



Gusau Journal of Accounting and Finance (GUJAF)

Vol. 2 Issue 4, October, 2021 ISSN: 2756-665X

A Publication of
Department of Accounting and Finance,
Faculty of Management and Social Sciences,
Federal University Gusau, Zamfara State -Nigeria

FINANCIAL FORENSIC ANALYSIS AND FRAUD DETERRENCE IN LISTED DEPOSIT MONEY BANKS IN NIGERIA

Daniel Nduka Anowu

Department of Accounting
Faculty of Management Sciences
Nigerian Defense Academy, Kaduna.
danielanowu@yahoo.com

TerzungweNyor

Department of Accounting
Faculty of Management Sciences
Nigerian Defence Academy
terzungwenyor@gmail.com

Samuel EniolaAgbi

Department of Accounting
Faculty of Management Sciences
Nigerian Defence Academy
samagbi@yahoo.com

AnowuIfeanyinchukwu Nelson

Accountancy Department
Enugu State University of Science and Technology
anowunelson07@gmail.com

Adebola Naomi Saliu

Department of Economics
Faculty of Management Sciences
Nigerian Defence Academy
saliu.adebola@yahoo.com

Abstract

This study was carried out to investigate how financial forensics, influences fraud deterrence in the listed deposit money banks in Nigeria. A total number of 619 top management staff from the antifraud department, internal control department, compliance unit and the internal audit department of the deposit money banks (DMBs) listed on the floor of the Nigerian stock exchange as at the 31st of December 2020 were considered for this study. Since this study indicated the cumulative impact of the independent variables against the dependent variable, multiple regression was considered to be the most appropriate form of data analysis. The Adjusted R^2 was 0.51, indicating that the financial forensics variables (investigative accounting service, litigation support service and expert witness) can explain 51% of changes in fraud deterrence by Nigeria's listed deposit money banks. The Fstat-chi2 value of the model was 76.80, with a P-value of 0.000. This study recommends that listed deposit money banks should engage

in financial forensics, which will ensure an unbiased workplace inquiry and interrogation in suspicions of wrongdoings, or discovery of fraud, not minding the magnitude, position, individual or group of individuals involved.

Keywords: Expert Witness, Financial Forensics, Fraud, Investigation, Litigation Support.

1. Introduction

When a company's fraud attempts suddenly increase, it's called a fraud 'earthquake.' These earthquakes have the potential to destroy a company's reputation with consumers while also stealing revenue from organizations. In recent years, the frequency and severity of fraud attacks have increased. Fraud leads to reputational harm, loss of client confidence, and regulatory violation. The Association of Certified Fraud Examiners (ACFE, 2020) stated that one of the costliest forms of financial crime is the fraud committed by individuals against the organizations that employs them. The intentional and premeditated use of one's position for self-enrichment through conscious mis-use and misappropriation of resources and assets of the employing firm, is likely to have huge impact on the organization.

According to the Corporate Finance Institute (CFI) Top Accounting Scandals 2021, the past decade has recorded notable corporate fraud scandals such as the Enron bankruptcy (2001), WorldCom fraud (2002), the Lehman Brothers (2008), and Bernard Madoff's \$65 billion Ponzi scam (2009), all in the United States of America (CFI, 2020). Also, Cable News Network (CNN, 2019) reported the case of Capital One Bank (2019), which had more than 100 million credit card applications and customer accounts compromised. In Africa, there's the case of Steinhoff (2019), where PricewaterhouseCoopers (PwC) carried out an investigation and discovered \$7.4 billion accounting fraud. When fraud is suspected or identified in an organization, investigative accounting services are expected to be embarked upon.

Investigative services can help in conducting interviews, record reviews, and evidence collection. Additionally, when whistle blowers signal unethical behaviors and suspected wrong dealings, immediate punishable or legal actions are to be taken. When no litigation process is designed to help businesses, and when no form of investigation is carried out after a fraudulent act, organizations will not be able to build a strong case and present meaningful evidence in court. Most times, evidences gathered aren't sufficient enough to punish a perpetrator, an expert in accounting or fraud matters may be involved to help build up more evidences. The testimony and knowledge of an expert witness is usually sufficient, causing others to officially and legally rely upon the experts' witness opinion. The expert opinion may provide more background information and clarifying scientific concepts, while litigation support services and investigations can create a contextual understanding of a fraudulent event that may have aroused within organizations such as banks.

As demonstrated by the continuous increase in fraud cases, events of corporate failure have placed greater responsibility on management and accountants to equip themselves with the expertise needed to recognize, act on signs of poor corporate governance, mismanagement, unethical and other wrongdoings. The failure on the part of management, regulators and organizational c-suite in tackling incidences of fraud, puts the credibility of financial statements

and corporate governance processes in jeopardy. Accounting professionals, most especially, must possess the necessary expertise and experience needed for detecting, and preserving evidence of all types of financial records, activities and irregularities.

In Nigeria, there are some cases of fraud, such as the case reported by the British Broadcasting Corporation (BBC, 2010) of Oceanic Bank (2010), where the guilty party was fined over one hundred and fifty billion naira (₦150 billion) for fraud and mismanagement. Also, according to Dailypost.ng, (2019) there is the case of staff fraud in Diamond Bank Nigeria (2019), money laundering offences of the defunct Syke Bank Plc now Polaris Bank, (Daily Trust, 2019), and Zenith Bank (2019) alleged N700 million staff frauds (The Guardian, 2019). All of these fraud cases have occurred despite efforts to ensure that banks adhered adequately to the respective corporate governance policies to protect depositor funds and to protect the banks from distress.

Questions are being asked, when fraud is committed by top management, how will it be detected and deterred in the future? Notwithstanding the efforts aimed at preventing fraud in the banking sector in Nigeria, the Nigerian Inter-Bank Settlement System (NIBSS, 2020) “report on Fraud in the Nigerian Financial Services”, states that fraud in Nigeria peaked the highest in 2020 with over 180% increase against previous years. Fraudsters attempts increased to 46,126 attacks from 16,128 attempts in 2019 and were successful in 41,979 of the attempts, giving a 91% success rate. The Nigeria financial services firms of which the listed deposit money banks are categorised under, have been reported to have lost 5.2billion naira to fraud between January and September (NBIS, 2020). This reveals that, individual’s no longer need access to a structured organizational building to perpetrate fraud. In light of the aforementioned problems, as well as the many unreliable opinions that abound, the following hypotheses were tested in the null form:

- H₀₁: Investigative accounting service has no significant effect on fraud deterrence in listed deposit money banks in Nigeria.
- H₀₂: Litigation support service has no significant effect on fraud deterrence in listed deposit money banks in Nigeria.
- H₀₃: Expert witness service has no significant effect on fraud deterrence in listed deposit money banks in Nigeria.

The result of this research will help shareholders, management and potential investors of listed DMBs in Nigeria in understanding the importance of financial forensics in deterring fraud as this will avail a springboard for growth opportunities in the financial sector. The remainder of this paper is organised and presented as follows: the review of related literature which centres on financial forensics and its components, vis-à-vis Investigative accounting service, litigation support service, expert witness service and the theoretical framework underpinning the study; the research methodology; analysis and discussion of result; conclusion and recommendation.

2. Literature Review

Financial forensics otherwise known as forensic accounting, according to Peloubet (1964), is the application of accounting expertise and investigative skills to locate and address legal issues. Financial forensic is the “application of investigative and analytical skills for the purpose of resolving financial and accounting matters in a way that the outcome can be used in a court of law” (Hopwood et al., 2012). Financial forensics (FF) has also been defined as the action of identifying, recording, extracting, sorting, reporting and verifying past financial data or other

accounting activities for settling current or prospective legal disputes or using such past financial data for projecting future financial data to settle legal disputes (Oyedokun, 2019). Financial forensics can be classified into three main lines of activities vis-à-vis financial investigative accounting service, litigation support service, expert witness service (Hopwood et al., 2012).

According to the corporate finance Institute (CFI 2021), financial investigative service is an aspect of financial forensic that refers to the practical steps' professional fraud examiners or certified accountants take in order to gather evidence relevant to alleged fraudulent deeds. Investigations are usually carried out, to ascertain who, how, when and where a fraud or error may have occurred and the reason behind such occurrences. The use of advanced forensic skills in carrying out financial investigations in such a way that the results can be used in a court of law is known as investigative accounting service (IAS) (Bassey, 2018).

American Bar Association (ABA, 2021) states that litigation support service (LLS) refers to the rules and practices, involved in resolving disputes in the court of law. LSS involves preparing, researching and reviewing litigation documents, which assist lawyers in managing court cases or lawsuits to settle fraud and other related matters (Olowo, 2019).

Fraud according to SAS 110 paragraph 4, is defined as the use of deception to obtain unfair or illegal financial advantage and intentionally misrepresentation that affect the financial statement, carried out by one or more individual among management, employees or other parties. Corporate frauds refer to political and business scandals that stems from the engagement of malpractices by trusted executives of corporate corporations (Pinkasovitch, 2016). Corporate fraud consists of illegal, unethical and deceptive actions committed either by a company or an individual acting in their capacity as an employee of the company (Olowo 2019).

The Economic and Financial Crimes Commission (EFCC, 2004), defines fraud is any non-violent criminal and unauthorized behavior conducted with the aim of unlawfully gaining wealth, either individually or in a collective or coordinated manner, thus breaching established laws regulating the civil and corporate administration's economic activities. Many businesses have been harmed as a result of fraudulent activities, as a result, many aspects of modern society are focused on maintaining an environment of fair dealing and fraud deterrence through the passage of laws, and the establishment of agencies such as the Independent and Corrupt Practices Commission (ICPC) and the EFCC in Nigeria, which are meant to enforce laws through the legal and judicial systems that can help curb the menace of fraud through deterrence, detection or preventive measures.

Fraud deterrence according to Cendrowski et al., (2007), is the proactive identification and removal of the casual and enabling factors of fraud. FRD involves acts and processes of discouraging actions or procedures that instills fear, doubt and hesitation which stops fraud from occurring in an organization. In the bank, deterrence is a protective measure that makes bank workers less enthusiastic about doing something wrong by making it unpleasant for the employees by threatening negative consequences. Fraud deterrence being a preventative measure, lowers the number of input variables of fraud's causal and facilitating factors (Cendrowski et al., 2007).

Combating fraud before it happens is critical to an organization's survival. Fraud deterrence is a component of fraud management that sways people away from committing fraud due to the likelihood of detection and punishment (ISA, 240). Fraud deterrence applies to all of the requirements and processes that must be in place to discourage fraud (Cendrowski, 2020). The cost of deterring fraud is a fraction of the cost of detecting and recovering from fraud. Fraud deterrence is a systematic and comprehensive methodology that has been suggested for professionals tasked with the responsibility of fraud management in corporate firms (Skalak & Sellitto, 2006; Cendrowski et al 2007). According to Skalak & Sellitto, (2006), FD comprises of corporate governance, transaction level controls, whistleblowing, remediation, retrospective examination of an organization's processes and transactions called the fraud deterrence cycle.

Figure 1:

The Fraud Deterrence Cycle

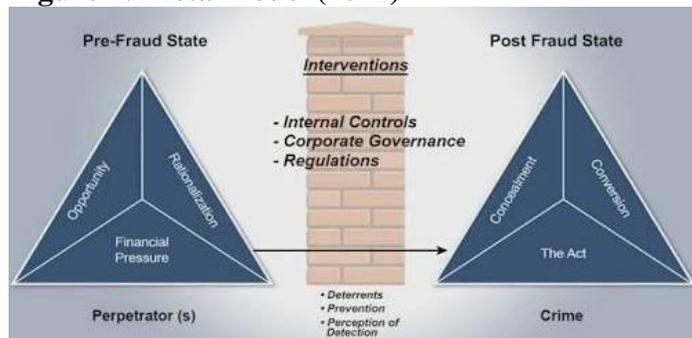


Source: Skalak, Alas and Sellitto (2006).

This paper is anchored on the Dorminey model because the theory closely relates to the objective of this study. The Dorminey model is based on the theory of Fraud Triangle with the addition of interventions between the perpetrator and the crime. Dorminey et al., (2012) published "Evolution of Fraud Theory" in 2012, which juxtaposed the traditional Fraud Triangle with the Triangle of Fraud Action in what has become known as the "meta-model of fraud." Pre-fraud, Interventions, and Post-fraud are the three parts of the model. On the model's left side, the perpetrator is defined as the initial decision maker, the one who must analyze his or her personal and professional situation, as well as the deterrent, prevention, and detection strategies in place, to determine whether a fraudulent act can be performed and concealed successfully.

The model discusses the post-fraud state on the far right, focusing on the basic elements of the fraud or financial crime known as the triangle of fraud intervention, which involves the fraudulent act, attempts to hide the act, and an identification of whether and how profits accrue to the victim, also known as conversion. The act denotes how the crime was carried out, such as embezzlement, check kiting, or materially false financial statements. Concealment refers to the act of making fake journal entries, falsifying bank reconciliations, or deleting files in order to conceal the fraud. The method of transforming ill-gotten profits into something usable by the victim in a way that seems legal is known as conversion.

Figure 2: Meta Model (2012)



Source: Dorminey et al., Meta Model (2012).

Organizational and social interventions, such as internal controls, wider aspects of corporate governance, legal and regulatory environments, and other preventive strategies, stand between the victim and the criminal act, reducing the occurrence and effect of fraudulent actions. Deterrence, prevention, and the understanding of identification have also become key components of these measures. These factors are partially outside the perpetrator's control, but they influence the perpetrator's assessment of the probability of completing and concealing the criminal act. Recent works have attempted to analyze financial forensics and fraud management. Therefore, this paper highlights the results of a few empirical studies.

Ehioghiren (2016), investigated financial forensics and fraud management evidenced from Nigeria. Administering 572 questionnaires, the researcher used SPSS 21 to test the hypotheses and to determine the F-value. Findings revealed that financial forensics significantly influences fraud detection and control, and also, there's a significant difference between the duties of qualified Forensic Accountants and that of traditional External Auditors.

Hamdam (2018), studied the role of financial forensics in discovering financial fraud in Philadelphia, Jordan. Simple random sample of 630 accountants were selected randomly from various accounting offices. Differential statistics including t-test and analysis of variance (ANOVA) were used to test the effect of demographic characteristics on the evaluation of financial forensics variables, while linear regression was used to test the effect of financial forensics variables on discovering fraud. Confirmatory factor analysis was used as a tool to figure out the contribution of different items to financial forensics variables and its contribution in discovering fraud. The results showed that financial forensics is an effective tool to find fraud if the general requirements were available to prepare professional forensic accountants.

Eme et al., (2016) investigated the effectiveness of the mechanisms of fraud prevention and detection in Nigeria. To achieve the study's objective, data was collected from accounting practitioners in Nigeria through the use of the survey instrument, questionnaire. The result found internal controls, operational audits, and corporate code of audit, financial forensics techniques, and many other fraud prevention and detection mechanisms used in Nigeria. The result of the study, however, revealed that the most effective mechanism is the financial forensics techniques, although the least used in Nigeria.

3. Methodology and Variable Measurement

Regression was considered to be the most appropriate because the study shows the combined effect of the independent variables (ISS, LSS, and EWS) against the dependent variable (FRD). The research used Statistical Product for Services Solution (SPSS) software to conduct a quantitative data analysis. E-questionnaire was used due to the Covid-19 protocols that were put in place by the Government of the Federal Republic of Nigeria, restricting movements and the gathering of individuals in public and corporate places.

This study comprised of the banks listed on the floor of the Nigeria stock exchange as at the 31th of December, 2020. Due to the inability of the researcher to obtain the exact number of the management staff of Ecobank Plc and First Bank plc as at the time of this study, these banks were filtered out. The total population for this study consists of 619 top management staff, disclosed in the annual reports of 12 out of 14 listed deposit money banks considered in this study. Sample size of 242 respondents comprising of the management staff of the internal control department, antifraud unit, internal audit department and the compliance department. Response were gathered using a 5-point Likert scale consisting of strongly agree (SA), agree (A), undecided (UD), disagree (D) and strongly disagree (SD). The Taro Yamane formula was used to calculate the total sample size for this study:

$$n = \frac{N}{1 + N(e)^2} \text{ ----- (1)}$$

Where n = Desired sample size
 N = Population of the study
 e = precision of sampling error (0.05)

Therefore: n = $\frac{619}{1 + 619 (0.05)^2}$ ----- (2)

$$1 + 1.5475 = \frac{619}{242.9822}$$

However, to compensate for non-response probability; 30% of the sample was added to the study sample to increase the sample base as suggested by Basse, (2018).

Therefore 30% of 242 = 72.

Hence the sample size is given as

$$n = 242 + 72 = 314$$

$$n = 314.$$

All decimal places were ignored, reason being that scientifically, there's no such thing as a fractional human being.

Table 1: Population and Sample Size

S/N	BANK NAMES	TOP MANAGEMENT (TARGET POPULATION)	SAMPLE SIZE ALLOCATION
1	Access bank Plc	60	31
2	FCMB Plc	66	34
3	Fidelity bank Plc	44	22

4	GTB Plc	56	28
5	Jaiz Bank	10	5
6	Stanbic IBTC bank	80	40
7	Sterling bank Plc	48	25
8	United Bank for Africa	99	50
9	Union bank Plc	40	20
10	Unity Bank Plc	29	15
11	Wema Bank Plc	28	14
12	Zenith Bank Plc	59	30
	TOTAL	619	314

Source: Researcher’s Compilation, 2021

This study adopted the following proxies and regression models from Ehioghiren and Atu (2016), Dada, Owolabi and Okwu (2013). The mathematical expression is given as:

$$Y = f(X) \text{-----i}$$

Hence, the mathematical expression was substituted to suit this study as follows:

$$FRD = f(FF)\text{----- ii}$$

Where:

- FF =Financial Forensic
- FRD = Fraud Deterrence
- Y = Fraud Deterrence (Dependent Variable)
- And X = Financial Forensics (Independent Variable)
- X = (x₁, x₂, x₃)

Where:

- x₁ = Expert Witness Service (EWS)
- x₂ = Investigative Accounting Service (ISS)
- x₃ = Litigation Support Service(LSS)

Functional Relationship

$$FRD = f(FF)\text{.....iii}$$

$$FRD = \beta_0 + \beta_1 EWS + \beta_2 ISS + \beta_3 LSS + \mu \text{..... iv}$$

4. Results and Discussion of Findings

The gender, age, educational qualification, professional qualification, and length of service of respondents were stated in the section. Multiple linear regression was used to evaluate hypotheses. 316 questionnaires links were shared, with 242 completed responded to. This equates to 76% response rate. Manning (2010) noted that for analysis and publication, 50% return rates are reasonable, 60% is fine, and 70 % is very good. A response rate of 76 % for this study is deemed appropriate for making inferences and drawing conclusions based on these assertions from renowned scholars.

Table 2: Distribution of Questionnaire/Response Rate

Categories	Frequency	Percentage %
No of Questionnaires distributed	316	100
No of Questionnaires Returned	242	76.58
No of questionnaire not returned	74	23.41
Invalid questionnaire return	3	0.94
Valid questionnaire return	239	75.63

Source: Field Survey, 2021

As shown in table 2, that the number of questionnaires distributed by the researcher to the respondents' amounted to 316 questionnaires. Among which, 242 questionnaires replies were returned and the researcher revoked the access to the e-questionnaire link from the google forms. Out of the 242 responses, 239 were valid and used in the analysis, amounting to a total response rate of 75.6%.

Analysis of the Variables

Table 3: Fraud Deterrence Analysis

S/N	Items	SA(%)	A(%)	UD(%)	D(%)	SD(%)
1.	Banks have mechanisms that checks against fraud	49.1	47.7	1.4	1.8	-
2.	Conducting background checks helps against employing fraudulent individuals	34.5	62.3	.9	1.8	.5
3.	Employees are encouraged to report fraud cases	40	57.3	.9	1.8	-
4.	Effective monitoring controls identifies red flags	45.9	50.9	1.8	1.4	-
5.	Third party like forensic accountants do verify organizations transactions and activities	43.2	52.7	1.8	2.3	-
6.	Conviction of perpetrators can discourage fraudulent acts	36.8	60	2.3	.9	-

Source: Field Survey, 2021

With respect to Table 3, question 1 relating to fraud deterrence, 49.1% of the respondents strongly agree that banks have an established and functional system which measures and monitors internal control effectiveness and external reporting activities. 47.7% agree with the statement, 1.4% were undecided while the remaining 1.8% disagree. The majority of respondents (96.8%) believed that banks have a well-established and functional framework in place to assess and track internal control effectiveness and external reporting activities.

Question 2, revealed that 34.5% of the respondents strongly agree that conducting employees' background checks before recruitment can help against employing fraudulent individuals. 62.3%

agreed with the claim, 0.9% were undecided.1.8% disagree, while the remaining 0.5% strongly disagree. This revealed that the majority of the respondents (96.9%) were positive that conducting employees' background checks before recruitment could help against employing fraudulent individuals. In addition, Question 3 disclosed that 40% of respondents strongly agree that workers are encouraged to disclose any alleged or observed fraud cases by their colleagues in good faith with valid evidence (i.e., whistleblowing), 57.3 percent agree, 0.9 percent are undecided, and the remaining 1.8 percent disagree to the argument. This revealed that most of the respondents, which account for 97.3%, are of the view that employees are encouraged to report, in good faith with relevant proof of any suspected or observed fraud cases from their peers (i.e. Whistleblowing).

On Question 4, 45.9% of the respondents strongly agree that effective monitoring controls and IT gadgets are in place to identify red flags for fraud, should they occur.50.9% agree with the claim, 1.8% were undecided while the remaining 1.4% strongly disagree. This revealed that the majority of the respondents (96.8%) were positive that effective monitoring controls and IT gadgets are in place to identify red flags for fraud, should they occur.In addition, question 5 revealed that 43.2% of the respondents strongly agree that management usually brings in a third party like external auditor, forensic accountants or certified fraud examiners to verify organizations' transactions and activities.52.7% agree, 1.8% were undecided, while the remaining 2.3% disagree. Nevertheless, the claims were overwhelmingly positive, with 95.9% of respondents claiming that management typically employs a third party to check an organization's transactions and operations, such as an external auditor, forensic accountants, or certified fraud examiners.

Finally, on fraud deterrence, question 6 revealed that 36.8% of the respondents strongly agree that conviction of perpetrators brought about by forensic audit can discourage others from committing fraudulent acts. 60% agree with the claim, 2.3% were undecided while the remaining 0.9% strongly disagree. This revealed that the majority of the respondents (96.8%) were positive that conviction of perpetrators brought about by forensic audit could discourage others from committing fraudulent acts.

Table 4: Investigating Accounting Service Analysis

S/N	INVESTIGATIVE SUPPORT SERVICE	SA(%)	A(%)	UD(%)	D(%)	SD(%)
1.	Investigation support helps in the search for evidence.	44.5	51.4	2.7	1.4	-
2.	Investigative knowledge uncovers fraudulent events.	39.5	57.7	2.7	-	-
3	Investigative support assists in internal cases of fraud.	32.3	60.5	4.1	3.2	-
4.	Sophisticated electronic gadgets used during investigations can discourage fraud.	39.5	53.6	5	1.8	-

Source: Field Survey, 2021

Question 1 on Table 4 confirmed that 44.5 percent of respondents strongly agreed that an investigative support service assists in the search for evidence to support a court case. 51.4 percent of those polled agreed with the assertion, 2.7 percent were undecided, and 1.4 percent disagreed. This revealed that the majority of the respondents (95.9%) were of the opinion that banks' investigation support service helps in the search for evidence that supports a court case.

Question 2, reveals that 39.5% of the respondents strongly agree that investigative knowledge such as surveillance tactics, interviewing and interrogation skills can assist the forensic accountant in uncovering fraudulent events not exposed by external auditors 57.7% agreed with the claim, while the remaining 2.7% were undecided. This revealed that the majority of the respondents (97.2%) were positive that investigative knowledge such as surveillance tactics, interviewing and interrogation skills could assist the forensic accountant in uncovering fraudulent events not exposed by external auditors. Further, Question 3 revealed that 32.3% of the respondents strongly agree that investigative support service can be used for internal cases of fraud within the bank, 60.5% agree, 0.9% were undecided and the remaining 1.8% disagree with the claim. This revealed that most of the respondents, which account for 92.8%, are of the view that investigative support services can be used for internal cases of fraud within the bank. Finally, IAS in question 4 illustrates that 39.5% of the respondents strongly agree that knowing that sophisticated electronic gadgets can be used during investigations can discourage one from committing fraud. 53.6% agree with the claim, 2.3% were undecided while the remaining 0.9% disagree. This revealed that the majority of the respondents (93.1%) were positive that knowing that sophisticated electronic gadgets can be used during investigations can discourage one from committing fraud.

Table 5: Litigation Support Service Analysis

S/NO	LITIGATION SUPPORT SERVICE	SA(%)	A(%)	UD(%)	D(%)	SD(%)
1.	Litigation support assists equitable judgement.	30	62.7	3.6	3.6	-
2.	Charging a guilty individual discourages fraud.	24.5	71.4	3.2	.9	-
3	Litigation support can establish legal patterns for resolving future fraud cases.	34.1	59.1	5	1.8	-
4.	Knowledge of the law can assist in identifying evidence needed in court.	34.1	61.8	2.3	1.8	-

Source: Field Survey, 2021

In table 5, 30.1 % of respondents strongly agree that litigation support services can assist the court in determining an equitable judgment. 62.7 % agreed with the statement, 3.6 % were undecided, and 3.6 % disagreed, 24.5 % of respondents strongly agree that charging a guilty individual in court for a fraudulent act and making the individual pay for the crime can deter people from committing fraud. 71.4 % agreed with the claim, 32% were unsure, and the remaining 9 % of people disagree. Further, Question 3 shows that 34.1% of the respondents strongly agree that the use of litigation support in financial forensics can establish legal patterns

which can prevent legal disputes or set standards for resolving future fraud cases 59.1% agree, 5% were undecided and the remaining 1.8% disagree to the claim. This revealed that most of the respondent which account for 93.2% are of the viewed that the use of litigation support in financial forensics can establish legal patterns which can prevent legal disputes. Finally, on LSS, question 4 revealed that 34.1% of respondents strongly agree that knowledge of laws and court procedures can assist the forensic accountant in identifying the type of evidence required to meet court requirements, 61.8% agree, 2.3% are undecided, and the remaining 1.8% disagree.

Table 6:Expert Witness Service Analysis

S/NO	EXPERT WITNESS SERVICE	SA(%)	A(%)	UD(%)	D(%)	SD(%)
1.	Availability of an expert can hinder fraud occurrences	21.4	65.5	9.1	3.6	.5
2.	Expert witness can identify manipulated transactions	21.8	65.9	10	1.8	.5
3	Expert witness can provide information which can lead to the prosecution of perpetrator	27.1	59.4	9.2	4.1	-
4.	Mistakes and omission can affect trail outcome	27.7	59.5	9.5	3.2	-

Source: Field Survey, 2021

With regard to expert witness, question 1 on Table 6 showed that 21.4% of the respondents strongly agree that knowing that an expert of a particular field is likely to give an opinion on a fraudulent act can hinder an individual from committing fraud, 65.5% agree to the statement, 9.1% were undecided, 3.6% were undecided while the remaining .5% strongly disagree. This showed that the majority of respondents (86.9%) believe that knowing that an expert in a specific field is likely to give an opinion on a fraudulent act will prevent anyone from committing fraud.

On question 2, 21.8 % of the respondents strongly agree that Expert witness services can be used in identifying manipulated transactions within the bank. 65.9% agree to the claim, 10% were undecided, 1.8% disagree while the remaining 0.5% strongly disagree. This revealed that majority of the respondents (87.7%) were positive that expert witness services can be used in identifying manipulated transactions within the bank.

Further, Question 3 revealed that 27.1% of the respondents strongly agree that an expert witness can provide reliability on matters related to fraud through supporting facts and this can lead to the prosecution of a fraud perpetrator, 59.4% agree, 9.2% were undecided and the remaining 4.1% disagree to the claim. This revealed that most of the respondents which account for 86.5% are of the viewed that an expert witness can provide reliability on matters related to fraud through supporting facts and this can lead to the prosecution of a fraud perpetrator.

Finally, question 4 on EWS showed that 27.7% of respondents strongly agree that expert witness errors and omissions would damage credibility in a court agreement or trial. 59.5 percent agree with the statement, 9.5 percent are undecided, and 3.2 percent strongly disagree. This revealed that majority of the respondents (87.2%) were positive that mistakes and omissions by the expert witness can damage credibility in a court negotiation or trail.

Descriptive Statistics of Variables of the Study

This section provides descriptive statistics of the variables of the study, using mean and standard deviation. The result is presented in Table 7.

Table 7: Descriptive Statistics of Variables

Variables	Sample	Mean	Std. Deviation
FRD	220	4.38	0.45
IS	220	4.32	0.37
LS	220	4.23	0.45
EW	220	4.08	0.51

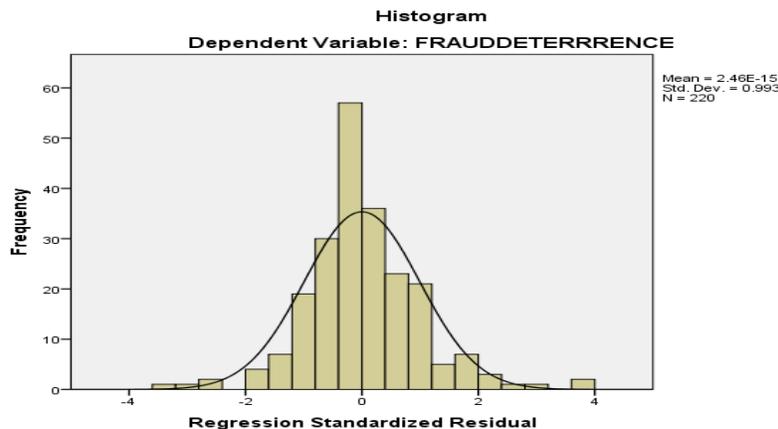
Source: SPSS Output, 2021

All constructs were evaluated using a five-point Likert scale. The mean response on fraud deterrence (FRD) was 4.38, with a standard deviation of 0.45. A mean response of 4.32 on IAS with a standard deviation of 0.38 indicated that staff respondents are also developing a positive perception of the banks' investigating accounting service (IAS). 4.23 mean response on (LSS) revealed that staff in banks are becoming more positive about Litigation support service of financial forensics. Finally, the mean response of 4.08 on expert witness indicates that the sampled banks have a positive perception of the expert witness function.

Diagnostic test

Ordinary least demand the satisfaction of some basic assumption for better inference. To this effect, the study conducted normality test and multicollinearity test.

Figure 4: Normality of Residual



Source: SPSS Output, 2021

The study used a histogram to check for the normality of the residual. The figure above reveals a bell-shaped and symmetric about the mean. This indicated that the residual is normally distributed.

Multicollinearity Test

The presence of multicollinearity between independent variables can result in a disputed result, necessitating testing. To check for multicollinearity, this paper used the Variance Inflation Factor (VIF). A VIF figure of more than 5 indicates severe multicollinearity (Kothari & Garg, 2014). There was no issue with multicollinearity since all of the VIF figures in Table 8 are less than 5.

Table 8: Test for Multicollinearity

	VIF	TV
IAS	1.68	0.60
LSS	2.24	0.45
EW	1.83	0.55

SPSS Output, 2021.

Regression Analysis

The regression results of this study - financial forensics on fraud deterrence in Nigeria's listed deposit money banks are presented in the table 8.

Table 9: Regression Analysis Output

Variable	Coefficients	D	t-value	p-value
IAS	.22	.07	2.99	0.003*
LSS	.38	.07	5.18	0.000*
EWS	.25	.06	4.33	0.000*
CONST	.84	.26	3.27	0.001*
Adjusted R2	0.51			
F-statistic	76.80			
p-value	0.000			

*** Significant at 5%.**

Source: SPSS Output, 2021.

The Adjusted R2 revealed a value of 0.51, indicating that the financial forensics variables (investigating accounting service, litigation support, and expert witness) can explain 51 % of changes in fraud deterrence by Nigeria's listed deposit money banks, with the remaining percent explained by other factors not captured in the model. The model's F-statistic value was 76.80, with a P-value of 0.000 showing that the financial forensics variables have joint effect on fraud deterrence by the listed deposit money banks in Nigeria.

Test of Hypotheses

Regression analysis shows that IAS has a P-value of 0.003 which is significant at less than 5% level of significance, showing that investigating accounting services has a significant effect on fraud deterrence of the sampled banks. Thus (H_{01}) is rejected. For LSS P-value of 0.000 was significant at 5% level of significance, indicating that LSS had a significant effect on fraud deterrence of the sampled firms. As a result, the study's null hypothesis (H_{02}) was rejected, which reported that litigation support services have no significant impact on fraud deterrence in

Nigeria's listed deposit money banks. Finally, regression result revealed that expert witness (EW) had a P-value of 0.000 which was significant at less than 5%, indicating that EW had a significant effect on fraud deterrence of the sampled firms. Therefore, the study rejected the null hypothesis (H_{03}) of the study that stated that expert witness has no significant effect on fraud deterrence in listed deposit money banks in Nigeria.

5. Conclusion and Recommendation

From the findings, the study concludes that financial forensics has a significant positive impact of fraud deterrence. The fraud deterrence cycle was used to explain fraud deterrence. Based on the findings and conclusions of this study, the study recommends that listed deposit money banks should engage in financial forensics, which will ensure an unbiased workplace inquiry and interrogation in suspicions of wrongdoings, or discovery of fraud, not minding the magnitude, position, individual or group of individuals involved.

References

- Adeyemo, Kingsley, A. (2012). Frauds in Nigerian banks: Nature, deep-seated causes, aftermaths and probable remedies. *Mediterranean Journal of Social Sciences*, 3(2), 279-289.
- Agbaje, W. H., & Adeniran, B. G. (2017). Effect of financial forensics services on fraud reduction in the Nigerian banking industry. *Advances in Social Sciences Research Journal*, 4(12), 53-64.
- Association of Certified Fraud Examiner, (2010). Report to the Nation on Occupational Fraud and Abuse. <http://www.acfe.com>
- Association of Certified Fraud Examiners, ACFE (2014). *Report to The Nations on Occupational Fraud and Abuse, Austin*: Association of Certified Fraud Examiners.
- Association of Certified Fraud Examiners, ACFE, (2018). *Report to The Nations on Occupational Fraud and Abuse, Austin*: Association of Certified Fraud Examiners
- Association of Certified Fraud Examiners, ACFE, (2020). *2020 Report to The Nations on Occupational Fraud and Abuse, Austin*: Association of Certified Fraud Examiners, Inc.
- Banking Fraud Investigation Department (2013). Internal Audit's Role in Modern Corporate Governance. <http://www.bfid.org.co>
- Bassey, E. B. (2018). Effect of financial forensics on the management of fraud in microfinance institutions in cross river state. *Journal of Economics and Finance*, 9(4), 78-89.
- BBC http://www.pcaobus.org/rules/Sarbanes_Oxley_Act_of_2002.pdf.
- Berg, J., Hilal, A., El, S., & Horne, R. (2021). World employment and social outlook: trends 2021.
- Bhasin, M. (2007). Financial forensics: A new paradigm for niche consulting. *Research Journal*
- Bloomberg <https://www.bloomberg.com/news/articles/2019-03-15/steinhoff-forensic-probe-shows-ex-executives-inflated-profits>
- Cendrowski, H., Martin, J. P., & Petro, L. W. (2007). *The Handbook of Fraud Deterrence*. New Jersey: John Wiley & Sons, Inc.
- Centre for Forensic Studies (2010). Nigerian Institute of Advanced Legal Studies Lagos, Nigeria round table on the role of forensic and investigative accounting: Challenges for the banking industry 19th July 2010. (Distributor). Essentials Series.
- Chartered Institute of Management Accountants (2008). *Fraud risk management a guide to good practice*. <http://www.thenationsnewspaper.ng>
- Chepngeno, K. F., & Fred, S. (2020). Effect of Litigation Support Services on Fraud Mitigation in Firms Listed At the Nairobi Securities Exchange, Kenya. *IOSR Journal of Economics and Finance*, 11(4):43-51

- Committee of Sponsoring Organizations of the Treadway Commission (COSO), Internal Control—Integrated Framework (New York: Committee of Sponsoring Organizations of the Treadway Commission, 1994), 23. Note: Commonly referred to as the COSO Report
- Companies and Allied Matters Act (CAMA) (2004). <http://www.new.cac.gov.ng>
- Corporate_Finance_Institute <https://corporatefinanceinstitute.com/resources/knowledge/other/enron-scandal/>
- Dada, S. O. (2014) Financial forensics Technique: A means of successful eradication of corruption through fraud prevention, bribery prevention and embezzlement prevention in Nigeria. *Kuwait Chapter of the Arabian Journal of Business and Management Review* 4(1), 176–186.
- Dada, S. O., Enyi, P. E., & Owolabi, S. A. (2013). Financial forensics: A relevant tool for effective investigation of bribery cases in Nigeria. *Unique Journal of Business Management Research*, 1(5), 095-099.
- Dada, S. O., Owolabi, S. A., & Okwu, A. T. (2013). Financial forensics a panacea to alleviation of fraudulent practices in Nigeria. *International Journal of Business, Management and Economics Research*, 4(5), 787-792.
- Daily Trust <https://dailytrust.com/alleged-money-laundering-ex-skye-bank-boss-md-gets-n100m-bail-each>
- DeLiema, M., Deevy, M., Lusardi, A., & Mitchell, O. S. (2020). Financial fraud among older americans: Evidence and implications. *The Journals of Gerontology: Series B*, 75(4), 861-868.
- Di Gabriele, J. A., (2010). An Empirical View of the Transparent Objectivity of Financial forensics Expert Witnesses. <http://ssrn.com/abstract1534705>
- Digabriele, J. A. (2008). An empirical investigation of the relevant skills of forensic accountants. *Journal of Education for Business*, 83(6), 331-338.
- Dorminey, J., Fleming, A. S., Kranacher, M., & Riley, R. A. (2012). The evolution of fraud theory. *Issues in Accounting Education*, 27(2), 555-579.
- Economic and Financial Crimes Commission Establishment Act (2004) Section 46. Abuja: EFCC
- Ehioghiren, E. E., & Atu, O. E (2016). Forensic Accounting and Fraud Management: Evidence from Nigeria. *Igbinedion University Journal of Accounting* (2), 254 – 308.
- Enofe, A., Okpako, P., & Atube, E. (2013). The impact of financial forensics services on fraud detection and prevention among commercial. *Unpublished Thesis*.
- Federal Bureau of Investigation (2001). Financial crimes report to the public. U. S: Department of Justice.
- Forbes Stowell, N., Pacini, C., Crain, J. M., Schmidt, M., & Wadlinger, N. (2019). Investigating Healthcare Fraud: Its Scope, Applicable Laws, and Regulations. *Wm. & Mary Bus. L. Rev.*, 11, 479.
- Godwin, O. E. (2020). *Fundamentals of Financial forensics And Investigation*. (F. Prof Muhammaed Akaro Mainoma, Ed.) Lagos, 16, Thomas Salako Street, Ogba, Lagos Nigeria, Nigeria: Aaron & Hur Publishing (A member of the BSA Group).
- Hopwood, C. J., Thomas, K. M., Markon, K. E., Wright, A. G., & Krueger, R. F. (2012). DSM-5 personality traits and DSM–IV personality disorders. *Journal of abnormal psychology*, 121(2), 424.
- Hopwood, W. S., Leiner, J. J., & Young, G. R. (2009). *Financial forensics. International edition*. NY: McGraw-Hill.
- Hopwood, W. S., Leiner, J. J., & Young, G. R. (2012). *Financial forensics and fraud examination*. New York, NY: McGraw-Hill.
- International Monetary Fund (2011) Nigeria Staff Report for the 2010 Article IV Consultation, Prepared by Staff Representatives for the 2010 Consultation with Nigeria approved by Sean. <http://www.highbeam.com/doc/1P3-821992191.html>
- International monetary fund (IMF) (2001). Financial System Abuse, Financial Crime and Money Laundering. Monetary and Exchange Affairs and Policy Development and Review Departments, 1- 41. <http://www.highbeam.com/doc/1P3-821992191.html>

- John, I. O., & Eiya, O. (2013). Combating corruption in Nigeria: The role of the public sector auditors. *Research Journal of Finance and Accounting*, 4(4), 122-131.
- KPMG. (2003). Internal Audit's Role in Modern Corporate Governance. Hong Kong. <http://www.researchscience.org>
- Lowe, D., Geiger, M., & Pany, K. (1999). The effects of internal audit outsourcing on perceived external auditor independence. *A Journal of Practice & Theory*, 18(6), 7-26.
- Manning, G. A. (2010). *Financial investigation and financial forensics*. (5th ed.) USA: CRC Press.
- New York Stock Exchange (2004). Corporate governance rules. www.njse.com
- Ng'ang'a, J. K. (2015). *The effect of financial forensics services on fraud prevention in the insurance companies of Kenya*, (Doctoral dissertation) University of Nairobi.
- Nigerian Deposit Insurance Corporation (NDIC) Annual Report (2018). Nigerian deposit insurance corporation report on fraud and forgery. <http://www.NDIC.gov.ng>
- Nigerian Deposit Insurance Corporation (NDIC) Annual Report (2019). NDIC Act, No.16 of 2006. <http://www.NDIC.gov.ng>.
- Ojaide, F. (2000). Fraud detection and prevention: the case of pension accounts. <http://www.globalacademicgroup.com>
- Owo, O. (2005), Bank Frauds, Causes, and Prevention: An Empirical Analysis. Ibadan: ATT Books.
- Owolabi, M. S., Ogundajo, A., Yusuf, K. O., Lajide, L., Villanueva, H. E., Tuten, J. A., & Setzer, W. N. (2010). Chemical composition and bioactivity of the essential oil of *Chromolaena odorata* from Nigeria. *Records of natural products*, 4(1), 72.
- Owolabi, S. A., Dada, S. O., & Olaoye, S. A. (2013). Application of financial forensics technique ineffective investigation and detection of embezzlement to combat corruption in Nigeria. *Unique Journal of Business Management Research* 1(4), 65-70.
- Oyedokun, G. E. (2019). Financial forensics : Curbing Fraudulent Activities. *Association of Financial forensics Researchers*, 1-49.
- Oyedokun, G.E. (2013). Audit, investigation and financial forensics: Similarities and differences. Being a lecture delivered at the Institute of Chartered Accountants of Nigeria's financial forensics certification programme
- Peloubet, M. E. (1964). The Measurement of Property, Plant, and Equipment in Financial Statements; Harvard Business School Accounting Round Table, Summary of Proceedings. *Journal of Accountancy (pre-1986)*, 118(000006), 88.
- Pinkasovitch, A. (2016). Detecting financial statement fraud. <http://www.investopedia.com/articles/financial-theory/11/detecting-financial-fraud.asp>
- PricewaterhouseCoopers, "Financial Fraud—Understanding Root Causes," Investigations & Forensic Services Report (2002), Principal focus of PCAOB Auditing Standard No. 2 (AS2).
- Public Company Accounting Oversight Board, Sarbanes–Oxley Act of 2002, Sarbanes-Oxley Act of 2002, Public Law 107–204, 107th Cong., 2d sess. (January 23, 2002), (from statute's official title: "An Act to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws, and for other purposes").
- Skalak, S. & Golden, T. W. 2004, 'Independence, Objectivity, Skepticism', in A Guide to Financial forensics Investigation, John Wiley & Sons, Hoboken, pp. 87-107.
- Skalak, S., Alas, M. & Sellitto, G. 2004, 'Fraud: An Introduction', in A Guide to Financial forensics Investigation, pp. 1-20.
- Thi, P., & Nga, H. (2016). The Effect of Financial Restructuring on the Financial Performance of Commercial Banks in Vietnam. *Journal of Business Management And Economics*, 4(3), 32–37