

## FINANCIAL CRIMES AND FORENSIC AUDITING: A STUDY OF NIGERIA CASES

YUNUS AbdulRasheed Bolaji, **BILIQUEES** Ayoola Abdulmumin, Muhammed Lawal **SUBAIR**,  
**ALKADRIYAR** Sherifdeen & **OJURONGBE**, Olalekan Jubril

<sup>1</sup>Department of Accounting, Faculty of Management Sciences, University of Ilorin, Ilorin, Nigeria.

<sup>2</sup>Department of Finance, Faculty of Management Sciences, University of Ilorin, Ilorin, Nigeria

<sup>3</sup> Department of Accounting & Finance Kwara State University, Malete

<sup>4</sup>Departments of Religion, History and Heritage Studies, Faculty of Art, Kwara State University, Malete. Nigeria

<sup>5</sup>Department of Accounting, Faculty of Arts, Social and Management Sciences, Crescent University Abeokuta.

yunus.ab@unilorin.edu.ng, abdulmumin.ba@unilorin.edu.ng, muhammedlawal.subair@kwasu.edu.ng,

sherifdeen.alkadriyar@kwasu.edu.ng & jubriojurongbe@yahoo.com

08038578393, 0806302997, 08039433961, 0803943961 & 08029819587

### ABSTRACT

*Curbing the menace of financial crimes through forensic audit is imperative due to the global failure of statutory audit. This study examined financial and crimes forensic auditing evidence from Nigeria cases. This study employed a survey research method through the questionnaire. The data collected was analyzed using regression models. The research discovered that  $P\text{-value} = 0.00 < 0.05$  level of significant and the regression line is  $CFCs = 0.335 + 0.746\beta_1 + 0.042\beta_2 - 0.078\beta_3 + ut$ . The study also found that data based collection and data mining are effective enough and capable of curbing financial crimes in Nigeria, although ratio analysis is weak in doing that. The research concluded that forensic audit techniques are effective in combating financial crimes in Nigerian private sector. This study recommended that forensic audit courses should be given a more spaces in the academic curricula of Universities to increase its awareness in Nigeria.*

**Keywords:** Financial Crimes, Forensic Audit Techniques, Nigerian private sector.

### 1. INTRODUCTION

Commercial organizations have failed as a result of financial fraud and fund misrepresentation, the proliferation of financial-related crimes in these growing economies is concerning and catastrophic.

Researchers and business owners worldwide should be concerned about the ongoing battle against the proliferation of financial crimes. Due to statutory audit failure, the Nigerian private sector, like the public sector, requires forensic auditing in order to look into any reported cases of fraud claims or asset theft. Various financial frauds, money laundering, bribery, embezzlement, extortion, tax evasion, and corruption are among the financial crimes that are being committed by both ordinary people and those working for organizations. It can be challenging to identify some of these crimes through statutory audits, and incidentally, they are typically not reported out of concern for unwelcome publicity (Adeniyi & Obidi, 2019).

Although corruption and related financial crimes are a global phenomenon, their prevalence in developing nations such as Nigeria is concerning (Williams, 2004). Internal controls and statutory audits don't work well enough to stop them from spreading. The use of appropriate forensic auditing techniques could greatly aid in reducing the global financial vice and bringing those responsible to justice (Gbegi & Habila, 2017). The adoption of forensic audit techniques for fraud detection became necessary due to the global increase in economic crimes.

Even though forensic auditing is as ancient as regular auditing in Nigeria, its use in corporate settings has not received enough attention. The advancement of businesses in the private sector of the Nigerian economy is still hampered by financial crimes such as embezzlement. Therefore, efforts should be stepped up to combat these social vices by doing ongoing study on how to stop crimes from spreading.

According to Jephitha, Gillian, and George (2019), the rise in financial crimes during the 20th century was linked to the financial crisis, which lately presented forensic auditors with a difficulty in preventing and detecting fraud. In addition, financial scams were blamed for the demise of other companies, including Enron, WorldCom, Tyco, and Adelphia. For example, these businesses just lost \$460 billion (Anuolam, Onyema, & Ekeke, 2016). Due to recent unlawful manipulation of its financial records by its management, Cadbury Nigerian plc suffered a loss of up to \$15 million in Nigeria (Akenbor & Oghoghomeh, 2013). According to history, Nigerian politicians and government officials that are dishonest have lost trillions of naira every year (Ifeniyi & Joseph, 2013). Since statutory auditors and forensic auditors have different auditing skills, training, and mindsets, it is crucial to follow the American Institute of Certified Public Accountants' (AICPA) lead in recommending that effective forensic audit techniques and procedures be used to identify and halt the threat of financial frauds (Abuh & Acho, 2018). When it comes to identifying and prosecuting fraudsters, forensic audit can fill in the gaps left by statutory audit. It was anticipated that it would have overtaken its current position in fraud and other economic crimes. When it comes to pursuing white collar criminals, the method is considerably superior to statutory audit.

### **Objectives of the Study**

The main objective of this research is to investigate the effectiveness of forensic audit in combating financial crimes in Nigeria. The study specifically:

- i. evaluate the effectiveness of data base collection in curbing financial criminals in Nigerian public services.
- ii. determine the effectiveness of data mining in curbing financial crimes in Nigeria.
- iii. assess the effectiveness of ratio analysis in curbing financial crimes in Nigeria.

### **Research Hypotheses**

This research hypothesized that:

- i. data base collection is effective in curbing financial crimes in Nigeria.
- ii. there is no effectiveness of data mining in curbing financial crimes in Nigeria.
- iii. ratio analysis is not effective in curbing financial crimes in Nigeria.

## **2. Literature Review**

### **Financial Crimes**

In the literature, financial crimes were defined in a variety of ways. The illegal transfer of another person's property into one's own possession is known as a financial crime. According to Ezejiofor, Nwakoby, and Okoye (2016), financial crime is defined as "violent, criminal and illicit activities committed with the objective of earning wealth illegally in a manner that violates existing legislation." Bribery and corruption, tax evasion, illicit oil bunkering, theft of intellectual property, illicit mining, financial child labor, prohibited goods, money laundering, currency counterfeiting, drug trafficking, and other illegal activities to obtain wealth are all considered financial crimes (Joseph, Okike & Yoko, 2016). One type of financial crime that involves improperly taking money from someone to whom one owes a duty of care is called embezzlement. Stealing from the poor is corruption. The illegal transfer of

funds to another nation is known as money laundering. Bribery is the practice of offering money or another valued item in order to sway someone or a circumstance. Demanding cash or other material goods in exchange for a favor is known as extortion.

### **Forensic Audit**

Forensics is the search, analysis, monitoring, and collection of factual data relevant to legal proceedings. However, forensic audit is a useful tool for looking into financial fraud, embezzlement, corruption, money laundering, and similar crimes. The goal of forensic auditing is to gather evidence that can be used in court by applying particular audit and investigative techniques as well as accounting principles (Lawan, Magaji, & Naziru, 2018). In order to determine damages, gain, or loss on properties and to gather evidence that is appropriate for a court of law, forensic audits apply auditing principles, investigation tactics, and legal procedures (Mohammed & Peter, 2016). In reaction to the growing prevalence of fraud, forensic auditing became more popular. Peloubet coined it in 1946, and it dates back to the 1800s (Manas, 2014). According to Okoye, Adeniyi, and Obidi (2019), it is a specific field of auditing techniques used to offer appropriate evidence that is pertinent to legal difficulties. Fraudsters, embezzlers, and other financial offenders or suspects may be prosecuted using forensic audit. According to Nenyiaba, Osisima, and Okoye (2015), forensic auditing approaches include business intelligence, forensic analytics, data collecting, whistle blowing, and background investigation. Data mining is the process of looking through and evaluating gigabytes of data to find previously hidden yet valuable information that has been buried over time. Ratio analysis can be used to assess a company's well-being and financial health, which may also reveal fraud, waste, and misuse of funds. According to the findings of ratio analysis, there is less account doctoring if the greatest and lowest values are near to 1, but if they are far off, fraud may be suspected (Onodi, Okafor, & Onyali, 2015).

### **Theoretical Framework**

#### **White Collar Crimes Theory (WCCCT)**

The WCCT is the foundation of this investigation. Ross first proposed the general theory of financial crimes in 1907, but Sutherland expanded on it in 1938. According to this notion, most financial crimes (FCs) go unnoticed. However, Ross coined the word "criminalloid" to describe someone who takes advantage of the law to steal from the impoverished in public (Izedonmi, F. & Ibadin 2012). According to Sutherland, FCs are financial crimes that are purposefully and meticulously committed (Egbunike & Amakor, 2013). Sutherland asserted that as WCC is rarely done by the poor, poverty is not a motivating factor for it (Egbunike & Amakor, 2013). The WCCT talked about the way different financial crimes are being committed and how FC kings fit into this category. Thus, the theory was appropriate for our study.

### **Empirical Review**

To identify any gaps, a wide range of financial crime and forensic audit literature was evaluated. Eyisi et al. (2009), however, looked into how well forensic auditing works to identify, look into, and stop bank frauds. Using primary data, the study concluded that in order to assure effective performance, forensic auditors must be technically and physically equipped. A study on "forensic auditing and financial crime in Nigerian banks: a proactive approach" was carried out by Akenbor et al. (2013). Data from primary sources were employed in the study, and percentages, frequencies, and the Pearson Product Moment Correlation Coefficient were used for analysis. The study found that the threat of financial crimes in Nigerian banks has decreased as a result of a proactive approach to forensic audits.

The impact of forensic investigation techniques on corporate fraud deterrent in Nigerian banks was studied by Onodi et al. (2015). The study design used was a survey. The Z-test, regression analysis, and descriptive analysis were utilized to assess the study's primary data. The study found that in order to prosecute Nigerian scammers, forensic audit is required. The study "effect of forensic auditing on financial fraud in Nigerian deposit money banks" was conducted by Adeniyi (2016). A logistic regression analysis was used for the collection and analysis of primary data. According to the report, forensic auditing can help Nigeria combat financial fraud. Evans (2017) investigated the connection between Ghana's fight against financial and economic crimes and forensic accounting. The study used primary data sources and a survey research design. A regression model was utilized to examine the data. The study's conclusions demonstrated that the use of forensic accounting techniques significantly affects Ghana's efforts to prevent financial and economic crimes. According to the study's findings, forensic accounting can be used by anti-corruption organizations and businesses to improve internal controls and stop and identify financial crimes.

### 3. Methodology

This research employed a survey research design to examine the combating financial crimes in the emerging economies through forensic audit; evidence from Nigeria. The population of the study is made up of some selected professional accountants, professional auditors, and private organizations, such as businesses, corporation, and regulatory authorities such as bodies NFIU and EFCC across the South-Western region of Nigeria. A sample size of four hundred (400) accountants and auditors was purposively selected as only those professionally qualified were served the copies of the questionnaire online and personally. All the administered questionnaire copies were completely filled and retrieved for data estimation. The questionnaire copies were collected back the ways they were distributed. The questionnaire items were designed using a 4-point Likert scale of strongly agree (SA), agreed (A), strongly disagree (SD) and disagreed (D) to get the view of respondents. This study use primary data sourced through the distributed questionnaire to respondents. The collated data were analyzed using regression models as recently used by Akenbor, and Ironkwe (2014); Akepe (2015); Ijeoma (2015); Igweonyia (2016) (Adeniyi, 2016). The validity of the instrument was determined through thorough checking by the accounting and auditing experts, while Cronbach's Alpha reliability test was conducted its reliability as previously employed by various researchers such like Aduwo (2016); Evans (2017); Gbegi and Habila (2017); Abuh and Acho (2018); Ifeanyi and Joseph (2018); Ile and Odimmega (2018); Okoye, Adeniyi and James (2019); Eze and Okoye (2019). The explanatory variables of the study include data base collection (DBC), data mining (DM) and ratio analysis (RA), while the dependent variable is combating financial crimes (CFCs).

#### 3.1 Model Specification

This adapted the work of Anuolam, Onyema and Ekeke (2016) specified below:

$$FDP = f(FAS, FAV, FAP) \dots \dots \dots (3.1)$$

Where fraudulent practices (FDP) are the dependent variable; and forensic accounting services (FAS), forensic accounting validation (FAV) and forensic accounting practices (FAP) are the explanatory variables. The adapted model was modified to form this study' model by using combating financial crimes (CFCs) as the dependable variable and database collection (DBC), data mining (DM) and ratio analysis (RA) as explanatory variables. The model is specified below:

$$CFCs = f(DBC, DM, RA) \dots \dots \dots (3.2)$$

#### 4. DATA AND RESULTS

**Table 4.1 Reliability Test**

Cronbach's Alpha	Number of Items
0.994 (99.4%)	05
Minimum standards: 70%	

*Source: Author computation, 2024*

Table 4.1 discloses the result of Cronbach's Alpha with a coefficient of 0.994 (99.4%) which is greater than the minimum coefficient of 70% for "Cronbach's Alpha" recommended by George and Malley (2003) as the expected minimum reliability coefficient for the acceptability of an instrument. Thus, the instrument used in this study is reliable.

**Table 4.2 Regression Model Summary**

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate	Sig F-change
1	0.975	0.951	0.950	0.72390	0.000
Predictors: (Constant), DBC, DM, RA FAUD					

*Source: Author computation, 2024*

The result in table 4.2 shows that the explanatory variables of data base collection (DBC), data mining (DM) and ratio analysis (RA) positively and significantly relate to financial crimes investigations in Nigeria. The correlation's coefficient (R) of 0.975(97.5%) is very large and this implies a linear correlation between the observed variables and the dependent variable. Also, the  $R^2$  value is 0.951 (95.1%) showing a high positive correlation among the study's variables meaning that about 95.1% changes in combating financial crimes (CFCs) is explained by the DBC, DM, RA and FAUD, the proxies for forensic audit, while the remaining 0.4 9% is explained by other factors outside the model.

**Table 4.3 Analysis of Variances (ANOVA)**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	270.304	4	67.576	1896.678	.000 <sup>b</sup>
Residual	14.073	395	.036		
Total	284.378	399			

*Source: Author computation, 2024*

Table 4.3 presents the result of ANAOVA with an F-statistics value of 1896.678 and probability value of 0.000. This means the effectiveness of the study's explanatory variables: Data base collection (DBC), data mining (DM) and ratio analysis (RA) on combating financial crimes (CFCs) in Nigeria is positive and significant.

**Table 4.4 Regression Coefficient**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.335	0.038		8.919	0.000
DBC	0.746	0.062	0.791	12.083	0.000
DM	0.042	0.070	0.047	0.606	0.545
RA	-0.078	0.079	-0.089	-0.989	0.323
FAUD	0.196	0.058	0.230	3.402	0.001

*Source: Author computation, 2024*



The result in table 4.4 on the study's explanatory variables of data base collection (DBC), data mining (DM) and ratio analysis, and dependent variable of combating financial crimes (CFCs) where than value DBC is (8.919) and significant ( $0.00 < 0.05$ ) at 5% level of significant. The t value of DM is positive (12.083) and significant ( $0.00 < 0.05$ ). The t value of RA is negative (-0.089) and insignificant ( $0.323 > 0.05$ ). The t value of FAUD is positive (3.402) and significant ( $0.001 < 0.05$ ). The linear equation:  $Y = 0.335 + 0.746\beta_1 + 0.042\beta_2 - 0.078\beta_3 + U_t$  depicted that combating financial crimes through forensic audit in Nigeria is possible because a unit increase in the values of each explanatory variables will increase the effectiveness of forensic audit in combating financial crimes through forensic audit in Nigeria.

## DISCUSSION OF RESULTS

The R value of 0.975 in table 4.3 implied a strong effectiveness of the study's explanatory variables on combating financial crimes. The  $R^2$  value of 0.951 means the effectiveness and ability of data base collection, data mining and ratio analysis in combating financial crimes is about 95.1% while the remaining 4.9% is explained by error term. The probability value of  $0.00 < 0.05$  meaning that forensic audit is an effective tool for combating financial crimes in Nigeria. The regression line of CFCs =  $Y = 0.335 + 0.746\beta_1 + 0.042\beta_2 - 0.078\beta_3 + U_t$  in table 4.4 indicated that financial crimes could be combated through data base collection and data mining, although ratio analysis is not an enough tool for curbing financial crimes. This study's results are similar to the outcomes of the studies conducted by Modugu et al (2013); Okoye et al. (2013) and Anuolam et al. (2014) which found that forensic audit technique could curb financial frauds in business organizations all over the world including in Nigeria.

## 5. CONCLUSION AND RECOMMENDATIONS

The study highlights the crucial role of data-driven techniques in combating financial crimes in Nigeria. Effective database collection enhances fraud detection and prevention by ensuring accurate identification and tracking of financial criminals within public services. Data mining proves effective in identifying patterns, anomalies, and fraudulent activities, enabling proactive interventions.

Additionally, ratio analysis serves as a valuable financial forensic tool, aiding in the detection of irregularities and fraudulent financial reporting. Collectively, these mechanisms contribute significantly to mitigating financial crimes when properly implemented. Therefore, in order to raise knowledge of forensic auditing in Nigeria, the study suggested that greater space be allotted to it in university curricula. Based on the findings, the study recommends that;

### Recommendations

Collaboration and Policy Implementation: A synergy between financial institutions,

- i. regulatory agencies, and technology experts should be fostered to ensure effective implementation of data-driven crime prevention strategies.
- ii. Capacity Building: Continuous training for financial analysts, auditors, and investigators should be prioritized to maximize the effectiveness of database collection, data mining, and ratio analysis in curbing financial crimes.
- iii. Strengthening Database Collection: The government should enhance database infrastructure by integrating biometric and digital identity systems to improve financial crime detection in public services.

## References

- Abuh, A. P. & Acho, Y. (2018), Forensic accounting and economic stability in the Nigeria public sector: The role of economic and financial crime commission. *International Journal of Public Administration and management research* 4(3) pp of 19- 74.
- Aduwo, O. O. (2016), The role of forensic accounting in combating the menace of corporate failure, *International Journal of Economic, Commerce and Management*, 3(1), Pp.1-15.
- Adeniyi, A. A. (2016), Forensic auditing and financial fraud in Nigerian Deposit Money Banks. *European Journal of Accounting, Auditing and Finance Research*, 4(8), 1-19.
- Akenbor, C. O. & Oghoghomeh, T., (2013). Forensic auditing and financial crime in Nigerian banks: A proactive. *The Business & Management Review* 4(2).
- Akepe, U. E. (2015), Fighting white collar crimes using forensic investigation skills to enhance operational efficiency: Cameroon as a case study, Africa Director. International Institute of Certified Forensic Investigation professionals inc., USA. [www.iicfip.org](http://www.iicfip.org)
- Akenbor, C. O. & Ironkwe, U. (2014). Forensic auditing techniques and fraudulent practices of public institution in Nigeria. *Journal of Modern Accounting and Auditing*, 10 (4).451 - 459.
- Anuolam, O. M., Onyema, T. E. and Ekeke, U. (2016), Forensic accounting and financial crimes: Adopting the inference, relevance and logic solution approach. *West African Journal of Industry and Academic Research*, 17, Pp.126-132.
- Egbunike, F. C. & Amakor, C. I. (2013), Fraud and Auditors analytical procedure: A test of Benford's Law. E. B. S. *Journal of Management Science*, 3(1), 14-31.
- Evans, O. N. D. (2017), Forensic accounting and the combating of economic and financial crime in Ghana. *European Scientific Journal*, 13(31), Pp 1-15.
- Ezejiofor, R.A., Nwakoby, N. P. & Okoye, F. N. (2016), Impact of forensic accounting on combating fraud in Nigeria banking industry. *International Journal of Academic Research in Management and Business*, 1(2), 1-19.
- Eze, E. & Okoye, E. I. (2019), Forensic accounting and fraud detection and prevention in Imo State public sector. *International Journal of Accounting and Taxation*, (1), 12-26.
- George, D. & Mallery, P. (2003), SPSS for Windows step by step: A simple guide and reference. 11.0 update. Boston: Allyn & Bacon.
- Gbegi, D.O. & Habila, E. (2017), Effect of forensic accounting evidence on litigation services in the Nigerian judicial system. *Nigeria Journal of Management Sciences*, 6(1), 104-113
- Igweonyia, O. V. (2016), Forensic accounting as a panacea to alleviation of fraudulent practices in Nigerian Public sector organizations (A study of some selected Ministries in Enugu State. *International Journal of Management and Applied Science*, 2(9), 8-158.
- Ile, C. M. & Odimegwa, C.G. (2018), Use of forensic accounting techniques in the, detection of fraud in tertiary institutions in Anambra State. Nigeria. *International Multi-disciplinary Journal*, 12(1), 66-76.
- Ifeaniyi, M. & Joseph, M. O. (2013), Forensic accounting: A relief to corporate fraud. *Research Journal of Finance and Accounting*, 4(14), 43-50.
- Ijeoma, F. (2015), Empirical analysis on the use of forensic accounting techniques in curbing creative accounting. *International Journal of Economic, Commerce and Management*, 3(1), 1-15.
- Izedonmi, F. & Ibadin P. O. (2012), Forensic Accounting and Financial Crimes: Adopting the Inference, Relevance and Logic Solution Approach. *African Research Review, An International Multidisciplinary Journal, Ethiopia*, 6 (4), 125-139.
- Jephitha, K. K., Gillian, M. & George K. (2019), Forensic accounting skills and fraud control in country governments in Kena Region. *International Journal of Economics, Commerce and Management*, 7(6), 324-34.
- Joseph, F. A., Okike, B. M. & Yoko, V. E. (2016). The impact of forensic accounting in fraud detection and prevention: Evidence from Nigerian public sector. *International Journal of Business Marketing and Management*, 34-41.

- Lawan, Y., Magaji, A. & Naziru. S. (2018), Influence of forensic accounting practices on fraud prevention among listed companies in Nigeria. *Journal of Accounting, Auditing and Taxation*, 2(1), 18-24.
- Manas, C. (2014), Problems and prospects of forensic accounting profession in India. *International Journal of Informative & Futuristic Research* 2(1), 1-9.
- Mohammed, U. B. & Peter, K. N. (2016), Immunity clause and white collar crimes in Nigeria; A call for the withdrawal of immunity clause. *Journal of Research in Humanities and Social Science*, 4(9), 60-65.
- Neniyaba, I. C., Osioma, B. C & Okoye, E. I. (2015), Combating fraud and white collar crimes in Nigeria through application of international accounting reporting standards. *International Journal of economic Development Research and Investment*, 6(1), 72-83.
- Onodi, B. E., Okafor, T. G., & Onyali, C. I. (2015). The Impact of forensic investigative methods on corporate fraud deterrence in banks in Nigeria: *European Journal of Accounting, Auditing and Finance*, 3(4). 69 - 85.
- Okoye, I. Adeniyi, S.I, & Obidi, U. E. (2019), Forensic Accounting and financial fraud dissection through interview process in selected Federal Ministries Enugu State. *International Journal of Recent Innovation in Academic Research* 3(12), 88-104.