

The role of forensic accounting in mitigating financial crimes

Dr. AO Enofe, OA Utomwen (Ms.C), E.J. Danjuma (Ms.C)

Department of Accounting, Faculty of Management Sciences, University of Benin, Benin City, Edo State, Nigeria

Abstract

The broad objective of the study is to examine the role of forensic accounting in curbing financial crimes. The study adopts a survey research design. The method was adopted because it is likely to generate the kind of information required as well as providing good basis for the generalization of findings. The population of the study comprises of staffs of selected banks. Primary data was used for the purpose of this research. This research work employed the use of structured questionnaire in eliciting the required data needed to test the formulated hypotheses. Regression analysis was utilized as the method of data analysis and the results will be used in testing the hypotheses specified in the study. The study finding reveals that there is a need for forensic accountants in the Nigerian banking system, Forensic accounting is an effective tool for addressing financial crimes in the banking system and finally that Conventional accounting techniques are not effective in curbing financial crimes. The recommendation is that there is the need for corporations in Nigeria to engage the services of forensic accountants as forensic accounting now appears as a one of the strategic and dynamic tool for the management of all types of financial crimes. Also, they need to focus on training and up-dating the skills of the internal control and audit staffs.

Keywords: Financial crimes, forensic accounting, conventional accounting techniques

Introduction

Forensic accounting is perceived to have evolved rather inorganically in response to certain emerging fraud related challenges and has been precipitated by the surging number of white-collar crimes pressures. The scandals that recently rocked the corporate world with classical examples being the often cited Enron and WorldCom cases have also brought the field of forensic accounting to the forefront. Forensic accounting is seen as encapsulating all the other areas in the use of accounting for investigative purposes. The increasing sophistication of certain crimes requires that forensic accounting be added to the tools necessary to bring about the successful investigation and prosecution of those individuals involved in criminal activities. According to AICPA (2004) Forensic Accounting is the application of accounting principles, theories and discipline to facts or hypothesis at issues in a legal dispute and encompasses every branch of accounting knowledge. Forensic accounting is the tripartite practice of utilizing accounting, auditing and investigative skills to assist in legal matters. It is the specialty practice area of accounting that describes engagements that result from actual or anticipated disputes or litigation. Forensic accounting can, therefore, be seen as an aspect of accounting that is suitable for legal review, offering the highest level of assurance and including the generally accounted connotation of having been arrived at in a scientific fashion (Apostolou, Hassell, and Webber, 2000).

Ojaide (2000) noted that there is an alarming increase in the number of fraud and fraudulent activities in Nigeria emphasizing the visibility of forensic accounting services. According to the Centre for Forensic Studies (2010) report, the increasing need for forensic and investigative accounting in the banking sector results from the nature of modern-day banking that involve large volume of complex data, which makes it difficult to monitor those transactions by applying manual audit

processes. This in turn makes the control utility of auditing ineffectual. Virtually all the weaknesses and challenges identified in the banking industry in Nigeria's post-consolidation, and criminal investigations and prosecutions arising from them, are issues for forensic accounting. The general expectation is that forensic accounting may offer some respite to the seeming vulnerability of conventional accounting and audit systems to financial fraud. Consequently, the incorporation of modern forensic auditing techniques in an audit in Nigeria is seen as timely in order to prepare the accounting profession to deal effectively with the problem of unearthing ingenious fraud schemes arising from audit failure to detect frauds in Nigeria. According to the Centre for Forensic Studies (2010) report in Nigeria; *"If well applied, forensic accounting could be used to reverse the leakages that cause corporate failures. This can be attributed to the fact that proactive forensic accounting seeks out errors, operational vagaries and deviant transactions before they crystallize into fraud."* The focus of this study therefore is to examine the role and prospects of forensic accounting in curbing financial crimes in Nigeria with particular emphasis on the banking sector.

1.2 Statement of the Problem

Ojaide (2000) submitted that there is an alarming increase in the number of fraud and fraudulent activities in Nigeria emphasizing the visibility of forensic accounting services. Okoye and Akamobi (2009) Owojori and Asaolu (2009), Izedomin and Mgbame (2011), Kasum (2009) have all acknowledge in their separate works the increasing incidence of fraud and fraudulent activities in Nigeria. These studies have argued that in Nigeria, financial fraud is gradually becoming a normal way of life. As Kasum (2009) noted, the perpetuation of financial irregularities are becoming the specialty of both private and public sector in Nigeria as individual perpetrates

fraud and corrupt practice according to the capacity of their office. Effiong (2012) observed that Nigeria is still ranked very low by the transparency international corruption index. The 2010 survey places Nigerian at the 134th position out of 178 countries that was sample. Consequently, there is a general expectation that forensic accounting may be able to stem the tide of financial malfeasance witnessed in most sectors of the Nigerian economy. However, it would suffice to note that though the prospect of forensic accounting in has generated considerable research attention in Nigeria (Ewa and Udoayang, 2012; Adegbe and Fakile, 2012; Izedomin and Mgbame 2011) there's not been adequate emphasis on how forensic accounting can help curb financial crimes in the banking sector. This is why a study of this nature is necessary and following questions will be used to explore this problem in further details.

1. To what extent are forensic accountants needed in the Nigerian banking sector?
2. To what extent is forensic accounting an effective tool in addressing financial crimes?
3. What are the differences between the roles of forensic accountants and conventional accountants in curbing financial crimes?

1.3 Research Objectives

The broad objective of the study is to examine the role of forensic accounting in mitigating financial crimes in the banking sector. The objectives of the study are to;

1. examine if there is a need for forensic accountants in the Nigerian banking system
2. determine if forensic accounting an effective tool for addressing financial crimes
3. Ascertain if there are significant differences between the roles of forensic accounting and that conventional accounting in curbing financial crimes.

1.4 Research Hypotheses

1. HO: There is no need for forensic accountants in the Nigerian banking system.
H1: There is a need for forensic accountants in the Nigerian banking system.
2. HO: Forensic accounting is not an effective tool for addressing financial crimes in the banking system.
H1: Forensic accounting is an effective tool for addressing financial crimes in the banking system.
3. HO: There are no significant differences between the roles of forensic accounting and that of conventional accounting in curbing financial crimes.
H1: There are significant differences between the roles of forensic accounting and that of conventional accounting in curbing financial crimes.

2. Literature Review

2.1 Evolution of Forensic Accounting

Forensic accounting has been termed the fastest growing area of accounting today (Wallace, 1991). Despite the recent spotlight, forensic accounting is not new. Its roots have been traced as far back as the early 1800's to Glasgow, Scotland that, notwithstanding forensic accounting as a profession remained relatively unknown until the plethora of high-profile corporate scandals and stricter reporting and internal control regulations which brought to light its importance to the business world (Wallace, 1991). Recent history indicates that Maurice E.

Peloubet is credited with developing the term Forensic Accounting in his 1946 essay "Forensic Accounting" Although the term may not have been used before the 1940s, a strong argument can be made that the first high-profile forensic accountant was Frank J. Wilson, the man who spearheaded the campaign to convict Alphonse "Scarface" Capone of tax evasion in 1931 (Joshi, 2003). By this time, Forensic Accounting had proven its worth during World War II; however formalized procedures were not in place until the 1980's when major academic works were published. During the classical O.J. Simpson trial, forensic accountants evaluated his assets impacting the damages awarded in the civil suit. Forensic Accounting has been pivotal in the corporate scandals of companies such as Enron, Tyco and WorldCom.

Crumbley (2001) noted that the professional history of forensic accounting may be traced back to 1992 when the American College of Forensic Examiners was established with the American Board of Forensic Accounts starting in 1997. The Journal of Forensic Accounting, Auditing, Fraud and Taxation began publication in 2000. In 2002 the Sarbanes-Oxley Act established the Public Companies Accounting Oversight Board (PCAOB) which was charged with developing auditing standards, conducting investigations and ensuring corporate compliance. As a result of the Sarbanes-Oxley Act, there has been continuing emphasis on forensic accounting. Forensic accounting is the new branch in accounting which has the sole aim of unearthing fraudulent activities within and outside an organization so far as the third party's action is in any way reflective on the activities of that organization (Crumbley, 2003). As a discipline, it encompasses financial expertise, fraud knowledge, and a sound knowledge and understanding of business reality and the working of the legal system. Zyman (2004) points out that the development of forensic accounting has been primarily achieved through on-the-job training as well as experience with investigating officers and legal counsel.

2.2 The Concept of Forensic Accounting

Forensic accounting has witnessed a gradual entrance into mainstream contemporary accounting literature and has been defined both conceptually and operationally by a considerable number of scholars. In the views of Howard and Sheetz (2006) forensic accounting is simply the process of interpreting, summarizing and presenting complex financial issues clearly, succinctly and factually often in a court of law as an expert witness. It is concerned with the use of accounting discipline to help determine issues of facts in business litigation (Razae, Crumbley and Elmore, 2006). As a result, forensic accounting has been thrown into the forefront of the crusade against financial deception (Rumaswamy, 2005).

Boligna and Linquist (1995) defined forensic accounting as the application of financial skills and an investigative mentality to unresolved issues, conducted within the context of the rules of evidence. Manning (2002) also defined forensic accounting as the application of financial accounting and investigative skills, to a standard acceptable by the courts, to address issues in dispute in the context of civil and criminal litigation.

According to Damilola and Olofinsola (2007), Forensic accounting is the application of criminalities methods and integration of the accounting investigative activities and law procedures to detect and investigate financial crimes and related economic misdeeds. To them, Forensic accounting is a highly technical and specialized area of practice within the principles

and ethics of accounting profession. They further assert that it is not every forensic accounting engagement that ends up in the court of law.

The AICPA (2005) defined forensic accounting as “the application of accounting principles, theories and discipline to facts or hypotheses at issue in a legal dispute and encompasses every branch of accounting knowledge.” The AICPA (2005) further classifies forensic accounting into two broad categories: investigative services and litigation services. The AICPA has recognized forensic accounting services to generally involve: The application of specialized knowledge and investigative skills, Collecting, analyzing and evaluating evidential matter, Interpreting and communicating findings in the courtroom, boardroom or other legal/administrative venue.

Crumbley (2006) defined Forensic accounting as the application of specialized knowledge and specific skill to stumble up on the evidence of economic transactions. Zysman (2001) posits that Forensic accounting as the integration of accounting, auditing, and investigative skills. Simply put, forensic accounting is accounting that is suitable for legal review offering the highest level of assurance and including the now generally accepted connotation of having been arrived at in a scientific fashion.

Coenen (2005) stated that forensic accounting involves the application of accounting concepts and techniques to legal problem. It demands reporting, where the accountability of the fraud is established and the report is considered as evidence in the court of law or in the administrative proceeding. It provides an accounting analysis that is suitable to the court, which will form the basis of discussion, debate and ultimately dispute resolution (Zysman, 2001).

Traditional auditing and accounting	Forensic accounting
Traditional Audit and Accounting is Mandatory	Forensic Accounting is done in response to an event
Auditors should possess “professional skepticism”.	Forensic accountants should possess “Investigative mentality”
Measures compliance with reporting standards	Deals with Financial investigation
Obtain reasonable assurance that financial statements are free of material misstatement	Findings used as evidence in court or to resolve disputes
An auditor basically focuses on material transactions.	A forensic accountant may focus more on seemingly immaterial transactions.
Audit is mainly concentrated on Financial statements and its related items	The coverage of forensic accounting is wider than audit dealing with both financial & non-financial issues

Source: Sage Forensic Accounting, Inc (www.sagefa.com)

2.4 Financial Fraud

The concept of financial fraud is itself chaotic; however, scholars vary significantly in their expressions about fraud. Bello (2001) and quoting Russel (1978) remarks that the term crime is generic and is used in various ways. Crime assumes so many different degrees and forms that courts are compelled to context themselves with only few general rules for its discovery and defeat. It is better not to define the term lest men should find ways of committing frauds which might evade such definitions.

Okafor (2004) also reported that financial 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 advantage over another in false representation. No definite and invariable rule can be laid down as a general proposition in defining crime as it includes surprise, trick, cunning and unfair ways by which another is cheated.

The accounting fraud is executed by making falsified financial accounting statements where the numbers are manipulated by

According to Accounting Web (2002), forensic accounting is a field of specialization that has to do with provision of information that is meant to be used as evidence especially for legal purposes. It is the practice of rigorous data collection and analysis in the areas of litigation support consulting, expert witnessing, and fraud examination. According to Durkin and Ueltzen (2009), Forensic accounting is sufficiently thorough and complete so that an accountant, in his/her considered independent professional judgment, can deliver a finding as to accounts, inventories, or the presentation thereof that is of such quality that it would be sustainable in some adversarial legal proceeding, or within some judicial or administrative review.

2.3 Similarities and Differences between Forensic Accounting, Traditional Accounting and Auditing

According to Okoye and Akenbor (2009), it has been established that one of the challenges facing the development of forensic accounting in developing economies, is the fact that most companies, educational institutions and individuals myopically believe that forensic accounting is not different from auditing, hence they give very little or no attention to it. This is evidenced from the fact that forensic accounting is considered as a component part of audit courses rather than being a standalone course in tertiary institutions of developing economies. Though these two accounting disciplines are similar, yet a sharp line of demarcation can be drawn in terms of their objectives and requirements.

Grippio and Ibex (2003) Mazni and Mohd (2008); and Carey (2008) revealed that forensic accounting is different from auditing and is as presented in the table below:

overstating assets, spurious entries related to sales and profit, misappropriation in taxes, or understating liabilities, debts, expenses or losses . The accounting fraud is also defined by accounting professionals as deliberate and improper manipulation of the recording of data in financial statements in order to achieve an operating profit of the company and appear better than it actually is (www.accountingelite.com). Economically, financial fraud is becoming an increasingly serious problem and effective detecting accounting fraud has always been an important but complex task for accounting professionals. The internal auditing of financial matters in the companies has become an increasingly demanding activity and there are much evidence that book cooking ‘accounting practices are world-wide applied for doing financial frauds. Williams (2005) incorporates corruptions to his description of financial crimes. Other components of FCs cited in William’s (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.

2.5 Forensic Accounting and Financial Fraud

The integration of accounting, auditing and investigative skills results in the special field known as forensic accounting (Crumbley, 2008). Forensic accountants have been described as experienced auditors, accountants and investigators of legal and financial documents that are hired to look into possible suspicions of fraudulent activity within a company; or are hired by a company who may just want to prevent fraudulent activities from occurring (McKittrick, 2009). Manning (2005) notes that the services of forensic accounting are utilized in areas such as accounting, antitrust, damages, analysis, valuation, and general consulting. Forensic accountants have also been used in divorces, bankruptcy, insurance claims, personal injury claims, fraudulent claims, construction, royalty audits, and tracking terrorism by investigating financial records. Though, the use of forensic accounting is not yet widespread in Nigeria, the spate of financial irregularities in Nigeria especially in the banking sector has put the focus on the need for forensic accounting techniques to be utilized. Sanusi (2010) made a presentation on the state of some banks operations and provided the sordid details of a number of the banks. Five prominent banks were declared technically insolvent, chronically illiquid, with the revelation that they had largely eroded their shareholders funds and practically breached all the ratios in banking. CBN unfolded the list of debtors comprising companies and their directors who secured loans worth N747 billion from the affected banks. The question still awaiting answers remain that some auditors approved these bank's financials which were presented to shareholders at the annual general meetings, refusing to disclose their debt portfolio.

Quite surprisingly, price water house coopers and Akintola Williams Delliote are the auditors of the five troubled banks. Questions were being raised about their accountant's competence and integrity, apart from doubts on the exact standards of corporate governance. Before the CBN announced its findings on the conditions of the five banks and their activities in the Expanded Discount Window (EDW), their auditors were unable to properly scrutinize and bring to public domain the true state of these reports including their loans portfolio which CBN now put at N2.8 trillion.

According to the Centre for Forensic Studies (2010) report, the increasing need for forensic and investigative accounting in the banking sector results from the nature of modern-day banking involves large volume of complex data, which makes it difficult to monitor those transactions by applying manual audit processes. This in turn makes the control utility of auditing ineffectual. Virtually all the weaknesses and challenges identified in the banking industry in Nigeria's post-consolidation, and criminal investigations and prosecutions arising from them, are issues for forensic accounting.

Though financial fraud in Nigeria has witnessed highly publicized cases especially in the banking system, Enyi (2009) undertook a study to offer suggestions using real case problem on how to apply forensic accounting in investigating variances and suspected fraudulent activities in manufacturing processes and thus suggest that the application of forensic accounting applies to all scenes where fraud is a possibility.

Okoye and Akenbor (2009) commenting on the application of forensic accounting in developing economies like Nigeria,

notes that forensic accounting is faced with so many bottlenecks. Crumbly (2001); Grippo and Ibex (2003) revealed the following challenges confronting the application of forensic accounting. (i) A significant challenge that faces a forensic accountant is the task of gathering information that is admissible in a court of law. (ii) The admissibility, of evidence in compliance with the laws of evidence is crucial to successful prosecutions of criminal and civil claims. (iii) Globalization of the economy and the fact that a fraudster can be based anywhere in the world has led to the problem of inter-jurisdiction. (iv) The law is not always up to date with the latest advancements in technology. Therefore, lawyers and forensic accountants have to rely on outdated acts, laws that are of general nature, or on acts that have not yet proven their effectiveness in prosecuting fraudsters. (v) Forensic investigations often wind up as evidence in legal proceedings, including full-fledged trials. (vi) Forensic accounting is, seen as an expensive service that only big companies can afford it to detect any irregularities or fraud in their companies.

Besides, it will be quite costly if the issues were brought to court and where it involves expert witnessing. Thus, most companies prefer to settle the issue outside the court to avoid the expensive cost and the risk of bad publicity on their corporate image. (vii) Forensic accounting is a new trend particularly in developing economies. Hence, accountants with adequate technical know-how on forensic issues are hardly available.

2.6 Challenges of Forensic Accounting Application.

With an upsurge in financial accounting fraud in the current economic scenario experienced, financial accounting fraud detection (FAFD) has become an emerging topic of great importance for academic, research and industries. The failure of internal auditing system of the organization in identifying the accounting frauds has led to use of specialized procedures to detect financial accounting fraud, collectively known as forensic accounting (Sharma and Panigrahi 2012).

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Degboro and Olofinsola (2007) noted that an important challenge to the application of forensic accounting in financial fraud control in Nigeria is that the law is not always up to date with the latest advancements in technology. Also, forensic accounting is, seen as an expensive service that only big companies can afford it to detect any irregularities or fraud in their companies. Besides, it will be quite costly if the issues

were brought to court and where it involves expert witnessing. Thus, most companies prefer to settle the issue outside the court to avoid the expensive cost and the risk of bad publicity on their corporate image. In addition, forensic accounting is a new trend particularly in developing economies. Hence, accountants with adequate technical know-how on forensic issues are hardly available.

3. Methodology

Our research objective is to examine the role of forensic accounting in curbing financial crimes in Nigeria. The research design for the study is the survey research design. It is adopted because the study deals with evaluation of opinions of respondents with regards to the focus of the study. The population of a study is that group about whom we want to be able to draw conclusion (Asika, 1991). The population of the study comprises of staffs of selected banks. We expect that these groups will be able to provide knowledgeable information that will be relevant in achieving the study objectives. The sampling was done using both the purposive and simple random sampling. The former is utilized in selecting the segment of the population useful for the study while the latter is used in selecting the participants from the identified segments. We finally adopt a sample of 50 respondents. Primary data was used for the purpose of this research. This research employs the use of structured questionnaire in eliciting the required data needed to test the formulated hypotheses. The five point Likert scale was utilized in developing the questionnaire. The research

instrument comprised of (1) a brief set of demographic questions, including questions on age and gender. (2) Questions to elicit information on role of forensic accounting in curbing financial crimes. The statistical package for social science (S.P.S.S) 20.0 will be utilized as the method of data analysis. The package has a range of statistical techniques for conducting analysis of data that will be useful for this study.

Model Evaluation

The objective of the study is to examine the impact of forensic accounting in curbing financial crimes. In this study we adopted Multiple OLS regression techniques to examine how the explanatory Variables {Efficiency of forensic accounting (EFA), presence of forensic accountant (PFA), Conventional accounting skills (CAT) and forensic accounting skills (FAT)} impact on the curbing financial crimes. The OLS multiple regression was adopted because it is the appropriate techniques for examining the relationship between variables especially when the dependent variable is not limited in nature. In this study we also conducted descriptive statistics and correlation matrix.

Four single equation regression models were specified and a multiple regression model in order to examine the relationship. The models are presented below;

$$FINF = a + \beta_1 EFA + \beta_2 PFA + \beta_3 CAT + \beta_4 FAT + U_t \dots \dots \dots (1)$$

4. Presentation And Analysis Of Result

Table 4.1: Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev	Reliability test
FINF	2.702	1	5	1	0.457	0.76.
EFA	2.821	2	5	1	0.577	0.82
PFA	1.642	1	5	1	0.233	0.76
CAT	2.522	3	5	1	0.109	0.69
FAT	1.879	9.97	11.66	7.87	0.790	0.68

Source: Eviews 7.0

Where: FINF= Financial Fraud, EFA=Efficiency of forensic accounting, PFA=presence of forensic accountant, CAT=Conventional accounting skills and FAT=forensic accounting skills. Table I presents the result for the descriptive statistics and cronbach reliability test for internal consistency of the research instrument. As observed, the mean for Financial Fraud (FINF) and Effectiveness of forensic accounting (EFA) is 2.70 and 2.821 respectively which is within the agree option (Agree=2) and suggest that most of the respondents agree that financial fraud is present in most banks and that effectiveness of forensic accounting can be instrumental in curbing it. The means for Forensic accounting techniques (FAT) and Presence of forensic accountant (PFA) are 1.879 and 1.642 respectively which is within the agree option (strongly agree=1) and suggest that most of the respondents strongly agree that forensic

accounting techniques and presence of forensic accountant can help to reduce financial fraud in the banking industry. Finally, the mean for Conventional accounting techniques (CAT) is 2.552 which is within the agree option (Agree=2) and suggest that most of the respondents agree that conventional accounting techniques and procedures can also be instrumental in curbing it. The standard deviation of all the variables differ significantly from zero and this is suggestive of the spread in the responses. The maximum and minimum values of 1 and 5 results from the likert scale structure of the research instrument. The reliability statistics for all the variables range from between 0.69 to 0.82 and this range is not significantly different from the 0.7 minimum level recommended by Nunally (1978). Hence we conclude that the questions are able to measure the research variables.

Table 4.2: Spearman rank correlation result

		FINF	PFA	CAT	EFA	FAT
FFA	Corr. Coef	1				
	Sig. (2-tailed)	.				
PFA	Corr. Coef.	-0.591*	1			
	Sig. (2-tailed)	0.00	.			
CAT	Corr Coef	-0.549*	-0.656*	1		
	Sig. (2-tailed)	0.00	0.00	.		

EFA	Corr. Coef	-0.154*	-0.026	-0.011	1	
	Sig. (2-tailed)	0.026	0.799	0.91	.	
FAT	Corr. Coef	-.269*	-0.376*	-0.149*	-0.144	1
	Sig. (2-tailed)	0.00	0.00	0.00	0.153	.

Source: SPSS. 20.0

Where: FINF= Financial Fraud, EFA=Efficiency of forensic accounting, PFA=presence of forensic accountant, CAT=Conventional accounting skills and FAT=forensic accounting skills.

The spearman rank correlation result is presented above, however, of particular interest to the study is the correlation between Financial accounting fraud (FINF) and Efficiency of forensic accounting (EFA), presence of forensic accountant (PFA), Conventional accounting skills (CAT) and forensic accounting skills (FAT). The relationship between these variables is the focus our analysis and discussion.

Firstly, the result reveals that a negative correlation is observed to exist between FFA and PFA ($r=-0.591$) which is also significant at 5% ($p=0.00<0.05$) and this suggest that the presence of forensic accountant can reduce financial fraud. Secondly, FFA appears to also be negatively correlated with

CAT ($r=-0.549$) and also significant at 5% ($p=0.00<0.05$) and this also suggest that conventional accounting techniques and procedures can be linked with reducing financial fraud. Thirdly, FFA appears to be negatively correlated with EFA ($r=-0.154$) and also significant at 5% ($p=0.026<0.05$) and like the analysis of prior variables, it suggest that the effectiveness of forensic accounting can also result in decrease in increase in reducing financial fraud. Finally, FFA appears to be also be negatively correlated with FAT ($r=-0.269$) and also significant at 5% ($p=0.00>0.05$) and this suggest that increase in forensic accounting techniques in banks can decrease the occurrence of financial fraud. However, correlation analysis does not necessarily suggest causality between variables and hence there is the need to proceed to conduct regression analysis. But first, we examine the regression assumptions test.

Table 4.3: Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.19	23.77	-2.6104	0.01
EFA	-8.641	19.498	7.771	0.032
PFA	-2.506	26.946	3.932	0.041
CAT	-0.074	18.210	4.453	0.592
FAT	-0.390	12.920	4.900	0.011
R-Squared	0.620			
Adjusted R-squared	0.413			
Durbin-Watson stat	1.753			
F-statistic	23.454			
Prob(F-statistic)	0.00			

Source: SPSS, 20.0

Equation 4.5

$$\text{FINF} = -2.19 - 8.641 \text{EFA} - 2.506 \text{PFA} - 0.074 \text{CAT} - 0.390 \text{FAT} + U_t$$

(0.01) (0.032) (0.041) (0.592) (0.011)

$$R^2 = 0.620. \quad \text{D.W Stat} = 1.753$$

$$F = 23.454 \quad \text{Prob (F-Stat)} = 0.00$$

The regression equation is a multiple regression model and hence it examines the relationship between financial fraud and all the explanatory variables (EFA, PFA, CAT, and FAT) examined together. As observed, the R^2 is 0.620 which shows that the model explains about 62% of the systematic changes in financial fraud while other factors not included and captured by the stochastic error term explains the remaining 38%. The equation shows that Effectiveness of forensic accounting (EFA) is negative (-8.614) and Presence of forensic accountant is negative (-2.506). The result is in tandem with theoretical expectation and indicates that effectiveness of forensic accounting and the presence of forensic accountants can reduce the occurrence of financial crimes. The result is also statistically significant at 5% level as the p-values of both variables (0.031 & 0.041) are less than 0.05. Also, Conventional accounting techniques (CAT) is negative (-0.074) and forensic accounting techniques (FAT) is also negative (-0.390) and this implies that both conventional and forensic accounting techniques can reduce the occurrence of financial fraud. However, only FAT appears to be significant at 5% as the p-value (0.011) is less than 0.05 ($p<0.05$). The F-stat value of 23.454 is significant at

5% as $p<0.05$ and confirms statistical significance of the model and that significant linear relationship exists between the dependent and independent variables. The Durbin Watson statistics of 1.753 is close to 2 and hence we reject the presence of first order serial correlations and hence the regression coefficients will not be biased.

5. Discussion of Findings

The study findings reveal that there is a need for forensic accountants in the Nigerian banking system. This finding is in line with the Centre for Forensic Studies (2010) report that emphasized the increasing need for forensic and investigative accounting in the banking sector resulting from the nature of modern-day banking. The study is also in line with McKittrick, (2009) which notes that forensic accountants are experienced auditors, accountants that can look into possible suspicions of fraudulent activity within a company and prevent fraudulent activities from occurring. Ojaide (2000) also agrees with our findings as he notes that there is an alarming increase in the number of fraud and fraudulent activities in Nigeria emphasizing the need for forensic accounting services. Crumbley, (2006) Zysman (2001), also agree with the study finding as they pointed out that the past two decades have witnessed high-profile financial scandals signalling an increasing demand for forensic accountants and accounting.

The study finding also reveals that Forensic accounting is an effective tool for addressing financial crimes in the banking system. This is in line with Levanti (2009) which notes that forensic accounting can help protect organizations from the long-term damage to reputation caused by the publicity associated with insider crimes. The study finding is also in tandem with the findings of Crumbley (2006) Zysman (2001), Rumaswamy (2005), Bologna and Linquist (1995). These studies have argued that forensic accounting is a specialized investigative skill that can be effective in curbing financial crimes and also providing evidence tenable in a court of law. In addition, the study finding also reveals that conventional accounting techniques are not effective in curbing financial crimes. The finding agrees with that of Grippo and Ibex (2003) Mazni and Mohd (2008); and Carey (2008) revealed that conventional accounting may not be effective in curbing financial crimes because of the complex nature with which crimes are perpetrated and this is also in line with the views of Baron, (2006) Wells, (2003).

6. Conclusion

Forensic accounting is seen as encapsulating all the other areas in the use of accounting for investigative purposes. The increasing sophistication of certain crimes requires that forensic accounting be added to the tools necessary to bring about the successful investigation and prosecution of those individuals involved in criminal activities. The increasing need for forensic and investigative accounting in the banking sector results from the nature of modern-day banking involves large volume of complex data, which makes it difficult to monitor those transactions by applying manual audit processes. This in turn makes the control utility of auditing ineffectual. Virtually all the weaknesses and challenges identified in the banking industry in Nigeria's post-consolidation, and criminal investigations and prosecutions arising from them, are issues for forensic accounting. The general expectation is that forensic accounting may offer some respite to the seeming vulnerability of conventional accounting and audit systems to financial fraud. Consequently, the incorporation of modern forensic auditing techniques in an audit in Nigeria is seen as timely in order to prepare the accounting profession to deal effectively with the problem of unearthing ingenious fraud schemes arising from audit failure to detect frauds in Nigeria. The study findings show that; (i) there is a need for forensic accountants in the Nigerian banking system. (ii) Forensic accounting is an effective tool for addressing financial crimes in the banking system and (iii) Conventional accounting techniques are not effective in curbing financial crimes.

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