

Effects of Forensic Audit on Fraud Detection in the Nigerian Banking Sector

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Abstract

This study assessed the effects of forensic audit on fraud detection in the Nigerian banking sector. The objective of the study is to assess whether forensic audit affects fraud detection. Field survey was adopted as a research design for this study. Data was sourced from both primary sources (questionnaire and interview) and secondary sources (textbooks, journals & internet). A sample of 10 respondents from 10 banks in Yola totaling 100 was taken from the population. Regression was used in testing the hypothesis through the use of Statistical Package for Social Sciences (SPSS). Findings from the study revealed that forensic audit has a significant effect on fraud detection by virtue of the analysis showing an R square value of 0.795 (i.e 79.5% approx.). The study recommends that the managements of deposit money banks should undertake regular forensic audits of their operations in order to effectively detect fraud that is currently bedeviling the Nigerian financial sector.

Keywords: Forensic, audit, fraud detection, financial crime, banking sector.

Introduction

Fraud is an endemic that is gradually becoming a normal way of life in both public and private sectors, from the presidential cabinets, down to the political officer, to the ward councilors, from managing directors of companies, through middle management cadre and to lower managers in Nigeria (Gbegi and Adebisi, 2014). Financial fraud has for long been categorized as a menace that led to the collapse of many reputable institutions in the world which include Enron, Bernie Madoff scandals, WorldCom, Lehman Brothers, Tyco International Ltd, and Adelphia Communications Corporation in the USA, Parmalat crises in Italy and HIH Insurance Ltd in Australia. In Nigeria, the cases of Cadbury Nigeria Plc; Afribank Nigeria Plc, NAMPAK, Oceanic Bank Nigeria Plc, and African Petroleum Plc were relatively caused by massive fraud (Sule, Ibrahim, & Sani, 2019). Despite the several legislations put in place to reduce, alleviate and if possible, eliminate the occurrence and incidences of fraud, it is worrisome that incidences of fraud have become so widespread that it is fast assuming an epidemic proportion in the Nigerian banking sector.

In fact, fraud has become a daily occurrence in Nigerian banks. Dhar and Sarkar (2010) define forensic accounting as the application of accounting concepts and techniques to legal problems. It demands reporting, where accountability of the fraud is established and the report is considered as evidence in the court of law or in administrative proceedings.

Forensic audit is the tripartite practice of utilizing accounting, auditing and investigative skills to assist in legal matters. It is a specialized field of accounting that describes engagements that result from actual or anticipated disputes or litigation. Forensic audit can, therefore, be seen as an aspect of accounting that is suitable for legal review and offering the highest level of assurance (Apostolou, Hassell & Webber, 2000).

Statement of the Problem

Ojaide (2000) notes that there is an alarming increase in the number of fraud and fraudulent activities in Nigeria, and this requires the visibility of forensic audit services. According to the Centre for Forensic Studies (2010) report, the increasing need for forensic and investigative accounting in the banking sector results from the complexities of modern-day banking with large volume of complex data. This makes it difficult to monitor transactions by applying manual audit processes. This in turn makes the control utility of auditing ineffective. Virtually all the weaknesses and challenges identified in the banking industry in Nigeria's post-consolidation, and criminal investigations and prosecutions arising from them, are issues for forensic audit. Hence, Modugu and Anyaduba (2013) conclude that the general expectation is that forensic audit may offer some respite to the seeming vulnerability of conventional accounting and audit systems to financial fraud.

According to Abdulrahman (2019), financial related fraud and increase in financial crime has led to the need of forensic audit in order to aid investigation and prosecution of the syndicates of financial crimes just like in the case of some prominent political parties ex-governors in Nigeria are presently facing trials on money laundering, embezzlement, misappropriation of funds, security fraud, breach of contract from different court of laws within the country and many more including some public civil servants that converted public treasury as personal assets to their pockets, hence there is the need for a comprehensive study to find out if there is a significant relationship between forensic audit and fraud detection in the Nigerian banking sector.

Objectives of the Study

This study is aimed at determining:

- i. Whether forensic audit affects fraud detection in the Nigerian banking sector.
- ii. The extent of the relationship between forensic audit and fraud detection in the Nigerian banking sector.

Research Questions

- i. Does forensic audit affect fraud detection in the Nigerian banking sector?
- ii. What is the extent of the relationship between forensic audit and fraud detection in the Nigerian banking sector?

Literature Review

Conceptual Framework

In this study, the conceptual framework is focused on how forensic audit affects fraud detection in the Nigerian banking sector. Forensic Audit is primarily concerned with fraud detection and resolution of such allegations and assisting in the prevention of fraud.

Forensic Audit

Ehioghiren and Atu (2016) opined that forensic audit encompasses three major areas, investigation, dispute resolution and litigation support. Forensic audit has been identified as tool in detecting and implementation of white-collar Investigations. Degboro and Olofinsola (2007) described forensic audit as the application of criminalist methods, and integration of accounting investigative activities and law procedures to detect and investigate financial crimes and related accounting misdeeds. According to Enofe, Agbonkpolor and Edebiri, (2015), forensic accountants play a role in litigation support services in the public sector and are relevant in documentation and reporting. It was

observed that forensic audit plays a significant role in curbing crime and corrupt practices in any public sector since it provides a mechanism to hold people accountable, such that those who manage resources in a fiduciary capacity do not easily abuse that trust without detection. Gbegi and Adebisi, (2014) observed that the forensic audit skills and techniques could help to investigate fraud occurrence since the external auditors do not or may not have the required training to be able to tackle modern frauds like white collar crimes such as security fraud, embezzlement, bankruptcy, contract disputes, and possible criminal financial transactions.

A forensic audit is an examination and evaluation of a firm's or individual's financial records. During a forensic audit, an auditor seeks to derive evidence that could potentially be used in court. A forensic audit is used to uncover criminal behavior such as fraud or embezzlement. Forensic audits cover a large spectrum of investigative activities. There may be a forensic audit to prosecute a party for fraud, embezzlement or other financial crimes. The auditor may be called in during the process of a forensic audit to serve as an expert witness during trial proceedings. Forensic audits could also include situations that do not involve financial fraud, such as bankruptcy filing disputes, closures of businesses, and divorces. Forensic audit investigations may expose, or confirm, various kinds of illegal activities. Normally, instead of a normal audit, a forensic audit is used if there is a possibility that the evidence gathered would be used in court.

The forensic audit process is similar to a traditional financial audit — planning, gathering evidence, and writing a report — with the additional step of a possible appearance in court. The lawyers on both sides offer evidence that the crime is either discovered or disproved, which decides the harm sustained. They explain their conclusions to the defendant should the case go to trial before the judge.

Forensic accounting is the tripartite practice of utilizing accounting, auditing and investigative skills to assist in legal matters. It is a specialized field of accounting that describes engagements that result from actual or anticipated disputes or litigation. Forensic accounting can, therefore, be seen as an aspect of accounting that is suitable for legal review and offering the highest level of assurance (Apostolou, Hassell, and Webber, 2000).

Financial crimes today have grown wild, and the emergence of computer software coupled with the advent of internet facilities has compounded the problem of financial crimes. Besides, the detection or minimization of these crimes are made more difficult and committing these crimes much easier. The size and complexity of accounting services and the inability of the statutory auditors further constrained by the related clauses in the company laws and standards, present very visible and poor show of the fight against financial crimes in corporate organizations (Famous and Okeoguale 2012).

Fundamental Concept of Fraud

Fraud has grown rapidly over the last few years, and there is a growing trend for large organizations to consider hiring professionals such as forensic accountants to reduce the pressure and potential of occupational, financial frauds (Abdullahi and Mansor 2015). Fraud is defined as any act, expression, omission, or concealment calculated to deceive another to his or her disadvantage, specifically, a misrepresentation or concealment with reference to some fact material to a transaction that is made with knowledge of its falsity. And or in reckless disregard of its truth or falsity and worth the intent to deceive another and that is reasonably relied on by the other who is injured thereby (Manurung and Hadian 2013).

Fraud Detection: Fraud detection is a set of activities undertaken to prevent money or property from being obtained through false pretenses. Fraud detection is applied to many industries such as

banking or insurance. In banking, fraud may include forging checks or using stolen credit cards. Other forms of fraud may involve exaggerating losses or causing an accident with the sole intent for the payout. With an unlimited and rising number of ways someone can commit fraud, detection can be difficult. Activities such as reorganization, downsizing, moving to new information systems or encountering a cybersecurity breach could weaken an organization's ability to detect fraud. Techniques such as real-time monitoring for fraud is recommended (Gillis 2021).

Fraud typically involves multiple repeated methods, making searching for patterns a general focus for fraud detection. For example, data analysts can prevent insurance fraud by making algorithms to detect patterns and anomalies.

According to Gillis (2021), fraud detection can be separated by the use of statistical data analysis techniques or artificial intelligence (AI). Statistical data analysis techniques include:

- Calculating statistical parameters
- Regression analysis
- Probability distributions and models
- Data matching

AI techniques used to detect fraud include:

- Data mining classifies, groups and segments data to search through millions of transactions to find patterns and detect fraud.
- Neural networks learn suspicious-looking patterns and use those patterns to detect them further.
- Machine learning automatically identifies characteristics found in fraud.
- Pattern recognition detects classes, clusters and patterns of suspicious behavior.

Fraud has become a reoccurring trend in Nigeria. In fact, FBI (2018) report shows that Nigeria is among the top 5 hub of fraudsters as most perpetrators come from the country. Central Bank of Nigeria (2018) report and Nigeria Deposit Insurance Commission (2018) report both reported high amount of monies lost by banks to fraud annually. Collaborating with this is Economic and Financial Crime Commission (2018) report that big companies in Nigeria and influential individuals have continued to fall victim to fraudsters losing large amount of money in the process. In recent times, series of fraud have been committed both in the public sector and private sector of the economy. These in no doubt are perpetrated under the supervision of the internal auditors of the organization. Thus, forensic audit has evolved as a means of checking fraud since the traditional accounting system and auditing have failed in some areas in checking fraud.

Theoretical Framework

The selected theory for this study is fraud diamond theory which was first presented by Wolfe and Hermanson in the CPA Journal in December 2004. However, it is essential to highlight the interconnectivity between the Fraud Triangle Theory (FTT) and the Fraud Diamond theory (FDT).

Fraud Triangle Theory: In 1950, Donald Cressey, a criminologist, started the study of fraud by arguing that there must be a reason behind everything people do. Questions such as why people commit fraud led him to focus his research on what drives people to violate trust? He interviewed 250 criminals in a period of 5 months whose behaviour met two criteria: (i) initially, people are accepting responsibilities of trust in good faith, and (ii) circumstances make them violate the trust. He relates that three factors (pressure, opportunity, and rationalization) must be present for an offense to take place.

Fraud Diamond Theory: Abdullahi and Mansor (2015) revealed that the FDT is viewed as an expanded version of the FTT. In this theory, an element named capability has been added to the three initial fraud components of the FTT. Wolfe and Hermanson (2004) argued that although perceived pressure might coexist with an opportunity and a rationalization, it is unlikely for fraud to take place unless the fourth element (i.e., capability) is also present. In other words, the potential perpetrator must have the skills and ability to commit fraud. They also stated that the four sides of the fraud diamond actually overlap each other and that the primary lesson of the fraud diamond indicates that assessing capability to commit fraud separately in any fraud risk assessment process is key. This moves beyond viewing of fraud opportunity in terms of environmental or situational factors as is currently been practiced.

This paradigm was adopted because conscious capacity must be built in the area of fraud perpetration before it can be used for committing any fraud.

Materials and Methods

Research Hypotheses

To achieve the above objective, a hypothesis was formulated as stated below:

H₀: Forensic audit has no effect on fraud detection in the Nigerian banking sector.

Research Design

The research design adopted for this study is the survey research method. The survey design approach was justified on account of its economy, rapid data collection and ability to understand a population from a part.

Population and Sampling Technique

The population adopted for the study consists of 10 staff each from Ecobank, First Bank, Zenith Bank, Skye Bank, Keystone Bank, GT Bank, Union Bank, UBA, Fidelity Bank and Access Bank respectively which gives a total of 100, all in Yola Adamawa State. The sampling technique used for the study is the simple random sampling. Data was collected using both primary and secondary sources.

Method of Data Analysis

Regression analysis was used in testing the research hypothesis and for this; the Statistical Package for Social Sciences (SPSS) was utilized. For the regression analysis, a model was formulated for testing the hypothesis. The model is:

$$\text{FraudDetctn}_o = \alpha + \beta_o \text{ForensicAudit}_o$$

Where: FraudDetctn_o = Fraud Detection

α = Intercept of regression model

$\beta_o \text{ForensicAudit}_o$ = Forensic audit

μ = Error

Results and Discussion

Test of Hypothesis

For testing the hypothesis, the collected data was analyzed using computer programs particularly the Statistical Package for Social Sciences (SPSS) for easy analysis and interpretation of results.

Table 1 Model Summary of Forensic audit and Fraud Detection

Model	R	R square	Adjusted R Square	Standard Error of the Estimate
1	.994 ^a	.795	.790	12.70684

Source: Field work 2022

- Predictors (Constant), forensic audit
- Fraud detection

This table provides the R and R² values. The R value represents the simple correlation and is .994^a (the R column), which indicates a high degree of correlation. The R² value (the R square column) indicates how much of the total variation in the dependent variable (fraud detection) can be explained by the independent variable (forensic audit). Here, 79.5% can be explained which is significant.

Table 2 Analysis of Variation Goodness of Fit Model

Model	Sum of Squares	df	Mean Square	F	Significance
Regression	10611.306	1	10611.306	182.516	.000 ^a
Residual	19183.837	337	96.88864		
Total	29795.143	338			

Source: Field work 2022

- Predictors (Constant), forensic audit

This table indicates that the regression model predicts the dependent variable very well. The regression Row "Sig" column shows that the statistical significance of the regression model was run. Here, $p < 0.0005$, which is less than 0.5, and indicates that, overall, the regression model statistically significantly predicts the outcome variable i.e. (it is a good fit of the data).

Table 3 Models Coefficients

Model	Unstandardized Coefficients		Standardized coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	39.928	4.6761		14.2301	.000
Forensic Audit	.919	.883	.994	17.4398	.000

Source: Field work 2022

- Dependent Variable: Fraud detection

The coefficient table provides the necessary information to predict fraud detection from forensic audit, as well as determine whether forensic audit contributes statistically to the model (by making reference to the "Sig" column).

Furthermore, the values in the "B" column under the unstandardized coefficients column can be used to present the equation as:

$$\text{FraudDetctn}_0 = \alpha + \beta_0 \text{forensic audit}_0$$

And substituting into the equation, we have:

$$\text{FraudDetctn}_0 = 39.928 + 0.919 (\text{Forensic audit})$$

From the table, it can be seen that the relationship between fraud detection and forensic audit is positive (0.919) and based on the t-value of 10.47 and P-value of 0.000, it can be concluded that the relationship is statistically significant.

Hence the hypothesis which states that forensic audit has no effect on fraud detection is hereby rejected and it can be concluded that there is a statistically significant linear relationship between forensic audit and fraud detection in the Nigerian banking sector.

Discussion

Findings from testing the hypothesis show that the model fits the data for prediction of correlation between forensic audit and fraud detection. The R correlation coefficient of .994^a shows a good level of prediction and the model has positive correlation. The R^2 value of .795 indicates that proportion in the dependent variable explained by the predictor variables. This means that 79.5% change in fraud detection is predicted by forensic audit.

In addition, the regression coefficient of the predictor variable in the model is significant. The coefficient contribution of forensic audit (.919) in the model is statistically significant with $P < .005$. This means that a decrease in forensic audit will lead to a decrease in fraud detection.

The findings are also in line with Eyisi and Agbaeze (2014), Bello, U. (2020), and Dada and Jimoh (2020) whose researches showed that there is a significant positive relationship between forensic audit/accounting and fraud detection, corruption and misappropriation which means that a high level of forensic audit discourages fraud, embezzlement and consequently will reduce corruption.

Conclusion

Based on the findings of the study, it is concluded that forensic audit taken as the independent variable significantly affects fraud detection by virtue of the regression model (R coefficient) which shows a good level of prediction and that 79.5% change in fraud detection is caused or predicted by forensic audit. Therefore, the variable added significantly to the prediction of fraud detection, meaning that forensic audit and fraud detection are positively correlated.

Recommendations

By virtue of the study revealing that forensic audit has a significant effect on fraud detection, the study recommends that:

- The managements of deposit money banks should undertake regular forensic audits of their operations in order to effectively detect fraud that is currently bedeviling the Nigerian financial sector.

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