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**FORENSIC ACCOUNTING AS A VERITABLE TOOL FOR EFFICIENT  
MANAGEMENT OF STATE OWNED PUBLIC SECTORS IN EBONYI STATE: THE  
ACCOUNTANTS PERSPECTIVE**

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**ABSTRACT:** *The study was carried out to find out the uses of forensic accounting as well as the basic skills required for the use of forensic accounting in state owned public sectors in Ebonyi state, Nigeria. Two research questions and hypotheses guided the study. The population of the study comprised of One hundred and fifty six Accountants working in the state ministries in Abakaliki urban. A sample size of sixty two (62) accountants was used. Out of sixty two (62) copies of the questionnaire distributed only sixty copies (60) were returned. The study found out the uses as calculation of economic damage, determining the level of bankruptcy or insolvency for an organization, act as a guide in re-organization of organizational financial activities, used to check on security fraud, used for valuation of a business, etc. The basic skills required for the use of forensic accounting in public sectors include: knowledge of preparing financial statements, ability to compute key financial ratios, being informed on the types of audit evidence etc. The researchers conclude that forensic accounting is essential in every organization especially public sectors and recommended that tertiary institutions offering accountancy and accounting education should ensure that forensic accounting is offered not just in the post graduate level but equally at the under graduate level and to curb the incessant cases of corruption in public sectors in Nigeria, forensic accounting must be professionally practiced in all organizations.*

**KEYWORDS:** forensic, accounting, fraud, and public sector

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## **INTRODUCTION**

Forensic accounting is an indispensable practice in fraud detection and control. Forensic accounting as defined by Okoye and Gbegi (2013) is an investigative style of accounting used to determine whether an individual or organization has engaged in any illegal financial activities. They also observed that it 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. Coewen (2005) states that forensic accounting involves the application of accounting concepts and techniques. It demands reporting where the accountability report is considered as evidence in the 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, in Gbegi and Adebisi, 2014).

Forensic accounting is a veritable tool used for fraud detection in public sectors in Nigeria. Public sectors are those organizations owned and managed by the government. Fraud is gradually becoming a normal system of operation in public sectors. Fraud can be internal or external. Internal fraud involves the use of fictitious invoices to cover supplies made in public offices. Payments made could be equally duplicated; theft of stock provided in an organization, tampering with system data without due authorization, leaking of secrets in an organization to a third party. External fraud involves the fraud committed against an organization by a person or persons who are not employed by the victim organization to have financial gain or to use a service or product without authorization or payment (Monay, Anderson, Collie, Mickemish (2003). External frauds include fraudulent practices committed by using credit card, duplication of invoices, use of forged or stolen cheques, use of false identity, payment for services not rendered or products that are defective etc.

Seetharaman, Sentivemurugam and Periyannagam (2004) identified the fraud influencing factors as age, gender, position, educational background and motive for collusion. Fraud has had severe negative consequences in Nigeria, in each case the perpetrators are the people at the helm of affairs for example the aviation scam of #5.6 billion in 2009 was perpetrated by the then Minister of Aviation (Ojeme in Gbegi and Adebisi, 2014).

The administrative competence of performance of some public sectors in Nigeria has been faulted by poor credibility of some of these corporations. There is over estimates of government projects, cases of abandoned projects etc. Some of these projects mobilization fees have been paid for and yet to be executed. Achua (2009) explained that serious consideration is being given to the need to be more accountable for the vast amount of investment in resources at the command of government, which exercises administrative and political authority over the actions and affairs of political units of people. Government spending is a very big business and the public demand to know whether the huge outlays of money are being spent wisely for public interests hence the need for the use of forensic accounting to help in fraud investigation involving certain activities like search for public records, ability to use interview skills, document recovery, legal prosecution etc.

### **Statement of the problem**

The high level of fraud experienced in public sectors in Nigeria is worrisome. There has been an increased concern about fraud in Nigeria and beyond, for instance the oil subsidy probes in Nigeria which reveals that between 2007 and 2009, the Nigerian National Petroleum Corporation (NNPC) over deducted funds in subsidy claim to the tune of #28.5 billion naira calls for concern (Oboh, 2012) The employees, directors, suppliers and other parties commit a lot of fraud in Nigeria. Ogbi (2013) observed that corruption happens to have enveloped all sectors of the Nigerian society, ministries and agencies of government. Most disheartening was the legislative probe of the Aviation sector in which \$6.5 billion scams are unveiled. Such fraudulent activities are obtainable through asset misappropriation, misappropriation of revenue by employees of the organization as well as poor handling of funds set out for supply of goods and services. Others include incurring of expenditure by fraudulent or illegal acts.

Okwoli (2004) supporting the view stated that Nigerian society is filled with stories of wrong practices such as stories of ghost workers on the payroll of ministries, extra ministerial departments and setting ablaze of offices burning sensitive documents and corruption are found

everywhere in country. The level of awareness on the use of forensic accounting techniques in Nigeria is low especially in Abakaliki urban. This calls for the need to create awareness on the relevance of forensic accounting as an effective tool for fraud detection and investigations in the public sector hence the problem of the study.

### **Purpose of the study**

The study is aimed at the following:

- Ascertain the uses of forensic accounting in state owned public sectors in Ebonyi state.
- Identifying the basic skills required for the use of forensic accounting in state owned public sectors in Ebonyi state.

### **Research questions**

- What are the uses of forensic accounting in state owned public sectors in Ebonyi state?
- What are the basic skills required for the use of forensic accounting in state owned public sectors in Ebonyi state.?

### **Hypothesis**

The following hypotheses guided the study:

- The Accountants opinion on the uses of forensic accounting will not differ based on gender.
- The Accountants opinion on the basic skills required by a forensic accountant will not differ based on sex.

## **METHOD**

The study was guided by two research questions and two hypotheses. A structured questionnaire made up of 18 items was used for the collection of data. The questionnaire was validated by experts in accounting. The instrument was subjected to a reliability test and a reliability index of 0.87 was gotten. The population of the study comprised of One hundred and fifty six accountants working in the state ministries in Abakaliki urban. A sample size of sixty two Accountants was studied. Out of sixty two (62) copies of questionnaire distributed only 60 copies of questionnaire were received. The analysis of the research questions was done using mean and standard deviation while the t- test was used to test hypotheses at 0.05 level of significance. Any item of the questionnaire that scored up to 2.5 mean rating was accepted while any mean less than 2.5 was rejected.

## **RESULTS**

### **Research question 1:**

#### **What are the uses of forensic accounting in state owned public sectors in Ebonyi state?**

Data on the uses of forensic accounting in state owned public sectors is presented on table 11 below:

**Table 11: Mean score of the responses of accountants on the uses of forensic accounting in public sectors**

S/N	Uses of forensic accounting	Mean	SD	Decision
12	Calculation of economic damage	2.66	0.91	Agreed
13	Determining the level of bankruptcy or insolvency for an organization.	3.03	0.82	Agreed
14.	Act as a guide in reorganizational financial activities	3.14	0.86	Agreed
15.	Used to check on security fraud	2.91	0.85	Agreed
16.	Used for valuation of a business	3.03	0.82	Agreed
17.	Using electronic means to discover certain facts	3.40	0.77	Agreed
18.	Handling of cases like money laundering	3.49	0.70	Agreed

The result of the data analysis shows that all the items listed as the uses of forensic accounting in public sectors was accepted. They all scored a mean rate above 2.5.

**Research question 2:**

**What are the basic skills required for the use of forensic accounting in state owned public sectors in Ebonyi state?**

Data on the basic skills required for the use of forensic accounting in state owned public sectors in Ebonyi is presented on table 1 below:

**Table 1: Mean score of the responses of accountants on basic skills required for the use of forensic accounting in public sectors**

S/NO	Basic skills required for the use of forensic accounting	MEAN	SD	DECISION
1	Knowledge of the system of preparing financial statements	3.46	0.56	Agreed
2.	Ability to compute key financial ratios	3.29	0.93	Agreed
3.	Being informed on the types of audit evidence	3.37	0.60	Agreed
4.	Good use of internal control system	3.57	0.61	Agreed
5.	Knowledge of relevant professional standards and regulations	3.43	0.61	Agreed
6.	Basic skills in the use of computer software	3.23	0.88	Agreed
7.	Knowledge of basic business law	3.31	0.58	Agreed
8.	Knowledge of the systems used in fraud detection	3.14	1.03	Agreed
9.	Good oral and written communication	3.69	0.47	Agreed
10.	Efficiency in conflict negotiation and resolution	3.06	0.64	Agreed
11.	Skills in interview and research.	3.40	0.50	Agreed

All the items in the questionnaire were accepted as the basic skills required for the use of forensic accounting in state owned public sectors in Ebonyi state. This is because they all scored a mean score above 2.5.

**Hypothesis**

**Ho1: The Accountants opinion on the uses of forensic accounting will not differ based on gender**

**Table IV: T. test analysis of the uses of forensic accounting in public sectors based on gender**

S/N	SEX	N0	X	SD	DF	T.cal	T.crit	Decision
12	Male Female	46 14	2.80 2.71	0.70 1.14	58	0.56	2.02	Accept
13	Male Female	46 14	3.05 3.0	0.67 1.04	58	0.16	2.02	Accept
14	Male Female	46 14	3.24 3.14	0.70 1.03	58	0.32	2.02	Accept
15	Male Female	46 14	2.95 2.86	0.80 0.95	58	2.92	2.02	Reject
16	Male Female	46 14	3.0 3.07	0.77 0.92	58	0.24	2.02	Accept
17	Male Female	46 14	3.48 3.29	0.60 0.99	58	0.64	2.02	Accept
18	Male Female	46 14	3.52 3.43	0.68 0.76	58	0.36	2.02	Accept

The result of the t-test analysis in table IV shows that the calculated t value for all the items listed as the uses of forensic accounting were less than the critical value of 2.02 at 0.05 level of significance and 58 degree of freedom. Hence the null hypothesis stating that the Accountants opinion on the uses of forensic accounting will not differ based on sex will then be accepted.

**Ho11: The Accountants opinion on the basic skills required by a forensic accountant will not differ based on sex.**

**Table 111: T-test Analysis of Male and Female accountants on the basic skills required by a forensic accountant.**

S/N	SEX	N0	X	SD	DF	T.cal	T.crit	Decision
1	Male Female	46 14	3.67 3.14	0.46 0.53	58	3.01	2.02	Reject
2	Male Female	46 14	3.48 3.0	0.81 1.04	58	1.46	2.02	Accept
3	Male Female	46 14	3.19 3.64	0.57 0.633	58	2.23	2.02	Reject
4	Male Female	46 14	3.43 3.79	0.68 0.43	58	1.92	2.02	Accept
5	Male Female	46 14	3.33 3.57	0.57 0.65	58	1.12	2.02	Accept
6	Male Female	46 14	3.33 3.07	0.80 0.99	58	0.82	2.02	Accept
7	Male Female	46 14	3.24 3.43	0.54 0.65	58	0.90	2.02	Accept
8	Male TFemale	46 14	3.76 2.86	0.96 0.99	58	2.67	2.02	Reject
9	Male Female	46 14	3.76 3.57	0.44 0.57	58	1.14	2.02	Accept
10	Male Female	46 14	3.10 3.0	0.62 0.68	58	0.44	2.02	Accept
11	Male Female	46 14	3.38 3.42	0.50 0.57	58	0.23	2.02	Accept

The result of the t-test analysis in table 111 shows that the calculated values for all the items outlined as the basic skills required by a forensic accountant except items 1, 3, and 8 were less than the critical value of 2.02 at 0.05 level of significance and 58 degree of freedom. This shows that apart from knowledge of the system of preparing financial statements, being informed on the types of audit evidence and knowledge of the systems used in fraud detection, both the male and female accountants did not differ in their opinion.

## **DISCUSSION**

### **Uses of forensic accounting in public sectors**

The researcher found out that the following are the uses of forensic accounting in public sectors, they are calculation of economic damage, determining the level of bankruptcy or insolvency for an organization, act as a guide in re-organization of organizational financial activities, used to check on security fraud, used for valuation of a business, using electronic means to discover certain facts and handling of cases like money laundering. Forensic accounting expertise is useful in litigation involving loss of profits, breaches of contract, fraud, tax investigations and professional negligence. Much of Forensic accounting as described by Lrell (2002) involves an exhaustive, detailed effort to penetrate concealment tactics.

Appiah (2010) argues that cases of fraud is prevalent in the Nigerian public sector that every segment of the public service could seem to be involved in one way or the other in some of the nasty acts. Fraud causes huge loss to the business world and creates morale problems in the workplace. Fraud losses are serious problems to the organizations that need to be managed, controlled and monitored. He further noted that the act of fraud investigation comprises of several activities including initial discovery, public record search, interviews of various types, document recovery and search, legal prosecution and computer forensics. This calls for forensic accounting to be used in the public enterprises for easy detection of fraudulent practices in the public sector. Forensic accounting seeks out errors, operational vagaries and deviant transactions before they crystallize into fraud. This could go a long way in preventing “legacy crimes” where the perpetrators have tampered with the footprints and audit trails and left the organization.

Agreeing to this view Okoye & Gbegi (2013) stated that it is pertinent that forensic accounting be introduced and practiced 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 possible criminal financial transaction including money laundering by organized criminals, also is the ability of the forensic accountant to provide litigation support for investigative accounting. The forensic accountant tries to fish out errors, vagueness in operations and poorly recorded transactions before they culminate into fraudulent practices. This is based on the fact that forensic accounting involves identifying, recording, extracting, reporting and verifying past financial data necessary for settling prospective legal disputes or using the information to settle past financial data in legal disputes.

### **Basic Skills required for the use of forensic accounting.**

The basic skills required for the use of forensic accounting includes knowledge of preparing financial statements, ability to compute key financial ratios, being informed on the types of audit evidence, good use of internal control system, knowledge of relevant professional

standards and regulations, basic skills in the use of computer software, knowledge of basic business law, knowledge of the systems used in fraud detection, good oral and written communication, efficiency in conflict negotiation and resolution and skills in interview and research. This agrees with the view of Joshi (2003) who sees forensic accounting as the application of specialized knowledge and specific skills to stumble up on the evidence of economic transactions. Zysman (2004) equally sees forensic accounting as the integration of accounting, auditing and investigative skills. No wonder Roche in Crumbley and Apostolou (2005) describes a forensic accountant as someone who can look beyond the faced-out, accept the records, at their face value. Someone who has a suspicious mind that considers that the documents he or she is 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.

Dada, Owolabi and Okwu (2013) observed that the primary duty of the forensic accountant is to analyze, interpret, summarize and present complex financial and business related issues in a manner that is both readily understandable by the layman and properly supported by the evidence. The forensic accountants' activities are relevant to various types of business and personal legal disputes. He further observed that much of the work is connected with an evaluation of past and projected as well as appraisal and preparing business valuations.

Supporting the view Okoye and Gbegi (2013) emphasized that as an investigator, a professional forensic accountant can be seen as those who are specialists 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. Meanwhile as an economist, they are particularly effective at economic loss, damage and social harm estimate; familiar with the assumptions, algorithm and calculations in econometric models and opportunity cost scenarios, can measure and quantify such things as loss of goodwill and reputation. He further stated that as an appraiser, forensic accountants should be able to reliably express informed opinion on matter of business value based on generally accepted theory effective at evaluation of the historical and projected degrees of risk and return of any going concern as well as any and all financial transactions involving assets, property types and equities (Balogun and Lindquist, 1995)

## **CONCLUSION**

The use of forensic accounting is indispensable in checking fraud in every organization. It is a veritable tool in the combat of the high level of corruption in both the public and private sectors. The provision of a forensic accounting unit is vital in every public sector to ensure that funds are appropriately allocated and judiciously appropriated to improve the living condition of Nigerian citizens and above all ensure adequate accountability of finances provided for the development of this country.

## **RECOMMENDATIONS**

- Curriculum should be developed by tertiary institutions in Nigeria offering accountancy and accounting education to ensure that forensic accounting and investigation are offered from

the undergraduate level in their institutions not just the post graduate level to ensure that adequate attention is paid to this special area of accounting.

- An employee should not be allowed to occupy a duty post for a very long period to avoid concealment of fraudulent practices done in the organization.
- Training and retraining programme on the area of forensic accounting should be organized for the accountants in public parastatals. This is to equip them with the basic knowledge of handling forensic accounting issues.
- Finally a professional standards code of conducts and guidelines for the practice of forensic accounting and investigation should be established to check the incessant cases of corruption in the public sector.

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