EFFECT OF FORENSIC ACCOUNTING SERVICES ON FINANCIAL CRIMES DETECTION OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

BY

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BEING A DISSERTATION PROPOSAL SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, NASARAWA STATE UNIVERSITY KEFFI, IN PARTIAL FULFILMENT FOR THE AWARD OF MASTER OF FORENSIC INVESTIGATION

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DECLARATION

I hereby declare that this dissertation has been written by me and it is a report of my research work. It has not been presented in any previous application for Masters Degree. All quotations are indicated and sources of information specifically acknowledged by means of references.

ISHIAKU Jafaru   Sign……………………….

NSU/IGDS/M.Sc/FAA/008/15/16

DEDICATION

This dissertation is dedicated to Almighty Allah, the Most Beneficent the Most Merciful, the Alfa and the Omega who gave me the life, the opportunity, the time, the good health, the patience and perseverance to accomplish this rigorous task.

It is also dedicated to all members of my family especially my children because it serves as a pointer to them that it is never too late to learn and there is no age limit to acquiring knowledge**.**

CERTIFICATION

This dissertation entitled "Effect of Forensic Accounting Services on Financial Crimes Detection of Listed Deposit Money Banks in Nigeria", meets the regulation governing the award of Masters Degree of the school of postgraduate studies of Nasarawa state university, Keffi,for its contribution to knowledge and literary presentation.

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ABSTRACT

This study examines the effect of forensic accounting services on financial crimes detection of listed deposit money banks in Nigeria. The increasing spate of financial crimes perpetrated through the banking sector under the watchful eyes of internal and external auditors, banking inspectors, supervisors and regulatory agencies and the fact that the banks are employing all necessary measures including the use of forensic accountingservices to curtail this crime motivated this study in order to look into the resultant effect of forensic accounting services on financial crimes detection of listed deposit money banks in Nigeria.. This study proxied forensic accounting services by litigation support, expert consultancyand fraud investigation which were tested against fraud. The study used 14 quoted deposit money banks for the period of year 2007 to 2016. The data for the study were collected using secondary source. The hypotheses of the study were tested using regression analysis. The result of the study shows that fraud investigation and expert consultancy have negative insignificant effect on financial crime while litigation support has positive and significant effect on fraud. While expert consultancy reduces the level of frauds in banks, the level of reduction in the fraud level is of no significance. In line with this, it is recommended that banks employ more of expert consultancy. The quantum of the services will lead to a more drastic fall in fraud level with consequent significant effect. It is also recommended for a less dependence on litigation support as it has no negative effect of fraud level. Thus, attention should be more focused on expert consultancy and increased fraud investigation.

CHAPTER ONE

INTRODCTION

1.1 Background to the Study

Financial crimes have been considered as a worldwide phenomenon. It has to do with allhumans irrespective of their background and economic level. Financial crimes are common and rampant in both the public and private sectors especially in developing and emerging economies. For most obvious and apparent reasons it can be credited with the slow development in Nigeria today can be attributed to financial crimes. Today; modern organized financial crimes have engulfed the system and thwarted any significant effort towards development. Financial crimes such as employee theft, payroll frauds, fraudulent billing systems, management theft, corporate frauds, insurance fraud, embezzlement, bribery, security fraud (EFCC, 2004), among others, have taken the center stage in the scheme of affairs; and on the scale of public and governmental preference. Financial crimes today have grown wild, and the emergence of computer software coupled with the advent of internet facilities has compounded the problem of financial crimes. Besides, the detection or minimization of these crimes are made more difficult and committing these crimes much easier. (Izedonmi, &Ibadin, 2012**).**

Giving the significance of this problem, Okunbor and Obaretin (2010) reported that the spates of corporate failures have placed greater responsibility and function on accountants to equip themselves with the skills to identify and act upon indicators of poor corporate governance, mismanagement, frauds and other wrong doings. It has become imperative for accountants at all levels to have the requisite skills and knowledge for identifying, discovering as well as preserving the evidence of all forms of irregularities and financial crime. Therefore, financial crimes require more sophisticated approach from preventative to detection. One of the modern approaches that can be used for the prevention and detection of financial crimes has been suggested to be called forensic accounting.

Forensic accounting is widely regarded as a modern and innovative branch of the accounting and auditing profession all over the world is relatively new in Nigeria. It is even doubtful if there is any significant awareness and application of this branch of accounting in most emerging countries It is not also very clear if forensic accounting services are used in financial crimes detection in the Country more especially public sector organization and local governments to be specific. Extent literature has reviewed that the services of forensic accounting are needed both in private and public sector of Nigeria's economy especially for fraud and corruption related cases (Kasum, 2009). Professional Forensic Accountant may work for local governments when forensic accounting services are required. Although, forensic accounting has been in existence for several decades, it has evolved over time to include several types of financial information scrutiny.

Forensic accounting as the application of accounting concepts and techniques to legal problems demands reporting, where accountability of the fraud is established and the report is considered as evidence in the court of law or in administrative proceedings. The complex nature of forensic accounting constitutes part of the appeal for many accountants to enter the field (Kranacher et al.,2008). Due to the common nature of the various characterizations that resides in the areas of litigation services, accounting investigation and preparing court ready evidence all of which are of great importance to the local government where it is perceived that much fraud is perpetrated. Forensic accounting may be one of the most effective and efficient ways to reduce and prevent financial crime activities as it is concerned with the evidentiary nature of accounting data, and as a practical field concerned with accounting fraud and forensic auditing; compliance, due diligence and risk assessment; detection of financial misrepresentation and financial statement fraud (Skousen& Wright, 2008) .

The Nigerian financial sector can largely be regarded as one of the most controlled and regulated sectors of the economic by the virtue of constitutional rights backing its establishment. In spite of this, financial crimes such as embezzlement, bribery, kickback, among others, have taken the center stage in the scheme of things in the sector (Adeniyi, 2016). The consequences and the effects of financial crimes in organizations are very grave and it is against this background that forensic accounting emerged. It is a response to the growing sophistication and awareness of financial crimes. Karwai (2002) maintains that the increasing wave of fraud is causing a lot of havoc in Nigeria. This is because financial crimes have eaten deep into every aspect of the Nigerian society to the extent that many organizations have lost confidence in government. Key institutions like Independence Corrupt Practices Commission

(ICPC), Economic and Financial Crime Commission (EFCC) were established to fight financial crimes. All these could not work effectively because of various challenges like politicization and blackmail, constitutional immunity as stated in section 308 of Nigerian constitution, public apathy and doubtful attitudes towards anti-corruption work, and slow justice. In the light of the discussion, this study aims at examining the extent to which forensic accounting services affects financial frauds of listed deposit money banks in Nigeria.

1.2 Statement of the Problem

The increasing rate of financial crimes perpetrated through the banking sector under the watchful eyes of the internal and external auditors, banking inspectors, banking supervisors, the regulatory agencies and the fact that this crime has led to great economic losses to the banks, the investors and government tax revenue, loss of good will of the affected banks, loss of value and valuable assets, loss of good image of the nation before local and foreign investors and the international community, loss of competent staff involved in the crime, increased burden of insurance liabilities on the part of government;, liquidation, insolvency and indecent mergers and acquisitions; and also the fact that these banks are doing everything possible to curtail these crimes motivated this study in order to look into the resultant effect of forensic accounting services on financial crimes detection in listed deposit money banks in Nigeria

Although, various studies were conducted in recent times in order to address the relationship and debate surrounding forensic accounting services and financial crimes prevention, detection and control. Most of these studies are foreign based and the few local based were surrounded with mixed reactions and lots of disagreements and controversies. Majority of the studies were conducted for only one year using primary data and analysis done using chi-square and ANOVA. These techniques are deficient in terms of reflecting the causes and effect relationship and considering the significance of the argument and the increasing spate of these crimes perpetrated through the banking sector, evaluating the effect of forensic accounting services on financial crimes detection of listed deposit money banks in Nigeria becomes an urgent value which is considered a yarning gap this study intends to fill.

1.3Research Questions

The research questions to solicit the responses are given below.

i. To what extent does litigation support systems influence financial crime detection of listed deposit money banks in Nigeria

ii. To what extent does expert consultancy systems affect financial crime detection of listed deposit money banks in Nigeria

iii. What is the impact of fraud investigation on financial crime detectionof listed deposit money banks in Nigeria

1.4 Objectives of the Study

The main objective of this study is to examine the effect of forensic accounting services on financial crime of listed deposit money banks in Nigeria. The specific objectives are to:

i. examine the influence of litigation support system on financial crime detectionof listed deposit money banks in Nigeria

ii. evaluate the effect of expert consultancy on financial crime detection oflisted deposit money banks in Nigeria

iii. assess the impact of fraud investigation on financial crime detection oflisted deposit money banks in Nigeria

1.5 Statement of Hypotheses

In order to achieve the above objectives, the following null hypotheses formulated are;

H01 litigation support system has no significant effect on financial crimes detection oflisted deposit money banks in Nigeria

H02 expert consultancy has no significant effect on financial crimes detection oflisted deposit money banks in Nigeria

H03 fraud investigation has no significant effect on financial crimes detection oflisted deposit money banks in Nigeria

1.6 Significance of the Study

- The study was expected to be of significance to various groups as follows:

The government in formulating policies towards increasing effectiveness of forensic accounting services to reduce the extent of financial crime in deposit money banks in Nigeria.

It will be significant to the banks because the outcome of this study could form basis for decision making as to whether or not to increase or reduce the level of forensic accounting services on financial crimes detection and which of the services should be relied upon

Researchers and Academicians: the study forms the basis for future researchers and academicians who may be conducting research on roles and effect of forensic accountants in service delivery since accounting as a profession has evolved over the years thus contributing to theory by indicating whether the forensic accounting services are fully applicable in the public sector. It will add to the existing body of knowledge and provide a source of reference to further empirical studies on forensic accounting services and financial crimes detection.

1.7 Scope of the Study

The scope of this study was limited to deposit money banks in Nigeria. The choice of deposit money banks was based on the facts that they have wider cases of financial crimes and are subjected into more forensic investigation. Most financial crimes investigations involves the banking sector. The study covered fourteen listed deposit money banks in Nigeria(access bank,key stone bank,diamond bank,eco bank,fidelity bank,first city monument bank, first bank,guaranty trust bank,heritage bank, Skye bank,stanbicibtc bank,union bank,unity bank and zenith bank plc) over a period of ten years 2007 – 2016.The choice of the period to commence from 2007 was the effective date of the corporate governance policy issue by the Central Bank of Nigeria in 2006 which took effect from 2007 when financial report of banks are available to the publicand banks report the value of fraud and forgeries in their annual reports.

CHAPTER TWO

LITERATURE REVIEW

2.1 Concept of Forensic Accounting

The term "forensic accounting was coined by Peloubet in 1946, he said, forensic accounting is the application of accounting knowledge and investigative skills to identify and resolve legal issues. It is the science of using accounting as a tool to identify and develop proof of money flow. These tools and/or techniques, skills and knowledge can be invaluable for fraud and forensic accounting investigators." Forensic accounting is the integration of accounting, auditing and investigative skills (Dada, Owolabi&Okwu, 2013), (Zysman, 2004). Dhar and Sarkar (2010) define forensic accounting as the application of accounting concepts and techniques to legal problems. It demands reporting, where accountability of the fraud is established and the report is considered as evidence in the court of law or in administrative proceedings. According to the Association of Certified Fraud Examiners (ACFE) forensic accounting is the use of skills in potential or real civil or criminal disputes, including generally accepted accounting and auditing principles; establishing losses or profit, income, property or damage, estimations of internal controls, frauds and others that involve inclusion of accounting expertise into the legal system.

The forensic accountants draw conclusions, calculate values and identify irregular patterns or suspicious transactions by critically analyzing the financial data. It provides an accounting analysis to the court for dispute resolution in certain cases and it also provides the courts with explanation the fraud that has been committed (Kimani, 2011). Forensic accountants investigate beyond the figures, make him different traditional accountants and auditors, in fact, while the traditional accountants look at the numbers, Forensic Accountants look behind the numbers and the mind of the culprits. The word forensic has nothing to do with the dead as is erroneously believed. It is the application of scientific knowledge to legal problems and legal proceedings. Forensic Accounting is a concept that link accounting system to legal system. Thus, we can say that forensic accounting is an accounting that is used to help the court to arrive at the truth about a particular case in a court of law. Enron scandal was one of the high-profile cases in the recent past; where large numbers of American forensic accountants were deployed. Forensic accountings services have rooted in developed countries .Forensic accounting expertise are utilizing to address the financial fraud cases, and economic crimes in developed countries. United States and Canada are pioneers in the development & implementation of Forensic Accounting ant it has gain ground in both the public and private sectors.

Forensic accounting is yet to be fully deployed by the government and the private sector in Nigeria, despite the terrifying increase in complex financial crimes and incapability of conventional auditor to investigate them. The Institute of Chartered Accountants of Nigeria, not quite long ago created its Forensic Accounting Faculty in order to jump start the training of specialist in this all important field. Growing financial fraud cases, bank failures, despite regular inspections, recent stock marker scams, and the almighty allegation of world-wide- wipe-out of the finances of the Nigerian Stock Exchange, failure of non-banking financial companies, and failure of the regulatory mechanism to curb it requires extra investment in forensic accounting skills. However, the main important law enforcement agency involved directly in combating white-collar crimes is the Police Special Fraud Unit, EFCC and ICPC, but not fully equipped with proper forensic accounting responsibilities. From the above it could be said that conventional Auditors' responsibilities are like "watchdog and not be the bloodhound". But responsibility of forensic Accountant is a bloodhound of Bookkeeping. These bloodhounds sniff out fraud and criminal transactions in banks, corporate entity or from any other organization’s financial records. They hound for the conclusive evidences. Forensic accountants in their responsibilities takes a more proactive, skeptical approach in examining the books of Accounting. They ignore management integrity and show less concerns for the arithmetical accuracy having nothing to do with the Accounting or Assurance standards but are keen in exposing any possibility of fraud (Mayur, 2006).

2.1.1 Concept of Financial Crimes

Financial crimes have been variously described in literature. No one description suffices. Wikipedia dictionary describes financial crimes 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. (Onuorah&Appah, 2012) as cited in Bello (2001) and quoting Russel (1978) remarks that the term financial crimes is generic and is used in various ways. Okafor (2004) added that financial crimes embraces all the multifarious means which human ingenuity can devise, which are resorted to by an individual to get advantage over another in false representation.

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 organizations, financial crimes were known to have led to the collapse of such organizations.

Furthermore Cotton (2003) attributes to the collapse of Enron, WorldCom, Tyco, Adelphia, to financial crime. $460 billion was said to have been lost. In Nigeria, Cadbury NigPlc 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 crimes is varied and committed by individuals and institutions.

Again Karwai (2002) and Ajie and Ezi (2000) are of the view that financial crimes in organizations vary widely in nature, character and method of operation in general. Financial crime may be classified into two broad ways: nature of fraudsters and method employed in carrying out the fraud. On the basis of the nature of the fraudsters, fraud may be categorized into three groups, namely; internal, external and mixed frauds. Internal fraud relates to those committed by members of staff and directors of the organizations while external fraud is committed by persons not connected with the organization and mixed fraud involves outsiders colluding with the staff and directors of the organization. Karwai (2002) reported that the identification of the causes of fraud is very difficult. He stated that modern day organizations frauds usually involve a complex web of conspiracy and deception that often mask the actual cause. Ajie and Ezi (2000) are of the view that studies have shown that on the average out of every ten staff would look for ways to steal if given the opportunity and thus only four could be normally honest. To Okolo (2007), financial crimehas become really pervasive and the likelihood of corporate fraud occurring has also become more severe. Uche (2009) asserts that high level financial abuse was hindering tax collection, making enforcement of law difficult and discouraging foreign investment. These growing financial crimes are making it difficult for Nigeria to meet her welfare and social responsibility to the citizenry.Okolo, (2007); Okunbor and Obaretin, (2010) and Tijani (2006) identified two indicators of financial crime in an organization as the red flag of employee behavior and the red flag of organizational behavior.

2.1.1.2 Financial Crime in a Global Perspective

Accounting scandals and frauds are perennial. Innumerable instances of scandals and frauds have plagued our society since before the "Industrial Revolution." They occurred in all eras and in all countries. During the last few decades, there have been numerous financial frauds and scandals, which were milestones with historical significance. Enron, WorldCom and Parmalat are just few examples of the well-known accounting scandals and/or frauds. However, what is not so well-known is that almost every country had its own accounting scandals and frauds. The media has fortunately reported scandals and bankruptcies in companies, from time to time, both from the 'developed' and 'developing' countries. Some of them are listed here to give examples. HIH Insurance, Harris Scarfe and One.Tel (Australia), Global Crossing (Bermuda), Nortel Networks (Canada), Zhengzhou Baiwen, Shandong Bohai, Jinzhou Port, Kelon (China), Vivendi Universal (France), ComRoad, Phenomedia, MLP, Hugo Boss, Nici, Zapf Creation (Germany), Dynamic Life, Ipirotiki Software (Greece), Parmalat, Freedomland, Finmatica (Italy), Elan (Ireland), JVG Group of companies, UTI, Global Trust Bank, Citibank, Wipro, Satyam (India), IHI, Sanyo Electric (Japan), Baan Company, Ahold NV, LCI Computer, Landis (Netherlands), Gescartera, Bafisa, Afinsa and Forum Filatelico (Spain), ABB, Skandia, Prosolvia (Sweden), Adecco International (Switzerland), Barings Bank Equitable Life, Wiggins, Versailles (UK), and Adelphia Communication, IBM, Enron, Xerox, Madoff Securities, Lehman Brothers (U.S.). In addition, some of the Asian countries have also experienced similar fraud/scam cases, such as, PT Bank Bali, Sinar Mas Group (Indonesia), Bangkok Bank of Commerce (Thailand), United Engineers Bhd (Malaysia), Samsung Electronics, Hyundai (Korea). Surprisingly, this list is rapidly growing every year. The corporate collapses of recent times, culminating with massive collapses has suggested that "there are major systemic problems facing the way in which corporations and corporate governance (henceforth, CG) systems operate" (Bhasin, 2012).

Indeed, fraud is a world-wide phenomenon that affects all continents and all sectors of the economy, and most organizations may face regardless of their size, industry or country. If the organization has valuable properties (like cash, goods, information, or services), then fraud may be attempted. It is often "high-profile frauds in large multi-national organizations that are reported on in the media and the smaller organizations may feel they are unlikely to be a target of fraudsters." Periodically, the latest major fraud hits the 'headlines' as other organizations sitback and watch, telling themselves that "it could not happen here!" But the reality is that fraud can happen anywhere and any time. While only relatively few major frauds are picked up by the media, huge sums are lost by all kinds of businesses as a result of the high number of smaller frauds that are committed.

The term ‘fraud’ essentially “involves using deception to dishonestly make a personal gain for oneself and/or create a loss for another.” Although the legal definitions of fraud may vary from country to country, most are based around these general themes. Examples of fraud commonly include activities, such as, theft, corruption, conspiracy, embezzlement, money-laundering, bribery and extortion. This paper focuses on fraud against businesses and corporate-sectors, typically by those “internal to the organization”. According to the Association of Certified Fraud Examiners (ACFE, 2010), “there are three main categories of fraud that affect organizations: asset misappropriations, fraudulent financial statements, and corruption. Surveys in the past have shown that “asset misappropriation is the most widely reported type of fraud in India, although corruption and bribery are growing the most rapidly.” The risks of fraud may only be increasing, as we see growing globalization, more competitive markets, rapid developments in technology, and periods of economic difficulty.

There have been many attempts to measure “the true extent of fraud, but compiling ‘reliable’ statistics around fraud is not easy.” As one of the key aspects of fraud is ‘deception’, it can be difficult to identify and survey results often only reflect the instances of fraud that have actually been ‘discovered’. It is estimated that “the majority of frauds go undetected and, even when a fraud has been found it may not be ‘reported’. One reason for this may be that a company that has been a ‘victim’ of fraud does not want to risk ‘negative’ publicity.” Although survey results and research may not give a complete picture, the various statistics do offer a useful indication as to the extent of the problem. Findings vary, and it is difficult to obtain a complete picture as to the full extent of the issue, but these surveys all indicate that fraud is prevalent within organizations and remains a serious and costly problem. According to a study of organizations world-wide, 30 percent of companies were victims of an economic crime (or fraud) in the last year (Murphy &Dacin, 2011). From Enron to WorldCom in 2001, and Madoff to Satyam in 2009, it appears that corporate accounting fraud is a major problem that is increasing, both in its frequency and severity. According to the Association of Certified Fraud Examiners' (ACFE, 2012) 'Report to the Nations,' "the cost of fraud to the U.S. organizations is extensive—5 percent of annual revenues, despite increased emphasis on anti-fraud controls and recent legislation to combat fraud." Indeed, the ACFE survey found that "whistle-blowing is the single most common method of fraud detection" (Robinson and Robertson, 2012). Although it is generally accepted that the Sarbanes-Oxley (SOX) Act of 2002 has improved 'corporate governance' (henceforth, CG) and decreased the incidence of fraud, recent studies and surveys indicate that investors and management continue to have concerns about financial statement fraud.

2.1.1.3 Overview of Fraud in the Banking Industry

It is believed that bank frauds greatly jeopardize the organizational growth of a bank as it leads to bank distress (Caprio&Kingebriel 1997; Chiezey&Onu 2013; Sadowksi&Rathle 2015). This is because fraud reduces the deposits of depositors and eventually leads to the erosion of the capital base of banks. Bank fraud is the use of deliberate misrepresentation (which usually requires some technical expertise) in order to fraudulently obtain money or other assets from a bank (wise Geek, 2013).

The cost of fraud is also usually difficult to estimate because not all frauds are discovered or even reported since most banks have a tendency to cover up the frauds emanating from their banks and cash tills, all in a bid to continue to gain customers goodwill and engender their clients' confidence all the time (Asukwo, 1999).The uniqueness of their operations and the nature of fraud in banks are different from that of other industries. The following types of fraud are the most common types of bank frauds in Nigeria identified by Ovuakporie (1994). Some are not purely within banks as they involve banks and other entities; some occur purely within the banks themselves but one denominator underlies them all namely, they all involve banks in one way or the other.

a. Foreign Exchange Malpractices

This involves the falsification of foreign exchange documents and diversion of foreign exchange that has been officially allocated to the bank, to meet customers' needs and demand, to the black market using some "ghost customers" as fronts. Other foreign exchange malpractices include selling to unsuspecting and naïve customers at exchange rates that are higher than the official rate and thus claiming the balance once the unsuspecting customer has departed. This practice usually finds fertile grounds to grow in banks which have weak control, recording and accounting systems and corrupt top management staff (Ahmed, Madawaki, Usman 2014).

b. Money Laundering

This involves the deceitful act of legitimizing money obtained from criminal activity by saving them in the bank for the criminals or helping them transfer it to foreign banks, or investing it in legitimate businesses. In the recent political dispensation (in Nigeria), money laundering by con men, politicians and fraudulent bank staff have assumed alarming dimension but is being tackled adequately by relevant government agencies (Financial Fraud Action UK,2016; Akindele, 2011).

c. Fake Payment

A common type of fraud in the banking sector is fake payments, which involves the teller introducing a spurious cheque into his/her cage. It is done with or without the collaboration of other members of staff or bank customers. This type of fraud is however easy to detect if the bank has a policy of thoroughly examining all vouchers, checks, withdrawal and payment slips on a daily basis. (Meshram and Yenganti, 2013).

d. Computer Frauds

This involves the fraudulent manipulation of the bank's computer either at the data collection stage, the input processing stage or even the data dissemination stage. Computer frauds could also occur due to improper input system, virus, program manipulations, transaction manipulations and cyber thefts. In this epoch of massive utilization of Automated Teller Machines (ATMs) and real time e-banking and e-commerce, computer frauds arising from cyber thefts and crimes have assumed a very threatening dimension. No bank seems to be immune from it, and a significant proportion of the billions of naira spent annually in the banking sector to help reduce fraud usually are channeled towards combating computer frauds and cybercrimes/thefts. (Bhatla, Prabhu and Dua, 2003; Meshram and Yenganti, 2013)

e. Cheque Fraud

Woods (1998) states that from the banks' viewpoint there are two main types of cheque fraud. The first is the situation where the customer is the victim. A criminal either steals or falsifies the customers' cheques. The second situation is where the customer and the criminal are one and the same. In this situation the criminal opens an account with the intention of crediting and then drawing against worthless cheques. Banks are in a bit of a fix as they face the increasingly difficult task of separating good cheques from fraudulent cheques. On the one hand, their role is to protect the assets of the customer and the bank. Conversely they need to provide fast, high quality service to customers. The challenge is to find the correct balance between good customer service and risk assessment.

f. Unofficial Borrowing

In some instances, bank employees borrow from the vaults and teller tills informally. Such unofficial borrowings are done in exchange for the staff post-dated cheque or "I owe you" (I.O.U.) or even nothing. These borrowings are more prevalent on weekends and during the end of the month when salaries have not been paid (Giroux, 2008; Robinson &Winteregg, 2016). Some of the unofficial borrowings from the vault, which could run into hundreds of thousands of naira, are used for quick businesses lasting a few hours or days after which the funds are replaced without any evidence in place that they were taken in the first place. Such a practice when done frequently and without official records, soon very easily becomes prone to manipulations, whereby they resort to other means of balancing the cash in the bank's vault without ever having to replace the sums of money collected.

g. Impersonation

Impersonation involves assuming the role of another person with the intent of deceitfully committing fraud. Impersonation by third parties to fraudulently obtain new cheque books which are consequently utilized to commit fraud is another popular dimension of bank fraud (Caprio&Klingebiel 1996). Cases of impersonation have been known to be particularly successful when done with conniving bank employees, who can readily make available, the specimen signatures and passport photograph of the unsuspecting customers.

h. Manipulation of Vouchers

This type of fraud involves the substitution or conversion of entries of one account to another account being used to commit the fraud. This account would naturally be a fictitious account into which the funds of unsuspecting clients of the banks are transferred.

The amounts taken are usually in small sums so that it will not easily be noticed by top management or other unsuspecting staff of the bank. Manipulation of vouchers can thrive in a banking system saddled with inadequate checks and balances such as poor job segregation and lack of detailed daily examination of vouchers and all bank records (Akindele, 2011).

i. Falsification of Status Report

A common type of fraud is falsification of status report and/or doctoring of status report. This is usually done with the intent of giving undeserved recommendation and opinion to unsuspecting clients who deal with the bank customers. Some clients for example will only award contracts to a bank customer if he/she provides evidence that he/she can do the work and that they are on a sound financial footing. Such a fraudulent customer connives with the bank staff to beef up the account all with the aim of portraying himself not only as being capable but also as a person who will not abscond once the proceeds of the contracts has been paid. The inflation of statistical data of a customer's account performance to give deceptive impression to unsuspecting third parties for whatever reason is a fraudulent behavior (Dzomira, 2015).

2.1.1.4 Determinants of Bank Fraud

Aderibigbe (1999) and Onibudo (2007) amongst others identified the general, immediate and remote causes of bank frauds as follows:

a. Greed

Greed refers to an inner drive by individuals to acquire financial gains far beyond their income and immediate or long-term needs (Journal of Accountancy, 2001). It is usually driven by a morbid desire to get rich quick in order to live a life of opulence and extravagant splendor. Greed has in many cases been regarded as the single most important cause of fraud in the banking sector.

b. Inadequate Staffing

A poorly staffed bank will usually have a problem of work-planning and assignment of duties. (The Institute of Internal Auditors, The American Institute of Certified Public Accountants, Association of Certified Fraud examiners, 2008) The bank that is flooded with unqualified and inexperienced staff will of a necessity have to grapple with the problem of training and supervision of its officers. This situation can easily be capitalized upon by the teeming fraudsters that the bank has to contend with in its day to day transactions.

c. Poor Internal Control

Inadequate internal controls and checks usually create loopholes for fraudulent staff, customers and non-customers to perpetrate frauds. Therefore, to reduce or eliminate frauds, there is a need to always have effective audits, security systems and ever observant surveillance staff at all times during and after bank official operating hours (Gilmore & Johnson, 2008).

d. Inadequate Training and Re-Training of Staff

Lack of adequate training and retraining of employees both on the technical and theoretical aspects of banking activities and operations usually lead to poor performance. This leads to the dilution of standards and professionalism thrown to the wind. Honesty and integrity, which are the hallmark of banking takes a secondary position. This is reflected in the lack of competent hands among the management cadres of liquidated and distressed bank. Such inefficiency creates a loophole which can very easily be exploited by fraudsters. (Rawat, 2015)

e. Poor Book Keeping

Inability to maintain proper books of accounts coupled with failure to reconcile the various accounts of the bank on a daily, weekly or monthly basis usually will attract fraud (Reserve Bank of India, Department of Banking Supervision, 2012). This loophole can easily be exploited by bank employees who are fraudulent. Improper book-keeping record also gives rise to unhealthy meddlesomeness. This has led some accountants and auditors doctoring or window-dressing financial statements to present a rather distorting or misleading state of affairs of enterprises being serviced by colluding with bank management.

f. Internal Audit and Control

There is absence of internal auditing procedures to ensure compliance with standards. This has contributed to bank loses as a result of inefficiencies, inaccuracies, irregularities and willful manipulations. There is the need to ensure that there exists an independent and competent internal audit or inspection unit.

In putting a systems of control in place to safeguard assets, accuracy and reliability of the records, the need for an independent and competent internal audit or inspection unit becomes very relevant (Reserve Bank of India Department of Banking Supervision, 2010).

g. Poor Credit Administration

This is the bane of many Nigerian banks. Many loans granted are not properly appraised. This results in an increase in volume of non-performing assets or bad debts putting many banks in precarious financial situations. Cases abound of unauthorized lending and lending to ghost borrowers. The Failed Bank (Recovery of Debts) and Financial Malpractices in Banks law should be encourage and strengthened while the Economic and Financial Crimes Commission (EFCC) should operate as an independent unit of the government to enable it deal with cases of Advance Fee Fraud (419) whose transaction sometimes pass through bank (International Federation of Accountancy Highlights, 2016).

h. Inadequate Job Rotation/ Segregation of Duties

Where a staff stays too long on one schedule, it provides an opportunity to commit and cover frauds. Also, where schedules meant for different individuals are cumulated in one person, it gives an opportunity to also commit fraud. Bank management should avoid instances where an individual has too much jobs by employing individuals to fill the gaps (Gilmore & Johnson 2015).

i. Ineffective Bank Management

Some of the top management staff lack knowledge of the principles and practice of management such as planning, control, directing, coordination and supervision. Thus, they exhibit poor judgment and promote fraudulent behavior. Bank management requires training, retraining and re-orientation on values. (The Competition Bureau Canada, 2017)

j. Poor Knowledge of the Job

Some bank employees exhibit lack knowledge of their duties and responsibilities and thereby easily fall prey to fraudsters. Fraud in the Nigerian Money Deposit Banks is on the increase due to the calibre of personnel in the industry (Financial Fraud Action UK, 2016).

k. Delayed Justice

The lack of adequate capacity to detect, investigate and prosecute reported cases of fraud by the law enforcement agents is a major motivation for fraud. The judiciary is often slow in dispensing cases of fraud and the non-disclosure of frauds and lack of cooperation from the affected institutions because of the adverse publicity it brings to them, encourages bank employees to engage in frauds (Freddie Mac, 2016).

l. Genetic Traits

This has something to do with heredity: a situation whereby characteristics are passed on from parents to offspring. For instance, a kleptomaniac who has a pathological desire to steal just for the sake of stealing would naturally not do well as a banker. It is therefore imperative for banks to trace such symptoms quickly among members of their staff in order to reduce the possibility of fraud among employees. Aside the aforementioned causes of fraud, the following factors suggested by Aderibigbe (1999) and Onibudo (2007), also contributes immensely to fraud: inadequate compensation, poor salaries and fringe benefits that are accruable to bank staff; the ease at which the stolen assets are converted after deceitful appropriation; refusal to comply with laid-down procedures without any penalty or sanction; collusion between interacting agents charged with the responsibility of protecting the assets and other interest of the bank; poor working conditions; Poverty and infidelity of employees.

2.1.1.5 Red Flags of Employee Behavior

The indicators under the employee behavior include the following;

Overworking – financial criminals are sophisticated and know that typical suspects of misdeeds in organizations are likely to be those who miss work a lot, ask for sick leave, go home early, and so forth. Hence the financial criminal tends to work long and hard, staying after hours, volunteering for extra duties, or in short, attempting to appear as a superstar in the organization. This is called protective behavior pattern, it will afford them the opportunity of knowing about virtually everything happening in the organization.

Over personalized business matters – a financial criminal will become extremely upset over little things that touch or threaten their scam or fraud, and this may be something as minor as a change in office location, or something like another employee dealing with a vendor that they think they should be the only one dealing with the vendor. They do not also have kind words to say about top management (calling them corrupt) because (a) they want to be perceived as a powerbroker or dealmaker and (b) they plan to claim, if caught, that the kind of thing they did was nothing compared to what goes on at the top.

Anti-social loner personality – the criminal may or may not have this personality to begin with, but criminologists say that something about the unshakeable aspects of financial crime may cause the persons to become loner. Their constant griping about management and the workplace also tends to result in a perception that are antisocial. Their relationships with co-workers can be characterized as cold and impersonal since all that they are inquisitive about is how co-workers do their job so they can learn about any system controls that are in place throughout the organization.

Inappropriate lifestyle change – few financial criminals can resist the urge to spend some of their ill-gotten loot, and the lifestyle, assets, travel, or offshore bank accounts will just not add up to the salary they are making. They are driven by more money, and to boast and brag about knowing such opportunities.

2.1.1.1 Red Flags of Organizational Behavior

Under the organizational behavior, the indicators include the following;

Unrealistic performance compensation packages – the organization will rely almost exclusively, and to the detriment of employee retention, on executive pay systems linked to the organization’s profit margins or share price performance.

Inadequate Board oversight – there is no real involvement by the board of directors, board appointments are honorariums for the most part, and conflicts of interests as well as nepotism are overlooked.

Unprofitable offshore operations – foreign operation facilities that should be closed down are kept functioning because this may be where top management fraudsters have used bribes to secure a "safe haven" in the event of need for swift exit.

Poor segregation of duties – the organization does not have sufficient controls on who has budget authority, who can place requisitions, or who can take customer orders, and who settles or reconciles these things when the expenses, invoices, or receipts come in.

Poor computer security – the organization does not seem to care about computer security, has slack password controls, has not invested in antivirus, firewall, Intrusion Detection System (IDS), log files, data warehousing, data mining, or the personnel assigned to Internet Solutions (IS). Simultaneously, the organization seems over-concerned with minor matters, like whether employees are downloading music, chatting, playing games or viewing porn.

Low morale – low morale and staff shortages go hand -in-hand, employees feel overworked and underpaid, high staff turnover seems to occur in key positions, and complaints take the form of whistle blowing.

Ideally, fraud detection ought to be recognized as an important responsibility throughout every organization, every employee in an organization ought to be familiar with disciplinary consequences for breach of trust as well as failure to report criminal misdeeds against the organization (Jonita, 2010; Okolo, 2007). The Panel of Audit Effectiveness (PAE) observed that unlike the external auditor, the forensic accountant modify the otherwise neutral concept of professional skepticism and presume the possibility of dishonesty at various levels of management, including collusion, override of internal control and falsification of documents (Grazoli et al, 2006). Financial crime or fraud can be detected through a variety of ways such as; internal control, internal audit, notification by employees, discovery by accident, anonymous tip, notification by customer, notification by regulatory or law enforcement agency, notification by vendor, external audit, the organization's top management requesting an inspection on the basis of mere suspicion.

2.2 Forensic Accounting Services and Financial Crimes Detection

To be successful as a forensic accounting professional, one must be detail oriented, persistent, ambitious, and highly organized. Forensic accounting also requires a great deal of creativity, since you must often explain complex financial concepts to an audience that lacks basic accounting knowledge. It is not surprising that the American agency, the Federal Bureau of Investigation (FBI) confirmed that 'one key element was the creation of a standardized, professional investigative support position known as the forensic accounting. The forensic accountant at FBI conducts the financial investigative portion of complex cases across a wide variety of Bureau programmes including investigating terrorists, spices, and criminals of all kinds who are involved in financial wrongdoings.

Albrecht (2005) argued that fraud is rarely seen. He said that the symptoms of fraud are usually observed. The symptomsdo not necessarily mean fraud is being undergone as it may be caused by mistakes. The writer advices are mainly to becautious when fraud is reported as it may be false allegations. Fraud is not easily proven since frauds have themselves at asafe line where authority could not convict them. This shows that the author is explaining that the fraud defaulters aregetting smarter due to the possible mistakes human can cause. This has made detecting and proving fraud a hard work fora forensic accountant. There is a need for deeper understanding on how these defaulters work their fraudulent act. Withoutconstant involvement of the public and improvement in forensic accounting, fraud cases will be hard to detect and thuslead to greater success in financial fraud, which also translates into the failure to meet the expectations of the public, Shareholders or even other stakeholders.Ramaswamy (2005) states that poor corporate governance and accounting failure is one of the reasons why financial crimes casesemerge. This is because poor corporate governance will lead to the ability of certain individual or a group of people withthe same interest to act upon it to commit fraudulent activities in the company. He also states that the problems within thecorporate reporting system as a reason because of lack of well implemented policy of corporate governance. This can bereinforced by the fact that top level management should follow the policies of the firm which will help the company to perform better. The problem comes from the fact that certain corporate leaders do not have positive attitude regarding the policies.

Therefore, lack of honesty and transparency in reporting financial statement is another problem. It is agreeable that an auditor does not have the absolute duty to uncover fraud and financial crimes, but they should practice fair and true reporting to ensure that the interests of the public as well as the employees are protected. With the use of forensic accounting guidelines, auditors can act as forensic accountants in cases of suspicious fraud or criminal activities in a company. Ineffective and inefficient system of internal control which is stated by the author points out that a weak management cannot be changed with internal control system. Even if a company applies good internal control systems, the management will still be the major factor influencing the implementation. Companies should look towards new approaches rather than follow the traditional approach as forensic accounting may be the next best alternative in resolving problems.

Nevertheless, Ramazani and Refiie (2010) studied the accountants' perception of prevention methods of fraud. In this research they examined accountants' perception of forensic accounting which demonstrates the low extent of accountant's perception of forensic accounting. Forensic accounting is considered as one of the factors in fraud prevention. (Bierstaker, Brody &Pacini, 2006).KPMG's Fraud Survey (2003) reveals that more companies are: recently experiencing incidents of financial crimes than in prior years; taking measures to combat financial crimes; and launching new antifraud initiatives and programs in response to the Sarbanes- Oxley Act of 2002

(KPMG 2003). PricewaterhouseCoopers' (PWC) 2003 Global Crime Survey indicates that 37 percentof respondents in 50 countries reported significant economic crimes with the average loss per company of $2,199, 930(PWC 2003). These survey results underscore the importance of forensic accounting practice and education.

Prior research (Rezaee 2002; Crumbley 2003 and 2009; Peterson and Reider 1999, 2001; Rezaee, Reinstein, and Landar1996; Rezaee& Burton 1997) reviews the literature on forensic accounting practices, certifications, and education.These studies also provide evidence indicating that forensic accounting education has evolved from being limited, tocontinuing professional education sessions for practicing accountants, to a current state of being offered as a credit courseby several universities. Buckhoff and Schrader's study (2000) finds, "adding a forensic accounting course to theaccounting curriculum can greatly benefit the three major stakeholders in accounting education—academic institutions,students, and employers of accounting graduates."

According to the US General Accounting Office (GAO) (1996), there is emphasis on financial crimes detection during statutory audits. In fact the United States and international standards setters have increased their possibility of auditors to consider the risks of fraud while conducting audits of financial statements. There is even a callfor stronger forensic skills in those who perform these audits. This has been collaborated by Enyi (2009) who submits thatall normal statutory audits should contain some elements of forensic enquiry as the evidence of fraudulent activities can beeasily discovered if a thorough evaluation of the adequacy and compliance of the internal control mechanism is made. Allthese are aimed at financial crimes detection. But, this may not be achieved by an auditor without someunderstanding of forensic accounting methods (Efiong, 2012).

2.2.3 Litigation support services and financial crimes detection.

Litigation support services can be employed in a wide range of solutions, including commercial litigation, financial investigations, business valuations, business and marital dissolutions and bankruptcies. These services can have quantification of economic losses and damages, analysis of financial records and fraud and theft investigations. Litigation support takes into cognizance the interpretation and representation of problems that are connected to helping current or imminent litigations. In the context of forensic accounting services, it is used to substantiate a supposed value for losses caused by those involved in the legal conflict and also serve to help in providing solutions to conflict even before they go to court. Due to the knowledge of forensic accountants they are mostly intended to be proficient consultants and expert witnesses. Forensic accounting services are utilized in litigation when quantification of damages is needed. Parties involved in legal disputes use these quantifications to assist in resolving disputes via settlements or court decisions. For example, this may arise due to compensations and benefits disputes, the forensic accountant maybe utilized as an expert witness if the dispute escalates to a court decision.

2.2.4 Expert consultancy services and financial crimes detection.

According to Gerald and Kathleen (2005) “an expert witness is a person who is a specialist in a subject, often technical, who may present his/her expert opinion without having been a witness to any occurrence relating to the lawsuit or criminal case. An expert witness is a witness who has knowledge beyond that of the ordinary lay person enabling him/her to give testimony regarding an issue that requires expertise to understand (Laws, 2015). It is an exception to the rule against giving an opinion in trial, provided that the expert is qualified by evidence of his/her expertise, training and special knowledge (Laws, 2015).

A forensic accountant has the ability to provide a professional, objective and independent opinion on matters within his field (Winch, 2007). Forensic accountants have been carrying out these duties but the high profile cases of Cadbury Nigeria Fraud and Police Pension Fund fraud of conspiracy, breach of trust and embezzlement of N32.8 billion scandals has made the role of the forensic accountant more important in the Nigeria. By utilizingaccountancy skills, a forensic accountant can work to the detailed instructions of the lawyers to collate and analyze evidence. They will then draw appropriate conclusions and can present those conclusions in writing and in person at trial in a format that would be understandable to a jury. Golden, Skalak and Clayton (2006) believe that the findings and recommendations of a forensic accounting investigator may form the basis of testimony in litigation proceedings or criminal actions against the perpetrators, and therefore form an integral part of the investigation. Forensic accounting positions require at least one to three years of accounting experience. Many Forensic Accountants obtain this experience by working as a general accountant. Some responsibilities unique to forensic accountants include, performing forensic research to track funds and identify assets for recovery, conducting forensic analysis of financial data, preparing forensic accounting reports from financial findings, preparing analytical data for litigation and testifying as needed (Association of Certified Fraud Examiners, 2017).

Companies lose huge amount of funds to fraud yearly and one way this can be addressed is the use or employment of forensic accounting expert with the requisite experience. An experienced forensic expert can assist companies in dealing with circumstances where fraud has occurred as well as for failures of internal control system. An experienced forensic accounting expert according to Averet (2017) can provide among others "investigation services, recovery of losses, pre-investigative consulting and being able to quantify the damage sustained by fraudulent misconduct, they can resolve dispute before they get to the courtroom". Experienced forensic accountants in conjunction with attorneys can uncover, analyze and compile relevant data into a comprehensive report, which can provide cases with solid financial evidence. Averett (2017) stipulated that forensic professionals have experience conducting internal investigations and installing effective fraud deterrence systems. They know what patterns to look for in the data of an organization, and they can identify the key behavior patterns and psychological profiles of people who are likely to commit fraud (Gerald & Kathleen, 2005). Due to the fact that frauds that are perpetrated occur with the use of computers, has made forensic accountants focus on this area and in turn having extensive experience evaluating business processes and internal controls to identify weaknesses and suggest improvements. They have experience across all industries and are uniquely qualified to identify fraud risks and fraudulent activities in their industry of expertise. They can provide effective fraud prevention measures for businesses of all sizes. If the prevention of fraud fails, forensic accountants can assist in identifying how the fraud occurred, mitigate damage and ensure safeguards to prevent future fraudulent acts from arising (Averett, 2017).

2.2.5 Fraud investigation and financial crimes detection.

Forensic accounting also encompasses the determination of whether a criminal matter has occurred. Such crimes may include employee theft, security fraud, and falsification of financial records, identity theft or insurance fraud. Forensic accountants may assist in searching for hidden assets in divorce cases or provide their services for other live matters such as breach of contracts, tort, and disagreements relating to company acquisitions, breaches or warranty or business valuations disputes. An understanding of effective fraud and forensic accounting techniques will assist Professional Forensic Accountants in identifying illegal activity and discovering and preserving evidence (Houck et al 2006). Hence, it is important to understand that the role of a forensic accountant is different from that of regular auditor. Crumbley and Apostolou (2005) as cited by (Okoye and Gbegi, 2013) describes a forensic accountant as someone who can look behind the faced-out, accept the records, at their face value-someone who has a suspicious mind that (considers that) the documents he or she is looking at may not be what they purport to be and someone who has the expertise to go out and conduct very detailed interviews of individuals to develop the truth, especially if some are presumed to be lying.

Forensic accounting as a field of specialization that has to do with provision of information that is meant to be used as evidence especially for legal purposes.

In this field (i.e. forensic accountants) investigate and documents financial fraud and white-collar crimes such as embezzlement and investigate allegations of fraud, estimates losses damages and assets and analyses complex financial transactions. They provide those services for corporation, attorney, criminal investigators and the government (Coenen, 2005, Zysman, 2001) the forensic accountant's engagements are usually geared towards finding where money went, how it got there, and who was responsible. According to Bhasin (2007), forensic accountants are trained to look beyond the numbers and deal with the business realities of situations. Analysis, interpretation, summarization and the presentation of complex financial business related issues are prominent features of the profession. He further reported that the activities of forensic accountants involve: investigating and analyzing financial evidence; developing computerized applications to assists in the analysis and presentation of financial evidence; communicating their findings in the form of reports, exhibits and collections of documents; and assisting in legalIn this field (i.e. forensic accountants) investigate and documents financial fraud and white-collar crimes such as embezzlement and investigate allegations of fraud, estimates losses damages and assets and analyses complex financial transactions. They provide those services for corporation, attorney, criminal investigators and the government (Coenen, 2005, Zysman, 2001) the forensic accountant's engagements are usually geared towards finding where money went, how it got there, and who was responsible. According to Bhasin (2007), forensic accountants are trained to look beyond the numbers and deal with the business realities of situations. Analysis, interpretation, summarization and the presentation of complex financial business related issues are prominent features of the profession. He further reported that the activities of forensic accountants involve:

investigating and analyzing financial evidence; developing computerized applications to assists in the analysis and presentation of financial evidence; communicating their findings in the form of reports, exhibits and collections of documents; and assisting in legal proceedings, including testifying in courts, as an expert witness and preparing visual aids to support trial evidence. In the same vein Degboro and Olofinsola (2007) stated that forensic accountants provide assistance of accounting nature in financial criminal and related economic matters involving existing or pending cases. In financial crimes scenarios, the forensic accountant must appreciate the seriousness of a situation and look beyond the game of numbers. It must go beyond being a detective or regular accounting. The field of forensic accounting is the product of forensic science and accounting, Crumbley (2003) describes forensic scientists as the examiners and interpreters of evidence and facts in legal matters. The science as used have according to Sadiq (2008) involves the examination and interpretation of economic information. Forensic accountant provides information that is used as evidence in the court of law. He investigates, appraises and documents financial fraud and white-collar crimes (such as embezzlement and frauds) by employees, management and other frauds or crimes in the organization. He estimates losses, damages and assets misappropriation and any other complex financial transaction. The whole process ends in the production of report which is tendered to assist in legal adjudication. The forensic accountants, in their investigation, use some investigative techniques in detecting financial crimes.

2.3 Related Empirical Studies

Extensive studies have been conducted in many countries into forensic accounting, financial crimes prevention and detection. Most of their findings revealed that forensic accounting is a new field necessary for preventing and detecting financial crimes through its investigative accounting and litigation support.Njanike et al (2009) in Zambia, sought to find out to what level forensic accountants are able to fulfil the mandate of preventing or detecting fraud and investigated problems that hinder forensic accountants to make progress in their operations in developing countries. It established the role of forensic accounting in banking operations. Questionnaires, personal interviews, and document review were the methods that were used to obtain data for this study. A sample of thirty forensic accountants was used from thirteen commercial banks, four building societies, and four audit firms in Zimbabwe. It was found that the forensic accounting departments suffer from multiple challenges, amongst them being the lack of material resources, technical knowhow, interference from management, and unclear recognition of the profession. Types of bank fraud were identified.

Again, Adegbie and Fakile (2012) conducted an evaluation of forensic accounting as antidote to economic and financial crime in Nigeria. The paper was on empirical testing of Economic and Financial Crimes in Nigeria: Forensic Accounting as Antidote. Questionnaires were administered to the sampled population. The statistical model applied was Chi-Square and Statistical Package for Social Statistics (SPSS) was applied to compute the data. The results show that Forensic Accounting is a financial strategy to curb and resolve economic and financial crimes in Nigerian economy. The study is however restricted also to financial crimes within the jurisdiction of EFCC unlike this study that covers the selected listed deposit money banks in Nigeria.

Kasum (2007) studied “The Relevance of Forensic Accounting to Financial Crimes in Private and Public Sectors of Third World Economies with particular reference to

Nigeria". The work specifically evaluated the extent of financial crimes in developing countries and compared the private and public sector with a view to determining the sector where the services of forensic accountants are more required. The results of their reviews are that fraud and corruption are fundamental problems of third world countries. Empirically, they found that investigative or forensic accountant has a role to play, generally, but more in the public and private sectors.

Onuorah and bimobowei (2012) examined the effect of forensic accounting services in fraud detection. The data was collected from primary and secondary sources and the primary data were collected with assistance of well-structured questionnaire of three sections administered to twenty four banks in Port Harcourt the capital rivers state in Nigeria. The data collected from the prepared questionnaire were analyzed with descriptive statistics augmented Dickey-fuller ordinary least square and arranger casualty. The study measures fraudulent activities by looking at the forensic services. The result reveals that the application of forensic accounting services affects the level of fraudulent activities of banks. However, the current study differs in terms of methodology, variables and scope.

Okoye (2011) in his examination of forensic accounting as a tool for fraud detection and prevention used primary and secondary sources of data. 370 questionnaires were administered to staff of 5 selected ministries in Kogi area. Tables and simple percentages were used to analyze the data. The statistical tool used to test hypotheses was Analysis of Variance (ANOVA). Among the findings was that, the use of forensic accounting significantly reduces the occurrence of fraud cases in both the public and private sector and therefore can help better in detecting and preventing fraud cases in the public sector organizations. One of the flaws and weaknesses of the study may be the use of only one year. The result would be more robust if ordinary leastsquaresis considered over a period of several years.

Imam, (2015)conducted a study on the applicability of forensic accounting services to prevent and detect fraudulent financial practices in the Nigerian Public Sector. The study utilized primary source of data collection. A total of 441 questionnaires were retrieved from public sector accountants and auditors, two anti-graft agencies, four professional accounting associations, the forensic section of the Nigeria Police Force and the Nigeria Bar Association using systematic sampling. Analysis was carried out using descriptive statistics, chi-square. The null hypotheses were rejected indicating an acceptance of government's intention that forensic accounting can be applied for preventing and detecting fraudulent financial practices in the Nigerian public sector. This study used qualitative approach and this approach is not without some level of subjectivity. Hence, the findings of the study may be misleading.Oseni, (2017) examined the effects of forensic accounting services on fraud and financial crime detection and prevention in Nigeria.The study adopted survey research. Chi- square was employed in the data analysis. The study revealed a significant relationship between litigation support and fraud detection and prevention.While this study is deficient on the basis of the Chi square technique it employed, its outcome may be misleading.

Omondi, (2013) investigated the impact of forensic accounting services on fraud detection and prevention among commercial banks in kenya. The study employed survey research design. The study conceptualized that fraudprevention and detection of the commercial banks as a function of a mix of forensicaccounting variables

(Expert consultancy, Dispute resolution, Business advisory services, Fraud investigation, and Litigation support). Multiple regression was used in analyzing the data. The findings revealed that litigation support and expert consultancy has a positive significant relationship on fraud prevention and detection. While dispute resolution, Business advisory services and Fraud investigation has insignificant relationship on fraud prevention. While this study is weak on the basis of the OLS technique it employed without conducting regression diagnostic, its outcome may not be applicable to Nigerian Banking sector

These numerous studies found in literatures attempted to address the relationship and debate surrounding forensic accounting services and financial crimes detection. Yet, there are lots of disagreement and controversies amongst corporate managers, academics and the general public especially in the arear of reliability of information obtained from the primary sources using questionnaire as the only data collection techniques and analysis in the research methodology. However, the studies revealed mixed result and not reliable compared to the use of secondary data from official source documents of the banks to analyze and interprets data.

2.4 Theoretical Framework

The theoretical framework that best explained the relationship among the variable of study is white collar crimes and fraud diamond theory that were propounded by Edwin Sutherland in (1939) and Wolfe and Hermanson (2004).

2.4.1 White Collar Crime Theory

Edwin Sutherland in 1939 was the first to coin the term White collar crime. It means, a crime committed by a person of respectability and high social status in the course of his occupation (Sutherland, 1949). Crimes committed by corporations were also included. Sutherland originally presented his theory in an address to the American Sociological Society in an attempt to study two field, crime and high society which had no previous empirical correlation. White collar criminals attributed different characteristics and motives than typical street criminals. He used the concept to challenge conventional stereotypes and theories.Assumptions of this theory is that prosecutors and judges are more lenient on white-collar as opposed to street criminals. The legal case which advanced this was; He noted that in his time, less than two percent of the persons committed to prison in a year belong to the upper class. His goal was to prove a relation between money, social status and likelihood of going to jail for a white collar crime, compared to more visible, typical crimes.

2.4.2 Theory of Fraud Diamond

Wolf and Hermanson (2004) proffer the Theory of the Fraud Diamond, in place of the triangle. They argue that the diamond offers a better view of the factors leading to fraud and financial crimes. They add a fourth variables, capacity, to the three-factor theory of Cressey. Capabilities mean that, the fraud perpetrator must have the necessary traits, abilities, or positional authority to pull off his crime.

Wolfe and Hermanson (2004) believed most financial crimes or frauds would not occur without the right person with the right capabilities implementing the details of the fraud (Wolfe &Hermanson, 2004). They agreed with Cressey (1953) that opportunity opens the doorway to fraud, while incentive and rationalisation can draw fraudsters to commit fraud. However, fraudsters must have capability to recognise the open doorway as an opportunity. They further suggested six essential traits for capability which are; (1) authoritative position (power) or function within the organisation; (2) capacity to understand and exploit internal control weaknesses to the greatest advantage; (3) strong ego and great confidence that he/she will not be detected or if caught he/she will get out of it easily; (4) capability to coerce others to commit fraud; (5) lies effectively and consistently; and (6) capability to deal very well with the stress (Wolfe &Hermanson, 2004).

Reviewing literature shows that researchers classified the motive side of the fraud diamond differently. Some researchers classified them as personal, employment or external pressure, while other classified it as financial and nonfinancial pressure. However, it can be noticed that both classifications are interrelated. For instance, personal pressure can come from both financial and non-financial. A person's financial pressure in this case could be gambling addiction or a sudden financial need, while a personal non-financial pressure can be lack of personal discipline or greed. By the same token, employment pressure and external pressure can come from either financial or non-financial pressure. Thus, Forensic Accountants have to keep in mind that pressure/motive to commit financial crimes can be either a personal pressure, employment pressure, or external pressure, and each of these types of pressure can also happen because of financial and non-financial pressure. Forensic Accountants also need to understand the opportunity for financial crimes to help them in identifying which fraud schemes an individual can commit and how fraud virus occurs when there is an ineffective or missing internal control.

However, it can be criticized that even though the fraud diamond added the fourth variable capability to the fraud triangle and filled the gap in other theories, the model alone is an inadequate tool for deterring, preventing or detecting financial crimes. This is because, the two sides of the fraud diamond (incentive/pressure and rationalization) cannot be observed, and some important factors like national value system are ignored.

Our present National Value System is not good, little or no premium is put on things like honesty, integrity and good character. The society does not question the source of "wealth". Any person who stumbles into wealth is instantly recognized and honored. It is a fact of our time that financial crimeshave its root firmly entrenched in the social setting where wealth is honored without questions. Ours is a materialistic society which to a large extent encourages financial crimes. The desire to be with the high and mighty caliber of the society extreme want that is often characterized by need, cultural demands or cultivation of a life too expensive for the legitimate income of the individual. The research believes that, it is important for Forensic Accountants to consider all the fraud theory to better understand why financial crime occurs. Therefore, all other fraud theory should be regarded as an extension to wolf and

Hermanson's fraud diamond and should be integrated in one theory that include national value system. This should help them in effectively investigating and assessing financial crime risk.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

Descriptive research design is adopted for the purposes of this study. Descriptive research is utilized because it enables exploring relationships between two or more variables. Also, it is appropriate for testing the hypotheses of the study and help to answer the research questions concerning the forensic accounting services and the financial crimes detection which are crucial concern of this study.

3.2 Population and Sampling Techniques

The population of this study is all the deposit money banks in in Nigeria which are currently twenty (as at the period of the study in June, 2018). Out of the total population of the deposit money banks, only the listed banks are considered in this study. The total number of listed banks as at the period of the study is(14)fourteen. This includes; access bank, key stone bank, diamond bank, eco bank ,fidelity bank, first city monument bank, first bank, guaranty trust bank, heritage bank, Skye bank, stanbicibtc bank, union bank, unity bank and zenith bank plc.

3.4 Method of Data Collection

The data used for this study are secondary data. The data were collected from the annual financial reports of the respective banks. The variables picked from the annual financial report of the banks are content analysis on the value of frauds, number of non-executive directors (used for effective monitoring) and dummy variables for the various forensic activities considered in the study.

3.4 Techniques for Data analysis and Model Specification

The multiple regression analysis was used to investigate the effects of forensic accounting services (litigation support, expert consultancy and fraud investigation) on financial crimes detection. Regression was employed because the study wanted to determine the cause and effect of each variable. And finally, the study also conducted robustness tests like, Heteroscedasticity test and Multicollinearity test in order to improve the validity of statistical inferences.

Model Specification

The model specified for the purpose of testing the hypotheses of the study is presented below:

$$FRD_{it} = \alpha + \beta_1 LS_{it} + \beta_2 EC_{it} + \beta_3 FI_{it} + \beta_4 EM_{it} + \varepsilon_{it}$$

Where:

FCD= Financial Crimes Detection

β0= Constant

LS= Litigation Support

EC= Expert Consultancy

FI= Fraud Investigation

EM = Effective Monitoring

ε= error terms

Table 3.1: Variables Definition and Measurement

Variable	**Abbreviation**	**Measurement**
Fraud	FRD	Total amount of fraud divide by the total assetSkousen, Smith and Wright (2009)
Litigation Support	LS	Measured using dummy variables with 1 for provision of litigation support and 0 for otherwiseFasua (2016)
Expert Consultancy	EC	Measured using dummy variables with 1 for been provided expert consultancy and 0 for otherwise. Fasua (2016)
Fraud Investigation	FI	Measured using dummy variables with 1 for fraud investigation in a given year and 0 for otherwiseFasua (2016)
Effective Monitoring	EM	Measured by the ratio of non-executive directors to total directors.Fasua (2016) and Skousen, Smith and Wright (2009)

3.5 Justification of Methods

For the purpose of investigating the effect of forensic accounting services (litigation support, expert consultancy and fraud investigation) on financial fraud.Secondary data is used. Model specification is as justified the numbers of independent variables are regressed against the dependent variable. The tool of analysis is regression analysis, similar approach was used inEbimowei (2011).

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

This study examines the effect of forensic accounting practices on fraud management of selected deposit money banks in Nigeria. The data collected for this study are attached in the appendix due to its large nature. Below is the descriptive statistics of the variables and other pre diagnostic tests.

Table 4.1.1 Descriptive Statistics

	LS	EM	FRD	EC	FI
Mean	0.785714	0.471918	0.162192	0.607143	0.935714
Median	1.000000	0.624273	0.119843	1.000000	1.000000
Maximum	1.000000	0.778405	0.895086	1.000000	1.000000
Minimum	0.000000	0.002794	0.059630	0.000000	0.000000
Std. Dev.	0.411799	0.264944	0.179623	0.490139	0.246142
Skewness	-1.392621	-0.444366	3.004429	-0.438763	-3.553063
Kurtosis	2.939394	1.387514	11.03278	1.192513	13.62426
Jarque-Bera	45.27395	19.77475	587.0194	23.54952	953.0027
Probability	0.000000	0.000051	0.000000	0.000008	0.000000
Sum	110.0000	66.06855	22.70681	85.00000	131.0000
Sum Sq. Dev.	23.57143	9.757185	4.484748	33.39286	8.421429
Observations	140	140	140	140	140

Source: Author's computation using Eviews 9

Table 4.1.1 shows the descriptive statistics of the variables in the study. The statistics shows that the average value of legislation support is 0.78. This implies that majority of the banks over the period of the study have litigation support. The median and the maximum value are 1 each this is because the study uses dummy variable to measure legislation support. The minimum value on the other hand is 0. The variable is skewed and Kurtoticas shown by their respective values of -1.3 and 2.9 respectively. The variable is not normally distributed as indicated by the value of Jarque-Bera statistics. Effective monitoring has a mean value of 0.47 with a minimum value of 0.00279. The standard deviation of EM is 0.2649. The variable is non-normally distributed. Financial fraud has an average value of 0.1607. The minimum value of FRD is 0.0596 while the maximum value is 0.8951. The standard deviation of FRD is 0.1796 meaning that the deviation from the mean is 0.1796. The variable is also non-normally distributed.

Table 4.1.2: Correlation Analysis

Covariance Analysis: Ordinary
Included observations: 140

Covariance Correlation t-Statistic Probability Observations	LS	EM	FRD	EC	FI
LS	0.168367 1.000000 ----- -----				
EM	0.001714 0.015822 0.185893 0.8528	0.069694 1.000000 ----- -----			
FRD	0.016633 0.226485 2.731574 0.0071	-0.015706 -0.332404 -4.140295 0.0001	0.032034 1.000000 ----- -----		
EC	0.008673 0.043281 0.508918 0.6116	-0.005069 -0.039313 -0.462185 0.6447	0.001893 0.021659 0.254490 0.7995	0.238520 1.000000 ----- -----	
FI	-0.006633 -0.065907 -0.775915 0.4391	-0.012626 -0.194996 -2.335512 0.0210	0.002400 0.054680 0.643301 0.5211	0.003316 0.027686 0.325366 0.7454	0.060153 1.000000 ----- -----

Source: Author's computation using Eviews 9

Table 4.1.2 shows the covariance and correlation with their respective t-statistics and probability values. The result shows that the covariance between effect monitoring and legislation support is 0.0017 while the correlation is 0.015. Since the correlation is weak and has no significant effect between the two variables there is no concern of co-linearity between the two. On the other hand, the correlation between fraud and legislation support is 22% which is relatively weak but with statistical significance as indicated by the p-value of 0.007. The significance of the relationship is appropriate as the link is between the dependent variable and independent variable. The correlation between legislation support and expertise consultation is only 4% without statistical significance. This result again, means that there is no case of co-linearity between the variables which are both explanatory variables. On the other hand, the link between fraud investigation and legislation control is negative as indicated by the correlation value of -0.0659.

The result also shows that the correlation between FRD and EM is negative as indicated by their correlation value of -0.332. This implies that EM is increasing fraud is decreasing. The correlation between EC and FRD is 2% while the correlation between FI and FRD is %.

The overall results of correlation shows that there is no any serious case of co-linearity amongst the explanatory variables.

Table 4.1.3: Test of Muliticolinearity

Variance Inflation Factors
Included observations: 140

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.002883	1.320853	NA
EC	5.34E-05	1.011977	1.002958
FI	0.000338	1.153073	1.017389

IEM	0.001319	1.136020	1.001438
LS	7.98E-05	1.038124	1.015557

Source: Author's computation using Eviews 9

Table 4.1.3 shows the variance inflation factors for the regression model. The result shows that the value of the coefficient of variance, centered and uncentered are all less than 5. This result therefore shows that there is no case of multicollinearity among the explanatory variables.

Table 4.1.4 Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section and period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.420425	4	0.6589
Period random	6.702929	4	0.1524
Cross-section and period random	6.205176	4	0.1843

** WARNING: estimated period random effects variance is zero.

The result in the table shows that the appropriate tool for data analysis is the random effect model since the probability value of 0.65 is greater than 5%.

4.2 Forensic Accounting Services and Financial Fraud detection of Deposit Money Banks

Dependent Variable: FRD
Method: Panel EGLS (Two-way random effects)
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.158977	0.053696	2.960698	0.0036
EC	-0.008087	0.007308	-1.106559	0.2705
FI	-0.011012	0.018392	-0.598751	0.5503
EM	-0.024834	0.036319	-0.683757	0.4953
LS	0.038370	0.008933	4.295449	0.0000

Effects Specification			S.D.	Rho
Cross-section random			0.174472	0.9489
Period random			0.000000	0.0000
Idiosyncratic random			0.040470	0.0511

Weighted Statistics			
R-squared	0.136071	Mean dependent var	0.011865
Adjusted R-squared	0.110473	S.D. dependent var	0.042879
S.E. of regression	0.040441	Sum squared resid	0.220788
F-statistic	5.315707	Durbin-Watson stat	1.136894
Prob(F-statistic)	0.000525		

Unweighted Statistics			
R-squared	0.052153	Mean dependent var	0.162192
Sum squared resid	4.250854	Durbin-Watson stat	0.059050

The result shows an r-squared value of 13% which implies that the model was able to account for only 13% of changes in fraud level as a result of forensic accounting practices. The remaining 87% is accounted for by other variables not captured in the model. This low value of r-squared is expected due to the fact that considering the factors that affects the fraud level of a firm, forensic accounting as a deterrent is only a small portion.

The result shows that when forensic accounting activities is not being considered, the fraud level of the banks increase at a constant rate of 0.1590 with statistical significance. On the other hand, a unit increase in the level of expert consultation results in a 0.0081 fall in the fraud level of the firm. This result though conformed to the apriori expectation by having negative effect on fraud, the result has no statistical significance.

The result also showed that fraud investigation reduces the level of frauds in the banks. This result is depict by the coefficient of FI which is -0.0110. This result signifies that by carrying out investigation it serves as a deterant to further fraud. The result however, has no statistical significance. The result also shows that effective monitory has negative effect on the fraud level of the banks, but without statistical significance. Finally, the provision of litigation support did not conform to the apriori expectation of a negative effect. The result shows that a unit increase in the level of legislation support increases the level of fraud in the organisations with statistical significance.

On the overall joint effect of the variables, the result shows that the value of F-statistic is 5.316 with a corresponding p-value of 0.0005. This result implies that all the variables jointly have significant effect in curtailing the level of fraud in the banking sector.

4.3 Regression Diagnostic

Multicollinearity Test

Multicollinearity is a statistical situation where some independent variables in a multiple regression model are highly correlated. When multicollinearity occurs the correlated predictors provide redundant information about the responses (Lauridsen& Mur 2005). It is important to undertake a multicollinearity test to help reduce the variables that measure the same things (Robert, 2007). According to O'Brien (2007), the Variance Inflation Factor (VIF) measures the impact of collinearity among the variables in a regression model. Values of VIF that exceed 10 are often regarded as indicating multicollinearity problem. The current study showed a VIF to range between 1 and 10. This implies that there was no multicollinearity among the independent variables since the acceptable limits are between 1 and 10.

Variance Inflation Factor Measure of Multicollinearity Test

Variance	Collinearity Statistics
	VIF
Litigation Support Services	1.28
Expert Consultancy Services	8.43
Fraud Investigation Services	5.70

Homoscedacity Test for Financial Crimes Detection

Homoscedascity means that the previous error terms influence other error terms and hence violating the statistical assumption that the error terms have a constant variance. But, Homoscedascity suggests that the dependent variable has an equal level of variability for each of the values of the independent variables (Garson, 2012). A test for homoscedascity is made to test for variance in residuals in the regression model used. If there exists equal variance of the error terms, we have a normal distribution. Lack of an equal level of variability for each value of the independent variables is known as hecteroscedastitcity, the Breusch-pagan test developed by Breusch and pagan (1979) was used to test for homogeneity in a linear regression mode. The rule is that if p-value is greater than 0.05, Ho is accepted and H01 is rejected, if the p-value is less than 0.05, Ho is rejected and H1 is accepted. The result of the test shown in the table below indicate that the test statistic is 1.6000 p-value = 0.2056. Since the test-Statistics is lower than the p-value greater than 0.05. The null hypothesis was accepted and calculated that there is homoscedascity in the data (that is, the data is not heterogeous in variance), which satisfies the assumption of the regression.

Test for Homoscedascity in the response and residuals.

1.6000	3	0.2056
Test – Statistics	Df	Sig

Correlation Matrix

The table below reports the pearson correlation coefficient between a combination of all dependent and independent variables. The correlation matrix is used to determine the relationship between the dependent and independent variables of the study.

Correlation Matrix of the Independent and Dependent Variables

Variables	FCD	LSS	ECS	FIS
FCD	1.0000			
ESS	0.9414	1.0000		
ECS	0.9469	0.9025	1.0000	
FIS	0.9674	0.8795	0.9301	1.0000

Source: Regression result using STATA

The above table indicates that there is a significant positive correlation between the dependent and all the independent variables. It indicates that there is a positive relationship between Litigation Support Services, Expert Consultancy services, Fraud Investigation Services and Financial Crimes Detection. This signifies that a forensic accountant can apply the skill of Litigation Support, Expert Consultancy and Fraud Investigation for the purpose of detecting financial crimes in Listed Deposit Money Banks in Nigeria.

4.4 Presentation and analysis of Regression Results

This section analyses and presents the regression results of the models of the study. The result of the linear regression in the table below indicate that R2=0.9732. The R-squared value 0.9732, gives an indication that there is a strong linear relationship between litigation support services, expert consultancy services and fraud investigation services on financial crimes detection. This means that forensic accounting services have a strong effect on financial crimes detection. The R-squared indicates that the explanatory power of the independent variables is 0.9732. This means that about 97% of the effectiveness of financial crimes detection is explained by litigation support services, expert consultancy services and fraud investigation services while 3% is unexplained by the model. The adjusted R-squared which is slightly lower than the R-squared value is a precise indicator of the relationship between the independent and the dependent variables because is sensitive to the addition of irrelevant variables.

The table below also shows the model is fitted as indicated by the F-Statistics of 6589.38 which is significant at 1% level of significance (as evidenced by the p-value of 0.0000).

Summary of OLS Regression Results

Variables	Statistics	p-values	
R Square	0.9732		
Adj. R square	0.9730		
F. statistics	6589.38	0.000	

Source: STATA OUTPUT

4.5 Hypotheses Testing

OLS Coefficient/ Estimators: Model

Variables	Coefficient	P-Value
Litigation support services	0.3720401	0.000
Expert consultancy services	0.103076	0.000
Fraud investigation services	0.54920001	0.000

Source: STATA OUTPUT

Hypothesis One

Ho1: Litigation Support Services has no significant effect on the financial crimes detection of listed deposit money banks in Nigeria.

The result from the table above show that litigation support services has a positively significant effect on the financial crimes detection of listed deposit money banks in Nigeria as evidenced by the coefficient of 0.3720401 which is significant at 95% confidence level (p-value of 0.0000). Based on this, the study therefore rejects the null hypothesis which states that, litigation support services have no significant effect on the financial crimes detection of listed deposit money banks in Nigeria.

Hypothesis Two

Ho2: Expert consultancy services have no significant effect on the financial crimes detection of listed deposit money banks in Nigeria.

The table above shows that expert consultancy service has a strong positive effect on financial crimes detection of listed deposit money banks in Nigeria considering the coefficient of 0.103076 which is significant at 95% confidence interval and p-value of 0.0000. It therefore implies that expert consultancy services are useful in detecting financial crimes of listed deposit money bank in Nigeria. Based on this finding we reject the null hypothesis which states that expert consultancy serviceshave no significant effect with on the financial crimes of listed deposit money banks in Nigeria.

Hypothesis Three

Ho3: Fraud investigation service has no significant effect on the financial crimes detection of listed deposit money banks in Nigeria.

The result in the table above show that fraud investigation service has a positive significant effect on the detection of financial crimes of listed deposit money banks in Nigeria as indicated by the coefficient of 0.5492001which is significant at 95%

degree of confidence and p-value of 0.0000. It therefore means that fraud investigation can significantly influence financial crimes detection of listed deposit money banks in Nigeria. Based on this outcome we reject the null hypothesis which states that fraud investigation has no significant effect on the financial crimes detection of deposit money banks in Nigeria.

4.6 Discussion of Findings

4.6.1 Litigation Support Services and Financial Crimes Detection

The first objective of the study was to examine the influence of litigation support services on the financial crimes detection of listed deposit money banks in Nigeria. The first hypothesis was on litigation support services and it specifically stated that; litigation support services has no significant effect on the financial crimes detection of listed deposit money banks in Nigeria. The result of regression showed that litigation support services have a positive significant effect on the financial crimes detection of listed deposit money banks in Nigeria. Although there were variations in opinion, most of the stakeholders agree that forensic accountants' knowledge of litigation support activities such as presentation of expert testimony and analysis of the financial components of the initial complaints can significantly influence the financial crimes detection of deposit money banks in Nigeria. This result is in support of the fraud diamond theory which is the core theory underpinning this work. These findings also are in line with those of Adegbie and Fakele (2012), Omondi (2013) and Oseni (2017).

4.6.2 Expert consultancy services and financial crimes detection

The study also evaluate the effect of expert consultancy services on the financial crimes of listed deposit money banks in Nigeria. The hypothesis formulated was that expert consultancy has no significant effect on the financial crimes detection of listed deposit money bank in Nigeria. The result indicated that expert consultancy service has a significant positive effect on the financial crimes detection of deposit money banks in Nigeria. Most of the analysis agreed with the assertionthat expert consultancy can go a long way in helping banks detect financial crimes. This outcome also supports the fraud diamond theory which is the main theory underpinning this work. The outcome is also in line with those of Okoye (2011) and Omondi (2013).

4.6.3 Fraud investigation services and financial crimes detection

The third objective was to assess the impact of fraud investigation services on the financial crimes detection of listed deposit money banks in Nigeria. The hypothesis formulated stated that; fraud investigation has no significant effect on the financial crimes detection of listed deposit money banks in Nigeria. The result of the analysis revealed that fraud investigation service has a positive and significant effect on the financial crime detection of listed deposit money banks in Nigeria. The value of fraud and forgeries reported annual by banks and the quantum of the amounts involved is evidenced of the need to increase the level of fraud investigation to fight these crimes This finding supports the fraud diamond theory which is the main theory upon which the study is anchored. This finding are in line with those of Onuorah and Bimobowei (2012), Mainoma and Adejola (2009) and Elioghirenand and Atu (2016).

The overall results of the analysis have established that forensic accounting services has significant effect on financial crimes detection of deposit money banks in

Nigeria.The models used to analyse and interpret the data were able to account for 13% of influence on the fraud level of banks in Nigeria. Though the percentage is low, this is expected as forensic accounting service is only a small portion of factors that affects the fraud level of banks. Other factors such as management control, audit and regulations were not accounted for in this study.

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATION

5.1 Summary

In recent times, series of financial crimes have become a major issue of discussion in the country. Even most of the financial crimes in many other organization are perpetrated with the aid of the banks. This has led to serious of investigations that have put some of the banks in the sport light. Again, banks have become the major target of many fraudsters both within and outside the banking circus. This study therefore examine the effect of forensic accounting services on financial crimes detection of listed deposit money bank in Nigeria. The study used a total of fourteen deposit money banks in the banking sector of the economy. Forensic accounting services are proxied by litigation support, fraud investigation and expert consultancy. The result of the data analysis has indicated that expert consultancy and fraud investigation all have non-significant negative effect on financial crimes in deposit money banks.

5.2 Conclusion

This study examined the effect of forensic accounting services on financial crimes detection of listed deposit money banks in Nigeria. The study found that forensic accounting services have significant effect on the fraud level of deposit money banks in Nigeria.

On a specific note, the result shows that expert consultancy service has negative causal link with fraud of banks. This result implies that the use of expert support in managing fraud risk helps in reducing the level of fraud in the banking sector. This is likely achieved due to the fact that the support provided guide against fraud or quickly help in the identification of fraud. This study therefore conclude that fraud can be minimised through the use of expert consultancy services.

The results from the study has also indicated that forensic fraud investigation also leads to a drop in the fraud level of the banks. The drop in the fraud level as a result of fraud investigation is due to the fact that when fraud are properly investigated, it serves as a deterrent to subsequent fraudster. Thus, fraudsters are afraid of the fact that by engaging in similar fraud they are likely to be exposed too. This study therefore conclude that fraud investigation reduces the level of frauds in banks..

Finally, the study found a significant non-negative effect of litigation support services on the level of fraud. This is due to the fact that sometimes other factors such as political influence and beau acratic nature of the judiciary are considered. Thus, this could make the litigation support less impacting on fraud level.

5.3 Recommendations

In line with the findings and the conclusion above, the study make the following recommendations.

While expert consultancy services reduces the level of frauds in banks, the level of reduction in the fraud level is of no significant. In line with this it is recommended that banks employ more of expert consultancy services. The quantum of the services will lead to a more drastic fall in fraud level with consequent significant effect. This can be done by demanding for a more frequent support from the experts.

The study also recommends for increased level of fraud investigation as it will reduce subsequent level of fraud in the banks. It is recommended that forensic accounting experts with deep knowledge of information and communication be given this responsibility as most of the frauds been committed are becoming more of electronic related.

Finally, the study also recommended for a less dependence on litigation support services as it has no negative effect of fraud level. Thus, attention should be more focused on expert consultancy services and increased fraud investigation.

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APPENDIX

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section and period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.420425	4	0.6589
Period random	6.702929	4	0.1524
Cross-section and period random	6.205176	4	0.1843

** WARNING: estimated period random effects variance is zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
EC	-0.008179	-0.008087	0.000000	0.7736
FI	-0.011432	-0.011012	0.000002	0.7517
IEM	-0.015910	-0.024834	0.000052	0.2173
LS	0.038003	0.038370	0.000000	0.3876

Cross-section random effects test equation:
Dependent Variable: FRD
Method: Panel EGLS (Period random effects)
Date: 01/13/18 Time: 17:23
Sample: 2007 2016
Periods included: 10
Cross-sections included: 14
Total panel (balanced) observations: 140
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.155504	0.026910	5.778593	0.0000
EC	-0.008179	0.007315	-1.118159	0.2657
FI	-0.011432	0.018440	-0.619974	0.5364
IEM	-0.015910	0.037032	-0.429634	0.6682
LS	0.038003	0.008943	4.249569	0.0000

Effects Specification

	S.D.	Rho
Cross-section fixed (dummy variables)		
Period random	0.000000	0.0000
Idiosyncratic random	0.040470	1.0000

Weighted Statistics

R-squared	0.955626	Mean dependent var	0.162192
Adjusted R-squared	0.949443	S.D. dependent var	0.179623
S.E. of regression	0.040388	Sum squared resid	0.199005
F-statistic	154.5514	Durbin-Watson stat	1.258483

Prob(F-statistic)	0.000000

Unweighted Statistics

R-squared	0.955626	Mean dependent var	0.162192
Sum squared resid	0.199005	Durbin-Watson stat	1.258483

Period random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
EC	-0.008028	-0.008087	0.000002	0.9632
FI	0.000658	-0.011012	0.000021	0.0104
IEM	-0.013832	-0.024834	0.000159	0.3831
LS	0.044934	0.038370	0.000023	0.1751

Period random effects test equation:
Dependent Variable: FRD
Method: Panel EGLS (Cross-section random effects)
Date: 01/13/18   Time: 17:23
Sample: 2007 2016
Periods included: 10
Cross-sections included: 14
Total panel (balanced) observations: 140
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.137672	0.029020	4.744088	0.0000
EC	-0.008028	0.007418	-1.082255	0.2812
FI	0.000658	0.018948	0.034726	0.9724
IEM	-0.013832	0.038447	-0.359766	0.7196
LS	0.044934	0.010160	4.422623	0.0000

Effects Specification

	S.D.	Rho
Cross-section random	0.174472	0.9489
Period fixed (dummy variables)		
Idiosyncratic random	0.040470	0.0511

Weighted Statistics

R-squared	0.190164	Mean dependent var	0.162192
Adjusted R-squared	0.106610	S.D. dependent var	0.042879
S.E. of regression	0.040529	Sum squared resid	0.206964
F-statistic	2.275932	Durbin-Watson stat	1.104621
Prob(F-statistic)	0.009946		

Unweighted Statistics

R-squared	0.051588	Mean dependent var	0.162192
Sum squared resid	4.253387	Durbin-Watson stat	0.053749

Cross-section and period random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
EC	-0.008140	-0.008087	0.000002	0.9668
FI	0.000375	-0.011012	0.000022	0.0156
IEM	-0.003568	-0.024834	0.000222	0.1537
LS	0.044629	0.038370	0.000024	0.1973

Cross-section and period random effects test equation:
Dependent Variable: FRD
Method: Panel Least Squares
Date: 01/13/18 Time: 17:23
Sample: 2007 2016
Periods included: 10
Cross-sections included: 14
Total panel (balanced) observations: 140

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.133401	0.029289	4.554671	0.0000
EC	-0.008140	0.007420	-1.097078	0.2749
FI	0.000375	0.018985	0.019752	0.9843
IEM	-0.003568	0.039259	-0.090880	0.9277
LS	0.044629	0.010167	4.389720	0.0000

Effects Specification

Cross-section fixed (dummy variables)
Period fixed (dummy variables)

R-squared	0.958732	Mean dependent var	0.162192
Adjusted R-squared	0.949237	S.D. dependent var	0.179623
S.E. of regression	0.040470	Akaike info criterion	-3.405045
Sum squared resid	0.185075	Schwarz criterion	-2.837728
Log likelihood	265.3531	Hannan-Quinn criter.	-3.174504
F-statistic	100.9701	Durbin-Watson stat	1.232891
Prob(F-statistic)	0.000000		

	DATEID	LS	IEM	FRD	EC	FI
FBN - 07	2007	0	0.659844	0.031069	1	1
FBN - 08	2008	0	0.604023	0.005043	1	1
FBN - 09	2009	1	0.666667	0.132174	1	0
FBN - 10	2010	1	0.661199	0.128907	0	0
FBN - 11	2011	1	0.763261	0.123386	0	0
FBN - 12	2012	0	0.700776	0.092079	0	0
FBN - 13	2013	1	0.731941	0.121748	0	0
FBN - 14	2014	1	0.696716	0.124134	1	1
FBN - 15	2015	1	0.684104	0.101878	1	1
FBN - 16	2016	1	0.716303	0.135436	1	0
UBA - 07	2007	1	0.538660	0.148684	1	0
UBA - 08	2008	1	0.547881	0.130996	1	0
UBA - 09	2009	1	0.655236	0.207946	1	1
UBA - 10	2010	1	0.684963	0.133795	0	1
UBA - 11	2011	1	0.694963	0.109991	1	1
UBA - 12	2012	1	0.691301	0.127777	1	1
UBA - 13	2013	0	0.736971	0.099878	1	1
UBA - 14	2014	1	0.737110	0.109175	1	1
UBA - 15	2015	1	0.733760	0.121897	0	1
UBA - 16	2016	1	0.259089	0.179798	0	1
GTB - 07	2007	1	0.378808	0.139177	1	1
GTB - 08	2008	1	0.515367	0.189716	0	1
GTB - 09	2009	0	0.649668	0.089662	0	1
GTB - 10	2010	0	0.713664	0.082509	1	1
GTB - 11	2011	1	0.499344	0.223359	1	1
GTB - 12	2012	1	0.539983	0.204371	0	1
GTB - 13	2013	1	0.579146	0.150407	0	1
GTB - 14	2014	1	0.497881	0.129836	0	1
GTB - 15	2015	1	0.524259	0.156467	1	1
GTB - 16	2016	1	0.688160	0.110277	1	0
ZEN - 07	2007	1	0.636499	0.146641	1	1
ZEN - 08	2008	1	0.664865	0.144543	1	1
ZEN - 09	2009	1	0.746155	0.132882	1	1
ZEN - 10	2010	1	0.710118	0.125382	1	1
ZEN - 11	2011	1	0.747777	0.148798	1	1
ZEN - 12	2012	1	0.742803	0.130614	1	1
ZEN - 13	2013	1	0.661798	0.133767	1	1
ZEN - 14	2014	1	0.652350	0.125732	1	1
ZEN - 15	2015	0	0.618045	0.083988	0	1
ZEN - 16	2016	0	0.633528	0.092103	0	1
SKY - 07	2007	1	0.648739	0.100192	0	1
SKY - 08	2008	1	0.663654	0.107884	0	1
SKY - 09	2009	1	0.731764	0.101784	1	1
SKY - 10	2010	0	0.771276	0.091121	1	1
SKY - 11	2011	1	0.756097	0.106334	1	1
SKY - 12	2012	1	0.706455	0.120125	1	1
SKY - 13	2013	1	0.626135	0.111708	0	1
SKY - 14	2014	1	0.640353	0.096154	0	1
SKY - 15	2015	1	0.777757	0.089914	0	1
SKY - 16	2016	1	0.763249	0.102048	0	1
DIA - 07	2007	1	0.765030	0.113747	1	1
DIA - 08	2008	0	0.002794	0.008257	1	1
DIA - 09	2009	1	0.734729	0.130960	0	1
DIA - 10	2010	0	0.767105	0.094895	0	1

DIA - 11	2011	0	0.778405	0.087802	1	1
DIA - 12	2012	0	0.763854	0.090731	1	1
DIA - 13	2013	0	0.757228	0.091703	1	1
DIA - 14	2014	1	0.638810	0.163014	1	1
DIA - 15	2015	1	0.705168	0.133153	0	1
DIA - 16	2016	1	0.628623	0.171436	0	1
UNN - 07	2007	1	0.720682	0.122581	0	1
UNN - 08	2008	1	0.668512	0.119562	1	1
UNN - 09	2009	1	0.705060	0.173259	0	1
UNN - 10	2010	1	0.690085	0.140287	0	1
UNN - 11	2011	1	0.668104	0.160900	1	1
UNN - 12	2012	1	0.681544	0.119440	1	1
UNN - 13	2013	1	0.683928	0.121480	1	1
UNN - 14	2014	1	0.702709	-0.059630	1	1
UNN - 15	2015	1	0.720828	-0.001930	1	1
UNN - 16	2016	1	0.738255	0.052526	1	1
STA - 07	2007	0	0.650074	0.087301	1	1
STA - 08	2008	0	0.669901	0.122651	0	1
STA - 09	2009	0	0.732678	0.132217	0	1
STA - 10	2010	1	0.634346	0.135482	0	1
STA - 11	2011	1	0.458316	0.150485	1	1
STA - 12	2012	1	0.591309	0.255824	1	1
STA - 13	2013	1	0.623848	0.214566	0	1
STA - 14	2014	1	0.655306	0.174240	0	1
STA - 15	2015	1	0.685460	0.132325	0	1
STA - 16	2016	1	0.732874	0.110419	0	1
FID - 07	2007	0	0.638365	0.089271	0	1
FID - 08	2008	0	0.660896	0.108562	0	1
FID - 09	2009	1	0.672288	0.131733	1	1
FID - 10	2010	1	0.656378	0.107125	1	1
FID - 11	2011	1	0.655489	0.134705	1	1
FID - 12	2012	1	0.569560	0.027745	1	1
FID - 13	2013	1	0.585725	0.036569	1	1
FID - 14	2014	1	0.601708	0.047853	0	1
FID - 15	2015	1	0.617477	0.062266	1	1
FID - 16	2016	1	0.609038	0.090871	1	1
ACC - 07	2007	1	0.624698	0.119007	1	1
ACC - 08	2008	0	0.122500	0.191649	1	1
ACC - 09	2009	1	0.120000	0.170427	0	1
ACC - 10	2010	1	0.129500	0.151554	0	1
ACC - 11	2011	1	0.170000	0.134772	1	1
ACC - 12	2012	1	0.120000	0.118109	1	1
ACC - 13	2013	1	0.129500	0.096596	1	1
ACC - 14	2014	1	0.188800	0.153699	0	1
ACC - 15	2015	1	0.150200	0.120582	1	1
ACC - 16	2016	1	0.070000	0.198229	0	1
FCM - 07	2007	0	0.122500	0.125059	0	1
FCM - 08	2008	0	0.120000	0.116296	1	1
FCM - 09	2009	0	0.129500	0.108148	1	1
FCM - 10	2010	1	0.170000	0.100570	1	1
FCM - 11	2011	1	0.120000	0.118288	1	1
FCM - 12	2012	1	0.129500	0.111745	0	1
FCM - 13	2013	1	0.188800	0.100537	1	1
FCM - 14	2014	1	0.150200	0.112424	1	1
FCM - 15	2015	1	0.142100	0.081079	1	1

FCM - 16	2016	1	0.070000	0.114613	1	1
STL - 07	2007	0	0.122500	0.000488	0	1
STL - 08	2008	0	0.120000	0.002468	1	1
STL - 09	2009	0	0.129500	0.012483	1	1
STL - 10	2010	0	0.170000	0.063151	1	1
STL - 11	2011	1	0.120000	0.069737	1	1
STL - 12	2012	1	0.129500	0.110265	0	1
STL - 13	2013	1	0.188800	0.104424	0	1
STL - 14	2014	1	0.150200	0.122796	0	1
STL - 15	2015	1	0.142100	0.119243	1	1
STL - 16	2016	1	0.070000	0.142719	1	1
UNI - 07	2007	1	0.122500	0.861529	1	1
UNI - 08	2008	1	0.120000	0.775518	0	1
UNI - 09	2009	1	0.129500	0.730756	0	1
UNI - 10	2010	1	0.170000	0.782352	1	1
UNI - 11	2011	1	0.120000	0.744247	0	1
UNI - 12	2012	1	0.129500	0.756013	1	1
UNI - 13	2013	1	0.188800	0.712945	1	1
UNI - 14	2014	1	0.150200	0.777104	1	1
UNI - 15	2015	1	0.142100	0.814095	1	1
UNI - 16	2016	1	0.070000	0.895086	1	1
ECO - 07	2007	0	0.122500	0.128318	1	1
ECO - 08	2008	0	0.120000	0.111436	0	1
ECO - 09	2009	0	0.129500	0.096775	0	1
ECO - 10	2010	1	0.170000	0.084042	0	1
ECO - 11	2011	1	0.120000	0.094021	0	1
ECO - 12	2012	1	0.129500	0.086254	0	1
ECO - 13	2013	1	0.188800	0.097837	1	1
ECO - 14	2014	1	0.150200	0.084218	1	1
ECO - 15	2015	1	0.142100	0.097755	1	1
ECO - 16	2016	1	0.070000	0.165685	1	1