

FORENSIC AUDIT AND FRAUD PREVENTION IN NIGERIAN PUBLIC SECTOR**DEBEKEME BOYELAYEFA****DEPARTMENT OF ACCOUNTING, FACULTY OF MANAGEMENT SCIENCES,
UNIVERSITY OF PORT-HARCOURT****Abstract**

Fraud is a global threat to public institutions and economies of the world. Preventive efforts in previous studies proved illusive as occurrences are on an escalating magnitude. In response to the above, this study is to investigate the relationship between forensic audit and fraud prevention in Nigerian public sector. The field survey research design was adopted for this study. The operant conditioning theory lent credence to the study. Three research questions and hypotheses were formulated. The study population was limited to an accessible population of Nine (9) Federal Ministries, Departments and Agencies in Rivers State. Secondary data were collected for this study and analyze with Augmented Dickey-Fuller (ADF) stationarity unit root test. The statistical tool, Multiple Regression Analysis with the aid of econometrics view version 10 was used to test the stated hypotheses. The results analyzed revealed that forensic audit report (FAR) is positively and significantly related to fraud prevention with positive coefficient $\beta = 0.152520$, t-statistic = 0.243268 and p-value=0.0159 less than ($<$) 0.05, thus rejected the null hypothesis. This implies that forensic audit report is a panacea in fraud prevention in Nigeria public sector. Our analysis of the results further reported that litigation support services (LSS) also relates to fraud prevention positively and significantly with positive coefficient $\beta = 0.0404997$, t-statistic = 0.337676 and p-value = 0.0471 less than ($<$) 0.05, thus rejected the null hypothesis. This implies that litigation support services (LSS) is highly effective in fraud prevention in Nigerian public sector. The findings also indicated that investigative accounting (IA) has a positive and significant relationship with fraud prevention, $\beta = 0.321988$, t-statistic = 0.327494 and p-value = less than ($<$) 0.05, thus rejected the null hypothesis. It was concluded that forensic audit is one of the most effective techniques in fraud prevention in Nigeria public sector. The Augmented Dickey-Fuller test indicated stationarity between the variables. The findings of this study suggested recommendations among others that forensic audit should be adopted as compulsory means in the fight against fraudulent practices in our public institutions. Further studies with different methodologies should be carried out on forensic audit and public expenditure in Nigeria.

Keywords: Forensic audit, fraud prevention, forensic audit report, litigation support services, investigative accounting, public sector

Introduction

Fraud is an international falsification, suppression or oversight of truth for the purpose of manipulation in financial statements to the benefits of perpetrators and detrimental to organizations, consisting of embezzlement, dishonestly obtaining or using assets of institutions. It is a global and contextual phenomenon with destructive tendencies, responsible for the collapse of institutions and adversely affects economic growth.

Forensic audit was introduced as a measure to control the excesses of fraud in all sectors of our economy. Several studies on this objective have been carried through empirical determinations with different variables, aimed at the preventive role of fraud in Nigeria and other part of the world. The research works of Enofe, Ibadin, Audu and Izevbogie (2014); Wolokolie (2017); Nawawi (2017); Edheku and Akpoveta (2020); Adamu (2015); Okoye, Emmanuel, Ndah and Nwoka (2019); Takachicha and Mulonda (2020); Akinadewo, Israel and

Akinkoye (2020); Dilshad, Irfan, Javed and Aftab (2020); Adulraham (2019); Maduabuchi (2019); Akani and Ogbeida (2017); Ogiriki and Appah (2018); Anichebe and Juliana (2016); Paul and Yunusa (2018); Olaoye (2020); Karuti, Nwaniki and King'oriah (2019); Mamahit and Urumsah (2018); Imam, Kumshe and Jajare (2015); Kasum (2007) and many others constitute forensic audit and fraud prevention literature for the study.

In respective of these efforts fraud still persists in an escalating magnitude in the world generally and Nigeria in particular. The numerous established fraud cases in Nigeria have assumed an unprecedented level of occurrences in all works of life. This is explicated with some evidence of fraud occurrences in recent times such as the high profile established fraud cases by Economic and Financial Crimes Commission (EFCC) between 2011-2019, that engulfed billions of naira. This is a clear indication that efforts in the past have been unsuccessful. Prior studies on forensic audit and fraud prevention such as Ekwe (2019), Okoye and Gbegi (2003) among others paid significant attention to the new concept, forensic audit report, the measure that enhances the successful prevention of fraud cases. In addition, studies such as Nawawi (2017), Adamu (2015), Akinadewo (2020) and Abdu-Iraham (2019) and others differ with this study in the methodology, particularly the use of secondary data as against the conventional primary data or combination of both data. In the light of the above, this study on forensic audit and prevention in Nigeria public sector focuses on filling the gaps in prior studies through empirical evaluation. Given the evidence above, this study intends to address the followings in order to achieve the purpose of the research work. It is to:

- i. Examine the relationship between forensic audit report and fraud prevention.
- ii. Evaluate how litigation support services relate to fraud prevention.
- iii. Determine the relationship between investigative accounting and fraud prevention.

Based on these specific objectives of this study, three hypotheses were formulated. They are:

- i. Forensic audit report has no significant relationship with fraud prevention.
- ii. There is no significant relationship between litigation support services and fraud prevention.
- iii. Investigative accounting is not significantly related to fraud prevention.

Theories of the Study

The Operant Conditioning Theory

The Operant conditioning theory was first hypothesized in 1938 by *Burrhus Frederic Skinner*, an Edgar Pierce Professor of psychology at Harvard University. *Skinner* subsequently, in his book titled 'science and human behavior' redefined negative reinforcement in 1953 (Cleod, 2018). Skinner is regarded as the father of operant conditioning theory, although his work was based on Thorndike's Law of Effect in 1898. Skinner affirmed that behaviour is determined by the environmental consequences it produces for the individual through the principle of stimulus. Behaviour therefore operates on the premise of reinforcement and punishment as results. Reinforcement increases undesired behaviour while punishment decreases such behaviour. This theory has been adopted by various researchers to explain human nature and how behaviour can be predicted and

controlled (Feldman and Feldman, 1993; Blackburn, 1995; Hollin, 1996; Ehioghien and Atu, 2016). Feldman and Feldman (1993) stated that if fraudulent activities were rewarded or not punished, it would have continual increase propensity but punishment serves as a deterrent. This is the basis upon which operant conditioning theory is relevant to the role of forensic accounting in fraud control in Nigerian public sector. Forensic accountants need to work with relevant agencies to produce evidence for litigations to aid punishment of convicted criminals. This would serve as a deterrent to decrease financial fraud in society.

The theory is a learning process through which the strength of behaviour is modified by reinforcement or punishment. It is also a procedure that is used to bring about such learning. Although operant and classical conditioning both involve behaviours controlled by environmental stimuli, they differ in nature. In operant conditioning, stimuli are present when behaviour is rewarded or punished to control that behaviour. For example, a child may learn to open a box to get the sweets inside, or learn to avoid touching a hot stove; in operant terms, the box and the stove are "discriminative stimuli". Operant behaviour is said to be "voluntary".

The operant conditioning provides insight as to how employees can through the application of stimuli (reinforcement or punishment) have their behaviour modified to avoid getting involved in fraudulent activities. This may include making a public show of punishing those caught committing fraud and reward those who uncovered fraudulent activities instantaneously or committed in past circumstances. Stimulus control of operant behaviour is very important in achieving the desired result (Bleda and Nieto, 2012). Consequently, the

organization has to keep a close eye on how employees respond to the stimuli implemented and where necessary modify the stimuli to become more effective in curbing malfeasance in all organizations.

Theory of Reasoned Actions (TRA)

This theory originates from social psychology and was developed by Ajzen and Fishbein in 1975. They developed TRA to define the links between the beliefs, attitudes, norms, intentions, and behaviors of individuals in their intention to use ICT. The theory assumes that a person's behavior is determined by the person's behavioral intention to perform it, and the intention itself is determined by the person's attitudes and his or her subjective norms towards the behavior. The subjective norm refers to "the person's perception that most people who are important to him think he should or should not perform the behavior in question" Fishbein and Ajzen, (1980). In TRA rational considerations determine the choices and behaviors of individuals, and individual intentions determine behavior. Intentions refer to individuals' plans and motivations to commit a specific act. Intentions also reflect individual attitudes and the extent to which individuals perceive a specific act as desirable or favorable. The theory suggests that human behavior is governed by personal attitudes, but also by social pressures and a sense of control.

According to Adeniji (2010), fraud is human behaviour intentional perpetrated by one or more individuals among management, employees, or third parties guided by personal attitudes, social pressures and control instinct to misrepresent financial statements". It may also involve,

- i. Manipulation, falsification or alteration of records or documents.

ii. Misappropriation of assets.

The Mice Model

Another model called “MICE” was suggested by Kranacher, et al in 2010 (as cited in Dorminey et al, 2010). In this model they suggested that motivation of fraud perpetrators, which is one of the sides in the fraud triangle, may be more appropriately expanded and identified with the acronym: MICE that stands for: Money, ideology, coercion, and ego. Ideological motivators justify the means where they can steal money or participate in a fraudulent act to achieve some perceived greater goals that are consistent with their beliefs (ideology). Coercion occurs when individuals may be unwillingly pulled into a fraud scheme, but those individuals can turn into whistleblowers. Ego can also be a motive for fraud, where sometimes people don't like to lose their reputation or position of power in front of their society or families. This social pressure can be a motive to commit fraudulent act just to keep their ego. In addition, Dorminey, et al (2010) argued that the model cannot solve the fraud problem alone because two sides of the fraud triangle, pressure and rationalization, cannot be easily observed.

In fact, it is important for auditors to consider all fraud models to better understand why fraud is committed. Hence, the above models should all be regarded as an extension to Cressey's fraud triangle model and should be integrated in one model that includes motivation, opportunity, integrity, and fraudster's capabilities.

Concept of Forensic Audit

Forensic audit is a new field of accounting in Nigeria and borne out of the need of ensuring and preventing fraudulent practices. Joshi (2003) ascribed the origination of forensic accounting to Kutilya,

the first economist to openly recognize the need for accountants to tender evidence in the court.

It is conducted by experts such as forensic accountants/auditors whose duty is to scrutinize the documents of financial transactions, investigate types of fraud, corruption fraud, asset misappropriation, financial statement's fraud as the cases maybe, allegations of fraud, estimate losses, damages, assets and analyse complex financial deals to generate evidence for court proceeding. They provide services for corporations, attorneys, criminal investigators and government, Coenen, (2005).

Forensic audit procedures consist of the followings:

1. Acceptance of the Audit
2. **Plan the Investigation:** The auditor is required to understand what the focus of the audit is in planning the investigation entails.
 - a. Identify what fraud, if any, is being carried out.
 - b. Determine the time period during which the fraud has occurred.
 - c. Discourse how the fraud was concealed.
 - d. Identify the perpetration of the fraud.
 - e. Quantify the loss suffered due to the fraud.
 - f. Gather relevant evidence that is admissible in the court.
 - g. Suggest measures that can prevent such fraud in the organization or institution in future.
3. **Collecting Evidence:** The evidence collected should be adequate enough to prove the identity of the fraudster(s) in court, reveal the

details of the fraud scheme, and document the amount of financial loss suffered and the parties affected by the fraud. A logical flow of evidence will help the court in understanding the fraud and the evidence presented. The auditor is to ensure that evidence and document collected are not damaged or destroyed by any one.

Common technique used for collecting evidence in a forensic audit include the following:

- a. **Substantive techniques:** This involves doing a reconciliation, review of document, excetera.
 - b. **Analytical procedures:** Comparing data from different segments.
 - c. **Computer assisted audit techniques:** Computer software programs that can be used to identify fraud.
 - d. Understanding internal controls and testing them so as to understand the loopholes which allowed the fraud to be perpetrated.
4. **Reporting:** A report is required so that it can be presented to the court about the fraud: The report should include the findings of the investigation, a summary of the evidence, an explanation of how the fraud was perpetrated, and suggestion on how internal control can be improved to prevent such frauds in future. The report is to be presented to the client for purpose of filing a legal case.
 5. **Court proceedings:** The forensic auditor needs to be present during

court proceedings to explain the evidence collected and how the suspect was identified.

As a result of these fraudulent activities perpetrated in our economy, auditors coming together decided to have a special people to do an in-depth study of what is happening, and the need to incorporate expertise that will be charged with responsibility of carrying out judicial functions together with accounting skills to investigate forensic auditing. Gbalam (2010) states that "forensic evidence is usually for investigation and prosecution of criminal acts such as embezzlement or fraud". Forensic auditing has been seen as a specialization within the field of accounting, whereby forensic auditors provide experts testimony during trials proceedings, Nigrini (2011). In relation to this, Scoth (2008) defined forensic auditing "as especial practice of accounting that involves using auditing techniques to specifically look for financial conduct".

Measures of Forensic Audit Forensic Audit Report

Forensic audit report is a detailed documentation of all the events in the forensic auditing process: consisting of the methods, fraud types, perpetrator, scrutiny of financial deals, determination of losses, damages and ultimately generating evidence for prosecution of suspects in court of competent jurisdiction. A typical audit report is presented in this order; acronyms and abbreviations, executive summary, background allegations and assessment, scope, methodology, annex if any, summary, conclusion and recommendations.

Litigation Support Services

Forensic accounting and auditing are performed to achieve an objective that

involves a judicial determination (Chariri, 2009). It involves the use of accounting, auditing and investigative skills to assist in legal matters. Forensic accounting comprises of two major components of litigation support services that recognize the role of the forensic accountant as an expert witness/consultant's skill and may require possible court room testimony (Coulbert, 2004).

(Houck, 2006). Forensic auditing requires investigative skills to collect, analyze, and evaluate financial evidence, as well as the ability to interpret and communicate findings (Chariri 2009) Forensic auditing encompasses litigation support, investigative accounting, and dispute resolution and, therefore is the intersection between accounting, investigation, and the law (Coulbert 2004) Crumbley and Appostolou 2005; Rezea 2002). Forensic accounting/auditing is mainly intended to prevent and detect the existence of fraudulent financial reporting through examination and investigative processes (Chariri, 2009; 4).

Investigative Accounting

Investigative accounting has been defined by various scholars. Ronald (2011) defines investigative accounting as the utilization of specialized investigative skills in carrying out an inquiry conducted in such a manner that the outcome will have application to a court of law. A forensic Investigation may be grounded in accounting, medicine, engineering or some other discipline. Ezeilo (2010) also defines investigative accounting as "audit that are performed to investigate incident of possible fraud or misappropriation of institution funds." It is usually seen as an audit that takes place as a result of report of unusual or suspicious activity on the part of an

individual or a department. It usually focuses on specific aspects of the work of a department or individual in relation to fraud and corruption, so as to examine how the systems can be reinforced for fraud prevention and detection.

Fraud Prevention

Fraud prevention refers to certain mechanisms put in place to prevent fraud occurrences. It refers to the power to influence or direct peoples' behavior or the course of events aimed at minimizing or eradicating fraud occurrence in an organization.

It is important for organization or institutions especially government agencies, ministries and parastatals to have a fraud prevention plan in place. The fraud cases studied in the Association of Certified Fraud Examiners (ACFE) 2014 report revealed that the fraudulent activities studied lasted an average of 18 Months before being detected. The following ways however help to minimize fraud occurrences by implementing different procedures and controls.

1. **Know your employees:** Fraud perpetration always displays behavioral traits that can indicate the intention to commit fraud. Observing and listening to employees can always help you identify potential fraud risk. Often an attitude change can clue you in to a risk. This can also reveal internal issues that need to be addressed. For example, if an employee feels a lack of appreciation from the business or director/boss or anger at their boss, this could lead him or her to commit fraud as a way of revenge. Any attitude change should cause you to pay attention to

that employee. This may help to minimize the risk of fraud.

2. **Make employees aware/set up reporting system:** Awareness affects all employees. Everyone within the organization or ministry should be aware of the fraud risk policy including types of fraud and the consequences associated with them. Those who are planning to commit fraud should know that management is watching and will hopefully be detected by this action put in place. Honest employees should be made aware of possible signs of fraud or theft. These employees are assets in the fight against fraud.

Since many employees are hesitant to report incidents to their employers, consider setting up an anonymous reporting system. Employees can report fraudulent activities through a Website keeping their identity safe or using a tip hotline.

3. **Implement internal controls:** Internal controls are the plans and/or programs implemented to maintain the integrity of and organizations accounting records, and deter and detect fraud and theft. Segregation of duties is an important component of internal control that can reduce the risk of fraud from occurring. Documentation is another internal control that can reduce fraud. Internal control should be monitored and revised on a consistent basis to ensure that they are effective and current with technological and other advances. If there is no internal control process or fraud prevention program in place, then you should hire a professional with experience in this area.

4. **Monitor Vacation Balances:** You might be impressed by the employees who haven't mined a day of work in years. While this may sound like loyalty, it could be a sign that these employees have something to hide and are worried that someone will detect their fraud if they were out of the office for a period of time. It is also a good idea to rotate employees to various jobs within a company. This may also reveal fraudulent activity as it allows a second employee to review the activities of the first.
5. **Live the corporate culture:** A positive work environment can prevent employee fraud and theft. There should be a clear organizational structure, written policies and procedures and fair employment practices.
6. **Hire experts:** Certified fraud examiners (CFE), certified public sector accountants (CPA) who are certified in financial forensic audit can help in establishing antifraud policies and procedures. These professionals can provide a wide range of services ranging from complete internal control audits and forensic analysis to general and basic consultation relating to fraud prevention/detection and other relevant issues.

Empirical Studies

Fraud is responsible for the failure of public institutions and has negative multiplier effect on all economies of the world. The escalating rate of fraud occurrences in Nigerian public sector is not an exemption. This informed Enofe, Ibadin, Audu and Izevbigie (2014) to empirically

examine forensic accounting and fraud deterrence in Nigerian public sector. The cross-sectional field survey method of data gathering was adopted. A total of one hundred (100) questionnaires were distributed to respondents in the accessible population such as civil servants, political officer holders and the public. In administering the questionnaires, ninety (90) out of the one hundred were successfully retrieved that generated the data analyzed. The statistical tool chi-square (χ^2) was used to test the stated hypotheses. The results showed that the use of qualified forensic investigators in the detection of fraud cases could assist deter potential fraudsters in public institutions.

Wolokolie (2017), from analytical perspective studied the framework of forensic accounting and pension management institutions in Liberia. He analyzed forensic in three distinct parts namely: (i) the forensic accounting mentality in auditors (ii) the promotion and influence of forensic accounting techniques and (iii) added evaluation in the forensic audit literature. In line with the above, the qualities of forensic investigator and forensic audit objectives were critically examined and discussed. The study examined both proactive and reactive accounting and the disparity between forensic audit and conventional auditing. The procedures for conducting forensic audit and detective techniques were also examined. It was concluded that forensic accounting controls fraud in public institutions' pensions' management agencies.

Nawawi (2017) investigated forensic audit in tackling fraud and corruption practices in Indonesia state-owned enterprises. The study intends to: (i) uncover the advantages of forensic audit application in combating fraudulent practices in the

state-owned enterprises. (ii) critically examine the model most appropriate for internal control departments comprising all financial transactions in the organogram and stakeholders behaviour of state-owned companies. The study adopted the sociological and normative methods of evaluation of forensic auditing legal framework, the judicial system as it affects the operations of state-owned companies. The findings of this study revealed that: (i) forensic audit is a necessary tool in supervisory capacity of the monitoring unit of state-owned institutions (ii) forensic audit provides evidence for fraud cases and the rational search model of forensic audit projections is most appropriate for government institutions. In reality, it is the desirability of the staff of the monitoring and supervision organs of the above corporations.

Edheku and Akpoveta (2020) carried out a study on the impact of forensic accounting on fraud detection in public and private sectors in Abuja, Nigeria. Cross-sectional survey design was adopted to capture four ministries, five multinational corporations in Abuja. A total of forty-three (43) accounting officers constituted the sample size and for the administration of questionnaires. The questionnaires dully designed and was validated with a reliability equals to ($= 0.73$). Cronbach alpha used appropriately. Ordinary least regression was used to test the hypotheses. The findings revealed that forensic audit is a sinquanon to fraud detection in both public and private institutions. The study suggested the establishment of independent forensic audit institution in the public institutions.

Adamu (2017) examined the application of forensic accounting techniques in fraud investigation and control in Nigeria: An analysis of its practicability.

The study aimed at empirically examining the forensic audit in fraud investigation and control.

Data were collected mainly from primary source with the use of questionnaires and interviews. The materials were administered and interview diligently conducted in the accessible population, Lagos, Abuja and Kano Covering the south-western region, north-central region and the nor-western region. The findings based on the results affirmed the position that forensic accounting is significantly related to fraud investigation and control. The efficacy of forensic audit is as a vital tool in fraud control.

Okoye, Emmanuel, Ndah and Nwoka (2019) investigated forensic accounting and fraud prevention in manufacturing companies in Nigeria. The study investigated the relationship between forensic accounting practices and the prevention of fraudulent activities in organizations in Nigeria.

The data were mainly from primary source: Fifty (50) valid questionnaires were administered to financial employees of the accessible population of ten (10) manufacturing firms. Ordinary least square statistical method of multiple regression analysis was used to test the stated hypotheses. The results and findings suggested a positive and significant relationship between forensic audit practices and fraud prevention.

Conclusively, it is an essential and effective means of preventing fraud. Furthermore, the legal framework of forensic audit aiding and facilitating prosecution of fraud cases is key to the prevention of fraudulent practices. Objectivity in detection of fraud and subsequent prosecution is recommended as a proactive approach to prevention of fraud.

Madzivire, Nyamwanza, Mushonga, Takachicha and Mulonda (2020) investigated the effectiveness of forensic audit as a tool for fraud detection and prevention in Zimbabwe. The study investigated the effectiveness of forensic audit as vital tool in the detection and prevention of fraud. As a case study of Zimbabwe's chartered accountancy companies, questionnaires and interviews were administered and conducted to generate both quantitative and qualitative data for analysis. The quantification of data was done with Likert scale using closed ended questions and qualitative data were generated using open ended questions. Primary data was main source of data for this research work out of the twenty (20) questionnaires administered in the sample size randomly, nineteen (19) were retrieved and a single lost was recorded multiple regression analysis method was most appropriate statistical tool used to tested all hypotheses stated in the study. The data were presented with descriptive statistics, such as tables, charts and graphs. It was concluded that forensic audit is effective in the prevention of fraud in Zimbabwe.

Research Methodology

The field survey, quasi-experimental research design was adopted for this study. The population for this study is all Federal Ministries and Agencies in Rivers State, Nigeria limited to fraud convictions in the Ministries, Departments and Agencies (MDAs). Secondary data were obtained from archival records of anti-graft agencies such as Economic and Financial Crimes Commission (EFCC) among others. The data generated for this study is represented in tables, charts, graphs and were analyzed with Augmented Dickey-Fuller stationarity test and others. Multiple Regression Analysis

was used to test the relationship between the variables. The analytical and statistical tools for the study were aided with the software, econometrics view version 10.

Model Specification

The functional relationships between the dependent variable, fraud prevention and the independent variables, forensic audit report, litigation support services and Investigative accounting. The functional relationship model using the Multiple Regression Analysis is presented below:

$$FP = f (FAR, LSS, IA, \dots) \quad (1)$$

Fraud prevention = f (Forensic Audit)

Where:

- FP= Fraud Prevention
- FAR = Forensic audit report
- LSS= Litigation Support Services
- IA = Investigative Accounting

Using equation 1 above, the mathematical form of the model is presented below:

$$FP = \beta_0 + \beta_1 FAR + \beta_2 LSS + \beta_3 IA + \dots \quad (2)$$

From the above, the econometric form of the model is presented below:

$$FP = \beta_0 + \beta_1 FAR + \beta_2 LSS + \beta_3 IA + \epsilon \dots \quad (3)$$

Where:

FP, FAR, LSS, and IA are as earlier defined. β_0 = Constants; β_1, β_2 and β_3 are all parameter estimates; ϵ = error term with the assumption that the constants and variables are normally distributed;

From equation 2 & 3, we expect that β_1, β_2 & $\beta_3 > 0$. That is, we expect an increase in:

FAR to increase FP

LSS to increase FP

IA to increase FP

Apriori expectation: β_1, β_2 & $\beta_3 > 0$.

Augmented Dickey-Fuller (ADF) Stationarity Unit Root Test

The Augmented Dickey-Fuller (ADF) stationarity unit root test output of variables in this study with the aid of the E-View version 10 is shown below:

Table 1: Summary of the Unit Root Test, Augmented Dickey-Fuller (ADF) results at 1st Difference

VARIABLES	ADF STATISTICS	MACKINNON 1% critical Value	5% critical Value	10% critical Value	Order of INT	Prob
FP	-6.367922	-5.119808	-3.519595	-2.898418	1(1)	0.0004
FAR	-4.547542	-3.713473	-3.623418	-2.643513	1(1)	0.0136
LSS	-5.322995	-4.503492	-3.040391	-2.660551	1(1)	0.0170
IA	-5.347841	-4.803492	-3.403313	-2.841819	1(1)	0.0165

Source: Extracts from E-view Version 10 print out and Author’s compilation

The ADF results in table 1 above showed that the test statistics in absolute terms of the variables FP, FAR, LSS, and IA were less than the test critical values in absolute terms at the conventional levels of significance (5%). To this effect the null

hypothesis; there is a unit root, meaning that the variables are not stationary was rejected. There is no unit root, implying that the variables are stationary was accepted, thus concludes that the variables are stationary and integrated of order one.

Dependent Variable: FP

Method: Least Squares

Date: 04/14/21 Time: 19:08

Sample: 2010 2019

Included observations: 10

Variable	Coefficient(β)	Std. Error	t-Statistic	Prob.
LSS	0.404997	1.199365	0.337676	0.0471
IA	0.321988	0.983188	0.327494	0.0440
FAR	0.152520	0.626963	0.243268	0.0159
R-squared	0.523722	Mean dependent var		0.287400
Adjusted R-squared	0.464416	S.D. dependent var		0.211000
S.E. of regression	0.255338	Akaike info criterion		0.396717
Sum squared resid	0.391185	Schwarz criterion		0.517751
Log likelihood	2.016416	Hannan-Quinn criter.		0.263943
F-statistic	0.048598	Durbin-Watson stat		1.674174
Prob(F-statistic)	0.043866			

Test Hypotheses

Decision rule: Reject the null hypotheses if p-value is less than or equal to (\leq) 0.05.

The stated hypotheses are being tested using Multiple Regression Analysis:

H₀₁: Forensic audit report has no significant relationship with fraud prevention in Nigeria public sector.

The table below presents the tested result on the data for Hypothesis I.

Table 1 Multiple Regression Analysis test result for hypothesis 1 with the aid of E-view version 10

$$FP = \alpha_0 + \alpha_1 FAR + \alpha_2 LSS + \alpha_3 IA + \mu$$

Dependent Variable: FP

Method: Least Squares

Date: 04/14/21 Time: 19:08

Sample: 2010 2019

Included observations: 10

Variable	Coefficient(β)	Std Error	t-Statistic	Prob.
FAR	0.152520	0.626963	0.243268	0.0159

Source: Extracts from E-views Version 10 print out and Author's compilation

Decision:

Reject null hypothesis (H₀₁) since the p-value 0.0159 is less than 0.05 (i.e, p-value 0.0159 < 0.05), the implication is that forensic audit report greatly affects fraud prevention in Nigeria public sector.

H₀₂: There is no significant relationship between litigation support services and fraud prevention in Nigeria public sector.

Table 2 below presents the result of the tested hypothesis using Multiple

Regression Analysis test for hypothesis II with the aid of E-view version 10.

$$FP = \alpha_0 + \alpha_1 FAR + \alpha_2 LSS + \alpha_3 IA + \mu$$

Dependent Variable: FP
Method: Least Squares
Date: 04/14/21 Time: 19:08
Sample: 2010 2019
Included observations: 10

Variable	Coefficient β	Std Error	t-Statistic	Prob.
LSS	0.404997	1.199365	0.337676	0.0471

Source: Extracts from E-views Version 10 print out and Author's compilation

Decision:

Reject the null hypothesis (H_{02}), since the p-value = 0.0471 is less than 0.05 (i.e. p-value = 0.0471 < = 0.05).the implication is that litigation support services highly effective in fraud prevention in Nigeria public sector.

H_{03} : Investigative accounting is not significantly related to fraud prevention.

Table 3 below presents the tested result for hypothesis III with Multiple Regression Analysis supported by E-view version 10.

$$FP = \alpha_0 + \alpha_1 FAR + \alpha_2 LSS + \alpha_3 IA + \mu$$

Dependent Variable: FP
Method: Least Squares
Date: 04/14/21 Time: 19:08
Sample: 2010 2019
Included observations: 10

Variable	Coefficient(β)	Std error	t-Statistic	Prob.
IA	0.321988	0.983188	0.327494	0.0440

Source: Extracts from E-views print out Version 10 E-view extracts and authors compilation

Decision:

Reject the null hypothesis (H_{03}) since P-value= 0.0440 is less than 0.05 (ie, P-value 0.0440 < α =0.05). The implication is that investigative accounting is an in-avoidable tool in fraud prevention in Nigerian public sector.

forensic audit is most appropriate for fraud prevention in Nigeria.

The specific findings are that forensic audit report has positive and significant relationship with fraud prevention. The result of the analysis for this objective indicates positive coefficient (β) = 0.152520, t-statistics 0.327494 and p-value = 0.0159 less than (<) = 0.05). The implication is that forensic audit greatly affects fraud prevention in Nigeria public sector. This finding is complimented by Akpoveta (2020),

Summary

The main finding of this study is that forensic audit is most efficient in fraud prevention in Nigeria public sector. The key finding of this work lends credence from the work of (Ogbeida 2017). He concluded that

who affirmed that forensic audit report is instrumental to fraud prevention in Nigeria. Again, litigation support services is positively and significantly related to fraud prevention in Nigeria public sector with positive coefficient (β) = 0.404997, t-statistics = 0.0337676 and p-value = 0.0471 less than 0.05 (i.e, p-value = 0.0471 < α =0.05).

The implication is that litigation support services are highly effective in fraud prevention in Nigeria public sector. The finding for this purpose is in agreement with the work of Olaoye (2020), who concluded that litigation support services is an effective tool for fraud prevention in Nigeria.

Furthermore, investigative accounting also has a positive and significant relationship with fraud prevention. With positive coefficient (β) = 0.321988, t-statistics = 0.327494 and p-value = 0.0440 less than 0.05 (ie, p-value = 0.0440 < α =0.05). The implication is that investigative accounting is an inevitable tool in fraud prevention in Nigeria public sector. This finding is in conformity with the work of Ahmed (2017), who reported that investigative accounting is one of the most efficient tools in fraud prevention in Nigeria.

Conclusion

The findings of this study revealed that forensic audit report (FAR) greatly affect fraud prevention in Nigeria public sector. The finding for this objective is not in disparity with the work of Akpoveta (2020), who affirmed that forensic audit is instrumental to fraud prevention in Nigeria.

The findings also revealed that litigation support services (LSS) is highly effective in fraud prevention in Nigeria public sector. The finding for this purpose concurs with the work of Olaoye (2020), who authoritatively claimed that litigation

support services is a powerful tool in fraud prevention in Nigeria.

Thirdly, investigative accounting (IA) is apt in fraud prevention in Nigerian public sector. The finding for this specific objective is in conformity with Ahmed (2017), who reported that investigative accounting is one of the most proactive measures of fraud prevention in Nigeria.

Finally, the evidence from this study lead to the conclusion that forensic audit is one of the most proactive and efficient techniques in fraud prevention in Nigerian public sector. This conclusion lend credence to the work of Nwoka (2019), who concluded that forensic audit is an essential and effective means of preventing fraud in Nigeria.

Recommendations

The findings of this study suggest the following recommendations:

- i. Application of forensic audit should be adopted as compulsory means in the fight against fraudulent practices in our public institutions.
- ii. Further studies with different methodologies should be carried out on:
 - a. Forensic audit and public expenditure in Nigeria.
 - b. Forensic audit and financial statements' fraud in Nigeria.

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