

AN INNOVATIVE APPROACH IN COMBATING ECONOMIC CRIME USING FORENSIC ACCOUNTING TECHNIQUES IN PUBLIC INSTITUTIONS IN TARABA STATE, NIGERIA

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Abstract

The study examines an innovative Approach in combating Economic Crime using forensic accounting techniques in Public Institutions in Taraba State, Nigeria. Survey research design was employed for the study with extensive reliance on primary data obtained through the use of structured Likert scale questionnaire. The data were tested using unit root test statistics and regression analysis on Eview version 10. The study findings showed that forensic accounting techniques of conducting investigation, analyzing financial fraud detection and reconstructing incomplete accounting records have significant effect on fraud detection in Public institutions in Taraba State, Nigeria. In the light of the study findings, the following recommendations were provided; more forensic accountants should be employed by Public Institution in, Taraba State, Nigeria to assist curb modern day financial fraud brought about by advancement in technology. The Central Bank of Nigeria (CBN) should in collaboration with all financial institutions establish an electronic fraud risk information center staffed with forensic accountants. Public Institutions should incorporate automated control measures such as biometric authentication of accounting records to serve as deterrent for fraud occurring.

Keywords: Forensic Accounting, Financial Fraud Detection, Fraud Prevention and Public Institutions.

Introduction

Forensic accounting involves the application of accounting principles and techniques to investigate financial discrepancies and provide evidence for legal proceedings. This specialized field plays a crucial role in the detection and prevention of financial crimes, particularly in environments where traditional auditing methods may fall short. By applying a combination of accounting knowledge and investigative skills, forensic accountants can uncover complex fraud schemes that might otherwise remain hidden. Forensic accounting's relevance has been growing in Nigeria, especially in light of numerous high-profile corruption cases that have highlighted the need for more rigorous financial oversight (Akinyemi, 2023).

Fraud prevention focuses on implementing controls and measures to deter potential fraudsters before fraudulent activities occur. In public ministries, where large sums of public funds are managed, robust internal controls are critical. These controls include segregation of duties, regular financial audits, and strict adherence to procurement procedures. By ensuring that no single individual has control over all aspects of a financial transaction, the risk of fraud can be significantly reduced. Additionally, continuous training and awareness programs for employees on the importance of ethical behavior and the mechanisms for reporting fraud are essential components of a comprehensive fraud prevention strategy (Eze, 2023). In public ministries,

robust fraud detection and prevention strategies are essential to ensure financial integrity and accountability. The implementation of advanced technologies, such as forensic accounting and data analytics, enhances the capability to detect and prevent fraud effectively. Forensic accounting, in particular, has been instrumental in uncovering complex financial frauds and providing evidence for legal proceedings. In Nigeria, integrating forensic accounting practices within public ministries has shown promising results in enhancing transparency and accountability (Okoro, 2022).

In the event of legal disputes or litigation, forensic accountants assess financial damages, losses, or economic impact to determine the extent of financial harm caused by a specific event or wrongdoing (Akinbowale, 2018). Forensic accountants are often called upon as expert witnesses to present their findings and analyses in legal proceedings, providing objective and credible testimony to support their conclusions. Forensic accountants play a crucial role in resolving financial disputes between parties by providing an independent and unbiased assessment of financial matters. By conducting thorough examinations and implementing robust internal controls, forensic accountants help organizations deter potentially fraudulent activities and enhance their fraud prevention measures. The diagram below depicts fraud detection cycles:

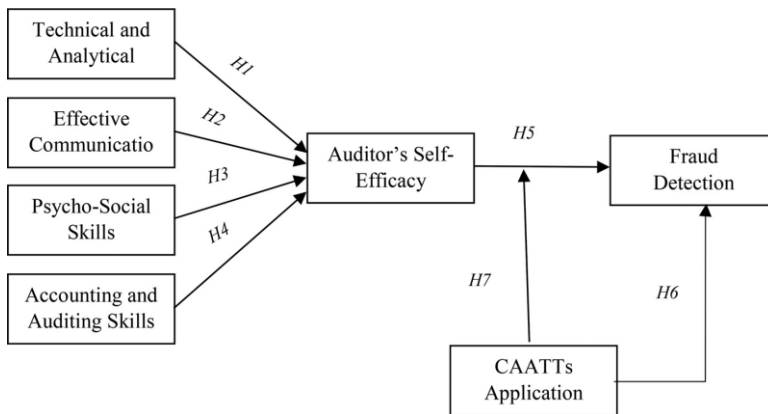


Fig:1.1 Fraud Detection skills

Source: CBN, Report, 2022

Forensic accounting is a multi-discipline that combines accounting, auditing, and investigative skills to detect financial irregularities and recommend appropriate guidelines for the relevant parties. Huber enhanced the relevance of the study by exploring the various theories of fraud and dimensions of financial crimes (Huber, 2017) He argued that the fraud and financial crimes are complex, multifaceted, and interrelated.

Statement of the Problem.

Fraud, corruption, and various financial crimes have profoundly impeded Nigeria's economic development, leading to significant challenges in the government's capacity to provide essential services to its citizens. These issues are particularly pronounced within the Nigerian public sector, where financial abuse and fraud have escalated to alarming levels. As a result, there has been persistent mismanagement of resources and a substantial loss of government assets. The

consequences of these financial malpractices extend beyond immediate fiscal losses; they erode public trust, deter foreign investment, and hinder overall national growth. Traditional auditing and investigation methods have proven increasingly inadequate in detecting and preventing fraudulent activities within government ministries. These conventional approaches often lack the sophistication required to address the complexities of modern financial crimes. Furthermore, public sector auditors frequently do not possess the requisite knowledge or skills to effectively tackle fraud, leaving significant gaps in oversight and accountability. This inadequacy is compounded by a broader systemic issue where public-sector institutions may not prioritize comprehensive training in advanced auditing techniques. (Alshurafat, Al Shbail, & Mansour, 2021))

Objective of the Study

- i. Examine the effectiveness of forensic accounting techniques in detecting fraud in public institutions in Taraba State.
- ii. Ascertain if forensic accounting will curb fraudulent activities in public institutions in Taraba State.
- iii. To establish that reconstructing incomplete accounting records can cause financial fraud activities in public institutions in Taraba State

Literature Review

Forensic Accounting

Forensic accounting is a specialized branch of accounting that blends financial auditing, investigative techniques, and legal knowledge to analyze financial records for use in legal proceedings. Its primary objective is to uncover financial fraud, embezzlement, corruption, and other economic crimes, often culminating in expert testimony during litigation. Forensic accountants apply their expertise to examine and reconstruct financial transactions, detect hidden assets, assess damages, and provide litigation support to resolve financial disputes. As a growing field globally, forensic accounting has become indispensable in identifying financial misconduct across both the public and private sectors (Hsu, Tian, & Yi, 2019).

In Nigeria, forensic accounting is crucial in the fight against fraud and corruption, which are widespread across various sectors. The country has been battling significant issues of corruption, financial irregularities, and economic crimes. These challenges prompted increased reliance on forensic accountants to scrutinize financial records, particularly in government, oil and gas, and corporate sectors (Ile, & Odimegwa, 2018). The Nigerian Economic and Financial Crimes Commission (EFCC) and Independent Corrupt Practices Commission (ICPC) are key players in leveraging forensic accounting expertise in investigating and prosecuting economic crimes. Forensic accountants help law enforcement agencies identify patterns of illicit financial activities, thus helping curb financial fraud (Jain, & Lamba, 2020).

Fraud detection

Fraud detection is the process of identifying fraudulent activities or financial irregularities within an organization, industry, or system. Fraud can occur in various forms, such as misappropriation of assets, financial statement manipulation, corruption, identity theft, and

cybercrime. Fraud detection aims to identify these illegal activities early on to minimize financial losses, safeguard the integrity of institutions, and prevent future occurrences. Fraud detection typically relies on the application of internal controls, auditing, data analysis, and forensic investigation. It is an essential component of risk management and corporate governance. In recent years, fraud detection has gained more attention, particularly in Nigeria, due to the increased frequency of financial crimes. According to the Economic and Financial Crimes Commission (EFCC), fraud is rampant in the country, with losses amounting to billions of naira annually (EFCC, 2022). The importance of fraud detection in Nigeria cannot be overstated, given the prevalence of corruption and financial crimes. (Kizyma, & Kizyma, 2019).

Forensic Accounting and Fraud Detection

Tamajong (2020) 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. The writer advises to be cautious when fraud is reported as it may be false allegations. Fraud is not easily proven since fraudsters have themselves at a safe line where authority could not convict them. This shows that the author is explaining that the fraud defaulters are getting smarter due to the possible mistake's 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.

Forensic Accounting Techniques

Forensic accounting techniques are highly effective in detecting and preventing fraud within public institutions. Through financial data analysis, payroll scrutiny, procurement audits, and digital forensics, forensic accountants can uncover fraudulent activities and provide the necessary evidence for prosecution. The impact of forensic accounting has been felt in Nigeria's public institutions, where it has led to the recovery of misappropriated funds, the identification of ghost workers, and the prosecution of corrupt officials. (EFCC, 2022; NEITI, 2022; ICPC, 2021).

The following among others are techniques available in forensic accounting:

1. **Data Mining:** Data mining is the use of specialized software to search for anomalies, trends, and correlations in datasets to anticipate outcomes. It makes it easier to extract hidden predictive information from massive databases and can help companies spot patterns, abnormalities, and other odd actions, allowing businesses to make proactive knowledge-driven decisions. Data mining software, which has scripting capabilities and can scan businesses' datasets for abnormalities and suspicious patterns that are indications of fraud, is particularly useful in identifying fraud.

2. **Continuous Control:** Continuous Control is regarded as one of the forensic accounting approaches used to gather evidence of fraud. Processes for continuous control are centered on audit departments, branches, customers, and agency owners.
3. **Ratio analysis:** As a forensic accounting approach, ratio analysis is performed to evaluate data on a historical, industry, or benchmark basis. It detects fraud by studying data patterns to identify potentially deceptive transactions. Ratio analysis is the process of determining the links between various financial statement items as well as these items and nonfinancial data. The vertical analysis compares aspects of a financial statement to a common base item, whereas horizontal analysis is used to analyze the ratio of change in distinct financial statement items over a specific period. Vertical analysis, on the other hand, converts financial statements into percentages.
4. **Computer-Assisted Auditing Software:** These are computer programs that forensic accountants could make use of, in the audit procedure to process data of audit significance in the client's information system and at the same time not depend on that client (Ewa, 2022; Akpanuko & Umoren (2018)). This technique assists experts in investigative and forensic accounting assignments to perform auditing procedures such as Testing transactions and balances in detail; the identification of any inconsistencies or significant fluctuations; general testing in addition to computer systems application; sampling programs in extracting data for audit testing; and the recording of the calculations performed by accounting systems (Ewa, 2022).
5. **Relative Size Factor (RSF):** This approach is the ratio of the greatest numbers in a given set to the second-largest number, and when applied to figures, the unusual deviations may be traced back to fraud or actual errors (Coita, Filip, & Kicska, 2021.; Yussof, & Al-Harthy, 2018)).
6. **Net Worth Approach (NWA):** According to Ewa (2022), there are two techniques for assessing and confirming taxpayers' income: which are the Direct Method and the Indirect Method. The direct method is the specific item relied upon in verifying income and expenses by referring to the books and records used in the preparation of the relevant tax computations while the indirect method involves the determination of tax liabilities through an analysis of a taxpayer's financial affairs accumulating information beyond the taxpayer's declaration and formal books and records ((Altuk, 2021).).
7. **Net Worth Comparative Method:** Net Worth Comparative Method is like the Net Worth Approach, but in its application, the current net worth of the taxpayer will be compared with the value of the cumulative years in identifying the difference and treat as income not disclosed for the current year.

Theoretical Framework

Fraud \Triangle Theory



Figure 2.1: Fraud triangle

Source: Researchgate.net

The Fraud Triangle Theory, developed by Donald Cressey in 1950, provides a strong theoretical foundation for studying the effect of forensic accounting techniques on fraud detection and prevention in public ministries. Cressey's research aimed to understand the factors that lead individuals to commit fraud, focusing particularly on white-collar crimes and occupational fraud. The Fraud Triangle Theory posits that three key elements must be present for fraud to occur: Pressure (or Motivation), Opportunity, and Rationalization. Pressure refers to the perceived need or incentive to commit fraud, which could stem from financial difficulties, unrealistic performance expectations, or personal pressures. Opportunity arises when there are weak internal controls or oversight within an organization. Rationalization is the justification for fraudulent behavior; individuals engaging in fraud often convince themselves that their actions are justified, necessary, or harmless. According to Cressey's theory, fraud is likely to occur when these three elements converge.

The Fraud Diamond Theory



Figure 2.2: Fraud diamond

Source: Karunia dhi.blogspot.co

The Fraud Diamond Theory was first presented by Wolfe and Hermanson in the CPA Journal (December 2004). It is generally viewed as an expanded version of the Fraud Triangle Theory. In this theory, an element termed capability has been added to the three initial fraud elements of the Fraud Triangle Theory. Wolfe and Hermanson (2004) argued that although perceived pressure or incentive might coexist with an opportunity to commit fraud and a rationalization for doing so, it is unlikely for fraud to take place unless the fourth element (i.e., capability) is

also present. In other words, the potential perpetrator must have the skills and ability to commit fraud.

Review of empirical studies in Nigeria

Ahmed (2023) examined the effect of forensic accounting techniques on fraud detection in public ministries in Kano State from 2016 to 2022. The independent variables were forensic data mining, forensic auditing, and digital forensics, while the dependent variables were fraud detection and fraud prevention. The study utilized a combination of descriptive research design and ex-post facto methodology, with data collected from internal audit reports of 10 ministries. The analysis involved descriptive statistics and regression analysis. The findings revealed that forensic auditing and data mining had a significant positive effect on fraud detection, while digital forensics also showed a significant impact on fraud prevention. The study concluded that the implementation of forensic accounting techniques significantly improves fraud detection in public ministries. It recommended that ministries should enhance their internal controls by integrating forensic accounting systems to reduce fraudulent activities.

Baesens, Van Vlasselaer, and Verbeke (2015). Investigated the role of forensic accounting in fraud prevention in public institutions in Lagos State for the period from 2015 to 2020. The independent variables were forensic audit trails, digital forensic tools, and forensic document examination, while the dependent variable was fraud prevention efficiency. The study adopted a quantitative research design using secondary data from ministry records and audit reports. A fixed effect regression model was used to analyze the data. The results showed that forensic audit trails had a positive and significant effect on fraud prevention, while forensic document examination showed positive but insignificant results. Digital forensic tools also had a significant effect on fraud detection. The study recommended that public institutions should invest in advanced forensic tools for more effective fraud detection and prevention.

Adebayo and Oluwasegun (2022) explored the effect of forensic accounting practices on fraud detection in the public sector of Kaduna State from 2014 to 2019. The independent variables were forensic data analytics, forensic audit procedures, and fraud risk assessment, while the dependent variables were fraud detection and prevention rates. The study used a descriptive research design and ex-post facto methodology. Secondary data were obtained from audit reports and analyzed using descriptive statistics and multiple regression analysis. The findings revealed that forensic audit procedures and data analytics had a significant positive effect on fraud detection, while fraud risk assessment had a moderate impact on fraud prevention. The study recommended continuous training in forensic accounting for public officials to enhance the effectiveness of fraud detection systems.

Kizyma and Kizyma (2019)) examined the impact of forensic accounting techniques on fraud detection and prevention in public ministries in Osun State over the period 2012 to 2018. The independent variables were forensic investigation, forensic document review, and digital forensics, while the dependent variable was fraud detection rate. The study adopted a descriptive design and employed panel data regression analysis. Data was sourced from internal audits and annual reports. The findings indicated that forensic investigation had a significant positive effect on fraud detection, while digital forensics showed a moderate positive impact. Forensic document review had an insignificant effect on fraud prevention. The study concluded

that forensic accounting plays a critical role in detecting fraud and recommended regular updates of forensic tools to improve fraud detection rates.

Methodology

The data collected will be processed both manually and electronically using Eview Version 10. The statistical tool used in the analysis of the data collected was Descriptive Statistics and Regression Analysis.

Model Specification

The model Specification shows the relationships between the dependent, independent, and control variables can be mathematically and statistically represented. Each objective requires its own model, this study was following the lead of Bahmani, Mohsen and Abera, (2018). In this study, the model of Bahmani, Mohsen and Abera, (2018) augmented to make room for inclusion (the core variable of this study). Therefore, in line with the equation, the model for the study becomes.

$$FDP = (FAT, LSS, FAC, FACH) \dots\dots\dots 1. 1$$

Note that all the variables were computed using econometric form of equation 3.2 is expressed as follows:

$$FDP = \beta_0 + \beta_1FAT + \beta_2LSS + \beta_3FAT + \beta_4FATC + \epsilon \dots\dots\dots 1. 2$$

Where:

- FDP= Fraud detection and Prevention
- FAT= Forensic Accounting Technique
- LSS=Litigation and Support Services
- FACH= Foreign Accounting on competence account
- FAC= Forensic Accounting Challenges
- β_0 = Constant
- $\beta_1, \beta_2, \beta_3, \beta_4$ = Slope of Coefficient
- ϵ = error term

Stationarity Test

The popular Augmented Dickey-Fuller (ADF) test was employed in this study. The null hypothesis is stated as follows:

$$H_0: \delta = 0 \text{ or } \rho = 1 \text{ (I.e. the variables are non-stationary)}$$

Table 1.1.1 Stationarity test result for variables used in the study

Variable	Mackinnon Critical Value at Level	ADF Statistics at Level	Mackinnon Critical Value after 1 st difference	ADF Statistics after first difference	Order of Intergration
LgFDP	-3.440681	-3.162946	-3.440894	-12.33821	I(1)
LgFAT	-3.441552	-2.445328	-3.441552	-4.487467	I(1)
LSS	-3.440681	-2.156475	-3.440894	-12.05715	I(1)
LgFACH	-3.440681	-1.170405	-3.440894	-12.97558	I(1)
LgFAC	-3.440894	-12.97559	-	-	I(0)

Source: Author’s computation, 2025

Table 1.1.1 showed that variables such as LgFDP, LgFAT, LSS and LgFACH are stationary after first difference (i.e. order I (1)) while LgFAC was found to be stationary at level (i.e. I (0)) at 5 percent level of significance.

Test of Cointegration

Cointegration test is to determine whether the Data was shared in order of integration is a mere coincidence or an evidence of long-run relationship between these variables becomes essential.

Table 1.1.2 Summary of Johansen Cointegration Test Result for the Model One

Model	Number of Cointegrating Equation(s)	Trace Statistics	Critical Value at 5%	P-Value
(Equation 1.2)	None*	69.81889	58.66744	0.0242
	At Most 1	33.69685	47.85613	0.5185
	At Most 4	0.408279	3.841466	0.5228

Source: Author’s computation, 2025

Table 1.1.2 contains the result of the co-integration tests conducted using the Johansen Co-integration Test which is more appropriate particularly when there is more than one explanatory variable in the equation having same order of integration as the dependent variable (Gujarati & Porter, 2009).

Error Correction Model

The ECM is a short-run model that explains how the long run error of a model is corrected in the short-run. Gujarati & Porter (2009). The below table contains the summary of the error correction models:

Table 1.1.3 Error Correction Model (ECM) Result

Model	Variable	Co-efficient	t-Statistic at 5%
Model One (Equation 1.2)	Ecm (-1)	-0.083377	-2.246263

Source: Author’s computation, 2025

From table 1.1.3, the speed of adjustment of -0.083377 is negative and statistically significant (note the t-statistics at 5percent level of significance); since the size of the error correction term will determine how quickly the short-run disequilibrium will be taken care of, the coefficients of the lagged Ecm show that about 8.3percent of the previous short-run disequilibrium w corrected within the space of one quarter.

Table 1.14 Serial Correlation Test Result for Model One (Equation 3.2)

F-Statistics	89.57219	Prob. F (2, 38)	0.1877
Obs*R-squared	61.95131	Prob. Chi-square (2)	0.1236

Source: Author’s computation, 2025

From the Table 1.1.4, the corresponding P-value of the Obs*R-squared is 0.1877 (i.e. approximately 19 percent). This is greater than 0.05 (i.e. 5percent) therefore we do not reject null hypothesis. That is, there is no serial correlation in the model.

Table 1.1.5 Heteroscedasticity Test Result for Model One (Equation 3.7)

F-Statistics	9.140400 Prob. F (3, 40)	0.3723
Obs*R-squared	27.14640 Prob. Chi-square (3)	0.3517
Scaled explained SS	30.70576 Prob. Chi-square (3)	0.7800

Source: Author’s computation, 2025

The result above shows that the Observed R-squared (Obs*R-squared) is 27.14640 while its corresponding P-value is 0.3517 (about 35percent). Since the P-value of the Obs*R-squared is greater than 0.05 (or 5percent), we do not reject the null hypothesis. Thus, we can conclude that the result of model one is homoscedastic (i.e. not heteroscedastic)

Normality Test Result

Table 1.1.6 Normality Test Result for Model One (Equation 3.2)

Model	Jarque-Bera Statistics	P-value
Model One (Equation 3.2)	13.75659	0.234384

Source: Author’s computation, 2025

From the result of the normality test summarized in table 4.6.3 above, it is obvious that the corresponding P-values (0.23) for the J-B statistics in the model is greater than 0.05 (i.e. 5percent). Therefore, we do not reject the null hypothesis (that the error term of the equation is normally distributed).

Summary

This study examines an innovative Approach in combating Economic Crime using forensic accounting techniques in Public Institutions in Taraba State, Nigeria. The researcher was inspired and motivated by the quest for knowledge and the need to draw policy recommendation that can be adopted to better the Nigerian economy. The result of the co-integration test revealed the presence of co-integration among the variables incorporated in the model. Following the establishment of co-integration among the listed variables, the need for the estimation of error correction model (ECM) to reveal the short-run adjustments of the co-integrated variables became mandatory. Therefore, this test was conducted and the result showed that error correction term carries a negative sign and is statistically significant.

Recommendations

These measures must be undertaken in order to keep the forensic fraud under control, these are:

- i. Investigative flexibility was discovered to have exhibited a meaningful positive influence on the fraud examination in Nigerian electricity distribution companies. Consequently, it is recommended that the Internal Auditors and fraud examiners of the Nigerian electricity distribution companies should be encouraged by the top management and professional bodies to develop more interest on the application of investigative flexibility to enable them carry out effective fraud examination.
- ii. For the sustainability of effective fraud examination in the Nigerian electricity distribution companies, accounting and auditing expertise should be given a serious consideration by employing qualified accountants and auditors.

- ii. As analytical proficiency was discovered to have a negligible favorable effect in the fraud examination of Nigerian electricity distribution companies, seminar, workshop and training should be organized from time to time for the internal auditors and accountants to enable them improve their technical analytical skills for better performance in fraud.
- iii. Good communication skill was also established to have a strong positive impact on fraud examination in the Nigerian electricity distribution companies as it is required to communicate the result of investigative flexibility and analytical proficiency to the end users. In this regard, forensic accountants should be encouraged to development

Conclusion

This study employed the EGARCH model as developed by Nelson (1991) to measure the forensic accounting on financial fraud prevention in public institutions in Taraba State, Nigeria. It was confirmed that the forensic estimator adequately measured the financial fraud by testing for ARCH effect, serial correlation and normality test after running the EGARCH model. This is a timely study given the relatively high level of corruption in Nigeria most especially amid recent era democratic dispensations. This study has therefore made recommendations and policy intervention measures to be adopted in order to check the fraudulent nature of accounting activities in Public institution in Taraba State.

References

- Adebayo, F., & Oluwasegun, T. (2022). Whistleblowing and fraud detection in Nigeria: A case study approach. *Journal of Financial Crime*, 29(4), 123-135.
- Alshurafat, H., Al Shbail, M. O., & Mansour, E. (2021). Strengths and weaknesses of forensic accounting: an implication on the socio-economic development. *Journal of Business and Socio-economic Development*, 1(2), 135-148.
- Altuk, E. V. (2021). Detection and prevention of fraud in the digital era. *Machine Learning Applications for Accounting Disclosure and Fraud Detection*, 126-137. <https://dx.doi.org/10.4018/978-1-7998-4805-9.CH009>
- Akinbowale, O. E. (2018). Information communication technology and forensic accounting in Nigeria. *International Journal of Business and Finance Management Research*, 6(1), 1-7.
- Akinyemi, K. (2023). Forensic accounting: A tool for detecting and preventing financial crimes in Nigeria. *Journal of Financial Crime*, 30(1). 11 – 25
- Akpanuko, E., & Umoren, G. (2018). The role of forensic accounting in public sector accountability. *Public Finance Review*.
- Baesens, B., Van Vlasselaer, V., & Verbeke, W. (2015). *Fraud analytics using descriptive, predictive, and social network techniques: a guide to data science for fraud detection*. John Wiley & Sons.
- Bahmani, O. Mohsen B., & Abera, G. (2018). International trade performance: Evidence from 12 African countries. *Economic Analysis and Policy*, 1–22.
- Coita, I. F., Filip, L. C., & Kicska, E. A. (2021). Tax evasion and financial fraud in the current digital context. the annals of the university of Oradea. *Economic Sciences*, 30(1st). [https://dx.doi.org/10.47535/1991AUOES30\(1\)020](https://dx.doi.org/10.47535/1991AUOES30(1)020)
- EFCC. (2022). Annual report on financial crimes in Nigeria. Economic and Financial Crimes Commission.

- Ewa, U. E. (2022). Forensic accounting and fraud management in Nigeria. *Journal of Accounting, Business and Finance Research*, 14(1), 19-29. <https://dx.doi.org/10.55217/102.v14i1.505>.
- Eze, O. (2023). Integrating forensic accounting into public sector financial oversight in Nigeria. *Public Finance Review*.
- Gujarati, D. N. (2003), Basic econometrics, United States, military academic, west point. Fourth edition.
- Huber, A (2017). Recent research brings new insights into fraud prevention and detection. *Journal of Accountancy*, 220(5), 40-45.
- Hsu, P., Tian, F., & Yi, L. (2019). The impact of financial fraud on technological innovation: myopia, job security, and loss of trust. <https://dx.doi.org/10.2139/ssrn.3562829>
- ICPC Report. (2021). Investigating financial mismanagement in public ministries. Independent Corrupt Practices Commission.
- Ile, C. M., & Odimegwa, C. G. (2018). Use of forensic accounting techniques in the detection of fraud in tertiary institutions in Anambra State, Nigeria. *African Research Review*, 12(1), 66-76. DOI:10.4314/afrrrev. v12i1.8
- Jain, E., & Lamba, J. (2020). Forensic accounting: A way to fight, deter and detect fraud. *IARS' International Research Journal*, 10(1). <https://dx.doi.org/10.51611/IARS.IRJ.V10I1.2020.106>
- Kizyma, T., & Kizyma, A. (2019). Identifying causes and potential consequences of financial fraud. <https://dx.doi.org/10.35774/visnyk2019.02.047>
- NEITI. (2022). Transparency and accountability in Nigeria's public sector. Nigeria Extractive Industries Transparency Initiative.
- Okoro, A. (2022). Forensic accounting in the Nigerian public sector: Challenges and prospects. *Journal of Public Administration*, 34(2). 77-95
- Tamajong, C. F. (2020). E-banking Acceptance: An empirical study of Cameroonian Customers (Doctoral dissertation, Cardiff Metropolitan University). <https://dx.doi.org/10.25401/CARDIFFMET.13127882.V1>
- Yussof, S. A., & Al-Harthy, A. M. H. (2018). Cryptocurrency as an alternative currency in Malaysia: issues and challenges. *ICR Journal*, 9(1), 48-65.