

Fighting Fraud in Nigeria Banking Industry. An Examination of the Impact of Forensic Auditing

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Abstract: *This paper examines the impact and effectiveness of forensic auditing in detecting, investigating, and preventing frauds in digital environment with emphasis on commercial banks in Nigeria. The study sought to find out to what level the forensic auditors are able to fulfill this mandate and investigate problems that hinder forensic auditors to make progress in their operations in Nigeria. It also established the role of forensic auditing in Nigeria banking operations. This paper also discusses four aspects of computer aided fraud detection that are of primary interest to fraud investigators and forensic auditors: data mining techniques for the detection of internal fraud, ratio analysis for the detection of financial statement fraud, the issues surrounding external information sources, and computer forensics during fraud investigations. Questionnaires, personal interviews, and document review are the methods that were used to obtain data for this study. A sample of One hundred and fifty-three respondents from various categories of staff were used from ten commercial banks and four audit firms in Nigeria. The collected data were analyzed using application of non-parametric statistical tests. It was found that the forensic auditing departments suffer from multiple challenges, among them being the lack of material resources, technical know-how, interference from management, and unclear recognition of the profession. In conclusion, forensic auditors must be capacitated materially and technically to improve their effectiveness.*

Keywords—Forensic Auditing, Accounting, Fraud, Commercial Banks

1. INTRODUCTION

Accounting Fraud is one of the most harmful financial crimes as it often results in massive corporate collapses, commonly silenced by powerful high-status executives and managers ((Mokhiber and Weissman, 2005). Accounting fraud represents a significant threat to the financial system stability due to the resulting diminishing of the market confidence and trust of regulatory authorities ((Mokhiber and Weissman, 2005). The modern digital environment offers new opportunities for both perpetrators and investigators of fraud. In many ways, it has changed the way fraud examiners conduct investigations, the methods internal auditors use to plan and complete work, and the approaches external auditors take to assess risk and perform audits. Fraud together with its sister white-collar crimes which came into being later in the 19th and 20th century inter alia corruption, money laundering, tax evasion, externalization of foreign currency to itemize just a few have stood as potent weapons capable of hemorrhaging the entire world economies, particularly the banking sector because of its high risk factor.

Bologna and Lindquistn (1987) assert that forensic auditing/ accounting as a discipline encompasses fraud knowledge, financial expertise, and a sound knowledge and understanding of business reality and the working of the legal system. Forensic auditing may be one of the most effective and efficient way to decrease and check accounting fraud.

Presently, forensic auditing is gaining popularity worldwide. The susceptibility of the banking sector to fraud, from within and without, has not spared Nigeria (Nigeria experienced bank failures starting from as early as 1930 to 2009 when the industrial and commercial banks failed.) Bank frauds vary in nature, character and methods of perpetration. Fraud can be perpetrated by employees, customers or others operating independently or in conjunction with others, inside or outside (see Okafor, 2004 and NDIC Quarterly, 1991 for causes and types of fraud). Empirical evidences have shown that many of the banks in liquidation have suffered a great deal of fraud. Some banks recorded monumental losses due to fraud, which rocked the foundation of these banks. For example, the sum of N8.2billion was involved in bank frauds between 1991 and 1996 (Umoh, 1997). In 1999 alone, the sum of N7.4billion was the reported fraud, while an actual loss of N2.7billion was expected (Okafor, 2004). A great deal of the frauds perpetuated in 14 liquidated banks were due to insider abuse (Adesola, 2008).

1.1 Statement of the Problem

Ojaide (2000) submits that there is an alarming increase in the number of fraud and fraudulent activities in Nigeria emphasizing the visibility of forensic accounting services. Okoye and Akamobi (2009) Owojori and Asaolu (2009), Izedomin and Mgbame (2011), Kasum (2009) have all acknowledge in their separate works, the increasing incidence of fraud and fraudulent activities in Nigeria and

these studies have argued that in Nigeria, financial fraud is gradually becoming a normal way of life. As Kasum (2009) notes, the perpetuation of financial irregularities are becoming the specialty of both private and public sector in Nigeria as individual perpetrates fraud and corrupt practice according to the capacity of their office. Consequently, there is a general expectation that forensic auditing may be able to stem the tide of financial malfeasance witnessed in the Nigerian banking sector. However, there has not been adequate emphasis, especially survey evidence on how forensic auditing can help curb financial crimes in the Nigeria financial sector beyond the several anecdotal views that abound. It is within these challenges faced by banks that this research has been carried to determine the impact and effectiveness of the forensic auditors whether outsourced or within in detecting, investigating, and preventing bank frauds.

This study has also been prompted by the resultant economic downturn ushered in by the unprecedented cases of fraud undermining the growth of the Nigeria banking sector. The role of forensic auditors has not been well articulated by several banking institutions, although some of them have created the posts in their organizations.

1.2 Objectives of the Study

The study seeks to explore forensic auditing techniques adopted by the Nigeria commercial banks and how they can be effectively used to assist the departments to achieve their objectives in detecting, investigating, and preventing bank frauds. The study also examines how forensic auditing should be responsible for digging out frauds committed through application of auditing, accounting, and investigative techniques in order to come up with sufficient evidence that can be used in court proceedings (Albrecht et al, 2001). This study had several specific objectives, in particular the study sought to:

2. Explores the various forms of bank frauds that need the attention of the forensic auditors
3. Identifying the key roles of forensic auditing in banking operations and Internal control
4. Examining if the Nigeria banking environment is conducive to forensic auditing

1.3 Research Hypotheses

In line with the above stated objectives, the following null hypotheses will be tested in this study and are as follows;

H1: There is no significant impact on the effectiveness of forensic auditing in financial fraud control in Nigeria banks.

H2: Application of forensic auditing procedures will not enhance timely detection of fraud in banks.

H3: Forensic auditing is not effective in improving banking operations and internal controls.

2 REVIEW OF RELATED LITERATURES

Maurice E. Peloubet cited in Crumbley DL (2001) is credited with developing the term forensic accounting in his 1946 essay "Forensic Accounting: Its Place in Today's Economy." By the late 1940s, forensic accounting had proven its worth during World War II; however, formalized procedures were not put in place until the 1980s when major academic studies in the field were published (Rasey 2009). Forensic accounting is the specialty area of the accountancy profession which describes engagements that result from actual or anticipated disputes or litigation.

"Forensic" means "suitable for use in a court of law," and it is to that standard and potential outcome that forensic accountants generally have to work (Crumbley et al. 2005). Forensic accounting uses accounting, auditing, and investigative skills to conduct investigations into theft and fraud. Forensic accounting has been pivotal in the corporate agenda after the financial reporting problems which took place in some companies around the world (see, for example, Enron, Tyco, and WorldCom, just to mention a few). Forensic accounting is the integration of accounting, auditing and investigative skills (Zysman, 2004). Dhar and Sarkar (2010) define forensic accounting as the application of accounting concepts and techniques to legal problems. Degboro and Olofinsola (2007) note that forensic investigation is about the determination and establishment of fact in support of legal case. That is, to use forensic techniques to detect and investigate a crime is to expose all its attending features and identify the culprits. In the view of Howard and Sheetz (2006), forensic accounting is the process of interpreting, summarizing and presenting complex financial issues clearly, succinctly and factually often in a court of law as an expert. It is concerned with the use of accounting discipline to help determine issues of facts in business litigation (Okunbor and Obaretin, 2010)

2.1 THE CONCEPT OF FORENSIC AUDITING

According to investopedia (2018), forensic audit is an examination and evaluation of a firm's or individual's financial records to derive evidence that can be used in a court of law or legal proceeding. Forensic auditing is a specialization within the field of accounting, and most large accounting firms have a forensic auditing department. Forensic audits require the expertise of accounting and auditing procedures as well as expert knowledge about the legal framework of such an audit. Albrecht and Albrecht (2001) described forensic investigations as the utilization of specialized investigative skills in carrying out an enquiry conducted in such a manner that the outcome will have application to the court of law. Criminologists, just like their legal counterparts, have found it constantly challenging to define in its purest form and sample the constituents of fraud (Singleton et al.2006). From a legal point of view, fraud situates itself as a generic term which embraces all multifarious means, which human ingenuity can devise, that

are resorted to by one individual to get an advantage over another by false pretenses' (Nigerian Criminal Code, 1990).

The United States Association of Fraud Examiners (1999), in a rather conservative fashion, identifies fraud as the fraudulent conversion and obtaining of money or property by false pretenses: included are larcenies by bailee and bad cheque.

Certified Fraud Examiners (ACFE) 2012 defines forensic accounting as follows "Forensic accounting is the use of professional accounting skill in matters involving potential or actual civil or criminal litigation including but not limited to generally accounting and audit principles and concepts in the determination of lost profits, income, assets or damages, evaluation of internal control, fraud and other matters involving accounting expertise in the legal system.

Albrecht and Albrecht (2001) identified the following key functions of forensic auditing:

- I. To carry out the vision and mission of forensic audit to prevent, detect, and investigate issues of fraud and financial abuse within an organization/entity.
- II. Identification of causative factors and collection of facts for individual investigations by leading the evaluation of internal control weaknesses that allows unethical business behavior and practices to occur and go undetected.
- III. Lead internal/external resources in an effort to address allegations of fraud raised within the system.
- IV. Provision of help in the development of fraud awareness training and analyze fraud trends and internal control procedures.
- V. Perform comprehensive analysis of investigations result across the enterprise to identify pervasive control issues.
- VI. Oversee the investigations, planning, and forensic report writing process for forensic audits, and investigations and presentation of findings through reports and exhibits.
- VII. Work closely with financial training function to enhance fraud-auditing skills.
- VIII. Develop the Fraud prevention, detection and investigation program and management of company's Fraud Risk Assessment program.
- IX. Conduct activities in areas of moderate to high risk.
- X. Conduct complex and extremely sensitive investigations.
- XI. Promote education and awareness on fraud risk management throughout the bank.
- XII. Testifying in court as an expert witness.

2.2 Definitions of Fraud

Wikipedia defined fraud as "intentional deception to secure unfair or unlawful gain, or to deprive a victim of a legal right". Investopedia online dictionary state that financial fraud occurs when someone takes money or other assets from you through deception or criminal activity. Williams (2005) incorporates corruptions to his description of financial crimes. Other components of fraud cited in Williams (2005) description include bribes cronyism, nepotism, political donation, kickbacks, artificial pricing and frauds of all kinds. The EFCC Act (2004) attempts to capture the variety of economic and financial crimes found either within or outside the organization. The salient issues in EFCC Act (2004) definition include "violent, criminal and illicit activities committed with the objective of earning wealth illegally... in a manner that violates existing legislation... and these include any form of fraud, narcotic drug, trafficking, money laundering, embezzlement, bribery, looting and any form of corrupt malpractices and child labour, illegal oil bunkering and illegal mining, tax evasion, foreign exchange malpractice including counterfeiting, currency, theft of intellectual property and piracy, open market abuse, dumping of toxic waste and prohibited goods, etc

2.3 Fraud Triangle

The fraud triangle originated from Donald Cressey's hypothesis "Trusted persons become trust violators when they conceive of themselves as having a financial problem which is non-shareable, are aware this problem can be secretly resolved by violation of financial trust, and are able to apply to their own conduct in that situation verbalizations which enable them to adjust their conceptions of themselves as trusted person with their conceptions of themselves as users of the entrusted funds or property" –Donald R.Cressey, *Other People's Money* (Montclair: Patterson Smith, 1973) p.30



Donald R.Cressey Fraud Triangle

Forensic auditors relies on the fraud triangle to identify weak points in the business systems and find possible

suspects in cases of fraud. It consists of three core concepts which together create a situation ripe for fraud: incentive, opportunity, and rationalization. People must have the incentive and opportunity to commit financial fraud, as well as the ability to justify it. Recent analysis has suggested adding a fourth concept to make a diamond—capability (Rasey 2009).

2.4 Fraud Diamond Theory

Wolf and Hermanson (2004) introduced the fraud diamond model where they presented another view of the factors to fraud. The model adds fourth variable “capabilities” to the three factor theory of fraud triangle. Wolf and Hermanson believed many frauds would not have occurred without the right person with right capabilities implementing the details of the fraud.

They also suggested four observation traits for committing fraud:

- i. Authoritative position in the organization.
- ii. Capacity to understand and exploit the organization’s systems of accounting and internal control
- iii. Confidence that they will not be detected, or if caught, they will get out of it easily.
- iv. Capability to deal with the stress created within and otherwise good person when he or she commits bad act.

2.5 Frauds in Nigeria Bank

Olisabu (1991), state that the banking sector has become one of the most critical sectors and commanding heights of the economy with wide implications on the level and direction of economic growth and transformation and on such sensitive issues as the rate of unemployment and inflation which directly affect the lives of our people. Today, the very integrity and survivability of these laudable functions of Nigerian banks have been called into question in view of incessant frauds and accounting scandals. Oseni (2006) opined that the incessant frauds in the banking industry are getting to a level at which many stakeholders in the industry are losing their trust and confidence in the industry. Corroborating the views of Oseni and Idolo (2010) cited in Olaoye and Dada (2014), stressed that the spate of fraud in Nigerian banking sector has lately become a source of embarrassment to the nation as apparent in the seeming attempts of the law enforcement agencies to successfully track down culprits.

2.6 Types of Bank Fraud

Frauds in Nigeria banks has been classified in various ways and using various parameters. However for the purpose of this research, we shall employ the perpetrators criteria stated by Adeyemo (2012)

- Management of the banks (otherwise referred to as management fraud)

- Insiders. These perpetrators are purely the employees of the banks.
- Outsiders. These include customers and/or non-customers of the banks.
- Outsiders/Insiders. This is a collaboration of the bank staff and outsiders. Example includes; Advance Fee Fraud, Forged Cheques, Cheque Kitting, Account Opening Fraud, Counterfeit Securities, Money Transfer Fraud, Clearing Fraud.

2.7 Forensic Auditing and Fraud Detection

Albrecht, (2005) argued that fraud is rarely seen. He said that the symptoms of fraud are usually observed. The symptoms do not necessarily mean fraud is being undergone as it may be caused by mistakes. Fraud is not easily proven since frauds have themselves at a safe line where authority could not convict them (Albrecht, 2005). This shows that the author is explaining that the fraud defaulters are getting smarter due to the possible mistakes human can cause. This has made detecting and proving fraud a hard work for a forensic accountant. There is a need for deeper understanding on how these defaulters work their fraudulent act. Without constant involvement of the public and improvement in forensic accounting, fraud cases will be hard to detect and thus lead to greater success in financial fraud, which also translates into the failure to meet the expectations of the public, shareholders or even other stakeholders (Albrecht, 2005). Hassan and Ramazani (2012) studied the Accountant’s Perception of Forensic Accounting. In this research they examined accountants’ perception of forensic accounting which demonstrates the low extent of accountant’s perception of forensic accounting. Forensic accounting is considered as one of the factors in fraud prevention. (Bierstaker, Brody and Pacini, 2006).

Okoye and Gbegi (2013) carried out a study on the evaluation of forensic accountants to planning management fraud risk detection procedures. The study reveals that forensic accountants effectively modify the extent and nature of audit test when the risk of management fraud is high, forensic accountants propose unique procedures that are not proposed by auditors when the risk of management fraud is high, forensic accountants can make to the effectiveness of an audit plan when the risk of management fraud is high, involving forensic accountants in the risk of management fraud assessment process leads to better results than simply consulting them. KPMG’s Fraud Survey (2008) reveals that more companies are: recently experiencing incidents of fraud than in prior years; taking measures to combat fraud; and launching new antifraud initiatives and programs in response to the Sarbanes- Oxley Act of 2002 (KPMG 2008). PricewaterhouseCoopers’ (PWC) 2003 Global Crime Survey indicates that 37 percent of respondents in 50 countries reported significant economic crimes with the average loss per company of \$2,199, 930 (PWC 2003). These survey

results underscore the importance of forensic accounting practice and education. Prior research (Rezaee 2002; Crumbley 2003 and 2009; Peterson and Reider 1999, 2001; Rezaee, Rezaee and Burton 1997) reviews the literature on forensic accounting practices, certifications, and education.

2.8 Forensic Audit Fraud Detection Methodology

A. Data Mining for Fraud

The techniques used to perform data mining for fraud range from simple statistical averages to complex neural networks and cluster analyses. This section presents some of the more common techniques found in literature.

1. Digital Analysis

In 2000, Mark Nigrini published an important book called “Digital Analysis Using Benford’s Law” (Nigrini, 2000). Although Benford’s Law is now a century old and was discussed in fraud literature (Hill, 1995; Busta and Weinberg, 1998; Nigrini, 1999) prior to the book, Nigrini’s work introduced the technique to the large audience of auditors. Benford’s Law works because nature produces more small things than large things. There are more insects than large mammals, more small houses than large ones, and more small lakes than large bodies of water. Similarly, businesses produce more transactions with small amounts than with large amounts. Benford’s Law predicts that amounts will start with the digit 1 more often than the digit 9, and it even provides a mathematical formula describing the law and percentages. The digit 1 should show up about 30 percent of the time, while the digit 9 should occur less than 5 percent of the time.

Digital analysis is attractive because it is “deeply non-intuitive and intriguing..., simple enough to be described (if not fully explained) even to those without any formal training in math” (Cho and Gaines, 2007). It can be run on data with little regard to context.

2. Outlier Detection

One of the primary methods of detecting fraud is discovering data values that are outside the normal course of business. For example, a kickback scheme might be the reason purchases from one vendor are twice as high as similar purchases from another vendor.

The simplest method of outlier detection is the statistical z-score calculation. This formula, given as (value mean)/standard deviation, provides a simple and compact method of measuring outliers. The numerator shifts each point to a zero based scale, and the denominator adjusts the distribution to a standard deviation of one. Once the data are transformed into this standardized scale, generalized statements can be made.

3. Trending

In addition to comparing same period numbers from different vendors, employees, or customers, fraud can be discovered by comparing numbers over time. Because almost all perpetrators are greedy (Albrecht, 2008), fraud increases exponentially over time. Auditors can easily spot

an increasing trend on a line chart— computers are not needed if only one item is being audited (one employee, one vendor, etc.). The need for automation is during the initial phase of a fraud investigation. If auditors do not know which item is increasing, they must look through thousands of graphs to determine which item requires additional investigation. Trending methods allow the computer to determine which trends are increasing so the auditor can focus on those items.

One of the most basic methods of determining an increasing trend is linear regression. Once the computer fits a line to the data, the slope and goodness of fit provide a simple measure of trend. Nonlinear regression and Box Jenkins analysis provide more advanced methods of measuring trend. Statistical packages like SAS and SPSS provide full trending modules for the interested auditor.

B. Ratio Analysis

Traditional methods for the detection of financial statement fraud, such as vertical and horizontal analysis, tip lines, analysis of relationships between management and others, comparisons with industry, and analytical symptoms, are well documented in textbooks (Albrecht, et. al., 2009). More recently, research has focused on ratio analysis for the detection of financial statement fraud.

Ratio analysis involves calculating both traditional and nontraditional financial ratios, such as accruals to assets, asset quality, asset turnover, day’s sales in receivables, deferred charges to assets, depreciation, gross margin, increase in intangibles, inventory growth, leverage, operating performance margin, percent uncollectible, sales growth, SGE expense, and working capital turnover

C. Computer Forensics

Today, almost every financial fraud incorporates the use of a computer, whether the fraud is falsifying invoices or electronic money laundering (Smith, 2005). In the case of financial statement fraud, entries probably exist as electronic journal entries, login records found in log files, and electronic correspondence between involved individuals.

In recent years, auditors find themselves increasingly involved in evidence collection through computer forensics. As it pertains to fraud detection, computer forensics is the process of imaging data for safekeeping and then searching cloned copies for evidence (Gavish, 2007; Dixon, 2005). Perhaps the most common example is seizing the computer of a suspect for analysis. In gaining access to or auditing the data on a digital device, computer forensics can also involve white hat (legal) hacking, password and encryption cracking, key logging, digital surveillance, and intrusion detection.

2.9 Conceptual Framework

In line with the research objectives, a conceptual framework for the relationship among the independent variable (forensic auditing) and the dependent variables (financial fraud

control, financial reporting quality & Fraud detection and Internal Control) in Nigerian Banks.

3 RESEARCH METHODOLOGY

The survey research design is used in this study. The objective of the present research is to answer the research questions and test the hypotheses by identifying whether there is a relationship between forensic auditing and fraud detection. The survey method is selected for the purpose of this study in order to collect a sufficient amount of primary data. In considering sample size, Saunders and Thornhill (2003) suggest that a minimum number of thirty (30) for statistical analyses provide a useful rule of thumb. Nevertheless, we adopted a sample of one hundred and forty three (153) respondents which consist of the Banks IT and operations staff, internal and external auditors, as well as the top management staff, Customers and Forensic Auditors from Ten commercial banks in Nigeria. The justification for the choice of these groups is based firstly on their inclusion in prior studies (e.g., Lowe & Pany, 1995).

The research is a problem study designed to explore the relevance of forensic auditing in detecting, investigating, and preventing bank frauds. To generate an initial list of questionnaires designed to capture auditors' perceptions regarding bank frauds and how they manifest themselves, literature was reviewed extensively. The use of questionnaires is the most widely used data collection technique in a survey and, in this study. The questionnaire consisted of three parts that is personal, detection, and investigations sections designed to capture information on the forensic auditing status quo and suggestions on the way forward.

The data collected are analyzed using application of non-parametric statistical tests the results will be used to validate or invalidate the hypothesis. The findings will be discussed and conclusions will be drawn. This choice was influenced by prior studies that also used non-parametric tests for testing such hypotheses (e.g. Clark-Carter, 1997; Joshi, Bremser, Hemalatha, & Al-Mudhaki, 2007; Quick & Rasmussen, 2005). The non-parametric test has two assumptions both met by this research: that the observations are independent, and the variable under study has underlying continuity.

4 DATA PRESENTATION AND ANALYSIS

This section of the study has been mapped out to aid the presentation and discussion of empirical results. As it were, the study attempts to examine empirically the impact and effectiveness of forensic auditing on fraud detection such variables as: Theft of cash/suppression of lodgment, miscellaneous fraud, falsification of accounts, cashiering fraud, forged cheques with forged signature computer operator's fraud. A proxy for variable fraud detection as independent variables using both application of non-parametric statistical tests and using Chi-square statistical software, OLS regression analysis

NON PARAMETRIC TEST

Table 1. Profile of Responding Forensic Auditors

Academic and Professional Qualification	Frequency (N)	Percentage%
'O' Level	153	100
OND	2	1.31
B.SC/HND	151	98.70
Masters (M.SC/MBA)	43	28.10
Professional Forensic Qualification	15	9.80
Auditing Related Degree/Qualification (ACA, ACCA)	57	37.25
Police/Military Background	1	0.65
Total	153	100

Source: Researchers computation

All 153 respondents had at least passed their Ordinary Levels and joined their institutions having that qualification. A large majority (98.70%) of the respondents had Degrees from various background. While 37.25% had either an auditing related degree or professional accounting qualifications. Few respondents (28.10%) had a Master's Degree. Out of the total respondents, 9.8% indicated that they had undergone an orientation course in forensic auditing. It was discovered that 0.65% of the respondents, representing one person were former police officer, particularly from the Criminal Investigations Department (Serious Frauds).

Data was sought on the length of service of each of the forensic auditors in the banking and forensic audit department. Half (50%) of the respondents were in the forensic department for less than five years, while 40% had worked for 5 to 10 years, with the rest having been in the system for more than 10 years

Table 1. Cronbach Reliability Test

CRONBACH ALPHA	NUMBE OF ITEMS
0.876	15

Source: SPSS 20.0

The table above examines the properties of measurement scales and the items that compose the scales. Ideally, the cronbach alpha coefficient should be about 0.7 (Pallant, 2001). The cronbach coefficient for the study performs very well with a value of .876 and this indicates that the scales and the items of the research instrument show a high measure of internal consistency

Table 2. Forensic Auditing and financial fraud control

SN	ITEMS	MEAN	S.D
1	Enhancing quality of financial reporting	4.64	0.89
2	Accountants/auditors with forensic auditing skills will help expose material misstatement in financial reporting.	4.56	0.5
3	Risk assessment processes under forensic auditing specifically cover risk of fraud.	4.64	0.56
4	Forensic investigations deals directly with fraud investigation and this reduces financial reporting “expectations gap”	4.40	0.571

Source: Researchers computation

Table 2 provides the results of the questionnaire (Appendix 1) indicating the descriptive statistics of each item computed from the responses to the items. As can be seen from the table, “forensic auditing enhances the quality of financial reporting” has a mean and standard deviation response of 4.64 and 0.89, “Accountants/auditors with forensic auditing skills will help expose material misstatement in financial reporting” (4.32 and 0.62), “Risk assessment processes under forensic auditing specifically cover risk of fraud (4.64 and 0.56) “Forensic investigations deals directly with fraud investigation and this reduces financial reporting “expectations gap” (4.56 and 0.50). The means of the responses all suggest strong agreement amongst respondents on the importance of forensic auditing in improving financial fraud control. We observe that responses to item 1 had the highest deviation (0.89) amongst respondents which indicates that the preferences for what constitutes and hence should result in financial reporting quality may vary considerably amongst different stakeholders. Item 8 evinced the lowest variation amongst responses, indicating a greater consensus of opinion.

Table 3. Forensic Auditing and effectiveness of Banking operations & internal control quality

SN	ITEMS	MEAN	S.D
5	Improves the designing internal control system	4.6	0.49
6	Monitoring and evaluation of internal control systems	4.84	0.37
7	Forensic auditing identifies operational loopholes and weaknesses in the system and this subsequently reduces banking operations errors and fraud	4.56	0.571

Source: Researchers computation

Table 3 provides the results of the questionnaire (Appendix 1) indicating the descriptive statistics of each item computed from the responses to the items. As can be seen from the table, “forensic accounting improves the design of internal control system” has

mean and standard deviation of 4.6 and 0.49. Furthermore, “forensic accounting improves the monitoring and evaluation of internal control system” has mean and standard deviation of 4.84 and 0.37 respectively. Similarly, Forensic auditing identifies operational loopholes and weaknesses in the system and this subsequently reduces banking operations errors and fraud has mean and standard deviation of 4.56 and 0.57. The mean values for the responses of 4.56, 4.6 and 4.84 suggest that majority of the respondents ticked the “agree” option in the questionnaire. The means of the responses all suggest strong agreement amongst respondents on the importance of forensic accounting in improving financial reporting quality.

Table 4. Forensic Auditing and Timely detection of fraud

SN	ITEMS	MEAN	STD DEVIATION
8	Forensic auditing can be used to locate diverted funds or assets	4.80	0.49
9	Forensic auditing can Identify misappropriated assets and identify reversible insider transactions;	4.06	0.45
10	Forensic Auditing is effective as a fraud detection tool	4.12	0.87
11	Forensic Auditing is solely enough as a tool to detect suspicious or fraudulent transactions	3.21	1.10

Source: Researchers computation

Table 4 provides the results of the questionnaire (Appendix 1) indicating the descriptive statistics of each item computed from the responses to the items. As can be seen from the table, “Forensic Auditing can be used to Locate diverted funds or assets” has a mean and standard deviation response of 4.80 and 0.49, “Forensic auditing can Identify misappropriated assets and identify reversible insider transactions” (4.06 and 0.45), “forensic accounting is effective as a fraud detection tool” (4.12 and 0.87) and “Forensic auditing is solely enough as a tool to detect suspicious or fraudulent transactions” (3.21 and 1.10) The means of the responses all suggest strong agreement amongst respondents on the importance of forensic accounting in financial fraud control. However, for item 11, a weak agreement is observed (3.21) and the highest variation (1.10) amongst responses is observed. This suggest that respondents are quite divided as to whether Forensic auditing is solely enough as a tool to detect suspicious or fraudulent transaction

Test of Hypotheses

Table 5. Binomial test result of the effect of forensic auditing on financial fraud control, financial reporting quality and internal control

1	2	3	4	5	6	7
H1: Financial fraud control	Disagreeing	30	0.20	0.5	0.00	Confirmed
	Agreeing	123	0.80			
	Total	153	1.00			
H2: Effectiveness of Banking operations & internal control quality	Disagreeing	52	0.34	0.5	0.00	Confirmed
	Agreeing	101	0.66			
	Total	153	1.00			
H3:Timely detection of fraud	Disagreeing	38	0.25	0.5	0.00	Confirmed
	Agreeing	115	0.75			
	Total	153	1.00			

Source: Researchers computations

Notes: column headings are as follows: (1) hypotheses, (2) category, (3) frequency, (4) observed prop., (5) test prop., (6) Asymp. Sig., (7) results.

From the result above, we observe that the hypothesis (H1) of significant agreement on the effectiveness of forensic accounting in financial fraud control is rejected as we find a significant proportion of respondents (0.80) exceeds the test proportion (0.50) and is also significant at 5% level. Also with respect to the existence of a significant agreement on the effectiveness of forensic auditing will not improve banking operations & internal control quality (H2), we find a significant proportion of respondents (0.66) exceeds the test proportion (0.50) and is also significant at 5% level and hence the hypothesis is rejected.

Finally, for H3, we find a significant proportion of respondents (0.75) exceeds the test proportion (0.50) and is also significant at 5% level and hence the hypothesis that forensic auditing is not effective tools in the timely detection of fraud is rejected.

5 CONCLUSION AND RECOMMENDATIONS

Financial Fraud is real and has become prevalent in contemporary business environment. This trend needs to be arrested before it is too late. Forensic auditing is the new branch of accounting which has the sole aim of unearthing fraudulent activities within and outside an organization so far as the third party's action is in any way reflective on the activities of that organization.

This study found that there is significant agreement amongst stakeholders on the effectiveness of forensic auditing in fraud control, improving banking operations and internal control quality. Accountants should therefore be alert to potential fraud and other illegal activities while performing their duties. They can also be made to provide significant assistance in preventing, investigating and resolving such issues. In line with the above findings, we recommend that the Institute of Chartered Accountants of Nigeria, Association of National Accountants of Nigeria and the National Universities Commission should encourage formalization and specialization in forensic auditing. In addition, banks in Nigeria should have a specialize unit for forensic accounting for monitoring and investigation of suspected corruption cases.

Forensic auditing, as an administrative function, has a role to play in the overall protection of bank assets. Forensic auditors have a mandate to detect any potential bank fraud and, if occasioned, conduct investigations of cases at hand and at least suggest effective ways of preventing the occurrence of such frauds. This can be effective where the environment is conducive for them to fulfill this mandate using available detective and investigative techniques to counter bank frauds.

Forensic auditors we observed are not adequately equipped in terms of both materials, as has been reflected by the fact that they are not given a specific budget and usually fall under other departments. Most of the forensic auditing sections in Nigeria banks fall under either the internal audit or Internal Control departments. This compromised their independence and professional integrity. The forensic audit departments seem to have fragmented forensic audit procedures that they follow. The forensic auditors generally do not understand the internationally recognized forensic audit procedures, only claim to follow the procedures as contained in the banks' Operational policies and BOFIA.

The detective and investigative techniques used by the forensic auditors include Strategic Fraud Detection technique, Risk-based profiling, red flag technique, and Surveillance equipment technique. For the purpose of effectiveness, the forensic auditor needs to use different techniques in detection, just like in investigation. The forensic audit department forms part of the overall risk management and, therefore, are party to the creating of the fraud control policy, which covers the detective, investigative, and preventive plans and strategies of the bank institutions. The study showed that the forensic auditing department suffered from multiple challenges amongst them being lack of material resources, technical expertise, interference from management, and clear recognition of the profession. Forensic auditing is still an emerging new profession, which needs to be developed.

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