

# Forensic Auditing and Public Sector Fraud Detection in Rivers State, Nigeria

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## ABSTRACT

The study examined The need for forensic auditing in public sector fraud Reduction in Nigerian public sector. To achieve this objective, data was collected from secondary source which include press reports, report of Economic and Financial Crime Commission (EFCC), Report of Independent and Corrupt Practices Commission (ICPC) and Report from investigation committees. Two hypotheses were tested with the use of simple regression analysis. The results revealed that there is a significant relationship between forensic audit and fraud reduction also, that an increase in Forensic Audit significantly leads to a decrease in the occurrence of fraud cases in Nigerian public sector. On the basis of this finding, the study concludes that the services of Professional Forensic Auditors are needed to help reduce the occurrence of fraud in Nigerian public sector. Consequently, the study suggests among others that the Federal Government of Nigeria should adopt the services of professional forensic auditors to help reduce the occurrence of fraud in Nigerian public sector.

**KEYWORDS:** *Forensic auditing, fraud reduction, assets misappropriation, automated audit support, financial statement fraud.*

## INTRODUCTION

Over the years various administrations in Nigeria have articulated polices and measures designed to combat this economic monster called fraud. Examples include General Murtala Muhammed's crusade of confiscation of assets illegally acquired by Nigerians; Shehu Shagari's ethical revolution to combat corruption through the introduction of code of conduct for public servants, General Buhari's operation war against indiscipline, General Ibrahim Babaginda's ethical and social mobilization crusade, etc. These efforts have been largely cosmetic attempts to address a systemic problem that is deep-rooted in the fabric of the country (Benjamin 2012).

In spite of these enabling laws and the relevant institutions to administer them, fraudulent activities still thrive in the economy unabated. President Olusegun Obasanjo responded positively to the yearnings of Nigerians and the International community by taking proactive and responsive approach to eradicate this menace by establishing the Anti Corruption Commission, Creation of the Due Process Office in the Presidency, Corrupt Practices and Related Offences Act of 2000, and the establishment of the EFCC in 2002. President Jonathan, introduce the single treasury account system to curb fraud in the system. But despite all these effort to curb this economic monster, fraud is still perpetrated in our

economy on a daily basis under the supervision of both the internal and external auditors (Benjamin 2012).

This reveals the outright failure, weakness and or ineffectiveness of the fraud detection and prevention mechanisms, internal control, audit investigation procedures, etc that underlines the perpetuation of frauds by all, particularly by top government official and top managements of corporate organizations, this has brought to the fore once again the need for re-examination and procedure restructuring and policy formulations. The failure of existing fraud detection and prevention mechanisms of internal control, audit investigation to curb the fraud menace, has attracted widespread criticisms and agitations for alternative approach from stakeholders, it has prompted the accounting/auditing and law professions to seek for and adopt an alternative more effective fraud detection and prevention focused approach, (Owojori & Asaolu 2009). Consequently, the two professions have come up with the discipline of forensic auditing. Forensic auditing is introduced due to the quest to combat this economic monster called fraud, the concept of forensic auditing is out to reduce the incessant occurrence of fraud in our financial system which has held back our society and as such, hindered infrastructural development and loss of confidence

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by the general public who prefer to invest in the private sector rather than risk their resources in the public sector.

Forensic auditing is the tripartite practice of utilizing auditing accounting, and investigative skills to assist in legal matters. It is a specialized field of auditing that describes engagements that result from actual or anticipated disputes or litigation. Forensic auditing can, therefore, be seen as an aspect of auditing that is suitable for legal review and offering the highest level of assurance (Apostolou, Hassell, & Webber 2000). Forensic audit also reduces fraud risks (Beredugo, Inah & Edom, 2014).

Ojaide (2000) noted that there is an alarming increase in the number of corruption and fraudulent activities in Nigeria, requiring the visibility of forensic auditing services. Centre for Forensic Studies (2010: 12) also reports, "the increasing need for forensic and investigative auditing in the public and private sectors results from the high rate of corruption in the economy." This makes it difficult to monitor transactions by applying manual audit processes. This in turn makes the control utility of auditing ineffective. Virtually all the weaknesses and challenges identified in the Nigeria's economy, and criminal investigations and prosecutions arising from them, are issues for forensic auditing. The general expectation is that forensic auditing may offer some respite to the seeming vulnerability of conventional audit and accounting systems to financial fraud and corruption. Consequently, the incorporation of modern forensic auditing techniques in Nigeria will be seen as timely in order to prepare the auditing profession to deal effectively with the problem of unearthing ingenious fraud schemes arising from audit failure to detect frauds in Nigeria. Centre for Forensic Studies (2010) report in Nigeria, states that if well applied, forensic auditing could be used to reverse the leakages that cause corporate failures.

Degboro and Olofinola (2007) described forensic auditing as the application of criminalist methods and integration of auditing investigative activities and law procedures to detect and investigate financial crimes and related accounting misdeeds. The concept of Forensic Auditing can also be defined as "a concentrated audit of all the transactions of the entity to find the correctness of such transactions and to report whether or not any financial benefit has been attained by way of presenting an unreal picture". Forensic auditing aims at legal determination of whether fraud has actually occurred. In the process, it also aims at naming the person(s) involved (with a view to take legal action). Vasudevan (2004) noted that Forensic Auditing is also an examination and evaluation of a firm's or individual's financial information for use as evidence in court.

In general terms, forensic auditing involves reporting where fraud is established and the report is considered as evidence in the court of law. The engagements of forensic auditing techniques are usually geared towards finding where money went how it got there and who was responsible. A forensic auditor have been described as experienced auditors, accountants and investigators of legal and financial document that are hired to look into possible suspicious or fraudulent activity within an organization; or are hired by a company who may just want to prevent fraudulent activities from occurring. They also provide services in areas such as accounting, anti-trust, damage, analysis, valuation and

general consulting. Forensic auditors have also been used in bankruptcy, insurance claims personal injury claims, fraudulent claims, construction, royalty audits and tracking terrorism by investigating financial records. Forensic audit is an amalgamation of forensic science, investigation, accounting and legal process. Therefore, there is every need to inculcate the services of a forensic auditor in our public sector to fill in the gap that an auditor could not cover hence bringing up the trust of the general public to be fresh again and strong as it used to be that is the observation of the researcher after being motivated to carry out a research on the forensic audit and fraud detection in the Nigerian Public Sector.

### STATEMENT OF THE PROBLEM

In Nigeria, fraud has stultified growth and national development, and impunity in the public service, and frittered away the promise of the nation's future. It has caused decay and dereliction within the infrastructure of government and the society in general, despite all the efforts, made to reduce fraud in the public sector, fraud is still enduring all the way, and has unrelentingly thrived rather than perish. The anti-corruption commission has been seen as a watchdog that can bark but cannot bite. It suffices to say that the independence of these bodies is not guaranteed because they work as an employee of the government or organization (Okoye & Gbegi 2013).

The failure of existing fraud detection and prevention mechanisms of internal control, audit investigation to curb the fraud menace, has attracted widespread criticisms and agitations for alternative approach from stakeholders, it has prompted the accounting/auditing and law professions to seek for and adopt an alternative which is more effective in fraud detection and prevention. Consequently, professionals have come up with the discipline of forensic auditing.

### RESEARCH QUESTIONS

The following research questions were raised as a guide in order to carefully examine the challenges identified by this study. They include:

Is there any significant relationship between investigative auditing service and payroll fraud?

Is there any significant relationship between automated forensic auditing and financial statement fraud?

The following hypotheses are created to help us test the data for this research work.

Ho<sub>1</sub> There is no significant relationship between investigative auditing service and payroll fraud.

Ho<sub>2</sub> There is no significant relationship between automated forensic auditing and financial statement fraud.

### Literature Review & theoretical review

#### The Theory of the Fraud Triangle

Donald Cressey developed the theory of the fraud triangle. One leg of the triangle represents a perceived non-shareable financial need which can be a source of pressure. The second leg is for the perceived opportunity, and the final is for rationalization (Cressey, 1973). He concluded that individuals commit fraud when three factors are present: (1) a financial need that cannot be shared, (2) a perceived opportunity for illicit gains, and (3) a personal

rationalization of the act. Over the years, Cressey's hypothesis has become well known as "the fraud triangle" as shown in Figure 1 below. The first side of the fraud triangle represents a pressure or motive to commit the fraudulent act, the second side represents a perceived opportunity, and the third side stands for rationalization (Wells 2011).

Perceived pressure relates to the motivation that leads to unethical behaviors. Every fraud perpetrator faces some type of pressure to commit unethical behavior. Albrecht, Howe, and Romney, (2006) pointed out that the word perceived is important due to the fact that pressure does not have to be real; if the perpetrators believe they are being pressured, this belief can lead to fraud. Perceived pressure can result from various circumstances, but it often involves a non-sharable financial need. Financial pressure has a major impact on an employee's motivation and is considered the most common type of pressure. Specifically, about 95% of all cases of fraud have been influenced by financial pressure (Albrecht et al., 2006). Motivations are so natural to human beings that no special forces are necessary to explain law-breaking (Jensen, 2003).

Opportunity is created by weaknesses in the systems that allow an individual to commit fraud; in the accounting field, this is called weak internal control. The concept of perceived opportunity suggests that people classified and confidential information which together with technological advancement can give them the opportunity to commit frauds. All they need is some pressure and the rationalization and that way they become part of fraud cartels that are fleecing millions of shillings from the banks (Jensen, 2003).

will take advantage of circumstances available to them (Kelly & Hartley, 2010). Perceived opportunity is similar to perceived pressure in that the opportunity does not have to be real; the perpetrator must simply believe or perceive that the opportunity exists. In most cases, the lower the risk of getting caught, the more likely it is that fraud will take place. Other factors related to perceived opportunity can also contribute to fraud, such as the assumption that the employer is unaware, the assumption that employees are not checked regularly for violating company policies, the belief that no one will care, and the belief that no one will consider the behavior to be a serious offense (Sausser, 2007). Rationalization refers to the justification that the unethical behavior is something other than criminal activity. If an individual cannot justify unethical actions, it is unlikely that he or she will engage in fraud. Some examples of rationalizations of fraudulent behavior include "I am only borrowing," "the organization can afford it," and "it is not really a serious matter." It is important to note that rationalization is difficult to observe, as it is impossible to read the perpetrator's mind. Bank employees have knowledge of the systems as well as

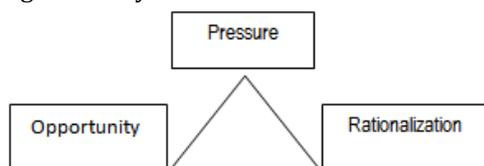


Figure 1: Fraud Triangle

### The Fraud Diamond Model

Wolfe and Hermanson (2004) introduced the "Fraud Diamond Model" where they presented another side that

extends the fraud triangle which is "the fraudster's capabilities".

**The fraud diamond:** Considering the four elements of fraud", Wolfowitz (2006) believed that many frauds would not have occurred without the right person with the right capabilities implementing the details of the fraud. He also suggested four observable traits for committing fraud; (1) Authoritative position or function within the organization, (2) capacity to understand and exploit accounting systems and internal control weaknesses, (3) confidence that she/he will not be detected or if caught she/he will get out of it easily, and (4) capability to deal with the stress created within an otherwise good person when she commits bad acts.

### The MICE Model

Another model called "MICE" was suggested by (Kranacher & Dorminey 2010). In this model they suggested that motivation of fraud perpetrators, which is one of the sides in the fraud triangle, may be more appropriately expanded and identified with the acronym: MICE that stands for: Money, ideology, coercion, and ego. Ideological motivators justify the means where they can steal money or participate in a fraud act to achieve some perceived greater good that is consistent with their beliefs (ideology). Coercion occurs when individuals may be unwillingly pulled into a fraud scheme, but those individuals can turn into whistleblowers. Ego can also be a motive for fraud, where sometimes people don't like to lose their reputation or position of power in front of their society or families. This social pressure can be a motive to commit fraudulent act just to keep their ego. Kranacher and Dorminey (2010) argued that the model cannot solve the fraud problem alone because two sides of the fraud triangle, pressure and rationalization, cannot be easily observed. In fact, it is important for auditors to consider all fraud models to better understand why fraud is committed. Hence, the above models should all be regarded as an extension to Cressey's fraud triangle model and should be integrated in one model that includes motivation, opportunity, integrity, and fraudster's capabilities.

### The Fraud Scale Theory

The fraud scale theory was developed by (Albrecht, Howe, & Romney, 1984) as an alternative to the fraud triangle theory. The fraud scale is very similar to the fraud triangle; however, the fraud scale uses an element called personal integrity instead of rationalization. This personal integrity element is associated with each individual's personal code of ethical behavior. Albrecht et al., (1984) also argued that, unlike rationalization in the fraud triangle theory, personal integrity can be observed in both an individual's decisions and the decision-making process, which can help in assessing integrity and determining the likelihood that an individual will commit fraud. This argument is consistent with other research. Experts agree that fraud and other unethical behaviors often occur due to an individual's lack of personal integrity or other moral reasoning (Kranacher & Dorminey, 2010; Rae & Subramaniam, 2008), as moral and ethical norms play essential roles in an individual's decisions and judgment.

### Theory of Reasoned Actions (TRA)

This theory originates from social psychology and was developed by (Ajzen & Fishbein 1975). They developed TRA

to define the links between the beliefs, attitudes, norms, intentions, and behaviors of individuals in their intention to use ICT. The theory assumes that a person's behavior is determined by the person's behavioral intention to perform it, and the intention itself is determined by the person's attitudes and his or her subjective norms towards the behavior. The subjective norm refers to "the person's perception that most people who are important to him think he should or should not perform the behavior in question" (Fishbein & Ajzen, 1980). In TRA rational considerations determine the choices and behaviors of individuals, and individual intentions determine behavior. Intentions refer to individuals' plans and motivations to commit a specific act. Intentions also reflect individual attitudes and the extent to which individuals perceive a specific act as desirable or favorable. The theory suggests that human behavior is governed by personal attitudes, but also by social pressures and a sense of control. Adeniji (2010), states that fraud refers to "an International act by one or more individuals among management, employees, or third parties, which results in a misrepresentation of financial statements". It may also involve,

- Manipulation, falsification or alteration of records or documents.
- Misappropriation of assets.
- Suppression or omission of the effects of transaction from records or documents.
- Recording of transactions without substance.
- Misapplication of accounting policies.

Adeniji (2010) further explains that among the various definitions of fraud, the most common is that "fraud is a generic term, and embraces all the multifarious means which human ingenuity can devise, which are resorted to by one individual, to get an advantage over another by false representations. No definite and invariable rule can be laid down as a general preposition in defining fraud, as it includes, surprise, lickers, cunning and unfair ways by which another is cheated. The only boundaries defining it are those which limit human knowing". Fraud is also defined "as the crime or offense not deliberately decreeing another in order to damage them usually to obtain property or services injustice" (Ekeigwe, 2010). Also Kano (2004), Opines that "fraud and forgery are jointly defined as irregularities involving the use of criminal detection to obtain unjust or illegal advantage".

### Types of Corruption Activities in Nigeria

Based on existing studies on corruption, the following types of corruption are visible in Nigeria:

**Political:** This is the sale by government officials of government property for personal gain. It involves the use of public office by politicians both for financial gain and purposes of remaining in office. It is further facilitated by the creation of rent seeking projects. **Bureaucratic:** This involves the use of public office for pecuniary gain. Bureaucratic corruption is common in Nigeria because the government plays crucial roles in the development process, especially intervening in the domestic economy. It is also common where there is instability in government and lack of tenure, which drive bureaucrats to engage in rent seeking opportunities for personal aggrandizement. Socio-economic conditions, such as poverty and inequality, cultural norms and practices, such as kinship loyalty not only impinge

directly on public officials but also shape their behavior. **Electoral:** Electoral corruption occurs when people, whether endowed with political clout or not, illegally try to buy influence through illegal payoffs such as illegal funding of campaigns, illegal campaign contributions, bribes, buying of votes for cash or other inducements (i.e. paying voters to vote, thereby influencing their choices), promise of contracts or other favors etc. Electoral corruption may also take coercive forms, such as paying thugs to intimidate or threaten supporters of a candidate in order to compel supporters to vote for the candidate who employed the thugs or stop them from voting entirely. Electoral corruption can lead to outright rigging of elections; expectation of reward once victory is achieved, or encouraging quid pro quo deals (Etzioni, 2018). It can include weak credible opposition politics, and the undermining of democratic values, especially where there is a conflict between the politicians' interests and those of the public. **Corporate:** Corporate corruption occurs in the relationship between private business corporations and their vendors or clients. It can also take place within a corporation when officers use company's resources for private aggrandizement, at the expense of the shareholders (Bhargava, 2005). **Financial Statement Fraud:** Bradford (2010), defined financial statement fraud as deliberate misrepresentation, misstatement or omission of financial statement data for the purpose of misleading the reader and creating a false impression of an organization's financial strength. Public and private businesses commit financial statement fraud to secure investor interest or obtain bank approvals for financing, as justification for bonuses or increased salaries or to meet expectations of shareholders. Upper management is usually at the center of financial statement fraud because financial statements are created at the management level. According to the Association of Certified Fraud Examiners, the average loss due to financial statement fraud is over \$1 million. Due to its nature, financial statement fraud is committed by one or more persons in top management. Frequently, collusion between a number of persons is found behind such schemes. This type of fraud can be devastating to an organization and the morale of the employees who have committed much of their lives to an organization.

According to the Association of Certified Fraud Examiners (ACFE 2017), financial statement frauds fall into these categories. They are improper revenue recognition, manipulation of liabilities, manipulation of expenses, improper disclosures on financial statements and overstating assets. **Improper Revenue Recognition** The most common scheme used in financial statement fraud involves manipulation of revenue figures. According to a survey by Deloitte of Accounting and Auditing Enforcement Releases (AAER 2016) filed by the SEC from 2000 through 2008, improper revenue recognition was recognized as the scheme employed in 38 percent of the 403 cases studied. Schemes to manipulate revenue figures typically involve posting sales before they are made or prior to payment. Examples include recording product shipments to company-owned facilities as sales, re-invoicing past due accounts to improve the age of receivables, pre-billing for future sales and duplicate billings. **Manipulating Expenses** Another fraud involving financial statements is the deliberate manipulation of expenses. The Deloitte survey of (AAER 2016) filings by the SEC shows that 12 percent involved expense manipulation and 8 percent manipulation

of liabilities. An example of manipulating expenses is to capitalize normal operating expenses. This scheme is an improper method to delay recognition of the expense and artificially raise income figures. An example of this type of scheme is the WorldCom scandal, where significant operating expenses were listed as capital on the balance sheet. Concealment and manipulation of liabilities frauds include failure to record accounts payables or report regular expenses on financial statements. Keeping certain liabilities, leaving notes or loans off-the-books and writing off money lent to executives are also common methods of fraud.

**Improper Disclosures** Disclosure frauds are commonly based on misrepresenting the company and making false representations in press releases and other company filings. Making false statements in the commentary sections of annual reports of other regulatory filings are another source for improper disclosures. Some disclosures might be intentionally confusing or obscure and impossible to completely understand. **Overstating Assets** Overstatement of current assets on financial statements and failure to record depreciation expenses are often employed as methods of fraud. Overstatement of inventory and accounts receivables are also commonly used to inflate company assets on fraudulent statements.

### Forensic Auditing

As a result of all these fraudulent activities perpetrated in our economy, the auditors coming together decided to have a special people to do an in-depth study of what is happening. The need to incorporate expertise that will be charged with responsibility of carrying out judicial functions together with accounting skills instigate forensic auditing. Mobile Greek (2011), defined forensic auditing as an examination and evaluation of a firm's or individual financial information for use as evidence in court. It can be conducted in order to prosecute a party for fraud, embezzlement or other financial claims. Chatterji (2009) opined that Forensic auditing is "the application of auditing skills to situations that have legal consequences". It is also seen as "an examination and evaluation of a firm's or individual's financial information's for use as evidence in event". During a forensic auditing, professionals compile and assess financial information to be used in legal proceedings, whereas the auditing is conducted by forensic auditors who rely on the principles of law, business and ethics. These reports are sometimes used to prepare legal defenses as well as prosecuting a party for fraud, embezzlement or other financial claims. (Investopedia 2019). Forensic auditing has been seen as a specialization within the field of accounting, whereby forensic auditors provides experts testimony during trial proceedings (Nigrini, 2011). Scott (2008) defined forensic auditing "as a special practice of accounting that involves using auditing techniques to specifically look for financial misconduct".

### Investigative Audits

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

or a department. It usually focuses on specific aspects of the work of a department or individual in relation to fraud and corruption, so as to examine how the systems can be reinforced for fraud prevention and detection. Ezeilo (2010) further explains that investigative audit is a valuable part of audit toolkit because it focuses on the risks that threaten achievement such as risk of fraudulent claims for expenditure, fraudulent provision of services to an organization or fraud and evasion of revenue payments. It also concentrates on the standards of financial management, implementation of internal control regimes and electronic services. It is also worth noting that this audit differs from other audits because they are normally conducted without first notifying the personnel who may be affected by the findings.

In carrying out this investigation, the forensic auditors who are usually referred to as investigative auditors have certain principal tools used in investigating, and they include;

1. Information (informants)
2. Interviews (witnesses)
3. Interrogation (suspects)
4. Instrumentation (crime laboratory, comparison microscopes, polygraph etc.).

Out of all these tools, information contribute to the solution of crime more than the other tools, although there are some evidence that instrumentation could be used more frequently and more effectively to solve a greater number of crimes.

### Asset Misappropriation Fraud:

According to Chad Albrecht (2010), Asset misappropriation fraud happens when people who are entrusted to manage the assets of an organization steal from it. Asset misappropriation fraud involves third parties or employees in an organisation who abuse their position to steal from it through fraudulent activity. It can also be known as insider fraud. This type of fraud can be committed by company directors, or its employees, or anyone else entrusted to hold and manage the assets and interests of an organisation (Benjamin 2012).

Typically, the assets stolen are cash or cash equivalents, such as credit notes or vouchers. However, the fraud can extend to include company data or intellectual property. At one end of the scale, asset misappropriation fraud may be limited to isolated cases of expense fiddling or an employee lying about his or her qualifications to get a job. Ezeilo, (2010) stated that there are different types of fraud which fall into this category. The common feature is the theft of cash or other assets from the company, for example: Cash theft – the stealing of physical cash, for example petty cash, from the premises of a company. Fraudulent disbursements – company funds being used to make fraudulent payments. Common examples include billing schemes, where payments are made to a fictitious supplier, and payroll schemes, where payments are made to fictitious employees (often known as 'ghost employees'). Inventory frauds – the theft of inventory from the company.

**Automated Forensic Audit:** They are a branch of forensic science pertaining to legal evidence found in computers and digital storage mediums. These tools are ideal for solving cyber-crimes, revealing accounting fraud, and more

commonly, for the retrieval of accidentally/deliberately deleted data. **Payroll Fraud:** Unauthorised altering of payroll or benefits systems in order for an employee to gain funds which are not due.

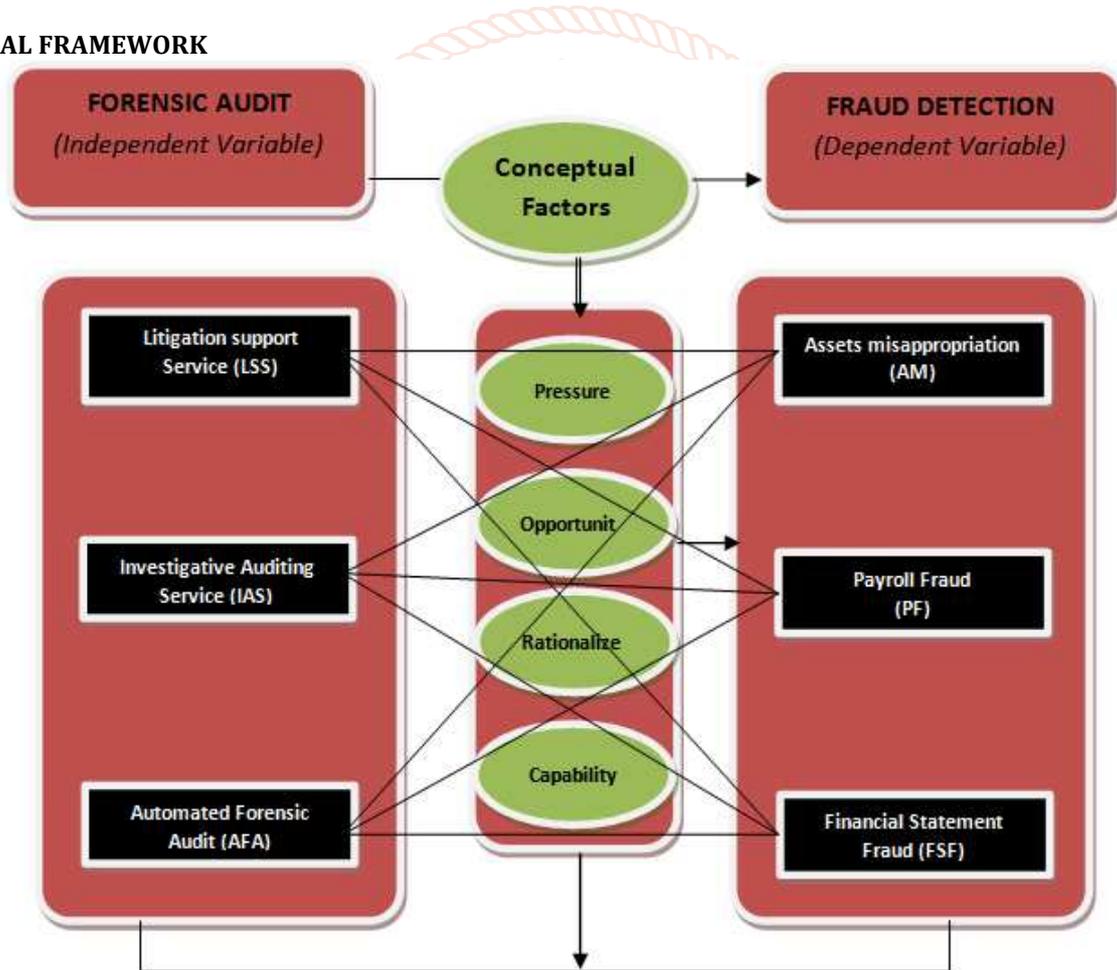
**Financial Fraud**

Financial fraud has been variously described in literature. No one description suffices. Wikipedia dictionary describes Fraud as crimes against property, involving the unlawful conversion of property belonging to another to one’s own. Williams (2005) incorporates corruptions to his description of financial crimes. Other components of fraud cited in Williams (2005) description include bribes cronyism, nepotism, political donation, kickbacks, artificial pricing and frauds of all kinds. The array of components of financial crimes, some of which are highlighted above, is not exhaustive. The EFCC Act (2004) attempts to capture the variety of economic and financial crimes found either within or outside the organization. The salient issues in EFCC Act (2004) definition include “violent, criminal and illicit activities committed with the objective of earning wealth illegally in a manner that violates existing legislation and these include any form of fraud, narcotic drug, trafficking,

money laundering, embezzlement, bribery, looting and any form of corrupt malpractices and child labour, illegal oil bunkering and illegal mining, tax evasion, foreign exchange malpractice including counterfeiting, currency, theft of intellectual property and piracy, open market abuse, dumping of toxic waste and prohibited goods, etc. This definition is all-embracing and conceivably includes financial crimes in corporate organization and those discussed by provision authors (William, 2005 and Khan, 2005). At the level of corporate organization, financial crimes were known to have led to the collapse of such organization.

Cotton (2003) attributes the collapse of Enron, WorldCom, Tyco, Adelphia, to corporate fraud. \$460 billion was said to have been lost. In Nigeria, Cadbury Nig Plc whose books were criminally manipulated by management was credited to have lost 15 billion Naira. In the case of the nine collapsed commercial banks in Nigeria, about one trillion naira was reported to have been lost through different financial malpractice. This is still being investigated by EFCC under the EFCC Act (2004). Generally, financial fraud is varied and committed by individuals and institutions.

**CONCEPTUAL FRAMEWORK**



Sources: Conceptualized by the Researcher based on the fraud models in the theories above

**Research Methodology**

This study adopts the cross-sectional field survey of quasi-experimental research design. The survey design was adopted because of the need to gather enough discriminative data across a wide range of the study subjects that further enhanced the generation of our findings.

Data used in this study were mainly collected from secondary sources which include: Press Reports, report of Economic and Financial Crime Commission (EFCC), reports from Independent and Corrupt Practices Commission (ICPC), and report from investigation committees. The data collected was analyzed with the use of Simple regression; SPSS Version 20.0 was particularly used

Accordingly, the functional relationship between the variables are casted thus:

$$PF = f(IAS) \dots\dots\dots 1$$

$$FSF = f(AFA) \dots\dots\dots 2$$

Where

PF = Payroll Fraud  
 FSF = Financial Statement Fraud

From the above functional relationship, the econometric models are specified thus:

$$PF = b_0 + b_1 LSS + U_{2t} \dots\dots\dots 3$$

$$FSF = w_0 + w_1 LSS + U_{3t} \dots\dots\dots 4$$

$$PF = \zeta_0 + \zeta_1 IAS + U_{5t} \dots\dots\dots 5$$

$$FSF = \mu_0 + \mu_1 IAS + U_{6t} \dots\dots\dots 6$$

$$PF = \rho_0 + \rho_1 AFA + U_{8t} \dots\dots\dots 7$$

$$FSF = \cap_0 + \cap_1 AFA + U_{9t} \dots\dots\dots 8$$

Where LSS, IAS and AFA are Independent variables. Also  $U_{1t}$  are the errors terms with the assumption of constant and variables are normally distributed. Again,  $b_0, w_0, \zeta_0, \mu_0, \beta_1, \rho_1,$  and  $\cap_1$  are all parameter estimates.

**Data Presentation**

The analyses begin with the examination of the basic features of the data using descriptive statistics. Averages and percentages were obtained from the studied ministries on the dimensions of the independent as well as the dependent variables.

From the table 1, the total frequency of Assets Misappropriation Fraud (AMF) committed in Rivers State public sector between 2008 – 2018 is about 6 recorded cases while about 74 cases were recorded in Nigeria within the same period. This however, show an average frequency of 0.6 in Rivers State and 7.4 in Nigeria for a particular year. Also, available data from the table 1 above reveals that, between 2008 – 2018, the total occurrence of payroll fraud (PF) committed in Rivers State is about 9 recorded cases while about 43 cases was recorded in Nigeria within the same period.

This, however, shows an average frequency of 0.9 in Rivers State and 4.3 in Nigeria for a particular year. Again, available data from the above table also reveals that between 2008 – 2018, the total occurrence of Financial Statement Fraud committed in Rivers State public sector is about 7 cases while about 38 cases was recorded in Nigeria within the same period. This, however, shows an average frequency of 0.7 in Rivers State and 3.8 in Nigeria for a particular year.

**TABLE1 FREQUENCY OF FRAUD OCCURRENCES IN RIVERS STATE AND NIGERIA (2008 – 2018)**

| Year           | Assets Misappropriation Fraud (AMF) |            | Payroll Fraud (PF) |            | Financial Statement Fraud (FSF) |            |
|----------------|-------------------------------------|------------|--------------------|------------|---------------------------------|------------|
|                | Rivers State                        | Nigeria    | Rivers State       | Nigeria    | Rivers State                    | Nigeria    |
| 2008           | 0                                   | 5          | 1                  | 3          | 0                               | 4          |
| 2009           | 0                                   | 7          | 0                  | 2          | 1                               | 2          |
| 2010           | 1                                   | 5          | 1                  | 7          | 0                               | 4          |
| 2011           | 1                                   | 4          | 2                  | 7          | 1                               | 3          |
| 2012           | 1                                   | 5          | 1                  | 4          | 0                               | 4          |
| 2013           | 2                                   | 11         | 0                  | 3          | 1                               | 3          |
| 2014           | 0                                   | 7          | 1                  | 4          | 0                               | 5          |
| 2015           | 0                                   | 8          | 1                  | 5          | 1                               | 2          |
| 2016           | 0                                   | 9          | 0                  | 4          | 1                               | 1          |
| 2017           | 1                                   | 6          | 1                  | 0          | 0                               | 6          |
| 2018           | 0                                   | 7          | 1                  | 4          | 2                               | 4          |
| <b>Total</b>   | <b>6</b>                            | <b>74</b>  | <b>9</b>           | <b>43</b>  | <b>7</b>                        | <b>38</b>  |
| <b>Average</b> | <b>0.6</b>                          | <b>7.4</b> | <b>0.9</b>         | <b>4.3</b> | <b>0.7</b>                      | <b>3.8</b> |

Source: Financial data obtained from Newspapers, press, Reports, EFCC reports, ICPC reports, and other publications

**TABLE2 FREQUENCIES OF DETECTED CASES OF FRAUD COMMITTED IN RIVERS STATE AND NIGERIA (2008 – 2018)**

| Year | Litigation Support Service (LSS) |         | Investigative Auditing Services (IAS) |         | Automated Forensic Audit (AFA) |         |
|------|----------------------------------|---------|---------------------------------------|---------|--------------------------------|---------|
|      | Rivers State                     | Nigeria | Rivers State                          | Nigeria | Rivers State                   | Nigeria |
| 2008 | 0                                | 3       | 1                                     | 3       | 0                              | 0       |
| 2009 | 0                                | 5       | 0                                     | 1       | 0                              | 0       |
| 2010 | 1                                | 4       | 1                                     | 5       | 0                              | 0       |
| 2011 | 1                                | 6       | 1                                     | 6       | 0                              | 0       |
| 2012 | 1                                | 5       | 1                                     | 4       | 0                              | 0       |
| 2013 | 1                                | 7       | 1                                     | 2       | 0                              | 1       |
| 2014 | 0                                | 4       | 2                                     | 4       | 0                              | 1       |
| 2015 | 0                                | 6       | 0                                     | 5       | 0                              | 0       |

|                |            |            |            |            |            |            |
|----------------|------------|------------|------------|------------|------------|------------|
| 2016           | 0          | 8          | 0          | 3          | 0          | 0          |
| 2017           | 1          | 5          | 1          | 0          | 1          | 2          |
| 2018           | 0          | 7          | 1          | 3          | 0          | 2          |
| <b>Total</b>   | <b>5</b>   | <b>60</b>  | <b>9</b>   | <b>36</b>  | <b>1</b>   | <b>6</b>   |
| <b>Average</b> | <b>0.5</b> | <b>6.0</b> | <b>0.9</b> | <b>3.6</b> | <b>0.1</b> | <b>0.6</b> |

From the table 2 above, the total frequency of Litigation Support Service (LSS) between 2008 – 2018 in Rivers State is about 5 recorded cases while about 60 cases was recorded in Nigeria within the same period. This however, show an average frequency of 0.5 in Rivers State and 6.0 in Nigeria for a particular year. Also, available data from the table 2 above reveals that, between 2008 – 2018, the total occurrence of investigated cases in Rivers State is about 9 while about 36 cases were investigated in Nigeria within the same period. This, however, shows an average frequency of 0.9 in Rivers State and 3.6 in Nigeria for a particular year. Again, the above table 2 reveals that between 2008 – 2018, the total occurrence of automated forensic auditing cases in Rivers State public sector is about 1 while about 6 cases were recorded in Nigeria within the same period. This, however, shows an average frequency of 0.1 in Rivers State and 0.6 in Nigeria for a particular year.

H<sub>01</sub>: There is no significant relationship between investigative audit services and payroll fraud.

**Table3. A simple regression for investigative audit services and payroll fraud at 5% level of confidence.**

Simple Regression Method Independent variable: investigative audit services Dependent Variable: payroll fraud

| Variable     | Co-efficient | R <sup>2</sup> | t-value | F-value | Prob. |
|--------------|--------------|----------------|---------|---------|-------|
| Constant (C) | 0.731        | 0.534          | 0.049   | 10.04   | .062  |
| PF           |              |                | 3.210   |         | .001  |

Researcher’s computation from appendix 2

From table 3 above shows a strong correlation between investigative audit services and payroll fraud. Forensic audit helps to detect fraud if it exists in the financial records of the organization. R<sup>2</sup> being 0.534 show that approximately 53% of the total variation in payroll fraud is explained by investigative audit services. The remaining 47% is caused by other variables outside the model but covered by the error term. F-value calculated of 10.04 is less than 10.13 table values implying that the model is significant at 0.05 level of significance.

The T-value calculated of 3.210 is greater than table value of 2.353 which indicates that there is a significant relationship between investigative audit services and payroll fraud. This result though consistent with literature may be as a result of the function played by audit in Nigeria. However, Rezaee, et al. (1996) pointed out that Misstatements arising from fraudulent financial reporting are intentional misstatements or omissions of amounts or disclosures in financial statements designed to deceive financial statement users where the effect causes the financial statements not to be presented, in all material respects, in conformity with generally accepted accounting principles. They further stated that this fraudulent act can only be detected through thorough audit investigation. Again their study shows that in

preparation of payroll if so much authority is vested in an individual or group over time the tendency of manipulating the payroll becomes high. This is a problem that has persisted in the Nigerian public sector. Conventionally, t-calculated = 3.210 > t-table = 2.323. Therefore, the null hypothesis is rejected meaning that there is a significant relationship between investigative audit services and payroll fraud.

H<sub>02</sub>: There is no significant relationship between automated forensic auditing and financial statement fraud.

**Table4. A simple regression for automated forensic auditing and financial statement fraud at 5% level of confidence.**

Simple Regression Method Independent variable: Automated Forensic Auditing Dependent Variable: Financial Statement Fraud

| Variable     | Co-efficient | R <sup>2</sup> | t-value | F-value | Prob. |
|--------------|--------------|----------------|---------|---------|-------|
| Constant (C) | 0.217        | 0.490          | 2.703   | 1.445   | 0.079 |
| FSF          |              |                | 0.667   |         | 0.004 |

Researcher’s computation from appendix 2

From table 4. above shows a positive but weak relationship between automated forensic auditing and financial statement fraud. Forensic audit investigates the financial records of the organization with a view to detecting any misgiving that may exist therein. R<sup>2</sup> being 0.490 shows that approximately 49% of the total variation in financial statement fraud is explained by automated forensic auditing. The remaining 51% is caused by other variables outside the model but covered by the error term. F-value calculated of 1.445 is less than 10.13 table values implying that the model is significant at 0.05 level of significance.

The T-value calculated of 2.705 is greater than table value of 2.353 which indicates that there is a significant relationship between automated forensic auditing and financial statement fraud. This result is consistent with literature as supported by other results in respect of forensic audit and financial statement fraud in Nigeria. According to Albrecht, (2005) while discussing the effect of financial statement fraud observed that inpreparing financial statements, management is responsible for making a number of judgments or assumptions that affect significant accounting estimates and for monitoring the reasonableness of such estimates on an ongoing basis. Fraudulent financial reporting often is accomplished through intentional misstatement of accounting estimates. It was also found that material misstatements in financial statements due to fraud can occur throughout the period and may involve extensive efforts to conceal how it is accomplished. Fraudulent financial reporting need not be the result of a grand plan or conspiracy. It may be that management representatives rationalize the appropriateness of a material misstatement, for example, as an aggressive rather than indefensible

interpretation of complex accounting rules, or as a temporary misstatement of financial statements, including interim statements, expected to be corrected later when operational results improve. Conventionally,  $t$ -calculated = 2.705 >  $t$ -table = 2.323. Therefore, the null hypothesis is rejected meaning that there is a significant relationship between investigative audit services and payroll fraud.

### Conclusion and Recommendation

The researcher in the course of this work, made the following findings;

There is a significant relationship between investigative audit services and payroll fraud. There is a significant relationship between automated forensic audit and financial statement fraud. That an increase in forensic auditing will significantly leads to a decrease in the occurrence of fraud cases in Nigeria. That Forensic auditing will institute good corporate governance in the Nigerian public sector which will install public confidence in the government and the entire system. The traditional auditing has limitation in detecting fraudulent practices which the forensic auditor will effectively fill. They have the professional ability back up by law to break into the organization system and examine the books, make discoveries and present the documentary evidences in the law courts.

Following the findings and the conclusions drawn from the study, the following recommendations were made:

1. The Federal Government should adopt the use of Professional Forensic Auditors in the Nigerian public sector to help reduce the occurrence of fraud cases. The Professional Forensic Auditors should conduct the investigation in such a manner that, where there is evidence of fraud, appropriate disciplinary action in accordance with the Provision of Public Service Rules should be implemented. Criminal prosecution should also be instituted as well as civil action to recover any losses of public fund or property.
2. Training of forensic auditors should be conducted regularly so as to enable them carry out investigation and litigation support services successfully.
3. Auditors should be encouraged to make adequate use of automated forensic tools to investigate suspicious activities of fraud or misappropriation of fund.
4. The image of Nigeria in the international community has discouraged foreign direct investment because of economic and financial crime. This has effect on development, employment and the standard of living of the people. Eradication of economic and financial crime through the adoption of forensic auditing in Nigeria will improve the image of country.
5. Government and regulatory authorities should ensure the provision of standards and guidelines to regulate forensic activities and above all Nigerians should embrace integrity, objectivity, fairness and accountability in their day-to-day activities.

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