

# **Forensic Accounting: A Tool for Fraud Detection and Prevention in the Public Sector. (A Study of Selected Ministries in Kogi State)**

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## **Abstract**

The contribution/importance of Professional Forensic Accountant cannot be over emphasized, whether to the public sector or to the private sector. The purpose of this study is to examine forensic accounting as a tool for fraud detection and prevention in the public sector organizations with particular reference to Kogi State. Both primary and secondary sources of data were appropriately used. 370 questionnaires were administered to staff of five (5) selected ministries in Kogi State of Nigeria, along with interviews conducted with those ministries out of which 350 were filled and returned. Tables and simple percentages were used to analyze the data. 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 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 research therefore recommended that Forensic Accountants be replaced with the external auditors in Kogi State, proper training and retraining on Forensic accounting should be provided to staff of Kogi State and proper adherence to accounting and auditing standards should be followed.

**Keywords:** Forensic accounting, Fraud, Fraud Detection, Fraud Prevention, External Auditors.

## **Background To The Study**

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 public sector activities are by virtue of that duty, required to render adequate accounts of their activities to the public.

The incidence of fraud continues to increase across private and public sector organizations and across nations. Fraud is a universal problem as no nation is immuned, 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 an investigative style of accounting used to determine whether an individual or an organization has engaged in any illegal financial activities. 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. In making reference outside the scope of this research to enhance better need of the service of forensic accounting in Kogi State is the news reports following the September 11 attacks depicted how terrorists used the international banking system to fund their activities, transfer money, and hide their finances, and signaled a need for investigators to understand how financial information can provide clues as to future threats. These events raised public awareness of fraud and forensic accounting.

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 required possible court room testimony. According to the definition developed by the Association of Institute of Certified Public Accountants (AICPA's) 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.

Fraud includes all the multifarious means human ingenuity can devise that are resorted to by 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, 1979).

Forensic accounting is said to bring significant improvement in the quality of fraud detection and prevention. This study meant to help and remind the public sector organization of Kogi State, in the affected ministries to design an integrated approach to preventing and controlling fraud and corruption within the workplace through an establish service of Professional Forensic Accountants.

## **Statement Of The Problem**

In recent times, series of fraud have been committed both in the public sector and private sector of the economy. These in no doubt are perpetrated under the supervision of the internal auditors of the organization. It suffices to say that the independent of the internal auditor is not guaranteed because he works as an employee of the government or organization. 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.

## **Objectives Of The Study**

The general objective of this study is determined whether the use of Forensic Accounting will help to reduce Fraud cases in the Public Sector in Kogi State.

The specific objectives of this study include:

- i. To examine the possibility of reducing the occurrence of fraud cases using Forensic Accounting.
- ii. To examine if there is significance difference between Forensic Accountants and External Auditors.

## **Statement Of Hypotheses**

In this research work, the hypotheses are;

### **Hypothesis I**

**H<sub>0</sub>:** The use of Forensic Accounting does not significantly reduce the occurrence of Fraud cases in the Public Sector.

### **Hypothesis II**

**H<sub>0</sub>:** There is no significant difference between Professional Forensic Accountants and Traditional External Auditors.

## **Scope Of The Study**

In the light of broad coverage, the researcher focuses on the fraud detection and prevention in the public sector organizations using some selected ministries in Kogi State like ministry of finance, ministry of justice, ministry of local government and chieftaincy affairs, ministry of budget and planning and ministry of commerce and industry. The scope of the research therefore, covers a period of 2006 to 2010

## **Conceptual Framework**

Oliver (2004), as 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 (2003) 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. He however stated that the term "forensic accounting was coined by Peloubet in 1946. He 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." Crumbley (2001) wrote on same when he stated that a form of forensic accounting can be traced back to an 1817 court decision. He stated that also that a "young Scottish accounting issued a circular advertising his expertise in arbitration support in 1824" but that Peloubet was probably the first to publish the phrase forensic accounting. Investigation of fraud and corruption is confirmed thus, not to be new, even in Nigeria. It is only gaining prominence because of growing wave of the crime under the seemingly new nomenclature in the last five years (Coenen, 2005). Forensic accounting also called investigative accounting or fraud audit is a merger of forensic science and accounting. Forensic science according to Crumbley (2003) "may be defined as application of the laws of nature to the laws of man." He refers to forensic scientists as examiners and interpreters of evidence and facts in legal cases that also requires expert opinions regarding their findings in court of law. The science in question here is accounting science, meaning that the examination and interpretation will be of economic information. Joshi (2003) further sees forensic accounting as the application of specialized knowledge and specified skill to stumble up on the evidence of economic translations. Zysman (2001) put forensic accounting 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) stated that forensic accounting involved the application of accounting concepts and techniques to legal problem. It demands reporting, where the accountability of 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, 2001). These 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 documents financial fraud and white-collar crimes such as embezzlement and investigate allegations of fraud, estimates losses damages and assets and analyses complex financial transactions. They provide those services for corporation, attorney, criminal investigators and the government (Coenen, 2005). Zysman, (2001) the forensic accountant's 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 business reality of the situation. According to the Black's law Dictionary, (1979) fraud (sometimes referred to as fraudulent act) includes all the multifarious means human ingenuity can devise that are resorted to by one 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. Dandago (1997), **fraud** is an intentional misrepresentation of financial information by one or more individuals among management, employees or third parties. It involves the use of criminal deception to obtain an unjust or illegal advantage. It is a deliberate cheating or deception intended to gain an undue advantage. Fraud is different from error, which refers to "unintentional misstatements or omissions of amount or disclosures from an entity's accounting records or financial statements." (Onochie, 2005).

### **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 2006). 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. Crumbley and Apostolou (2005), claim that a Professional Forensic Accountant has a single-minded focus on the detection, and deterrence of fraud.

Roche, as cited by Crumbley and Apostolou (2005), describes a forensic accountant as someone who can look behind 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.

Krell (2002) 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 accountant, 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.

As an investigator a 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. Meanwhile, as an economist, they are particularly effective at economic loss, damage and social harm estimates; 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. Finally, 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 evaluating the historical and projected degrees of risk and return of any going concern as well as any and all financial transactions involving assets, property taxes, and equities (Bologna and Lindquist, 1995).

Moreover, Bologna and Lindquist (1995) assert that the characteristic that differentiates fraud auditors and Professional Forensic Accountants from regular auditors is the persistence and doggedness to which a suspicion is followed upon. Professional Forensic Accountants may be ordered in by a regulatory agency after receiving notice from an employee whistle blower, or press coverage may make it know that the company has a scandalous ECO or history (Bologna and Lindquist 1995). There are no professional standards for when regular auditors should become whistleblowers, and unfortunately, the involvement of a forensic accountant is almost always reactive. There is a need for more proactive monitoring of the signs of financial crime.

Razae (2002) stated that, furthermore, Professional Forensic Accountants react in response to criminal complaints, statements made in civil litigation, and rumors that come to the attention of authorities. Suspicion should perhaps refer to sings of cover up or disguise class action suits by shareholders may stimulate a forensic accounting investigation, but class-action suits only hurt the corporation, and let the offending CEO go free. Regular auditors, as have been seen, also tend to not make good witness in court, and they sometime are more a hindrance than help for law enforcement. There may be a need for the auditing and assurance professions to change their ways before new, emerging fields move in to fill the gap.

In regard to the above arguments, forensic accounting should play an important role as expert witnesses and fraud investigators. Accordingly, forensic accountant should posses a specific skills and training that enable them to play their roles as expert witnesses and fraud investigators.

The area of forensic accounting, as Houck et al (2006) argue, consists of a rather unique skill set that ordinarily requires additional expertise and training beyond an academic degree in

accounting, and beyond being a CPA (Certified Public Accountant), a CFE (Certified Fraud Examiner) or CIRA (Certified Insolvency and Restructuring Advisor). Certifications are good in designating a high degree of professional expertise in rather specialized areas, but further graduate education and continuing education programs in more general fields would be better. More specifically, entry-level fraud and forensic accounting professional should possess knowledge, skills and abilities in the following areas (Houck et al 2006):

1. Criminology specifically oriented to the nature, dynamics, and scope of fraud and financial crimes; the legal, regulatory, and professional environment; and ethical issues.
2. Fraud prevention, deterrence, detection, investigation and remediation in the following areas: asset misappropriation, corruption, and false presentations, financial statement fraud; and fraud and forensic accounting in a digital environment, including computer-based tools and techniques for detection and investigation, electronics case-management tools, and other issues specific to computerized environments.
3. Forensic and litigation advisory services, including research and analysis, valuation of losses and damages, dispute investigation, and conflict resolution (i.e. arbitration and mediation).

Considering the above views, it seems that forensic accounting plays a significant role in preventing and detecting possibilities of fraudulent financial reporting. It can be seen as an attainable effort to improve quality alternative research in accounting.

### **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 his 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. He defined his idea as “crime committed by a person respectability and high social status in the course of his occupation (Sutherland 1949, cited 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.” His 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.

### **Research Methodology**

In this research work, survey design was used, which relate to collecting data from the population for intensive study and analysis. In the course of this study, the researcher in an attempt to gather useful and reliable information utilized two (2) sources of data collection namely; Primary Sources of Data collection and Secondary Sources of Data collection. Questionnaire and interview are the instruments employed to collect the data. They are special form of correspondence developed to procure authoritative information from a number of persons through the medium of well directed questions and interactions.

### **Population Of The Study**

The population of study for this research comprises five (5) ministries in Kogi State of Nigeria. The Ministries and various populations are therefore tabulated below:

<b>S/No.</b>	<b>Ministries</b>	<b>Population (in Person)</b>
1	Ministry of Finance	1230
2	Ministry of Justice	815
3	Ministry of Local Government and Chieftaincy	1120
4	Ministry of Budget and Planning	950
5	Ministry of Commerce and Industry	900
	<b>TOTAL</b>	<b>5015</b>

**Source:** *Field Survey 2011.*

The above table therefore shows that the 5 ministries have a total of 5015 workforce.



### Sample Size/Techniques

The sample size is usually a compromise between what is desirable and what is feasible. For the purpose of this study, the researcher used a non-probability sampling (purposive sampling) to select the five (5) ministries used as population for the study. The use of purposive sampling was based on the fact that, Kogi State has a total of 16 ministries which the population were selected, also that the nature of fraud committed in all the ministries appears to be the same and therefore may serve a good representative of the whole ministries. Hence, the researcher used random sampling on the staff population in the 5 selected ministries.

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 size
- e = Level of significance

$$N = \frac{5015}{1 + 5015(0.05^2)}$$

$$= \frac{5015}{1 + 5015(0.0025)}$$

$$= \frac{5015}{1 + 12.54}$$

$$= \frac{5015}{13.54}$$

$$= 370$$

The sample size of 370 selected from the 5 ministries were tabulate below:

S/No.	Ministries	Population (in Person)
1	Ministry of Finance	74
2	Ministry of Justice	74
3	Ministry of Local Government and Chieftaincy	74
4	Ministry of Budget and Planning	74
5	Ministry of Commerce and Industry	74
	<b>TOTAL</b>	<b>370</b>

Source: Field Survey 2011.

### Method Of Data Analysis/Techniques

Tables and percentage were used in the analysis of the data collected from the respondents. The statistical tool used for testing of hypothesis one and two is the Analysis of Variance (ANOVA). The formula is as follows in the table below:

#### ANOVA Table

Source	SS	DF	MS	F- ratio	Remark
Between	$SS_B$	$t - 1$	$SS_B/df_B$	$MS_B/MS_W$	Accept or reject
Within	$SS_W$	$N - t$	$SS_W/df_W$		
Total	$SS_T$	$N - 1$			

Source: Adefila (2008).

Where:  $N$  = The total number of individuals scores in all  
 $Q$  = The grand total of all the data  
 $t$  = Number of groups  
 $n$  = Number of elements or cells in each group  
 $SS_T$  = Sum of the square of each of the individual scores in all the groups, subtract  $Q^2/N$   

$$= \frac{(X_1^2 + X_2^2 + X_3^2 + \dots + Z_3^2 + Z_4^2 + Z_5^2) - Q^2/N}{N}$$
  
 $SS_B$  = Square of each group sum, divided by the corresponding group ( $n$ ), then sum all these and subtract  $Q^2/N$   

$$= \frac{(XX^2 + YY^2 + ZZ^2 - Q^2)}{n \quad n \quad n \quad N}$$

$SS_W$  = The outcome of SST less the outcome of  $SS_B$

$SS_W = SS_T - SS_B$

$df_B$  = degree of freedom for "variance between" =  $t-1$

$df_T$  = degree of freedom for total of all the data =  $N - 1$

$df_W$  = degree of freedom for "variance within" =  $df_T - df_B$  ( $N - t$ )

$Ms$  = mean square for "variance between" and "variance within".

#### Decision Rule

The null hypothesis is rejected if the calculated value of F-ratio i.e. ( $MS_B/MS_W$ ) is greater than the critical value of F. i.e. ( $F_{t-1, N-t}$ ) as given in the F distribution table otherwise, it stands accepted.

- If  $MS_B/MS_W > F_{t-1, N-t}$ , then, reject the Null hypothesis
- If  $MS_B/MS_W < F_{t-1, N-t}$  then, reject the ultimate hypothesis

The choice of ANOVA for this research is based on the fact that it determines the extent of variance in dependent variables that are caused by independent variables, also used in comparing the variation in more than two independent samples that are drawn just once from

population with the same variance. More so, ANOVA reduces the type 1 error rate (rejecting null hypothesis instead of accepting) thus, the equality of several means can be tested in a single classification, where the relationship between one independent and one dependent variable is examined.

### **Data Presentation And Analysis**

This chapter represents the data collected in response to 370 questionnaires distributed to staff of the 5 selected ministries in Kogi State of Nigeria on their view about the use of Forensic Accounting as a tool for fraud detection and prevention in the public sector by which 350 questionnaires were filled and returned.

#### **Question one: Are you aware of Forensic Accounting?**

**TABLE 4.1**

<b>RESPONSES</b>	<b>NUMBER OF RESPONDENTS</b>	<b>PERCENTAGE (%)</b>
Yes	272	78
No	78	22
<b>TOTAL</b>	<b>350</b>	<b>100</b>

*Source: Field Survey 2011.*

Table 4.1 indicates that 272 of the respondents or 78% of the total respondents whom were majorly drawn from the top management and senior staff, more of Degree/HND, other higher qualification and very few from A Level/Diploma are aware of Forensic Accounting while 78 of the respondents or 22% respondents are not aware of Forensic Accounting.

#### **Question Two: Do you understand the concept of Forensic Accounting?**

**TABLE 4.2**

<b>RESPONSES</b>	<b>NUMBER OF RESPONDENTS</b>	<b>PERCENTAGE (%)</b>
Yes	268	77
No	82	23
<b>TOTAL</b>	<b>350</b>	<b>100</b>

*Source: Field Survey 2011.*

Table 4.2 shows that 268 respondents, constituting 77% of the total respondents do understand the concept of Forensic Accounting while 82 of the respondents with a percentage of 23% do not understand the concept of Forensic Accounting. It therefore implies that the percentages of those who understand the concept of Forensic Accounting were drawn from the 272 who initially agree that they are aware of Forensic Accounting.

**Question three: The Services of Forensic Accountants are required in Kogi State?**

**TABLE 4.3**

<b>RESPONSES</b>	<b>NUMBER OF RESPONDENTS</b>	<b>PERCENTAGE (%)</b>
Strongly agree	100	29
Agree	168	48
Strongly disagree	30	9
Disagree	52	14
<b>Total</b>	<b>350</b>	<b>100</b>

**Source:** *Field Survey 2011.*

Table 4.3 reveals that 100 respondents or 29% of the total respondents strongly agree, 168 respondents representing 48% agree, 30 respondents representing 9 strongly disagree while 52 respondents representing 14% of the respondents disagree. This implies that, the total respondents of 268 constituting 77% do agree that the services of Professional Forensic Accountants are required in Kogi State.

**Question Four: The services of Forensic Accountant are needed more in Public Sector?**

**TABLE 4.4**

<b>RESPONSES</b>	<b>NUMBER OF RESPONDENTS</b>	<b>PERCENTAGE (%)</b>
Strongly agree	102	29
Agree	162	46
Strongly disagree	25	7
Disagree	61	18
<b>Total</b>	<b>350</b>	<b>100</b>

**Source:** *Field Survey 2011.*

Table 4.4 Shows that 102 of the respondents representing 29% strongly agree that Forensic Accounting in needed more in the public sector, 162 of the respondents representing 46% also agree while 25 of the respondents representing 7% strongly disagree, 61 respondents representing 18% also disagree. This implies that the service of Forensic Accounting is needed more in public sector.

**Question Five: Forensic Accounting can help in detecting and preventing fraud in the Public Sector**

**TABLE 4.5**

<b>RESPONSES</b>	<b>NUMBER OF RESPONDENTS</b>	<b>PERCENTAGE (%)</b>
Strongly agree	155	44
Agree	105	30
Strongly disagree	31	9
Disagree	59	17
<b>Total</b>	<b>350</b>	<b>100</b>

**Source:** *Field Survey 2011.*

Table 4.5: Shows that 155 of the respondents representing 44% strongly agree that Forensic Accounting can help in detecting and preventing fraud in the public sector, 105 respondents representing 30% also agree while 31 respondents representing 9% strongly disagree, 59 respondents representing 17% also disagree. This implies that Forensic Accounting can help in detecting and preventing fraud in the public sector.

**Question Six: The service of a Forensic Accountant differs to a traditional External Auditor.**

**TABLE 4.6**

<b>RESPONSES</b>	<b>NUMBER OF RESPONDENTS</b>	<b>PERCENTAGE (%)</b>
Strongly agree	120	34
Agree	141	40
Strongly disagree	24	07
Disagree	65	19
<b>Total</b>	<b>350</b>	<b>100</b>

**Source:** *Field Survey 2011.*

Table 4.6 shows that 120 of the respondents representing 34% strongly agree that the services of a Professional Forensic Accountant differs to a traditional external Auditor, 141 respondents representing 40% also agree while 24 respondents representing 7% strongly disagree, 65 respondents representing 19% also disagree. This implies that the service of a Professional Forensic Accountant differs to a Traditional External Auditor.

**Question Seven: The services of Forensic Accountants are preferable to the services of traditional External Auditor**

**TABLE 4.7**

RESPONSES	NUMBER OF RESPONDENTS	PERCENTAGE (%)
Strongly agree	130	37
Agree	131	37
Strongly disagree	20	6
Disagree	69	20
<b>Total</b>	<b>350</b>	<b>100</b>

**Source:** *Field Survey 2011.*

Table 4.7: Shows that 130 of the respondents representing 37% strongly agree that the services of Professional Forensic Accountants are preferable to the service of traditional external Auditor, 131 respondents representing 37% also agree, while 20 representing 6% strongly disagree and 69 respondents representing 20% also disagree. This means that the services of Professional Forensic Accountants are preferable to the Traditional External Auditor.

**Test Of Hypotheses**

The researcher used questions 3, 4 and 5 to test hypothesis one, while question 6 and 7 were used to test hypothesis two.

**Test of Hypothesis one**

**H<sub>0</sub>:** The uses of Forensic Accounting do not significantly reduce the occurrence of Fraud cases in the public sector.

Variables	Question 3	Question 4	Question 5	Total
Strongly agree	100	102	155	357
Agree	168	162	105	435
Strongly disagree	30	25	31	86
Disagree	52	61	59	172
Total	350	350	350	1050

**Source:** *Field Survey 2011.*

**ANOVA Summary Table**

Source	SS	Df	Ms	f-ratio
Between	26009	3	8670	15.66
Within	4430	8	553.75	
Total	30439	11		

Critical value at 5% level of significance with degree of freedom 3 to 8 is 4.07

**Decision Rule:**

Since the calculated value of 15.66 is greater than the critical value of 4.07, the alternate hypothesis ( $H_a$ ) is accepted and the Null hypothesis ( $H_0$ ) is rejected. Therefore we can conclude that the use of Forensic Accounting do significantly reduces the occurrence of fraud cases in the public sector.

**Hypothesis Two:**

$H_0$ : There is no significant difference between Professional Forensic Accountants and Traditional External Auditor

Variable	Question 6	Question 7	Total
Strongly agree	120	130	250
Agree	141	131	272
Strongly disagree	24	20	44
Disagree	65	69	134
Total	350	350	700

**Source:** *Field Survey 2011.*

ANVOA Summary Table

Source	SS	Df	Ms	F- ratio
Between	16938	3	5646	194.7
Within	116	4	29	
Total	17054	7		

Critical value of 5% level of significance with degree of freedom 3 to 4 is 6.59

**Decision Rule:**

Since the calculated value of 194.7 is greater than the critical value of 6.59, the alternate hypothesis ( $H_a$ ) is accepted and the Null hypothesis ( $H_0$ ) is rejected. Therefore we can conclude that there is significant difference between Professional Forensic Accountants and Traditional External Auditors.

**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 public sector. Hence, the service of Professional Forensic Accountant is therefore required in Kogi State.

The second hypothesis equally reveals that there is significance difference between Professional Forensic Accountants and Traditional External Auditors. In this view, the service of

the Forensic Accounting is therefore required in Kogi State to replace that of the external auditor.

Moreso, oral interview conducted shows that Kogi State does 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 Kogi State ministries, since services are provided by the Traditional External Auditor, yet fraud are still being perpetrated in the ministries.

### **Summary Of Findings**

Summary of findings for this research is based on the analysis of data collected through questionnaires and testing of hypotheses. They are itemized as follows:

- i. That a services of Professional Forensic Accountants differs to a Traditional External Auditor
- ii. That the services of Professional Forensic Accountant are preferable to the services of Traditional External Auditor
- iii. That the uses of Forensic Accounting do significantly reduces the occurrence of fraud cases in the public sector.
- iv. That there is significant difference between Professional Forensic Accountants and Traditional External Auditors in terms of a skills and techniques applied and fraud investigation.
- v. Majority of the respondents are aware of Forensic Accounting which where majorly drawn from the top management and senior staff and very few from the middle and lower cadre.
- vi. Majority of the respondents had good knowledge of the concept of Forensic Accounting.
- vii. Based on oral interview Kogi State does not use the services of Professional Forensic Accountants and therefore required such services.
- viii. That the services of Professional Forensic Accountants are needed more in the public sector
- ix. That Forensic Accounting can help in detecting and preventing fraud in the public sector.

### **Conclusion**

In conclusion, this study has analyzed why attention has to be given to the question of fraud detection and fraud prevention in Kogi State of 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 public 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 public 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.

## **Recommendations**

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

- i. Action and Recovery:** 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. Kogi State 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”.
- ii. Training:** Training and guidance is 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 managers 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.
- iii. Standards:** For Kogi State to properly embrace the practice of Forensic Accounting, the standard setting process should be modernized and streamlined to ensure that guidelines can be altered, created, or eliminated as changing conditions dictate. Accordingly, the state should embrace the practice or implementation of the Nigerian Accounting Standard Board (NABS) guideline. This should be strengthened for accounting standard setting toward broad principle aimed at elevating the quality of financial report. This if done will enable the Professional Forensic Accountant to operate more independently and effectively.

**iv. Information Technology:** The ministries should take advantage of the modern accounting and auditing software to enhance efficiency and smooth operation of Forensic Accounting.

**i. Code of Conducts:** A code of conduct should be established in every ministry in the state and officers or staff should be made to declare their assets from time to time. More training or favourable environment like attributes of independence, transparency, accountability, competence etc should be created to enhance the practice or operation of Forensic Accounting in Kogi State.

Adherence to the above recommendations will definitely bring about unhindered fraud detection and prevention in Kogi State, most especially this jet-age when the level of development in government activities is increasing everyday in the face of Information Communication Technology (ICT).

Finally, above all recommendations, since the hypothesis tested showed that the used of Forensic Accounting do significantly reduces the occurrence of fraud cases in the public sector; it therefore becomes pertinent to recommend that it should be replaced with the Traditional External Auditor in Kogi State.

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