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## **Forensic Accounting and Fraud Detection: The Accountants' Perspective**

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### **Abstract**

The frequent and consistent increase in fraud and financial crime in organizations both the Public and Private sectors despite the internal mechanism has motivated this study. The study investigated the effect of forensic accounting on fraud detection. The study adopted a survey research design. The population consist of 100 accountants in Ekiti State. The data were collected using a structured questionnaire. Data collected were analysed using descriptive statistics and ordinary least square regression analyses. The findings revealed that financial accounting surveillance and forensic audit investigation and detective skill exhibited a significant

positive relationship with fraud. Computer assisted review and document review skills show insignificant positive relationships. The result also shows that forensic accounting variables play a tremendous role in detecting fraud. It was concluded that to prevent and detect fraud occurrence accounting tools such as financial accounting surveillance, forensic audit investigation, and deterrence skills should be employed. Also, continuous application of forensic accounting surveillance will help in greater dimension in curbing and reduction of fraud to the lowest minimum in Nigeria organizations.

**Keywords:** Forensic Accounting, Forensic Audit, Fraud Detection, Financial Accounting Surveillance, Computer Assisted Review

**JEL Classifications:** K13, M14

### **1. Introduction**

Sequel to the frequent increase in corporate fraud globally, forensic accounting, in the recent time has become an issue of discussion among stakeholders of different institutions. Though forensic accounting has been in operation as far back as the 1800s, the course was never in the spotlight not until the collapse of big multinational companies like Enron when some legislations like the Sarbanes Oxley was brought into existence, increase the demand for forensic accounting services (Mammen & Edakalathur, 2019) <sup>[21]</sup>. Zon (2016) attributes fraud in China-listed firms to a lack of legal awareness of the management staff, a reduction of audit procedures, and a lack of due diligence investigation before listing the company. Ocansey (2017) <sup>[26]</sup> quoted that the Federal Bureau of a federal investigation of the United States of America calculated that more than 300 million Dollars is lost annually to fraud and many of these crimes were difficult to discover. Developing countries like Nigeria are not spare in this menace; fraud is on the increase in listed firms in Nigeria, Agbaje and Adeniran (2017) <sup>[2]</sup> asserted that fraudulent activities exist in quoted both private and public firms in Nigeria and since the auditors are answerable to the management, their independence is compromised; hence we have a wide spread of financial crime in the both public and private sector of our economy.

Forensic accounting is the special practice aspect of accountancy which is premised on the scientific detection of fraudulent activities, interpretation, and communication of evidence via a thorough examination of documents and records of accounting systems (Oyedokun, 2015; Fasua *et al.*, 2016) <sup>[34, 12]</sup>. It is considered to be an independent professional judgment, which can present findings as to records, inventories, or the presentation thereof that is of such quality and that would be sustainable in some adversarial legal proceeding, or within some judicial or administrative review. Apart from this, lack of financial surveillance; forensic audit, investigation, and deterrence skills; computer assisted review and document review; and level of competence of both management and finance and accounts staff on fraud and fraudulent activities are several of the threats to the going concern of firms which financial statements may not portray, this is where forensic accountants are needed in the view of accountants. It is hoped that fraud detection tools if applied in firms would detect and prevent fraudulent activities and related irregularities.

Therefore, since forensic accounting has evolved as a means of discovering and curbing fraud and conventional accounting systems and auditing are not effective in some aspects of preventing fraud. Considering the assertion of Mainom and Oyedokun (2019) <sup>[20]</sup> that forensic accounting has more advanced roles in fraud prevention, detection, and management thus this assertion needs to be examined. However, the application and effectiveness of forensic accounting have raised serious concerns as it has been contested that it is used mainly aftermath of the fraud to discover the perpetrator and how it was performed to avoid future occurrences (Okoye & Ndah, 2019) <sup>[31]</sup>. As a device mostly for legal reasons, the sophistication of fraudsters and the position of insiders who have facts on how to go around the tool and not get caught have also questioned the usefulness and craving for forensic accounting. Nevertheless, there has not been sufficient prominence, particularly survey evidence on how forensic accounting can assist curb financial fraud beyond the numerous unreliable perspectives that proliferate. All these doubts and many more have demanded more studies on forensic accounting and fraud detection (Oyedokun, 2015; Enofe *et al.*, 2013; Gupta & Mehta, 2021) <sup>[34, 10, 15]</sup>.

This study examines forensic accounting and fraud detection from an accountant's perspective. The primary objective is to investigate the effect of forensic accounting on fraud detection. This study is motivated to answer the following questions: Is there a significant relationship between financial accounting surveillance and fraud detection? Is there a significant relationship between forensic audit, investigation and deterrence skills and fraud detection? Is there a significant relationship between computer assisted review and document review and fraud detection? The remaining parts of this study are divided into: literature review; methodology which states the scope, population, sample size, variables and model specification; analysis of data and conclusion. Primary data are employed because of the nature of this study; it is qualitative and interpretive. Therefore, a structured questionnaire is adopted as a research instrument to address established questions in this study. This research work is carried out in Ekiti state, the southwestern region of Nigeria.

This study contributes to the existing literature on forensic accounting and fraud detection. The study will be of great use to a range of stakeholders of manufacturing companies, policymakers, and researchers as it would assist in making economic decisions.

## 2. Literature Review and Hypotheses Development

### 2.1 Conceptual Review

#### 2.1.1 Forensic Accounting

According to Pedneault *et al.* (2012) <sup>[35]</sup>, forensic accounting is the way of applying investigative and analytical skills to unravel financial problems in a manner that abides by the standard required by court regulations. Forensic accountants use uncommon competencies in accounting, auditing, finance, certain areas of the law, research, and investigative skills to collect, analyze and evaluate the evidence at hand and to interpret and communicate results to their clients. According to the research carried out by Corporate Financial Institute (2021) <sup>[6]</sup>, forensic accounting is the investigation of fraud or financial manipulation by performing extremely detailed research and analysis of financial information. Forensic accountants are often employed to prepare for

litigation associated with insurance claims, insolvency, divorces, embezzlement, fraud, skimming, and any type of financial crime.

#### 2.1.2 Fraud Detection

According to Enofe *et al.* (2013) <sup>[10]</sup>, the primary duty of an auditor is to examine whether the financial statements reveal a true and fair view of the state of affairs of the firm and the auditors' secondary task is the prevention and detection of errors and frauds. They argued that the primary task for preventing and detecting fraud and error rests on the shoulders of those who are charged with governance and the management of a firm. Some researchers have asserted that there are limitations in the way auditors make fraud judgments (Wilks and Zimelman, 2004) <sup>[37]</sup>.

Fasua *et al.* (2016) <sup>[12]</sup> and Enofe *et al.* (2013) <sup>[10]</sup> argued that auditors are not essentially the most suitable group of experts to perform the assignment of fraud detection. The firm, by establishing appropriate fraud prevention yardsticks within the firm, can detect and prevent non-management fraud. They asserted that it is the responsibility of the forensic accountants to detect fraud. Oyedokun (2015) <sup>[34]</sup> established that forensic accounting techniques are; fraud prevention, detection and deterrence skills, forensic audit, forensic investigation, and forensic interviewing skills, litigation, mediation and arbitration skills, and computer assisted reviews and document reviews.

#### 2.1.3 Financial Accounting Surveillance (FAS) and Fraud Detection

Accounting knowledge helps the forensic analyse and interpret the financial information necessary to build a case in a financial investigation, whether it is a bankrupt setting, a money-laundering operation, or an embezzlement scheme. This includes knowledge of proper internal controls such as those related to corporate governance).

Bronner (2014) <sup>[5]</sup> argued that forensic accounting techniques such as financial accounting surveillance, interviewing, computer assisted reviews such as data mining, and document review techniques are also useful to detect fraud. Because of the unique legal aspects of forensic accounting investigations, there are special auditing protocols that must be followed since the audit's conclusions and findings may be subject to challenge in an adjudication proceeding, or more formal court proceedings. Singleton and Singleton (2010) <sup>[36]</sup> asserted that financial accounting surveillance is the best method to detect skimming frauds; this is because it is off-the- books fraud and it is the most difficult to detect. This includes surveillance of employees at the point of sale (cameras above meal tables and registers).

#### 2.1.4 Forensic Audit, Investigation and Deterrence Skills (FAIDS) and Fraud Detection

The investigation is the process of examining or the condition of being examined and of searching analysis for ascertaining facts; detailed or cautious examination (Oyedokun, 2015) <sup>[34]</sup>. Interview and Interrogation are the two main techniques in investigation that are employed to elicit responses from the suspect or accused. It should however be noted that the investigator (interviewer or interrogator) cannot usurp the power of the court of competent jurisdiction by pronouncing the suspect or accused guilty. The forensic auditor or interrogator's role is

to gather evidence that can be used to prove or disprove the act in issue (Fasua *et al*, 2016) <sup>[12]</sup>. According to Fred *et al* (2004) <sup>[13]</sup>, an interview is non-accusatory. Even if the investigator has clear reasons to believe that the suspect is involved in the crime or has lied, he should still not accuse. If the investigator does not accuse the suspect while interviewing the suspect forensic auditor can establish a much better rapport with the suspect that will assist the investigator in interrogation after the interview.

To Singleton and Singleton (2010) <sup>[36]</sup>, the difference between an interview and an interrogation is that an interview is conducted in a cordial atmosphere where a witness is more comfortable physically and psychologically. On the other hand, whenever a person is questioned in an uncomfortable atmosphere (interrogation room) where the person is under psychological pressure, it is an interrogation. The interrogator, in this case, has more psychological advantage than the suspect. Interrogation is a kind of psychological warfare between the interrogator and the suspect.

According to Messier (2000) <sup>[22]</sup>, a forensic audit's purpose is the detection or deterrence of a wide variety of fraudulent activities. The use of auditors to conduct forensic audits has grown significantly, especially where fraud involves financial issues. Some examples where a forensic audit might be conducted include business or employee fraud; criminal investigations; shareholder and partnership disputes; business economic loss; and matrimonial dispute. Singleton and Singleton (2010) <sup>[36]</sup> argued that forensic accounting is the comprehensive view of fraud investigation and that it includes preventing fraud and analysing antifraud control which includes the gathering of nonfinancial information.

### **Computer Assisted Review and Document Review Skills (CARDR) and Fraud Detection**

According to Bronner (2016), computer assisted reviews and document review techniques are forensic accounting techniques used to detect fraud. A typical example of computer assisted review is data mining. Data mining is a process of extraction of useful information and patterns from huge data. It is also called a knowledge discovery process, knowledge mining from data, knowledge extraction or data /pattern analysis. Data mining is a logical process that is used to search through large amounts of data to find useful data.

Once data is explored, refined and defined for the specific variables the second step is to form pattern identification. Identify and choose the patterns which make the best prediction. Finally, patterns are deployed for the desired outcome (Zimbelman & Albrecht, 2012) <sup>[39]</sup>. According to Gupta and Mehta (2021) <sup>[15]</sup> 'data mining techniques have proven quite effective not only in detecting financial statement frauds but also in discovering other financial crimes, such as credit card frauds, loan and security frauds, corporate frauds, bank and insurance frauds' Document review techniques are useful to detect fraud.

## **2.2 Theoretical Review**

### **2.2.1 Theory of Fraud Triangle**

The theory of the fraud triangle was propounded by Cressey when the author was working in 1940. The focus of the research work was on embezzlers. The study's findings

resulted in a theory that, over the periods, has become identified as the fraud triangle. The first vertex of the triangle represents a perceived non-sharable financial need. The second vertex is called perceived opportunity, while the third vertex is for rationalization. The position of the non-sharable financial need is central. According to Cressey (1940) <sup>[7]</sup>, when the trust fraudsters were requested to explicate why they refrained from violating other positions of trust they might have held at previous times, or why they had not violated the subject position at an earlier time, those who had an opinion expressed the equivalent of one or more of the following quotations: 'There was no need for it like there was this time. The idea never entered my head. "I thought it was dishonest then, but this time it did not seem dishonest at first".'

Cressey (1940) <sup>[7]</sup> opined that there were two elements of the perceived opportunity to commit a trust breach: general information and technical skill. General information is merely the knowledge that the employee's position of trust could be violated. This knowledge might come from hearing of other embezzlements, from seeing dishonest behaviour by other employees, or just from generally being aware of the fact that the employee is in a position where he could take advantage of his employer's faith.

### **2.2.2 Theory of Fraud Diamond**

The theory of Fraud Diamond was postulated by Wolf and Hermanson in 2004. According to Wolf and Hermanson (2004) <sup>[38]</sup>, the fraud triangle as propounded by Cressey (1940) <sup>[7]</sup> could be improved to enhance fraud prevention and detection by adding a fourth element known as "Capability". They argued that to explain incentive, opportunity, and rationalization, the four-sided "fraud diamond" also considers an individual's capability like personal traits and abilities that serve a main function in whether fraud may occur even with the presence of the other three elements by Cressey.

Wolf and Hermanson (2004) <sup>[38]</sup> further posited that "many frauds, especially some of the multibillion-dollar ones, would not have occurred without the right person with the right capabilities in place. Opportunity opens the doorway to fraud, and incentive and rationalization can draw the person toward it. But the person must have the capability to recognize the open doorway as an opportunity and to take advantage of it by walking through, not just once, but time and time again. Accordingly, the critical question is, "Who could turn an opportunity for fraud into reality?". They also argued that four observation traits for committing fraud: trustworthy position or role within the firm; capacity to understand and exploit accounting systems, financial accounting surveillance, computer assisted review, document review and internal control; confidence that the fraudster will not be detected, or if caught, the fraudster will get out of it easily; capability to deal with the stress created within an otherwise good person when he or she commits bad act (Oyedokun, 2015) <sup>[34]</sup>.

Though two major theories are of interest to this study, such as; the theory of fraud triangle and the theory of fraud diamond as presented above, this study, therefore, adopts the theory of fraud diamond because the objective of the study is to assess the effect of forensic accounting on fraud detection: accountants' perspective to break the cycle of frauds in a firm to down tone fraudulent activities.

### 2.3 Empirical Review

Obiora and Asah (2022) <sup>[25]</sup> investigated the effect of forensic assurance services on fraud detection and prevention in manufacturing firms in Nigeria. It adopted a survey design approach and was collected through a questionnaire survey. The findings of the study reveal that there is a significant and positive relationship between forensic assurance services and fraud detection and prevention at a 1% significant level. Therefore, the study concluded that forensic assurance services promote fraud detection and prevention in manufacturing firms in Nigeria.

Owolabi and Ogunsola (2021) <sup>[32]</sup> examined whether forensic auditing helps in the detection and prevention of fraud in deposit money banks using branches in the Ibadan metropolis. A total of 120 respondents were selected from six banks using purposive sampling techniques. The study employed a survey method and the collection of data was through a questionnaire. Regression analysis, Analysis of Variance and Pearson moment correlation techniques were employed. Findings revealed that knowledge of procedures, Forensic accounting skills, legal background and knowledge of forensic accounting helps in the prevention of fraud and is statistically significant with ( $\beta = -.758, \rho < 0.01$ ), ( $\beta = -.766, \rho < 0.01$ ), ( $\beta = -0.697, \rho < 0.01$ ) and ( $\beta = -.729, \rho < 0.01$ ) respectively.

Lawal *et al* (2020) <sup>[19]</sup> examined the effect of forensic accounting on fraud detection in the manufacturing industry in Nigeria. This study employed the survey design and data were collected using primary data and this was achieved via a structured questionnaire. The population of the study consists of all the employees of PZ Nigeria Limited. The target population of the study was the employees in the accounting department of PZ Nigeria Limited. Regression analysis was used to show the relationship between the dependent variable and the independent variable. The study found out there is a significant effect of forensic accounting on fraud detection.

Okoye and Ndah (2019) <sup>[31]</sup> studied the association between forensic accounting and fraud prevention with a particular focus on manufacturing companies operating in Nigeria. The survey research design method using questionnaires was utilized to gather data while the regression model was used to analyze the collected data. Findings from the study indicate that the adoption of forensic accounting practices significantly aids the prevention of fraud in manufacturing outfits in Nigeria. The study recommended among others the retention of the services of forensic accountants permanently as well as prompt investigation and prosecution of fraudulent staff members to deter future financial fraud by others.

Okoye (2019) <sup>[31]</sup> appraised the impact of expert witness testimony on fraud prevention and detection in deposit money banks operating in Nigeria. The study employed the survey research design approach and data was obtained via a combination of personal interviews and administered structured questionnaires. The study showed that expert witness testimony has a statistically positive relationship with fraud detection and prevention. The study thereafter recommended that forensic accountants in the employment of deposit money banks should be empowered to ensure that fraud investigation is always followed through with expert testimony in courts of competent jurisdiction to serve as a deterrent to fraud perpetrators. The study's findings are corroborated by the works of Bassey and Ahonkhai (2017)

<sup>[4]</sup> and Ukoma and Azikiwe (2019).

Ogundana *et al.* (2018) <sup>[27]</sup> in their examination of forensic accounting and fraud detection in the Nigerian banking industry, the objective of the study was to examine the role of a forensic accountant in the detection and prevention of fraud in Nigeria's banking sector. Data was gotten through primary sources. 100 questionnaires were administered to 4 selected banks, 25 each. Simple regression, T-test, one way ANOVA as used to analyze the data. The statistical tool used to test hypotheses was the Analysis of Variance (ANOVA). Among the findings was there is a positive impact of forensic accounting on fraud detection.

Evans (2017) <sup>[11]</sup> carried out a study on the examination of forensic accounting and the combating of economic and financial crimes in Ghana using primary sources of data. The research design used was a survey consisting of 66 technical officers of the Economic and organized crime office of Ghana. The statistical tool used to test the hypotheses was the regression model. Among the findings was that forensic accounting plays a major role in combating economic and financial crime in Ghana.

Agbaje and Adeniran (2017) <sup>[2]</sup> investigated the impact of forensic accounting on fraud reduction in Nigerian banks but with a particular focus on certain key risk areas. These are loan processing and foreign exchange management. Data were obtained using a structured questionnaire while the collected data was analyzed with the aid of a correlation regression tool. The research found that the adoption of forensic accounting tools aided the reduction of incidences of fraud while it recommended improved regulatory oversight on the part of the Central Bank of Nigeria to ensure the continued safeguard of customers' interests.

Ocansey (2017) <sup>[26]</sup> descriptively assessed 66 technical officers of the Economic and Organized Crime Office of Ghana to examine the relevance of forensic accounting technique application in combating financial crimes in Ghana. Analysing the qualitative data obtained via questionnaire using regression statistics, it was found that the application of forensic accounting techniques has a significant impact on combating economic and financial crimes in Ghana. The study however failed to lend credence to findings through practical identification of the relevant forensic accounting technique that is most significant in combating economic and financial crimes in Ghana.

Dauda *et al* (2016) <sup>[8]</sup> conducted an investigation into forensic billing techniques and fraud detection and prevention in the public sector of Nasarawa State. The study used a survey research design the population consisted of one hundred and twenty-three professional accountants and the sample size consisted of ninety-three respondents. In the study, the questionnaire was used as the main data collection source and the data obtained were analyzed using descriptive statistics and chi-square. The results showed that forensic accounting techniques have a significant impact on the detection and prevention of public sector fraud in Nasarawa state, Nigeria.

Igweonyia (2016) <sup>[16]</sup> examined forensic accounting and fraudulent practices in Enugu state, Nigeria. The study used a survey research design and the population consisted of thirty-six respondents from twelve government departments, composed of chief accountants and internal auditors. The study used a targeted sampling method and data was obtained from primary and secondary data collection sources. The primary data consisted of a questionnaire,

observation and personal interview. The data obtained from the questionnaire were analyzed using descriptive statistics and the chi-square method. The results showed that forensic bookkeeping minimized the occurrence of fraudulent practices in the public sector.

Aduwo (2016) <sup>[1]</sup> evaluated the methodological analysis of the effect of forensic accounts on professional judgment, accountancy, auditing and law in combating the dreaded corporate liquidation disease in the financial sector using Ordinary least square. The paper concluded that forensic audits could have a great impact on corporate financial scandals. Furthermore, the enhanced management transparency of forensic auditors, the strengthening of independence by external auditors, and the supporting audit committee members in their monitoring roles are achieved by providing them with confidence if the internal audit report has had a beneficial effect on corporate governance and thus minimized corporate failure and impoverishment of investors.

Okafor and Agbiogwu (2016) <sup>[28]</sup> in their study titled the effect of forensic accounting skills on the management of bank fraud in Nigeria. The study made use of a non-probability sampling technique to select the five commercial banks used as the population for the study. From the analysis, the study findings revealed that possession of basic forensic skills significantly reduces the occurrence of fraud cases in the banking sector. Also, there is a significant difference between the services of forensic accountants and External auditors, and the presence of forensic accountants in Banks can aid in reducing fraud cases.

Enofe *et al* (2015) <sup>[9]</sup> investigated the accountants' perception of forensic accounting and fraud investigation using a quota sampling technique and the sample size of two hundred (200) professional accountants, practising in firms, mid-level employees and a senior accountant with academic accountant drawn from the population of the professional Accountants in Edo State. Data were extracted from our respondents with the aid of the research questionnaire, which was designed in the five-response option of the Likert scale and administered to our respondents. The data generated for this study were analyzed through mean scores while the stated hypotheses were statistically tested with Chi-test. Our findings revealed a general opinion of the need for the services of forensic accountants in Nigeria's economy and their services are more required for fraud and corruption related issues. Besides, accountants in Nigeria have an in-depth knowledge of Forensic accounting practice.

Enofe *et al.* (2013) <sup>[10]</sup> conducted a study on the impact of forensic accounting on fraud detection in Nigeria. The data collected from the sample of fifteen firms were analyzed using ordinary least squares and chi-square analysis techniques. The result of the study revealed that the application of forensic accounting services in firms affects the level of fraudulent activities. Ahmadu *et al.* (2013) <sup>[3]</sup> empirically examined the role of forensic audits in enhancing financial investigations in Nigeria. The primary data collected via a questionnaire administered to 240 accountants as respondents were analyzed using correlation and regression analytic methods. The result revealed a significant relationship between forensic audit and financial crime. Thus, it implies that forensic audit could be used to ensure early detection and confirmation of fraud and hence, enhance financial crime investigations in the country.

Therefore, the introduction of independent audit skills into periodic audits would boost financial crime investigations, especially in enhancing early detection and confirmation of fraud.

Fury and Eka (2013) <sup>[14]</sup> examined forensic accounting and fraud prevention in Indonesia's public sector. The objective of this study was to examine forensic accounting as a tool for fraud detection and prevention in public sector organizations. Both primary and secondary sources of data were appropriately used. Two hundred questionnaires were administered to employees of four ministries in Indonesia. Tables and simple percentages were used to analyze the data. The statistical tool used to test hypotheses was the analysis of variances (ANOVA). The study found that the use of forensic accounting significantly reduces the occurrence of fraud cases in the public sector. Modugu and Anyaduba (2013) <sup>[23]</sup> examined forensic accounting and financial fraud in Nigeria. A survey design was employed with a sample size of 143 respondents, which include accountants, management staff, practising auditors and stakeholders. A binomial test was employed for data analysis and it was found that there is significant agreement among stakeholders on the effectiveness of forensic accounting in fraud control, financial reporting and internal control quality.

Okoye and Gbegi (2013) <sup>[30]</sup> investigated the impact of forensic accountants on the planning and management of fraud risk detection procedures. The study employed analysis of variance (ANOVA) as the analytic technique. The study discovered that forensic accountants effectively modify the extent and nature of audit tests when the risk of management fraud was high. The study established that forensic accountants should be involved in the risk of fraud management and assessment process than consulting.

Nwoye *et al* (2013) <sup>[24]</sup> investigated the 2006-2010 annual reports of the top 5 manufacturing companies in Nigeria towards determining whether the Beneish Model will effectively improve Nigeria Auditors' detection of fraud in Financial Statements. The output of preliminary analysis performed on data extracts from the affected annual reports and consequent data analyses performed using one ANOVA statistical technique showed that the adoption and application of the Beneish Model by Auditors in Nigeria will effectively improve the detection of fraud in the Financial Statements.

In the work of Izedonmi and Ibadin, (2012) <sup>[17]</sup>, some basic and common financial crimes in corporate organizations, with a focus on Nigeria, and by extension, the developing world were examined. Their review indicated that the motivations for financial crimes were built around some risk factors, which include the incentive (or pressure), opportunity and rationalization surrounding the financial criminals. They canvassed for the intervention of forensic accounting to solve the vexed problems of financial crimes with a further recommendation that the forensic accountant adopts the inference, relevance and logic solution approach (IRLS) in dealing with financial crimes in corporate organizations in Nigeria.

Owojori and Asaolu (2009) <sup>[33]</sup> also carried out a study on "the role of forensic accounting in solving the vexed problem of the corporate world", looking at several instances of corporate scandals and failure in the recent past, opined that these have put the professional accounting bodies into a new perception that goes beyond statutory

audit and in some ways even the trend of corporate governance. Their study discusses the concept, need and role of forensic accounting in solving the vexed problem of the corporate world and concluded that forensic accounting is the best growing area of accounting that enables enhancing the chances of success in day-to-day life of corporate firms by surmounting all the vexing and critical problems of corporate field as a panacea. They, therefore, opine that the various agencies that are fighting corruption worldwide will need to engage the service of forensic accounting to complement the efforts of other professionals in reducing fraudulent activities and installing fraud proof internal control systems in corporate organizations. Joshua *et al.* (2013) [18], aimed at analyzing the characteristics of forensic accounting services performed by accounting firms in Brazil, using an exploratory approach. At the end of their study, they accepted the premise that the bone of contention in some unhealthy business environments is the inability of an auditor to track fraud. The study concludes that the idea that frauds have been least detected by auditors begins to gain shape as auditors are more adequately trained to detect frauds instead of emphasizing the traditional segregation of duties and safeguarding of assets.

**3. Data and Method**

This study adopts a field survey design. It involves the collection of data directly from the source or people involved using such tools as questionnaires. Primary data sourced from a questionnaire was mainly used in this study. The population of the study consists of Nigerians who are preparers of financial statements and professionals in the field of forensic accounting, accountancy and auditing in Ekiti State. Through a pilot survey, 100 accountants from different firms will be the sample size for this study. This is because the study premises on the purposive sampling method. The instrument of data collection for this study is mainly a questionnaire. Using the four Likert Scale method, the responses are scored as Strongly Agree (SD) =4, Agree (A) =3, Disagree (D) =2, Strongly Disagree (SD) =1.

**3.1 Model Specification**

In this study, a model (based on panel regression) is formulated and developed in line with Oyedokun (2015) [34] in specifying the model for the study, the independent variables were grouped into three namely: Financial Accounting Surveillance (FAS), Forensic Audit, Investigation and Deterrence Skills (FAIDS) and Computer Assisted Review and Document Review Skill (CARDR). Forensic Audit is assumed to be a function of Financial Accounting Surveillance (FAS), Forensic Audit, Investigation and Deterrence Skills (FAIDS) and Computer Assisted Review and Document Review Skill (CARDR) as formulated in the following model.  $FD = f(FA)$

This can be expressed clearly in equations 1 and 2.

$$FD = f(FAS, FAIDS, CARDR) \tag{1}$$

$$FD = \beta_{0it} + \beta_1 FAS_{it} + \beta_2 FAIDS_{it} + \beta_3 CARDR_{it} + \mu_{it} \tag{2}$$

Where:

FD= Fraud Detection

$\beta_0$ = Intercept of the regression line

$\beta_{1-4}$  = Coefficient or slope of the regression line or independent variables

FA = Forensic Accounting

$\mu$  = Error term that represents other independent variables that affect the model but not captured.

I = firm and ‘t’ time

**Table 1:** Cronbach Alpha Test Results

S. No	Variable	No. of Items	Cronbach's Alpha
1	Fraud Detection (FD)	6	0.712
2	Financial Accounting Surveillance (FAS)	6	0.707
3	Forensic Audit Investigation and Deterrence Skill (FAIDS)	6	0.715
4	Computer Assisted Review and Document Review (CARDR)	6	0.714

Source: Author’s Computation (2022)

**4. Data Analysis and Discussion of Findings**

**4.1 Descriptive Statistics**

Reported in Table 2 are the descriptive statistics on the examination of forensic accounting and fraud detection: Accountants perspective. The table showed that the average value of fraud detection is 3.939655, which varies from a minimum of 3.250000 to a maximum of 4.500000. A standard deviation of 0.376474 showed that fraud detection has a high variability to its mean value. The Skewness recorded a value of -0.319337 and therefore means that fraud detection is negatively skewed while the Kurtosis of 2.182770 is referred to as Platykurtic distribution. More so, financial accounting surveillance has a mean value of 3.717241 varies from a minimum of 2.000000 to a maximum of 5.000000. The standard deviation of financial accounting surveillance is 0.770132 and it showed a high deviation value from its recorded mean. Data for the variable is positively skewed with 0.163647 thus described as a long right tail while the Kurtosis value of 2.290679 shows that data for the variable is normally distributed.

Forensic audit investigation and deterrence skills have an average value of 4.048276 varying from a minimum of 3.000000 to a maximum of 5.000000. The standard deviation showed the extent of its variability from its mean value and it recorded a value of 0.700506 implying that the degree of its variability to its mean is high. The Skewness showed that the variable is negatively skewed as the value stood at -0.065888 while the Kurtosis of 2.051343 implied that the variable is normally distributed. Lastly, computer assisted review and document review skill has an average value of 3.917241, which varies from a minimum of 1.000000 to a maximum of 5.000000. The standard deviation of 1.096101 explained that the variability of the variable is to its mean value is high. Conversely, the Skewness of the data is -0.915262. This value shows that the variable is negatively skewed. The kurtosis of 3.088926 is known as leptokurtic distribution as it has a value higher than 3.

**Table 2:** Descriptive Statistics

Variables	TR	ETR	ETF	ETP
Observations	145	145	145	145
Mean	3.939655	3.717241	4.048276	3.917241
Median	4.000000	4.000000	4.000000	4.000000
Maximum	4.500000	5.000000	5.000000	5.000000

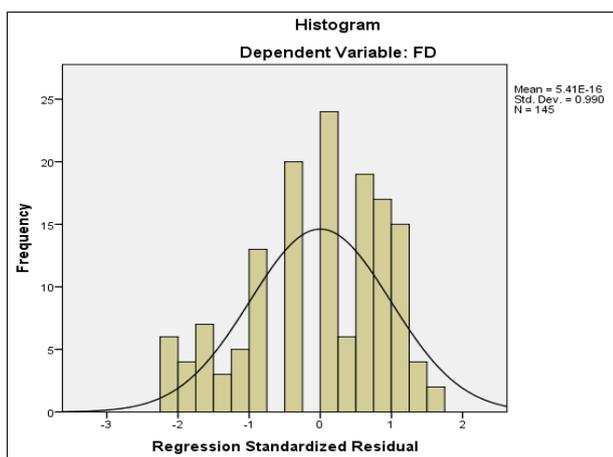
Minimum	3.250000	2.000000	3.000000	1.000000
Std. Dev.	0.376474	0.770132	0.700506	1.096101

Source: Author's Compilation (2022)

## 4.2 Test of Variables

### 4.2.1 Normality Test

The histogram normality test was used to test the normality distribution of the variables employed in the model. The test outcome is reported in Figure 1 and it showed that most of the respondent responses were within the histogram bean-shape, hence data employed in the study are normality distribution.



Source: Author's Computation (2022))

Fig 1: Histogram normal curve

### 4.2.2 Linearity Test

Table 3 revealed the correlation matrix used in the analysis of forensic accounting and fraud detection: an accountant's perspective in Nigeria with a specific focus on Ekiti State. The table showed that financial accounting surveillance has an insignificant positive correlation with fraud detection with a value of 0.072. This implied that an increase in financial accounting surveillance will lead to a 0.072 unit increase in fraud detection in Ekiti State, Nigeria. Forensic audit investigation and deterrence skill have a significant positive correlation of 0.353 units implying that an increase in forensic audit investigation and deterrence skill will increase fraud detection by 0.353 units. The correlation between computer assisted review and document review skill is 0.665 implying that a unit increase in computer assisted review and document review skill will lead to a 0.665 unit increase in fraud detection in Ekiti State, Nigeria. Other explanatory variables showed that the correlation between financial accounting surveillance and forensic audit investigation and detection skill is -0.335. It implied that the two variables are negatively correlated. On the other hand, the correlation between forensic accounting surveillance and forensic audit investigation and detection skill is -0.143 while the correlation between forensic audit investigation and detection skill and computer assisted review and document review skill is 0.358.

Table 3: Correlation Analysis of Study Variables

	FD	FAS	FAIDS	CADR
FD	1.0000			
FAS	0.072 (0.386)	1.0000		
FAIDS	0.353**	-0.335**	1.0000	

	(0.000)	(0.000)		
CADR	0.665** (0.000)	-0.143 (0.086)	0.358** (0.000)	1.0000

Source: Author's Computation, (2022)

### 4.2.3 Multicollinearity Test

To ascertain that the model is free from the problem of multicollinearity Tolerance value and Variance Inflation Factor (VIF) were employed. The test showed that the tolerance value for financial accounting surveillance is 0.887, forensic audit investigation and deterrence skill has a tolerance value of 0.790 while the tolerance value for computer assisted review and document review skill is 0.871. In the same vein, the Variance Inflation Factor (VIF) for financial accounting surveillance is 1.127, forensic audit investigation and deterrence skill has a variance inflation factor of 1.266 while the Variance Inflation Factor (VIF) for computer assisted review and document review skill is 1.148. The two tested outcomes showed that the multicollinearity problem does not exist in the model.

Table 4: Multicollinearity Test

Tolerance	VIF	1/VIF
0.887	1.127	0.887
0.790	1.266	0.780
0.871	1.148	0.871
Mean VIF	1.18	

Sources: Author's Computation (2022)

## 4.3 Forensic Accounting and Fraud Detection: Accountants' Perspective

Reported in Table 5 is the regression outcome of the ordinary least square conducted on the specified model. The result showed that R Square ( $R^2$ ) has a value of 0.505165 and its adjusted ( $R^2$ ) value is 0.494636 indicating that forensic accounting accounts for 49% of behaviour of fraud detection in Ekiti State Nigeria while the remaining % accounts for variables not included in the model. The overall significance of the whole model given by the F-statistics indicates a value of 47.98108 while its p-value of 0.000000 shows that the whole model is statistically significant.

The coefficient of other explanatory variables revealed that financial accounting surveillance has a significant positive coefficient of 0.113057, t statistics of 3.677194 and p-value of 0.0003 implies that a unit increase in financial accounting surveillance will lead to a 0.113057 unit increase in fraud detection in Ekiti State, Nigeria. Forensic audit investigation and deterrence skills have a positive coefficient of 0.111544 units, t-statistics of 3.113336 and p-value of 0.0022. This implies that a unit increase in forensic audit investigation and deterrence skills will lead to a 0.111544 unit increase in fraud detection in Ekiti State, Nigeria. Computer assisted review and document review skill has a coefficient of 0.142752 units, t-statistics of 1.637155 and p-value of 0.1038 implies that a unit increase in the coefficient of computer assisted review and document review skill will lead to a 0.142752 unit increase in fraud detection in Ekiti State, Nigeria.

From the empirical result that emerged from these findings, the study showed that financial accounting surveillance significantly and positively influences fraud detection. This finding implied that the effective application of accounting surveillance will help in preventing and detecting fraud among organizations. These findings support the works of

Obiora and Asah (2022) <sup>[25]</sup>, Owolabi and Ogunsola (2021) <sup>[32]</sup>, Okoye (2019) <sup>[31]</sup>, Basse and Ahonkhai (2017) <sup>[4]</sup> and Ukoma and Azikiwe (2019), Bronner (2014) <sup>[5]</sup>, Oyedokun (2015) <sup>[34]</sup>, Singleton and Singleton (2010) <sup>[36]</sup> that asserted that financial accounting surveillance is the best method to detect skimming frauds. According to these authors, financial accounting surveillance is off-the-books fraud and it is the most difficult to detect.

More so, forensic audit investigation and deterrence skills revealed a significant positive relationship with fraud detection in Ekiti State Nigeria. This positive relationship is quite explanatory with the findings of Ogundana *et al.* (2018) <sup>[27]</sup>, Evans (2017) <sup>[11]</sup>, Agbaje and Adeniran (2017) <sup>[2]</sup>, Ocansey (2017) <sup>[26]</sup>, Fasua *et al.* (2016) <sup>[12]</sup>, Dauda *et al.* (2016) <sup>[8]</sup>, Igweonyia (2016) <sup>[16]</sup>, Messier (2000) <sup>[22]</sup> among others that support to this effect. The positive relationship explained the role of auditors in gathering evidence that can be used to prove or disprove the act in the issue. The positive relationship is also justified by the ability of the forensic auditor to establish a much better rapport with the suspect which will assist the investigator in interrogation after the interview.

Furthermore, the relationship between computer assisted review and document review skills is positive but not significant in explaining fraud detection in Ekiti State, Nigeria. This positive relationship concurred with Gupta and Mehta (2021) <sup>[15]</sup>, Okoye and Ndah (2019) <sup>[31]</sup>, Bronner (2016), Zimelman and Albrecht (2012) <sup>[39]</sup>, and Aduwo (2016) <sup>[1]</sup> works earlier reviewed in this research. However, the insignificant relationship showed that computer assisted review and document review created by most organizations are not optimally used to the level that can significantly prevent fraud in most organizations. This contradicts the empirical findings of Bronner (2014) <sup>[5]</sup> and Oyedokun (2015) <sup>[34]</sup> among others.

**Table 5:** Forensic Accounting and Fraud Detection: Accountants' Perspective

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FAS	0.113057	0.030745	3.677194	0.0003
FAIDS	0.111544	0.035828	3.113336	0.0022
CARDR	0.142752	0.087195	1.637155	0.1038
C	2.228323	0.210575	10.58206	0.0000
R-squared	0.505165			
Adjusted R-squared	0.494636			
F-statistic	47.98108			
Prob (F-statistic)	0.000000			

Source: Author's Computation, (2022)

**4.4 Discussion of Findings**

The study examined forensic accounting and fraud detection with a special focus on the accountants in Ekiti State, Nigeria. The dependent variable is fraud detection while the independent variables are financial accounting surveillance, forensic audit investigation and deterrence skill and computer assisted review and document review skill. The study revealed that financial accounting surveillance and forensic audit investigation and deterrence skill exhibited a significant positive relationship with fraud detection while computer assisted review and document review skills showed an insignificant positive relationship. The outcome of this result suggested that forensic accounting variables identified in this study play a tremendous role in detecting fraud in Nigeria.

**5. Conclusion and Recommendations**

The study analyzed forensic accounting and how its roles have assisted in preventing fraud in Nigeria. Regression analysis of ordinary least squares was applied and also supported with correlation analysis. The study discovered that significant positive relationships were found between financial accounting surveillance, forensic audit investigation and deterrence skill and fraud detection while an insignificant positive relationship was discovered in the case of computer assisted review and document review. It was concluded that for an organization to prevent and detect the occurrence of fraud, forensic accounting tools such as financial accounting surveillance, forensic audit investigation and deterrence skill should be used:

It was therefore advanced that:

1. Organizations whether public or private establishment should not shy away from employing financial accounting surveillance as the method assists in detecting all forms of skimming fraud faced by an organization.
2. Since using forensic accounting investigation and deterrence skill approach creates a better rapport with the suspect that will assist the investigator in interrogation after the interview calls for an organization to continuously apply this method to curb the incidence of fraud in Nigeria.
3. Lastly, in as much as this study showed a positive insignificant relationship between computer assisted review and document review, organizations should not rely solely on this method for fraud reduction.

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