



**FORENSIC ACCOUNTING A TOOL FOR FRAUD  
DETECTION AND PREVENTION IN THE PUBLIC TERTIARY  
INSTITUTIONS IN SOUTH EAST NIGERIA**

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**Abstract:**

The study aimed at forensic accounting a tool for fraud detection and prevention in the public tertiary institutions in South East Nigeria. The main purpose of the study was to determine how the use of Forensic Accounting will help to reduce Fraud cases in the tertiary institutions in South East Nigeria. Two hypotheses were formulated in line with the objectives of the study. A descriptive survey design was adopted for this study. The population comprised of 470 account staff in 7 public tertiary institutions in South East Nigeria along with interviews conducted with those ministries out of which 350 were filled and returned. The statistical tool used to test hypotheses was Analysis of Variance (ANOVA). Among the findings was that the use of Forensic Accounting do significantly reduces the occurrence of fraud cases in the tertiary institutions in South East Nigeria, and that there is significance difference between Professional Forensic Accountants and Traditional External Auditors and therefore the use of Forensic Accountants can help better in detecting and preventing fraud cases in the tertiary institutions sector. The research therefore recommended that Forensic Accountants be replaced with the external auditors in South East Nigeria the tertiary institutions sector, proper training and retraining on Forensic accounting should be provided to staff of South East Nigeria the tertiary institutions sector and proper adherence to accounting and auditing standards should be followed.

**Keywords:** forensic accounting, fraud detection and prevention, public tertiary institutions

## 1. Introduction

It has been observed that Government spending has always been big business, but it has become so massive today that the public through its legislators is demanding to know whether the huge outlays of money are being spent wisely or whether they should be spent at all. Officials and employees who manage tertiary institutions activities are by virtue of that duty, required to render adequate accounts of their activities to the end users. The incidence of fraud continues to increase across private and public sector organizations and across nations. Fraud is a universal problem as no nations is immune, although developing countries and their various states suffer the most pain. Forensic accounting is a rapidly growing field of accounting that describes the engagement that results from actual or anticipated dispute or litigations. Forensic means suitable for use in a court of law, and it is to that standard Forensic Accountants generally work.

Forensic accounting is defined as the application of financial accounting and investigative skills to a standard acceptable by the courts to address issues in disputes in the context of civil and criminal litigation (Manning in Okoye, Adeniyi & Udegbonam, 2019). Professional Forensic Accountant can be seen as those who are specialist in fraud detection, and particularly in documenting exactly the kind of evidence required for successful criminal prosecution; able to work in complex regulatory and litigation environments; and with reasonable accuracy, can reconstruct missing, destroyed, or deceptive accounting records. Professional Forensic Accountant may work for government or public accounting firm. Although, forensic accounting has been in existence for several decades, it has evolved over time to include several types of financial information scrutiny.

Employee and management fraud, theft embezzlement, and other financial crimes are increasing, therefore accounting and auditing personnel must have training and skills to recognize those crimes, both at the state level and the grassroots (local) level to better ensure the states prospect in the area of fraud prevention, deterrence, detection, investigation and remediation. Forensic accounting includes the use of accounting auditing, and investigative skills to assist in legal matters. It consists of two major components. Litigations services that recognized the role of an accountant as an expert consultant, and investigative service that uses a forensic accountant's skills and may require possible court room testimony. According to the definition developed by the Association of Institute of Certified Public Accountants (AICPA's) in Okoye, Adeniyi and Udegbonam (2019), forensic and litigation services committee, forensic accounting may involve the application of special skills in accounting, auditing, finance, quantitative methods, the law and research. It also involves quantitative skill to collect, analyze, and evaluate financial evidence, as well as the ability to interpret and communicate findings. Okoye and Gbegi (2013) observed that the use of Forensic Accounting do significantly reduces the occurrence of fraud cases in the public sector, and that there is significance difference between Professional Forensic Accountants and Traditional External Auditors

and therefore the use of Forensic Accountants can help better in detecting and preventing fraud cases in the public sector organizations.

The Association of Certified Fraud Examiners in Oyebisi, Okere, Olusogo and Ifeoluwa (2018) defined fraud as any illegal acts characterized by deceit, concealment or violation of trust. These acts are not dependent on the application of threat of violence or of physical force. Fraud includes all the multifarious means that human ingenuity can devise are resorted to, be individual to get an advantage over another by false suggestions or suppression of the truth. It includes surprises, tricks, cunning or dissembling, and any unfair way by which another is cheated (Black's Law Dictionary in Okoye & Gbegi, 2013). Forensic accounting is said to bring significant improvement in the quality of fraud detection and prevention. This study meant to help and remind the tertiary institutions in South East Nigeria to design an integrated approach to preventing and controlling fraud and corruption within the workplace through an establish service of Professional Forensic Accountants.

## **2. Statement of the Problem**

In recent times, series of fraud have been committed both in the public and private tertiary institutions of learning. These in no doubt are perpetrated under the supervision of the internal auditors of the tertiary institutions of learning. It suffices to say that the independent of the internal auditor is not guaranteed because they work as an employee of the tertiary institutions of learning and government. Then come the idea of external auditors, yet frauds are still being committed on a daily basis. The above scenario indicated that as more and more development both in the information Communication Technology (ICT) world and other fields, so fraudsters continue to groom their own tactics towards fraudulent practices. It now become pertinent that forensic accounting be introduced and practices since the external auditors do not or may not have the required training to be able to tackle modern frauds like white collar crimes such as security fraud, embezzlement, bankruptcies, contract disputes and possibly criminal financial transaction; including money laundering by organized criminals, also is the ability of the forensic accountant to provide litigation support and investigative accounting. These areas have become a complex area of concern for the accounting profession.

### **2.1 Purpose of the Study**

The main purpose of this study was determined how the use of Forensic Accounting will help to reduce Fraud cases in the tertiary institutions in South East Nigeria. Specifically, the study sought to determine the:

- 1) possibility of reducing the occurrence of fraud cases using Forensic Accounting.
- 2) significance difference between Forensic Accountants and External Auditors.

### **2.2 Hypotheses**

The following null hypotheses were tested at 0.05 level of significance:

- 1) The use of Forensic Accounting does not significantly reduce the occurrence of Fraud cases in the tertiary institutions in South East Nigeria.
- 2) There is no significant difference between Professional Forensic Accountants and Traditional External Auditors on reduction of the occurrence of Fraud cases in the tertiary institutions in South East Nigeria.

### 2.3 Theoretical Framework

The basic theory that has been established in this research work is “white collar crime theory” by Sutherland (1949) as cited in Michael (2004). The term white-collar crime dates back to 1939. Sutherland (1949) as cited in Michael (2004) was the first to coin the term, and hypothesis white-collar criminals, attributed different characteristics and motives than typical street criminals. Sutherland originally presented the theory in an address to the American Sociological Society in attempt to study two field, crime and high society which had no previous empirical correlation. Sutherland defined his idea as “*crime committed by a person respectability and high social status in the course of his occupation*” (Sutherland in Michael, 2004). Sutherland noted that in his time, less than two (2) percent of the persons committed to prison in a year belong to the upper class. Sutherland goal was to prove a relation between money, social status, and likelihood of going to jail for a white-collar crime, compared to more visible, typical crimes, although, the percentage is a bit higher today.

Much of Sutherlands work was to separate and define the difference in blue collar street crimes, such as arson, burglary, theft, assault, rape and vandalism which are often blamed on psychological, associational and structural factors. Instead, white-collar criminals are opportunists, who over time learn they can take advantage of their circumstances to accumulated financial gain. They are educated, intelligent, affluent, individuals who are qualified enough to get a job which allows them the unmonitored access to often large sum of money.

But the federal Bureau of Investigation (FBI) has adopted a narrow approach defining white-collar crime as those illegal acts which are characterized by deceit, concealment, or violation of trust and which are not dependent upon the application or threat of physical force or violence. The blue collar crime will more often use physical force, whereas, in the corporate world, the identification of a victim is less obvious and the issuer of reporting is complicated by a culture of commercial confidentiality. Fredrichs (2007) stated that the only way one crime differs from another is in the backgrounds and characteristics of its perpetrators.

Most, if not all white-collar offenders are distinguished by lives of privilege, much of it with origins in class inequality. It is estimated that a great deal of white-collar crimes is undetected or if detected, it is not reported. Because of the high status of the perpetrators of these crimes, a highly trained and experienced examiner or investigator like the Professional Forensic Accountant is needed to forestall the occurrence of such high profile fraud. This study is anchored on while collar crime theory because it

expounds forensic accounting: A tool for fraud detection and prevention in tertiary institutions in south East Nigeria.

### **3. Forensic Accounting**

Oliver in Okoye, Adeniyi and Udegbumam (2019) noted that the complexity and scope of commerce has expanded throughout the world, the need to track money and financial information has grown. There has been a corresponding increase in illegal financial activity, according to separate surveys by the U.S department of Justice, Price Water House Coopers, and the Association of Certified Fraud Examiners (ACFE). Ironically, illegal businesses and perpetrators of financial crimes also need to keep track of their cash flow and manage their operational performance to generate profits, fund activities and avoid detection and seizure of their assets. Joshi in Okoye and Gbegi (2013) ascribed the origination of forensic accounting to Kutilya, the first economist to openly recognize the need for the forensic accountant whom he said, mentioned 40 ways of embezzlement centuries ago.

Okoye and Gbegi (2013) however stated that the term “forensic accounting” was coined by Peloubet in 1946. Okoye and Gbegi (2013) said, forensic accounting is the application of accounting knowledge and investigative skills to identify and resolve legal issues. It is the science of using accounting as a tool to identify and develop proof of money flow. These tools and/or techniques, skills and knowledge can be invaluable for fraud and forensic accounting investigators.

Forensic accounting is the specialty practice area of accountancy that describes engagements that result from actual or anticipated disputes or litigation (Oladipupo, 2005). Also, forensic accounting is simply the process of interpreting, summarizing and presenting complex financial issues clearly of law as an expert witness (Ola, 2018, 146). Okoye and Gbegi (2013) described forensic accounting as assistance in disputes: Which are likely to involve litigation, arbitration, expert determination, mediation or an enquiry by an appropriate regulatory authority, and investigation of suspected frauds, irregularity or impropriety which could potentially lead to civil, criminal or disciplinary proceedings; while focusing primarily on accounting issues (p. 6). In the context of this study, forensic accounting is viewed as the area of accounting that described engagement that result from real or anticipated litigation. In holistic view, these engagements fall into one of the four categories, economic damages, fraud and other forms of economic crime, as the use of investigative techniques, integrated with accounting to develop information and opinion for evidence in court and for use by expert witness.

#### **3.1 The Role and Skills of Forensic Accountants**

An understanding of effective fraud and forensic accounting techniques can assist Professional Forensic Accountants in identifying illegal activity and discovering and preserving evidence (Houck et al in Okoye &Gbegi, 2013). Hence, it is important to understand that the role of a forensic accountant is different from that of regular auditor.

It is widely known that an auditor determines compliance with auditing standards and considers the possibility of fraud. Okoye, Adeniyi and Udegbonam (2019), claimed that a Professional Forensic Accountant has a single-minded focus on the detection, and deterrence of fraud. Roche, as cited by Okoye, Adeniyi and Udegbonam (2019), described a forensic accountant as someone who can look behind the facade, accept the records, at their face value-someone who has a suspicious mind that (considers that) the documents they are looking at may not be what they purport to be and someone who has the expertise to go out and conduct very detailed interviews of individuals to develop the truth, especially if some are presumed to be lying.

Krell (2012) says forensic accounting often involves an exhaustive, detailed effort to penetrate concealment tactics. Stephen Seliskar says, in terms of the sheer labor, the magnitude of effort, time and expense required to do a single, very focused (forensic) investigation-as contrasted to auditing a set of the financial statements-the difference is incredible. The above views imply that the role of Professional Forensic Accountant is different from that of other accountants. They are different in their further education and training of years of experience. In addition, forensic accountants, are closer to being investigators, economists who do economic and market estimation and appraisers-who are typically trained in finance or valuation theory in business.

## **4. Method**

### **4.1 Research Design**

This could be seen as the procedure and processes adopted for collecting and analyzing data for this study. Research design is a blue print that guides the researcher. It helps researcher to layout the research hypothesis, methodologies, implementation, procedures, collection and analysis for the conduct of a research project. The study adopted the descriptive survey design for this study.

### **4.2 Area of the Study**

The study was carried out in 7 public universities of South East Nigeria. The public universities include: University of Nigeria, Nsukka; Enugu State University, Enugu; Nnamdi Azikiwe University, Awka, Chukwuemeka Odumegwu Ojukwu University, Ili; Ebonyi State University, Abakiliki; Abia State University, Uturu and Imo State University, were used in ascertaining forensic accounting: a tool for fraud detection and prevention in tertiary institution in South East Nigeria.

### **4.3 Population of the Study**

The population comprised of 470 account staff in 7 public universities of South East Nigeria to include (University of Nigeria, Nsukka = 88; Enugu State University, of Science and Technology, Enugu = 48; Nnamdi Azikiwe University, Awka = 84; Chukwuemeka Odumegwu Ojukwu University, Ili = 58; Ebonyi State University, Abakiliki = 64; Abia State University, Uturu = 54 and Imo State University = 74).

#### 4.4 Sample and Sampling Techniques

The sample size is usually a compromise between what is desirable and what is feasible. For the purpose of this study, the study used a non-probability sampling (purposive sampling) to select the seven public universities of South East Nigeria used as population for the study. The use of purposive sampling was based on the fact that, South East has a total of 7 public universities which the population were selected, also that the nature of fraud committed in all the public universities appears to be the same and therefore may serve a good representative of the whole public universities. The use of arithmetical formular was adopted to arrive at the sample size 'n' with 5% level of significance (Adefila, 2008).

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

Where:

n = sample size

N = population of business studies teachers

e = margin of errors (5% or 0.05).

I = constant value

The result is presented thus,

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

$$n = \frac{470}{1 + 470(0.05)^2}$$

$$n = \frac{470}{1 + 470(0.0025)}$$

$$n = \frac{470}{1 + 1.175}$$

$$n = \frac{470}{2.175}$$

$$n = 216.$$

The sample size of 216 was selected from the 7 public universities and tabulate below:

**Table 1:** The sample selection

| Universities   | Total Population of Account Staff | Proportion to Total Population | Sample     |
|--|-----------------------------------|--------------------------------|------------|
| University of Nigeria, Nsukka                            | 88                                | 46                             | 40         |
| Enugu State University, of Science and Technology, Enugu | 48                                | 46                             | 22         |
| Nnamdi Azikiwe University, Awka                          | 84                                | 46                             | 39         |
| Chukwuemeka Odumegwu Ojukwu University, Ili              | 58                                | 46                             | 27         |
| Ebonyi State University, Abakilike                       | 64                                | 46                             | 29         |
| Abia State University, Uturu                             | 54                                | 46                             | 25         |
| Imo State University, Amogu                              | 74                                | 46                             | 34         |
| <b>Total</b>   | <b>470</b>                        |                                | <b>216</b> |

## 4.5 Method of Data Analysis

The statistical tool used for testing of hypothesis one and two is the Analysis of Variance (ANOVA). The Analysis of Variance (ANOVA) statistics was used to test the null hypotheses at 0.05 level of significance. However, where a disagreement existed among the three groups in the case of the null hypotheses tested, the Scheffe Post-hoc test was conducted to determine the group in which such disagreement relates. A null hypothesis was rejected where the calculated p-value was less than the 0.05 level of significance, it meant that there was significant difference. Conversely, where the calculated p-value was greater than or equal to the level of significance (0.05), it meant that there was no significant difference and the hypothesis was not rejected.

## 5. Result

### 5.1 Testing of Hypotheses

**Hypothesis 1:** The use of Forensic Accounting does not significantly reduce the occurrence of Fraud cases in the tertiary institutions in South East Nigeria.

**Table 2:** ANOVA Summary Table (N= 216)

|                | Sum of Squares | df         | Mean Square | F-ratio | P-value | Decision        |
|----------------|----------------|------------|-------------|---------|---------|-----------------|
| Between Groups | 14007          | 2          | 4350        | 12.43   | 4.352   | Not Significant |
| Within Groups  | 3460           | 213        | 353.85      |         |         |                 |
| <b>Total</b>   | <b>17467</b>   | <b>215</b> |             |         |         |                 |

Since the calculated value of 12.43 is greater than the p-value of 4.352, the alternate hypothesis (Ha) is accepted and the Null hypothesis (H0) is rejected. Therefore, we can conclude that the use of Forensic Accounting does significantly reduces the occurrence of fraud cases in the tertiary institutions in South East Nigeria.

**Hypothesis 2:** There is no significant difference between Professional Forensic Accountants and Traditional External Auditors on reduction of the occurrence of Fraud cases in the tertiary institutions in South East Nigeria.

**Table 3:** ANOVA Summary Table (N= 216)

|                | Sum of Squares | df         | Mean Square | F-ratio | P-value | Decision        |
|----------------|----------------|------------|-------------|---------|---------|-----------------|
| Between Groups | 14934          | 2          | 5646        | 183.7   | 4.352   | Not Significant |
| Within Groups  | 124            | 213        | 32          |         |         |                 |
| <b>Total</b>   | <b>15058</b>   | <b>215</b> |             |         |         |                 |

Since the calculated value of 183.7 is greater than the critical value of 4.352, the alternate hypothesis (Ha) is accepted and the Null hypothesis (H0) is rejected. Therefore, one can conclude that there is significant difference between Professional Forensic Accountants and Traditional External Auditors on reduction of the occurrence of Fraud cases in the tertiary institutions in South East Nigeria.



## 6. Discussion of Findings

Based on the Analysis of Variance (ANOVA) used for the first and second hypothesis the findings are stated below. The conclusion of the first hypothesis reveals that Forensic Accounting do significantly reduces the occurrence of fraud cases in the tertiary institutions in South East Nigeria. Hence, the service of Professional Forensic Accountant is therefore required in the tertiary institutions in South East Nigeria. The finding of this study agreed with study of Okoye and Gbegi (2013) who noted that the use of Forensic Accounting do significantly reduces the occurrence of fraud cases in the public sector.

The second hypothesis equally reveals that there is significance difference between Professional Forensic Accountants and Traditional External Auditors on reduction of the occurrence of Fraud cases in the tertiary institutions in South East Nigeria. In this view, the service of the Forensic Accounting is therefore required in the tertiary institutions in South East Nigeria to replace that of the external auditor. The finding of this study also agreed with study of Okoye and Gbegi (2013) who noted that there is significance difference between Professional Forensic Accountants and Traditional External Auditors and therefore the use of Forensic Accountants can help better in detecting and preventing fraud cases in the public sector organizations

More so, oral interview conducted shows that the tertiary institutions in South East Nigeria do not use the services of Professional Forensic Accountants. It can equally be deduced from the two hypotheses analyzed that the services of Professional Forensic Accountants will definitely be required in the tertiary institutions in South East Nigeria, since services are provided by the Traditional External Auditor, yet fraud are still being perpetrated in the tertiary institutions.

## 7. Conclusion

In conclusion, this study has analyzed why attention has to be given to the question of fraud detection and fraud prevention in the tertiary institutions in South East Nigeria with the aid of Forensic Accounting. It has discussed the Forensic Accounting approach or procedure necessary for detection, prevention of fraud and the type of control to be established in order to control the incidence of fraud in the state. It should be emphasized that whether within the business world or in the tertiary institutions sector, the ultimate responsibility for discouraging and preventing fraud and corrupt practices rests with management.

This study also appreciated some of the reasons why government staff and other public servant engage themselves in fraudulent practices. Also, the role of forensic accountants and the skills they need to possess to be able to contribute their quota meaningfully in achieving the objectives of this study was extensively discussed.

Above all, the study revealed that the use of Forensic Accounting do significantly reduces the occurrence of fraud cases in the tertiary institutions in South East Nigeria sector, as it equally showed that there is significant difference between Professional

Forensic Accountants and Traditional External Auditors in terms of skills and techniques applied in Fraud detection and prevention.

## 8. Recommendations

Consequent upon several revelation from the research conducted, there is need to make some recommendations, which are stated below:

- 1) Appropriate sanctions should be applied when fraud is detected. Where persecution is considered to be the appropriate sanction, proper Forensic procedures need to be followed during investigation and trained experts like the Professional Forensic Accountants should conduct the investigation, where there is evidence of fraud, appropriate disciplinary action in accordance with the Provision of Public Service Rules should be implemented. Criminal prosecution may also be instituted as well as civil action to recover any losses of public money or property. South East Nigeria tertiary institutions is hereby encouraged to learn from what others are doing on fraud prevention, detection and investigation using state-of-the-art technique called "Forensic Accounting".
- 2) Training and guidance are vital in maintaining the effectiveness of the strategy for the detection and prevention of fraud and corruption and its general credibility. The government needs to support induction and work related training, particularly for employees involved in internal control system and the accounting sector, to ensure their responsibilities and duties are regularly highlighted and reinforced and that best practices is followed across organizations service. Significantly, Forensic Accounting or any anti-fraud and corruption strategy can only work if heads of departments and senior administrators are committed to it. The anti-graft agencies like the EFCC and the ICPC should ensure they have their technical, investigative and accounting staff trained in the field of Forensic Accounting. Adequate structure and mechanism must be put in place.

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