Forensic Audit and Economic Crime: Emerging Issues In Nigerian Public Sector

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Abstract

The aim of this study is to investigate the effect of forensic audit on economic crime in selected Ministries in Nigeria. The sample size comprised Federal Ministries in Anambra State, Nigeria. The study employs survey and analytical research design. The study made use of primary data from structured questionnaire. Two hypotheses were formulated for the study. One-Sample T-test was used in validating the hypothesis one with the aid of Statistical Package for Social Sciences (SPSS) ver. 23. Findings from the analysis showed that Forensic accounting techniques has significantly improved the forensic accountants' performance in the detection and forestalling economic crime in Nigeria. It was therefore recommended that forensic accounting techniques be implemented in conventional audit since it improves the forensic accountants' performance in detecting and forestalling economic crimes.

***Key words**: Forensic Audit, Earnings manipulation, Economic crime, Fraud Detection.*

1.0 INTRODUCTION

1.1 Background of Study

Audit of financial statements is one of the most common forms of validating the financial statement. With an upsurge in economic crimes in the global stage, financial accounting fraud detection and prevention has become an emerging topic of great importance for academic, research and industries. In this age of high technology, investigators of economic crimes can no longer be satisfied with just auditing or accounting skills, these investigators should be trained in assurance services and forensic accounting and this training should include an extensive knowledge of accounting information systems (Bressler, 2006; Manning, 2005; Ramaswamy, 2005). Indeed, economic crimes had been a big problem in many businesses in recent years and the integrity of the Nigerian Accounting profession had been under serious questions and criticisms as the reputation of many audit giants in Nigeria such as Akintola Williams & Delloite, Price water house Coopers etc., has been greatly undermined, considering their shocking involvement in incidence of fraudulent financial reporting in the country (Nwonye, Okoye & Oraka, 2013).

Economic crime is an offence that could hinders the going concern of a business. Economic crime is not only such that affects the business entity but also stretches to sabotage the local and global economy as in the case of Lehman Brothers from 2007-2009. While there seems to be broad agreement on the meaning of such concepts as money laundering, corruption, and tax evasion, the terms financial abuse and economic crime are far less precise, and in fact are sometimes used interchangeably. Financial abuse has the broadest meaning, encompassing not only illegal activities that may harm financial systems, but also other activities that exploit the tax and regulatory frameworks with undesirable results. IMF, (2001) pointed that economic crime, which is a subset of financial abuse, can refer to any non-violent crime that generally results in a financial loss, including financial fraud hence the need to validate all financial statement consumable by the public.

The resultant effect of negligence and unethical conducts has caused the witnessed of distressed state of some Nigerian banks such as AfriBank, Intercontinental Bank and the most recent Diamond Bank plc. Organisations in the manufacturing sector were not left out as Cadbury Nigeria Plc was plunged into an unnoticed distress following the negligence and unethical conducts of the auditors. The manufacturing sector is crucial to the growth, development and industrialization of any nation. This sector involves firms that create new commodities or add values to those already manufactured (Adebayo, 2011). Common financial statement fraud perpetrated in the sector includes fictitious sales, accepting expenditure wrongly, erroneous property estimation, undisclosed debt and inappropriate disclosure (Odunayo, 2014). The failure of internal and external auditing system of the organization in identifying the economic crimes therefore led to use of specialized procedures to detect financial and economic crimes, known as forensic accounting (Kranacher & Stern 2004).

Against this backdrop the present study seeks to explore the forensic accounting techniques and the forestall of earnings management in selected conglomerate firms in Nigeria.

Despite various measures by auditors to forestall financial statement misstatement and other economic crimes, most frauds are not detected in time because they are normally hidden from the eyes of the public or even the auditors. The high losses due to fraud reported by different organizations also confirmed failure in detection. Therefore, an effective tool is required to identify the signals of fraud. The problems tackled in this study is there for in two-fold; Firstly, Studies had been carried out on the effect of forensic accounting and quality assurance on financial reporting (Herbert, 2014; Nwaiwu & Aaron, 2018; the relationship between forensic accounting and quality assurance and financial reporting of public sector in Nigeria (Herbert, 2014; ICPC, 2017 Nwaiwu & Aaron, 2018); and the relationship between forensic accounting and quality assurance on financial reporting (Zysman, 2004). However, their studies and others have ignored one important trajectory; forensic accounting techniques as a forestall of economic crime.

Secondly, Studies on detecting economic crimes had been carried out internationally (Shabnam, Zakiah, & Mohd, 2016) and locally (Nwonye, Okoye & Oraka, 2013). However, studies on Forensic accounting and economic crime in Ministries and government parastatals in Anambra state appear to be relatively thin. It is on this premise that this study intends to investigate the effect of forensic accounting technique on economic crime in amongst selected Ministries in Anambra State, Nigeria.

The broad objective of the study is thus, to investigate the effect of forensic audit techniques on economic crime in selected Ministries in Anambra State, Nigeria. Specifically, the study intends to;

1. Investigate the extent to which forensic audit techniques has improved the forensic accountants' performance in detecting and forestalling economic crime in Anambra State, Nigeria.

2. Investigate the extent to which analytical techniques has improved the forensic accountants' performance in detecting and forestalling economic crime in Anambra State, Nigeria.

2.0 REVIEW OF RELATED LITERATURE
2.1 Conceptual Review
2.1.1 Forensic Audit

Zysman (2004) puts forensic audit as the integration of accounting, auditing and investigative skills. Simply put, forensic accounting is accounting that is suitable for legal review offering the highest level of assurance and including the now generally accepted connotation of having been arrived at in a scientific fashion (Crumbley, 2006). Coenen (2005) states that forensic accounting involves the application of accounting concepts and techniques. It demands reporting, where the accountability or the fraud is established and the report is considered as evidence in the court of law or in the administrative proceedings (Joshi, 2003). It provides an accounting analysis that is suitable to the court, which will form the basis of discussion, debate and ultimately dispute resolution (Zysman, 2004). This means that forensic accounting is a field of specialization that has to do with provision of information that is meant to be used as evidence especially for legal purposes.

The persons practicing in this field (i.e. Forensic accountants) investigate and document financial fraud and white-collar crimes such as embezzlement and investigate allegations of fraud, estimates losses damages and assets and analyses complex financial transaction. They provide those services for corporation, attorneys, criminal investigators and the Government (Coenen, 2005). Their engagements are usually geared towards finding where money went, how it got there, and who was responsible. They are trained to look beyond the numbers and deal with the business reality of the situation (Zysman, 2004).

Forensic accounting is a new branch in accounting/auditing which has the sole aim of unearthing fraudulent activities within and outside an organization so far as the third party's action is in any way reflective on the activities of that organization. Shamki, (2009) defines forensic accounting as the application of financial accounting and investigative skills to a standard acceptable by the courts to address issues in dispute in the context of civil and criminal litigation. Forensic audits are conducted by an expert in the field to verify information, determine valuations, investigate fraud, verify compliance with government regulations, verify compliance with contracts, and to investigate and report on other issues. Forensic audits are done for the benefit of third parties and are documented so that they can be presented in a court of law (Minniti, 2008).

2.1.2 Economic Crime

Prior to the enactment of the Act of 2002 as amended by the EFCC Act 2004 there was no comprehensive definition of what constitute the economic crime. Section 46 of the EFCC Act 2004 define economic and financial crime as a nonviolent criminal unlawful action consigned with the objectives of earning wealth illegal either individually or a group or organized manner thereby violating existing legislation governing the financial actions of a government and its administration and includes any forms of fraud such as: money laundering, embezzlements, bribery, looting and any form of corrupt malpractices, illegal arms deal, smuggling, human trafficking and child labor, illegal oil bunkering, theft of intellectual property and piracy, open market abuse, dumping of toxic waste and prohibited good. This statutory definition reveals that the crime could reasonably include a wide variety of criminal offences. (Oladapo, 2014).

Economic crimes include a wide range of activities from fraud to active manipulation of the stock market or laundering of the proceeds of crime (ACCA, 2011). The modern globalized economy and new technologies create new opportunities for organized crime to exploit vulnerabilities for profit (ACCA, 2011).

Economic crime, affect private individuals, companies, organizations, and have a negative impact on the economic and social system through the considerable loss of money incurred (Oladapo, 2014). Although, economic crime ranges from tax evasion, money laundering, financial statement fraud and such likes, this article considered economic crime from the financial statement fraud perspective. According to Ojeme (2010), fraud refers to an "intentional misstatements or omissions of amount or disclosures from an entity's accounting records or financial statements.'' Ojeme (2010) defines irregularities as a misstatement, omissions or acts which could have been carried out intentionally or unintentionally. It has to do with an activity or practice which is not according to the usual rules, or not normal. One of the financial statement fraud is earnings management. Where managers on certain level of accorded freedom, clean the financial reports to influence public approval and appraisal.

2.1.2.1 Earnings Management

According to Anh and Linh, (2016), Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers. (Dechow & Schrand, 2004) Earnings are composed of cash flows and accruals, and the manipulation of either component will affect the earnings number. A manager can take real economic actions that affect cash flows. Examples are cutting research and development (R&D) expenditures and boosting sales by offering products at a discount. The manipulation of real transactions is not a GAAP violation as long as the company properly accounts for the transaction. And these actions generally do not result in a qualified audit opinion or an enforcement action by the SEC. Nonetheless, such actions can have a significant impact on earnings quality and devastating effects on the company's future performance and the transactions are a form of earnings management. This could be a tricky situation but still considered to be misleading to the stakeholders who repose so much confidence in the financial statement information.

2.2 Theoretical Framework

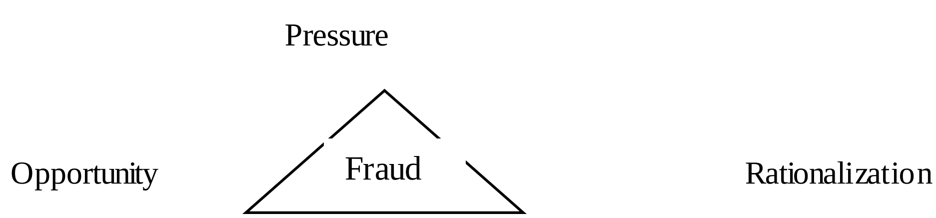
The theories that guide this work are the fraud triangle and fraud diamond as discussed below:

2.2.1 The Fraud Triangle

Cressey (1919-1987) was a student of Sutherland who builds on the initial works of the latter, to set forth the Theory of the Fraud Triangle, Cressey's work focuses on embezzlers whom he called "trust violators". His hypothesis states that:

Trusted persons become trust violators when they conceive of themselves as having a financial problem which is non-shareable, are aware this problem can be secretly resolved by violation of the position of financial trust, and are able to apply their own conduct in situation verbalizations which enable them to adjust their conceptions of themselves as trusted persons with their conceptions of themselves as users of the entrusted funds or property (Coenen, 2005).

Figure 1: The Fraud Triangle



Source: Coenen (2005)

This hypothesis widely called the *Fraud Triangle* has three postulations:

Unshakable needs or Pressure: the individual has a need which could not be shared with persons who from a more objective point of view, probably could have aided in the solution of the problem. Cressey (1973) cited by Coenen (2005) divide these non-shareable problems into six basic sub types: Voilation of ascribed obligations, Problems resulting from personal failure, Business reversals, Physical isolation, Status gaining, Employer employee relationship.

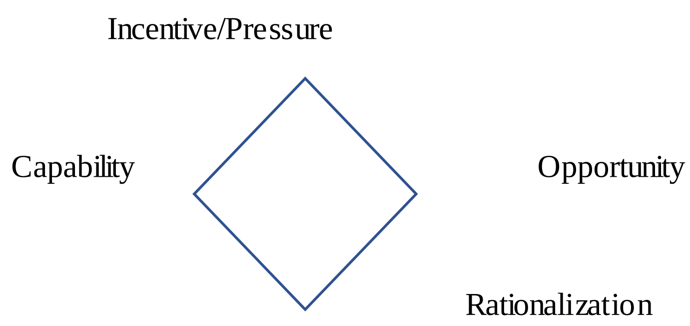
Opportunity: An opportunity affords itself for the individual to solve his financial problem by violating the position of financial trust he holds with his organization. The opportunity could be in the form of inefficient control and supervision in the organization.

Rationalization: he makes attempts at self-justification to rationalize and explain his actions and silence his conscience.

2.2.2 Theory of the Fraud Diamond

Wolf and Hermanson (2004) proffer the Theory of the Fraud Diamond, in place of the triangle. They argue that the diamond offers a better view of the factors leading to fraud. They add a fourth variables, capacity, to the three-factor theory of Cressey. Capabilities mean that, the fraud perpetrator must have the necessary traits, abilities, or positional authority to pull off his crime.

Figure 2: The Fraud Diamond



Source: *Wolf and Hermanson (2004)*

Theory of fraud Diamond offers a better view of the factors to fraud. The theory adds fourth variable, capabilities, to the three factor theory of fraud triangle. Wolf and Hermanson (2004) believed many frauds would not have occurred without the right person with the right capabilities implementing the details of the fraud. They also suggested four observation traits for committing fraud; First, authoritative position or function within the organization, second capacity to understand and exploit accounting systems and internal control weakness, Third, confidence that he/she will not be detected or if caught he/she will get out of it easily, Fourth, capability to deal with the stress created within and otherwise good person when he or she commits bad acts. Reviewing the literature shows that researchers classified the motive side of the fraud diamond differently. Some researchers classified them as personal, employment or external pressure, while other classified it as financial and non-financial pressure. However, it can be noticed that both classifications are interrelated. For instance, personal pressure can come from both financial and non-financial.

A person's financial pressure in this case could be gambling addiction or a sudden financial need, while a personal non-financial pressure can be lack of personal discipline or greed. By the same token, employment pressure and external pressure can come from either financial or non-financial pressure. Thus, Forensic Accountants have to keep in mind that pressure/motive to commit fraud can be either a personal pressure, employment pressure, or external pressure, and each of these types of pressure can also happen because of financial and non-financial pressure. Forensic Accountants also need to understand the opportunity for fraud to help them in identifying which fraud schemes an individual can commit and how fraud virus occurs when there is an ineffective or missing internal control. However, it can be criticized that even though the fraud diamond added the fourth variable capability to the fraud triangle and filled the gap in other theories, the model alone is an inadequate tool for deterring, preventing or detecting fraud.

This is because, the two sides of the fraud diamond (incentive/pressure and rationalization) cannot be observed, and some important factors like national value system and lack of corporate governance are ignored. Our present National Value System is not good, little or no premium is put on things like honesty, integrity and good character. The society does not question the source of "wealth". Any person who stumbles into wealth is instantly recognized and honored. It is a fact of our time that fraud has its root firmly entrenched in the social setting where wealth is honored without questions. Ours is a materialistic society which to a large extent encourages fraud.

The desire to be with the high and mighty caliber of the society extreme want that is often characterized by need, cultural demands or cultivation of a life too expensive for the legitimate income of the individual. Corporate governance is the lock to all the factors that cause fraud to take place in the public sector.

An important theme of corporate governance is the nature and extent of accountability of people in the public sector. Corporate governance is the principle and value that guides a company, organization and the public sector in the conduct of its day-to-day business and how stakeholders interrelate among one another (Anandarajah, 2001). Good corporate governance is the missing link in the Nigerian public sector, which is an index of fraud occurrence (Okoye, 2001). This situation can only change when the public sector achieves a positive change in the character and orientation of their government leadership. The leaders can bring this desired change by promoting good corporate governance in the public sector through Integrity, Accountability and Transparency, which would lead to attainment of strong internal control system in the public sector and thus the likelihood of an individual committing fraud.

2.3 Review of Empirical Studies

Hassnain, Hakeem,and Sallama,(2017)examined the role of Beneish M-score Model in Detecting of Earnings Management Practices: Empirical Study in Listed Banks of Iraqi Stock Exchange**.** The sample of the research that represented the listed banks in the Iraqi stock exchange amounted to 23 while 2014 and year 2015 are considered as the base year. It is found from the result that there is existence of earnings management practices for most of the banks listed in the Iraqi stock exchange. The researchers recommend the practitioners to be more professional by adopting international audit quality standards to reduce the practices of earning management. The financial quality reporting is affected by the practices and the decisions of relevant parties involved. This study therefore opines that the M-score model is a useful technique to detect earning manipulations and behavior of the companies. Also, it can be applied to improve financial reporting quality for the protection of potential investors.

Dbouk, and Zaarour, (2017) examined the application of a layer of machine learning technique such as the Bayesian Naïve Classifier (BNC) to enhance the decision making process in the framework of Earnings Manipulation Detection (EMD). It also evaluated and competes Manual Auditors' Methods versus a mathematical model in EMD such as the Beneish Model. The Data sets consist of fifty-three (53) Financial Statements acquired from largest corporations over four consecutive years. Using the Beneish model, they classified corporations between manipulators and non-manipulators to establish the training set. In testing for EMD under the mathematical model versus the audit methods, and to evaluate results, a new layer of Machine Learning technique was introduced such as the BNC. Their results show that mathematical models outperform auditors. They reveal a classification rate of (86.84 per cent) using the Beneish Model and (60.53 per cent) using Manual Auditors' Methods. Their findings indicate that Manual Auditors' Methods are difficult to detect Earnings Manipulation of Financial Statements.

Nwonye, Ekesiobi, Obiora and Abiahu, (2016) examined the inclusive application of SAS No. 99 in the effective deterrence of fraudulent financial reporting in Nigeria. The exploratory research design was adopted. A total of 91 samples were judgmentally selected comprising practicing accountants in the industries, professional auditors and the accounting academics in Enugu and Anambra States respectively. The Two-way ANOVA statistical tool, using SPSS 17.0, was deployed in testing the two hypotheses formulated for this research work. Their findings showed that there exists no significant difference in the opinions of the selected accountants in Enugu and Anambra on how auditors primary objectives of forming opinion on the true and fair view and absence of material misstatement in companies' financial statement will be breached if SAS 99's core emphasis on fraud detection and deterrence is upheld in Nigeria as part of auditors' audit primary responsibilities,

Shabnam, Zakiah, and Mohd, (2016)investigated the abilities of two financial-based models namely the Beneish's M-score and Dechow's F-score, to detect and predict FSF for Malaysian companies. In addition, their study compared the accuracy including the error rates between the two models. Financial data of Malaysian listed companies from 2001 to 2014 are used using a matched pair in the study. Their findings reveal that both Beneish and Dechow models are effective in predicting both the fraudulent and non-fraudulent companies with average accuracy at 73.17% and 76.22%, respectively. The results also indicate that Dechow F-score model outperforms the Beneish M-score model in the sensitivity of predicting fraud cases with 73.17% compared to 69.51%. On the efficiency aspect, the Dechow F Score model was found to have lower type II error (26.83%) than Beneish M Score model (30.49%).

Nwonye, Okoye and Oraka, (2013) investigated the contribution made by SAS 99 towards improving the skills of Nigerian Auditors in the detection of fraud in Financial Statements of corporate organisations, while laying emphasis on the extent to which the Beneish Model could further strengthen Auditors likelihood to detecting such manipulations in the Financial Statements. The research was descriptively and historically designed. 100 respondents comprising Auditors, Accountants in the Industries and the Accounting Academics in Anambra and Enugu State were infinitely determined using the Topman's formula. Data from secondary sources comprising Audited Annual Reports of the first five most capitalised manufacturing companies in Nigeria for the years 2002-2006 (in Cadbury, for model confirmatory test purpose) and 2006-2010 were used to complement this work. Inputs from the questionnaire distributed and the Annual Reports and Accounts were analysed with the aid of SPSS software package using the two-way ANOVA statistical technique, and the Beneish Model. The analyses result showed that SAS 99 will significantly contributed to the deterrence and detection of fraud by Auditors in Nigeria, especially where complemented with the Beneish model.

2.4 Gaps in Literature

Studies have documented varying reasons why auditors' fail to detect fraud and some have identified among other factors the audit processes as the crucial inhibitor of auditor fraud detection ability (Burton, Wilks, & Zimbelman, 2011; Hoffman & Zimbelman, 2009; Wilks & Zimbelman, 2004). In Nigerian, the most commonly used tools for classification and prediction of these fraudulent financial statement are the multiple discriminate analysis (MDA) and logistic regression technique (Adeyeye & Oloyede, 2014; Pam, 2013) despite the limitations of MDA technique based on its assumptions of linear separability, multivariate normality, and independence of the predictive variables (Lacher, Coats, Sharma, & Fant, 1995). Two gaps were therefore identified in this study: *firstly*studies and others have ignored one important trajectory; forensic accounting techniques as a forestall of earnings management using the small sample t-test. *Secondly,* there is a dart of a replica of such study in Federal ministries in Nigeria with specific emphasis on Awka, Anambra state. Hence the current study intends to bridge the gap identified.

3.0 METHODOLOGY

3.1 Research Design

The study employs survey and analytical research design. A survey research design is one in which a group of people or items is studied collecting and analyzing data from only a few people or items considered to be representative of the entire group (Nworgu, 2006).

3.2 Population of the Study

The population of the study comprises employees in selected Federal ministries in Anambra State. Only Ministries located in Awka were considered for the study. Prior to this study, there is no documented number of staff in the study ministries. The Ministries which make up the population size is given below:

Table 3.2: List of Federal Ministries in Anambra State, Nigeria

SN	Ministries	Location
1	Federal Inland Revenue Services (FIRS)	Awka
2	National Directorate of Employment (NDE)	Awka
3	Industrial Training Fund (ITF)	Awka
4	National Population Commission (NPC)	Awka
5	National Youth Service Corp	Awka
6	Central Bank of Nigeria (CBN)	Awka

Source: Field survey, 2022 (https://www.medianigeria.com)

3.3 Sample and Sampling Technique

Given the size of the population, large and indefinite, the study employed the approach adopted by Nwankwo (2010). the study also determined its primary data sample size using the Cochran's formula for large population using an estimated proportion of the population of:

$$n_0 = \frac{Z^2 Pq}{e^2}$$

Where:

n_0 = Sample Size
Z^2 = Z-value
p = estimated proportion of the population
e^2 = desired level of precision (margin of error)
q = 1-p

$$\textit{Hence, } n_0 = \frac{1.96^2\,(0.95)\,(1-0.95)}{0.05^2}$$

$$n_0 = 72.9904\ (Approx. = 73)$$

3.4 Method of Data Collection

Data for the study was collected through primary source and secondary source. Structured questionnaire was used in collecting the primary data. The questionnaire was structured on a 4-point Likert scale of Strongly Agree, Agree, Disagree and Strongly Disagree. The ranges of scores will be weighted as 4, 3, 2, and 1 respectively. The researcher administered copies of the instruments directly to the respondents with the help of one trained research assistants. The research assistant was briefed on the method of data collection and also in terms of distribution and retrieval of the instruments. The distribution and retrieval of the instrument lasted for three days.

3.5 Validity of the Instrument

Construct validity was used in validating the instrument. This was carried out by subjecting the instrument to factor analysis with the use of SPSS version 23. The validity test was done by giving out 73 item of questionnaire Auditors in Selected Audit firms in Awka, Anambra State, Nigeria to ensure accuracy of the sampling adequacy; the result is as shown below.

Table 3.1

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.811
Bartlett's Test of Sphericity	Approx. Chi-Square	479.127
	Df	45
	Sig.	.000

Source: SPSS Ver. 23.

The KMO and Bartlett's Test result revealed a Kaiser-Meyer – Olkin Measure of Sampling Adequacy value of 0.811. According to the measurement of appropriateness of Facto Analysis, the KMO and Bartlett's Test showed a meritorious result. Hence, the instrument is considered valid.

3.6 Reliability of the Instrument

For reliability of primary data, a statistical analysis was conducted to determine the internal consistency of the items of the questionnaire. This was done using Cronbach Alpha. Pallant (2007) stressed that when a psychometric scale is used, the internal consistency could be checked using Cronbach alpha.

Reliability Statistics:

Table 3.2: Cronbach's alpha values for research question one as in structured questionnaire

Reliability Statistics	
Cronbach's Alpha	N of Items
.859	10

Source: SPSS ver. 23.

The Cronbach's alpha on the test of measurement reliability scale for the extent of improvement forensic accounting techniques has brought on forensic accountants' performance in the detection and forestalling earnings manipulation in Nigeria showed an alpha level of .859 which is above the generally accepted threshold of .70. Thus, the measurement is reliable.

3.7 Method of Data Analysis

The technique employed in analysing the quantitative data in the study is the descriptive statistics done with the aid of statistical package for social science (SPSS ver. 23). A mean of 2.5 was used as decision thresh-hold in answering the research questions while the One-Sample Mean T-test was use in testing the formulated hypothesis one. The level of significance is 5%, while 95% confidence interval is adopted for the study.

3.7.2 Decision Rule:

The research hypothesis will be accepted when the probability value (p-value) is less than 0.05; if greater than 0.05 the research hypothesis will be rejected and null hypothesis accepted.

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Descriptive Statistics

4.1.1 Analysis of research questions

Research Question One:

To what extent has forensic accounting techniques improved the forensic accountants' performance in the detection and forestalling economic crime in Anambra state, Nigeria?

Table 4.1: Descriptive Statistics of Investigative questions

Descriptive Statistics								
Investigative Question	SA	A	D	SD	N	Sum	Mean	Std. Dev.
The adoption of Forensic accounting techniques has resulted in a positive change and improvement in the Auditor's performance in detecting material misstatement and other economic crimes.	47	7	4	15	73	232	3.18	1.229
Fraud detection technique adopted by Auditors in Nigeria is ineffective compared to measures applied by Forensic Accountants.	46	12	10	5	73	245	3.36	.963
There is probable indication that the	42	8	10	1	7	225	3.08	1.199

future demand for Auditing services, will be dependent on the Auditor's capability to detect and deter fraud.				3	3			
Forensic Audit sends market signals that would have a positive impact on the Audit clients, on how they value the firm's expertise.	47	0	10	16	73	224	3.07	1.295
Forensic Accountants sufficiently addresses the difficulties Auditors in putting a check on earnings management.	61	8	4	0	73	276	3.78	.534
Valid N (listwise)					73			

Source: Field Survey, 2021.

Table 4.1 shows the descriptive statistics of investigative questions which indicates that the mean statistics of the ten (5) scores higher than 2.50 with the least of them scoring a mean of 3.07 (question four) which is still higher than 2.50. The summary statistics also reveals a grand mean value of 3.294 for the investigative questions which is above the decision threshold hence to a great extent, forensic accounting techniques has improved the forensic accountants' performance in the detection and forestalling economic crime in Nigeria.

Research Question Two:
To what extent Analytical techniques improved the forensic accountants' performance in the detection and forestalling economic crime in Anambra State, Nigeria?

Descriptive Statistics

Investigative Question	SA	A	D	SD	N	Sum	Mean	Std. Dev.
The heightened state of corruption in Nigeria may undermined the effective application of Forensic Accounting techniques towards earnings manipulation and deter of fraud.	53	5	9	6	73	251	3.44	1.000
The Introduction of Brainstorming session in Audit was to make Auditors proactive in fraud detection, compared to her known reactive Audit role.	64	9	0	0	73	283	3.88	.331
Critical scrutiny of any document made available to the public improves the chances on discovering deliberate falsification in the financial statement	45	10	4	14	73	232	3.18	1.194
Analysing the financial statement is a forestall for earnings manipulations.	46	10	8	9	73	239	3.27	1.083

Taking extreme measures such as going undercover increases the possibility of uncovering the real culprit in a fraud situation.	40	15	11	7	73	234	3.21	1.027
Valid N (listwise)					73			

Source: Field Survey, 2021.

Table 4.2 shows the descriptive statistics of investigative questions which indicates that the mean statistics of the ten (5) scores higher than 2.50 with the least of them scoring a mean of 3.18 (question three) which is still higher than 2.50. The summary statistics also reveals a grand mean value of 3.396 for the investigative questions which is above the decision threshold hence to a great extent, analytical techniques has improved the forensic accountants' performance in the detection and forestalling economic crime in Anambra state, Nigeria.

4.2 Test of Hypotheses

4.2.1 Test of Hypothesis one

H_0: Forensic accounting techniques has not significantly improved the forensic accountants' performance in the detection and forestalling economic crime in Anambra state, Nigeria.

Table 4.2a

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
R1	73	33.4384	6.83331	.79978

Table 4.2b

One-Sample Test

	Test Value = 0.05					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
R1	41.747	72	.000	33.38836	31.7940	34.9827

Source: SPSS ver. 23

Table 4.2a-b above shows a t statistic value of 41.747 which is significant at .05 level; the sig (2-tailed) value was .000. Hence, ($p < .05$). Thus, the study finds evidence to refute the null hypothesis and accept the alternate. Thus, forensic audit techniques has significantly improved the forensic accountants' performance in the detection and forestalling economic crime in Nigeria.

4.2.2 Test of Hypothesis two

H_0: Analytical techniques has not significantly improved the forensic accountants' performance in the detection and forestalling economic crime in Anambra State, Nigeria.

Table 4.3a

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
R1	73	31.6743	6.83331	.7487

Table 4.3b

One-Sample Test

	Test Value = 0.05					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
R1	40.556	72	.000	32.4230	31.7940	33.6827

Source: SPSS ver. 23

Table 4.2a-b above shows a t statistic value of 40.556 which is significant at .05 level; the sig (2-tailed) value was .000. Hence, (p < .05). Thus, the study finds evidence to refute the null hypothesis and accept the alternate. Thus, Analytical techniques has significantly improved the forensic accountants' performance in the detection and forestalling economic crime in Anambra State, Nigeria.

4.3 Discussion of Findings

The core of the current study is to evaluate forensic audit and economic crime of selected government parastatals in in Nigeria. After the test of hypotheses, the current study found that forensic accounting techniques has significantly improved the forensic accountants' performance in the detection and forestalling earnings manipulation in Nigeria. Studies in agreement with this finding include; Nwonye, Ekesiobi, Obiora and Abiahu, (2016) and Dbouk, and Zaarour, (2017).

Also, in line with this finding is Hassnain, Hakeem,and Sallama,(2017) who examined the role of Beneish M-score Model in Detecting of Earnings Management Practices: Empirical Study in Listed Banks of Iraqi Stock Exchange and concluded that the M-score model is a useful technique to detect earning manipulations and behavior of the companies. Also, it can be applied to improve financial reporting quality for the protection of potential investors. Other similar findings to the current study includes Nwonye, Okoye and Oraka, (2013); Shabnam, Zakiah, and Mohd, (2016).

5.0 Conclusion

The study focused on forensic audit and economic crime in selected public sector firms in Nigeria. The study sees Forensic accounting as the action of identifying, recording, settling, extracting, sorting, reporting and verifying past financial data or other accounting activities, for settling current or prospective legal disputes, or using such past financial data for projecting future financial data to settle legal disputes. The study was anchored on the theory of fraud theory and theory of fraud diamond. The study concluded generally that forensic accounting techniques can serve as forestall for economic crimes among federal government parastatals in Nigeria.

5.1 Recommendations

In lieu of the findings of the study, it was recommended that forensic audit techniques be implemented in conventional audit since it improves the forensic accountants' performance in detecting and forestalling economic crimes.

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