023) which analyzed the impact of forensic audit services on fraud detection in south Africa found a positive relationship between forensic auditing and fraud detection. The findings buttress the role of forensic auditing in enhancing financial transparency and accountability while reducing fraudulent activities among commercial banks in Kenya and this position was corroborated by Alkhalailah *et al.*, (2024). Eguando (2024) examined forensic investigation dynamics and financial reporting fraud beverage companies in Nigeria and the findings revealed that forensic investigations have a profound impact on detecting, addressing, and preventing fraud in financial statements.

While forensic auditing is relatively new in Nigeria, company directors have progressively recognized the needs for forensic auditors as financial fraud incidence is growing and from the reviewed literature, it is clear that limited research has been conducted to evaluate how forensic auditing (proxies, such as forensic audit quality and forensic audit frequency) could grow firm financial performance specifically using returns on assets as a measure among Nigeria listed banks particularly the recent period of 2010 to 2024. This highlighted gap in the literature necessitates this pragmatic inquiry. Following from the above, we therefore hypothesized that:

H₀₁: Forensic Audit Quality does not significantly effect the growing of financial performance of listed banks in Nigeria.

H₀₂: Forensic Audit Frequency does not significantly effect the growing of financial performance of listed banks in Nigeria.

Methodology

This study adopted the Ex-post-facto research design because the research relied on historical data generated from annual reports and accounts of Listed Banks in Nigeria from 2010 to 2024 (15 years). The population of the study consists of all the listed companies in the financial service sector on the floor of the Nigerian Exchange Group as at 31st December, 2024. Justifiably, availability, accuracy and the sensitivity of the data is very crucial for studies of this nature; hence the researcher systematically selected and reviewed only companies with updated financial statements whose listing status as at 31st December, 2024 were still active and have not been delisted within the period under review. A systematic elimination and stage wise sampling method that is purposive in nature was adopted. Companies were therefore sampled if they meet the following selection criteria:

1. The company stocks must be actively traded on the floor of the Nigerian Exchange Group within the study period.
2. Delisted companies whose stocks have been suspended from active trading within the period are ineligible.
3. The company must have published accounts up-till-date (December, 2024).

Out of the 13 listed banks, 2 did not meet the condition number 3 and were excluded. Therefore, 11 companies comprised the sampled for this study.

Dimension of Variables

Variables	Metrics	Abbrv	Measurement
Dependent Variable	Returns on Assets	ROA	Net Income for each year divided by the Total Assets multiplied by 100 %.
Independent Variables	Forensic Audit Quality	FAQ	Detection of material misstatements or fraud leading to restatement of financial report. (1 if prior earnings are restated in current years, 0 if otherwise).
	Forensic Audit Frequency	FAF	Categories of detected fraud (Number) in a year within the period under review.
Control Variable	Firm Size	FMZ	Natural logarithm of firm's total assets.

Source: Researcher's Compilation, 2025

Model Specification

In line with the above speculated hypothesis, a regression model will be developed to test the relationship between forensic auditing and the firm's financial performance. The regression model is specified implicitly as follows:

$$FP = f(\text{Forensic audit quality} + \text{Forensic audit frequency} + \text{Control Variable}) + \epsilon \dots\dots\dots \text{Eqn 1}$$

$$ROA_{it} = \beta_0 + \beta_1FAQ_{it} + \beta_2FMZ_{it} + \epsilon_t \dots\dots\dots \text{Model 1}$$

$$ROA_{it} = \beta_0 + \beta_1FAF_{it} + \beta_2FMZ_{it} + \epsilon_t \dots\dots\dots \text{Model 2}$$

Where:

- FP = Firm's financial performance (Measured by Returns on Assets - ROA).
- FAQ = Forensic Audit Quality (Measured as the number of categories of detected material misstatement or fraud per year.)
- FAF = Forensic Audit Frequency (Measured as the frequency or number of detected fraud cases per year).
- FMS = Firm Size (Measured as natural logarithm of firm's total asset per year)
- β_0 = Intercept term
- β_1 - β_2 = Coefficients to be estimated (These represent the impact of each independent variable on firm performance).
- ϵ = Error term (Represents other factors affecting firm performance that are not included in the model).

Results and Discussion

This section dealt with the presentation of data obtained in the study. For this purpose, company specific data were obtained for the period 2015 - 2024. The data obtained from the financial statements of the sampled companies were analysed and results from the analyses are presented in tabular forms in the following sections.

Descriptive Statistics

The results of the descriptive statistics of the variables are presented in Table 1 below:

Table 1: Summary of Descriptive Statistics of the Variables of the Study

stats	npm	faq	faf	fms	acs
mean	19.97694	2.763636	7255.118	22.02095	5.763636
sd	13.48288	2.622861	52837.09	1.039543	.634299
skewness	.7625727	.360183	10.17506	.204608	.2365252
kurtosis	2.815857	1.898213	105.6523	2.691322	3.726216
max	59.13553	9	553356	24.49148	8
min	.6445323	0	0	19.77691	4
N	110	110	110	110	110

Source: Researcher's Computation from STATA 13.0 Version, 2018.

Table 1 shows the summary of descriptive statistics of the variables of concern in this study. The dependent variable (Firm Performance) is measured by Net Profit Margin (NPM) while the independent variables, Forensic Audit Quality (FAQ) and Forensic Audit Frequency (FAF) are measured by the number of categories of detected material misstatement or fraud per year and the frequency or number of detected fraud cases per year respectively. In this study, two control variables, firm size (FMS) and Audit Committee Size (ACS) are measured as the natural log of total assets and the numbers of audit committee members per year respectively were however introduced. As evidenced from the results in Table 1, it was observed that NPM recorded a mean and standard deviation of 19.97694 and 13.48288 respectively. Note that while the mean explains the average amount of values recorded for the data on each variable, the standard deviation (sd) measures the level of variability of the data. The minimum and maximum values reported during the period under review for NPM were 0.645 and 59.136. The highest amount of NPM of 59.136 was recorded by Zenith bank in 2023.

In a similar vein, the result of the descriptive statistics for the independent variable alongside the control variable was presented in Table 1. Accordingly, from the result, we observe that FAQ recorded a mean and standard deviation of 2.763636 and 2.622861, with maximum and minimum values of 0 and 9 respectively revealing the highest categories detected fraud was recorded by Ecobank in 2016 while FAF recorded a mean and standard deviation of 7255.118 and 52837.09, with maximum and minimum values of 0 and 553,356 respectively revealing the highest frequency or number detected fraud cases was recorded by United Bank For Africa in 2023.

With respect to the control variables (FMS and ACS), it could be observed that the FMS and ACS had a low standard deviation of 1.039545 and 0.2365252. The recorded figures for maximum/(minimum) values for FMS and ACS were 24.49148/(19.77691) and 8/(4) respectively. The largest value of 24.49148 for firm size was found in the books of Ecobank in 2024, while the minimum value of 19.77691 was recorded by Wema bank in 2017 while the highest/lowest number (8/4) of audit committee members are found in annual report of Zenith bank in 2016 and Ecobank in 2018 respectively. The skewness which measures the asymmetry in the series has values above 0 in all cases (dependent and independent variables) which indicate that the series is skewed to the right. The Kurtosis which measures the asymmetry within the series also indicates that the NPM, FAQ, FAF, FMA and ACS satisfy this condition.

Analysis of Data

Correlation Analysis

The results of the correlation analysis usually present ranges of numbers with designated signs that helps to tell the direction of relationship between pairs of variables under investigation. Noteworthy, where a pair of independent and/or control variables obtains coefficient of 0.8 and above, it is a sign of the presence of multicollinearity among the data set for such variables (Efenyumi, et al., 2022).

With the above in mind, the data obtained for all the variables were subjected to a correlation analysis and the result is shown in the table below:

Table 1.2. Result of Correlation Analysis

	npm	faq	faf	fms	acs
npm	1.0000				
faq	0.1184	1.0000			
faf	0.2955	0.2283	1.0000		
fms	0.5042	0.2542	0.1967	1.0000	
acs	-0.1233	-0.0504	0.0142	-0.3323	1.0000

Source: Researcher's Computation from STATA 13.0 Version, 2018.

Table 1.2 presents the correlation matrix for the entire variable set. As indicated above, the explanatory variables, FAQ and FAF had positive relationship with measures of the dependent variable NPM. In a similar vein, one of the control variable (FMS) also had positive relationship with measures of the dependent variable, NPM while the other had negative relationship with measures of the dependent variable, NPM. The correlation coefficient (Pearson *R*) between FAQ and FAF and measures of the dependent variable NPM are 0.1184, and 0.2955 respectively. It could be observed that the correlation coefficients between the independent variables FAQ and FAF) and one of the control variables (FMS) are positive (0.2542 and 0.1967) and the other control variable (ACS) has negative (0.0504) and positive (0.0142) with the independent variables FAQ and FAF, thus indicating a negative and positive relationship with each of them.

A further cursory look at the results in Table 1.2 indicated that with the coefficient between the independent variables (FAQ and FAF) and the control variables (FMS and ACS), signals of the existence of multicollinearity could not be spotted since the highest value of 0.5042 is not above the benchmark of about 0.80. We thus argue that the explanatory

variables used in this study do not have issues of multicollinearity. To confirm this assertion, the variables were subjected to multicollinearity test and the results are as shown in Table 1.3 below:

Result of Multicollinearity Test Using VIF

This section reports the result of the test for the presence or otherwise of multicollinearity among the independent variables. To achieve this, the Variance Inflation Factor (VIF) test was conducted and the result is hereafter presented.

Table 1.3: Variance Inflation Factor Results for Independent Variables

Variable	VIF	1/VIF
fms	1.23	0.810246
acs	1.13	0.882556
faq	1.11	0.901853
faf	1.09	0.921311
Mean VIF	1.14	

Source: Researcher's Computation from STATA 13.0 Version, 2018.

From Table 1.3, the range of VIF for the explanatory variables did not exceed the standardized VIF level ($1.14 < 10.00$), suggesting the absence of multicollinearity among the explanatory variables. This result therefore confirms that the models in this study are fit.

Result of the Test of Heteroscedasticity

To further confirm the fitness of the models in this study, the data were also subjected to tests for heteroscedasticity using the Breusch-Pagan/Cook Weisberg Test and the result is presented in Table 1.4.

Table 1.4: Result for Breusch-Pagan/Cook Weisberg Test

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Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of npm

      chi2(1)      =      1.90
      Prob > chi2  =      0.1679

```

Source: Author's Computation from STATA 13.0 Version, 2018.

As evident in Table 1.4, the $\chi^2(1)$ of the fitted values for the variables is 1.90 with a p-value of 0.1679. This result thus confirms the absence of heteroscedasticity problem in the data set. With the above results, the OLS regression outcome in the subsequent section of this report can be relied upon.

Panel Unit Root Test

Before the data of this study were used to estimate the specified models, they were subjected to panel data stationarity tests. This was done in a bid to establishing if their variances and covariances were relatively constant over the study period. The condition of covariance stationarity is a necessary requirement for determining the ability of the specified models to estimate the relationship between the variables of concern in this study. In this regard, several optional available tests like the Harris-Tzavallis test, and Hadri-LM stationarity test were employed. The result of the panel unit root test is shown in the table below:

Table 1.5 Summary of Panel Unit Root Test Result

Level for NPM		
	Stationarity	Probability
Harris Tzavalis	0.2215	0.0000
Hadri LM	4.7525	0.0000
Level for FAQ		
	Stationarity	Probability
Harris Tzavalis	0.5436	0.0135
Hadri LM	8.0207	0.0000
Level for FAF		
	Stationarity	Probability
Harris Tzavalis	-0.0692	0.0000
Hadri LM	1.4159	0.0784
Level for FMS		
	Stationarity	Probability
Harris Tzavalis	1.1800	1.0000
Hadri LM	14.3983	0.0000
Level for ACS		
	Stationarity	Probability
Harris Tzavalis	0.5000	0.0031
Hadri LM	7.3050	0.0000

Source: Researcher's Computation from STATA 13.0 Version, 2018.

The result for the panel unit root test for all the variables indicate that all the variables were stationary at level. Thus, all the variables are integrated at level which permits the estimation of the models in this study. As a result of the foregoing, the result of the Ordinary Least Square (OLS) regression analysis served as the basis for our Test of Hypothesis 1 and 2.

Test of Hypothesis

Analysis of Ordinary Least Square (OLS) Results

In this study, OLS results were used to ascertain if there is any significant relationship between the independent variable and measures of the dependent variable of the selected firms during the period 2015-2024.

Table 1.6: OLS Result for Firm Performance (NPM) and Forensic Auditing (FAQ and FAF)

Source	SS	df	MS	Number of obs = 110		
Model	5897.89224	4	1474.47306	F(4, 105) =	11.12	
Residual	13917.0017	105	132.542873	Prob > F =	0.0000	
Total	19814.8939	109	181.788017	R-squared =	0.2976	
				Adj R-squared =	0.2709	
				Root MSE =	11.513	

npm	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
faq	-.2666989	.4427125	-0.60	0.548	-1.144516	.6111183
faf	.0000539	.0000217	2.48	0.015	.0000108	.000097
fms	6.314296	1.178457	5.36	0.000	3.977633	8.65096
acs	.6988574	1.850545	0.38	0.706	-2.970432	4.368147
_cons	-122.7515	31.00777	-3.96	0.000	-184.2342	-61.26887

Source: Researcher's Computation from STATA 13.0 Version, 2018.

In Table 1.6, we presented the OLS result and it was observed that the values of the R-squared and adjusted R-squared were 0.2976 and 0.2709 respectively. This indicates that the independent variables (FAQ and FAF) explain about 27.09% of the systematic variation of the dependent variable (NPM) in the model for the sampled period (2015-2024). The F-statistics (df=4, 105, = 11.12) with a p-value of 0.0000 shows that the result is significant at 5 percent level, suggesting

that Forensic Audit Quality (FAQ) and Forensic Audit Frequency (FAF) appear to have a significant influence on Firm Performance (NPM) of firms and was statistically significant at 5%.

Discussion of Findings

The results from both the descriptive and inferential statistics via the Ordinary Least Square (OLS), the results have some insightful revelations. From the result of the descriptive statistics, we observe from Table 1.1 that NPM recorded a mean and standard deviation of 19.97694 and 13.48288 respectively. It was further observed that FAQ recorded a mean and standard deviation of 2.763636 and 2.622861, with maximum and minimum values of 0 and 9 respectively revealing the highest categories detected fraud was recorded by Ecobank in 2016 while FAF recorded a mean and standard deviation of 7255.118 and 52837.09, with maximum and minimum values of 0 and 553,356 respectively revealing the highest frequency or number detected fraud cases was recorded by United Bank For Africa in 2023.

The relative level of dispersion recorded for this variable could be accounted for by the nature of the Forensic Audit Quality (FAQ) and Forensic Audit Frequency (FAF) recorded by the different firms which to some extent could be accounted for by the size or nature of their businesses and the number of audit committee members. The results for skewness and kurtosis which measures the asymmetry in, and within the series had values above 0 in all cases (dependent and independent variables) which indicate that the data for the series were skewed to the right.

Additionally, the results of the correlation analysis indicated that the explanatory variables, FAQ and FAF had positive relationship with measures of the dependent variable (NPM). In a similar vein, one of the control variables (FMS) also had positive relationship with measures of the dependent variable, NPM while the other had negative relationship with measures of the dependent variable, NPM. The results of the correlation matrix also proved that there were no signs of the presence of multicollinearity among the dataset for this study. This position was further confirmed by the result of the heteroscedasticity test along with the test for multicollinearity.

With respect to the test of hypotheses 1 and 2, it was observed from the results presented in Table 1.6 that the output of OLS presents smaller beta coefficient in absolute terms for NPM than that reported for FAQ (-0.2666989), FAF (0.0000539), FMS (6.314296) and ACS (0.6988574). Judging further from the OLS result, the coefficient of NPM is -122.7515 with a t-value of -3.96. This study argued that on the basis of the test of hypothesis using the OLS result where F test, $F(4, 105)=11.12$, and $\text{Prob} > F = 0.0000$, the null hypotheses that there is no significant relationship between forensic audit quality and the profitability of firms in the financial services sector of the Nigerian Exchange Group (NGX) and that Forensic audit frequency has no significant impact on the financial performance of firms in the financial services sector of the Nigerian Exchange Group (NGX) are hereby rejected and the alternative hypotheses are accepted.

The rejection of the null hypothesis led to the conclusion that both Forensic Audit Quality (FAQ) and Forensic Audit Frequency (FAF) have significant relationship with the Net Profit Margin (NPM) of selected listed Banks in Nigerian Exchange Group (NXG).

Conclusion

This study investigated the effect of forensic auditing on firm financial performance, using net profit margin (NPM) as a proxy for financial performance, while forensic audit quality (FAQ) and forensic audit frequency (FAF) were proxies for forensic auditing. Additional control variables—firm size (FMS) and audit committee size (ACS)—were also considered.

The analysis spanned data from 2015 to 2024 and applied various statistical tools including descriptive statistics, correlation analysis, multicollinearity tests (VIF), heteroscedasticity tests (Breusch-Pagan/Cook-Weisberg), and panel unit root tests (Harris-Tzavalis and Hadri LM). The results demonstrated the absence of data irregularities such as multicollinearity or heteroscedasticity, thereby validating the reliability of the regression models.

The findings from the Ordinary Least Squares (OLS) regression analysis indicated that forensic audit quality (FAQ) and forensic audit frequency (FAF) both exhibit a positive relationship with firm performance, as measured by net profit margin (NPM). However, while FAF demonstrated a stronger positive and statistically significant relationship, FAQ's influence was weaker, albeit still positive. This supports the notion that effective and frequent forensic audit practices enhance the financial well-being of the listed financial firms

Furthermore, the control variables—firm size (FMS) and audit committee size (ACS)—were also examined. Firm size showed a positive influence on performance, suggesting that larger firms may benefit more from forensic auditing due to better resources and internal structures. Conversely, audit committee size had a negative relationship with performance, which may imply issues such as inefficiency or lack of expertise in larger audit committees.

In conclusion, the study affirms that the implementation of effective forensic auditing mechanisms can contribute to improved financial performance in the financial service sector and that high-quality forensic audits that detect more

material misstatements, and the frequency of conducting such audits, are valuable tools for improving profitability and fostering financial discipline within firms.

Recommendations

Based on the findings, the following recommendations are proposed:

1. Strengthen Forensic Audit Practices: Firms should invest in enhancing the quality of forensic audits by engaging skilled forensic auditors, utilizing modern investigative tools, and regularly updating their fraud detection techniques.
2. Increase Audit Frequency: More frequent forensic audits should be conducted, particularly in sectors prone to fraud and misstatement, as this appears to positively impact profitability and transparency.
3. Optimize Audit Committee Composition: While the audit committee is essential, firms should prioritize the competence of its members over size. Expertise in forensic accounting and internal controls should be considered during composition.
4. Encourage Regulatory Oversight: Regulatory bodies should issue guidelines mandating periodic forensic audits for firms in high-risk sectors, ensuring adherence to best practices and corporate governance.
5. Integrate Forensic Audits with Risk Management: Firms should treat forensic auditing as a critical component of enterprise risk management to proactively prevent fraud and enhance financial performance.

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