

Effect of Forensic Accounting On the Management of Fraud In Microfinance Institutions In Cross River State

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Abstract: This research focused on forensic accounting as it affects the management of fraud in microfinance institutions in Cross River State. The problem of this study therefore lies on how to effectively prevent and manage fraud in microfinance banks with the application of forensic accounting service. Study adopted a survey research design. Data were collected from both primary and secondary sources and analysed using the ordinary least square technique. Based on the empirical analysis, the regression results showed that the estimated coefficients of the regression parameter are all negative signs. The implication of these signs was that the actively engagement of forensic investigation and litigation support reduces fraud in the selected microfinance banks in Calabar, Cross River State. The study further showed that the individual test of the independent variables were significant. The continued audit failures over decades have prompted a paradigm shift in accounting. It is concluded that forensic accounting play a significant roles in the prevention of crimes and corruption in the selected micro finance banks in Calabar, Cross River State. Managements of micro finance banks in Calabar should develop more interest in forensic accounting for monitoring and investigating suspected culprits in fraud cases. Managers appointed to manage and run microfinance banks should be tested and the integrity ad trustworthiness should be proven before they are appointed to manage and oversee the affairs and the activities of the banks.

Keywords: External Audit, Forensic, Forensic Audit, Fraud Diamond, Fraud triangle,

Date of Submission: 15-07-2018

Date of acceptance: 30-07-2018

I. Introduction

1.1 Background to the study

Corporate organizations like banks are essentially social-technical devices made up of people and physical actors who process inputs and at the same time execute some functions and tasks that lead to the accomplishment of certain goals (Akenbor & Oghoghomeh, 2013). The Nigerian Banking sector is one of the most controlled and regulated sectors. In spite of this, fraud has continued to rear its ugly head in the sector. The growing level of fraud in Microfinance banks and the banking sector at large makes the need for use of forensic accounting in fraud investigation very apt especially in Nigeria.

Globally, the occurrence of fraud in corporate organizations is becoming rampant and this can be shown in the large number of reported cases of bribery, corruption, embezzlement, money laundering, racketing, fraudulent financial reporting, tax evasion, forgery and other means through which both financial and economic dishonesty are being perpetrated (Ofiafoh & Otor, 2013). The accounting profession had undergone radical changes as a result of the Enron and World Com debacles as well as other accounting scandals (Cotton, 2000). Hence, with the spot light on the accounting profession, a new market with a new breed of Accountants (forensic accountants) has emerged. Today, the occurrence of fraud and other financial crimes have gone sophisticated and even the advent of computerization together with the introduction of internet facilities have enhanced the problem of financial crimes. The detection and reduction of these fraudulent activities are made more difficult and committing these crimes much easier. Hence Onodi, Okafor and Onyali (2015) were of the opinion that forensic investigative skills are required to uncover and establish the occurrence of financial crimes.

Consequently, the incorporation of modern forensic auditing techniques in audit in Nigeria is seen as timely in order to prepare the accounting profession to deal effectively with the problem of unearthing ingenious fraud schemes arising from audit failure to detect frauds in Nigeria. Center for forensic studies (2010) report in Nigeria states that, if well applied, forensic accounting could be used to reverse the leakages that cause corporate failures. This could be attributed to the fact that proactive forensic accounting practice seeks out errors, operational vagaries and deviant transactions before they crystallize into fraud. This study examines the role and impact of forensic accounting in curbing financial crimes (fraud) in micro finance institution with a particular focus on micro finance banks in Calabar, Cross River State.

1.2 Statement of the problem

The various fraud cases experienced in the recent past especially in the banking sector in Nigeria has opened the eyes of many investors and the stakeholders in the country and corporate world generally. This is in line with the study of Okafor and Agbiogwu (2016) where they stated that, a good number of Banks in Nigeria have credibility problems. They further pointed out that some non-banking institutions manipulated their share prices in Nigeria stock market. Also, the Nigerian deposit insurance corporation (NDIC) in 2010 reported that frauds and forgeries involved in Banking sector amounted to 21 billion naira.

There have been continuous increase in financial crime, mismanagement and misappropriation of funds in the government agencies and the banking sectors in Nigeria. The primacy of the Buhari led administration is the fight against corruption. Many arrests have been made, however, the number of prosecution cannot be viewed in the same manner. Can this be attributed to lack of application of forensic accounting skills in the investigation process or is it that the awareness of the use and application of forensic accounting and litigation process is limited?

The problem of this study therefore lies on how to effectively prevent and manage fraud in microfinance banks with the application of forensic accounting service. It is in the light of the above, that this study seeks to provide answers to the questions of fraud and forensic accounting.

II. Review Of Related Literature

2.1. Theoretical framework

Prior studies have employed several theories to explain why corporate bodies may use forensic accounting skills to manage frauds and crimes. However, for the purpose of this study, the relevant theories are the fraud triangle, fraud diamond and fraud scale theories.

2.1.1 Fraud triangle theory

This theory is credited to American Criminologist Donald Cresset (1950). The fraud triangle is what the forensic accountant rely on to identify suspected fraud, the causes and the weakness in the system that prompted the fraud. Based on the fraud triangle concept, the three factors that cumulate into the triangle are; pressure, opportunity and

Opportunity-Employees use their position to commit fraud when internal controls are weak, or where there is poor management oversight on internal control Implementation. Most employees who commit fraud do so, because they have the opportunity to access Assets and information that allows them obscure their fraudulent deeds. It is true that employees need access to certain platform to perform their jobs. The same access can provide the employee with opportunity to commit fraud.

Pressure/Incentive-Pressure can make a staff commit fraud. Pressure does not only mean financial pressure. Lister (2007), states that there are three types of motivation or pressure; personal pressure to pay for lifestyle, employment pressure from continuous compensation structures, or management's financial interest, and external pressure such as threats to the Business Financial stability, financial covenants, and market expectations.

Rationalization - This is an attempt by an employee to justify why they commit fraud. For instance, an employee who is about to be evicted from his/her home, can be used to justify fraudulent act. The employee may say "I deserve to have a place to call my home", so also an employee who feels he/she is underpaid may say it is a way of augmenting the payment due to him/her. As such, the rationalization is an act of employee who commits fraud to give reasons for his action.

2.1.2 The fraud diamond theory

This theory considers the four elements by Wolf and Hermanson (2004). This theory is an improvement in the existing fraud triangle. They believe that the fraud triangle could be enhanced to improve both fraud prevention and detection by considering a fourth element. In addition to addressing incentive, opportunity and rationalization, the Wolf and Hermanson's four sided fraud diamond also considers an individual's capability personal traits and abilities that play a major role in whether fraud may actually occur even with the presence of the other three elements.

2.1.3 Fraud scale theory

The fraud scale theory was developed by Albrecht, Howe, and Romney (1984), as an alternative to the fraud triangle model. The fraud scale is very similar to the fraud triangle; however, the fraud scale uses an element called "personal integrity" instead of rationalization. This personal integrity element is associated with each individual's personal code of ethical behavior. Albrecht et al (1984) also argued that, unlike rationalization in the fraud triangle theory, personal integrity can be observed in both an individual's decision and the decision-making process, which can help in assessing integrity and determining the likelihood that an individual will

commit fraud. Experts agree that fraud and other unethical behaviors often occur due to an individual's lack of personal integrity or other moral reasoning. Hence, to forestall the occurrence of such fraud, the service of a trained and experienced investigator like the forensic auditor is highly required.

2.2 Empirical review

Okafor and Agbiogwu (2016) conducted a study on the effect of forensic accounting skills on the management of Bank fraud in Nigeria. In their research work, they adopted non-probability sampling technique to select the five (5) commercial Banks used as population for the study. Based on the analysis of variance (ANOVA) the findings of their study reveals that possession of basic forensic skills significantly reduce the occurrence of fraud cases in the banking sector and that there is a significant difference between services of forensic accountants and External auditors, and that the presence of forensic accountants in Banks can aid in reducing fraud cases.

Zachariah, Masoyi, Ernest and Gabriel (2014), work on the topic titled "application of forensic auditing in reducing fraud cases in Nigeria money deposit Banks". The study analyzed the trend in fraud cases from 2001-2012, included are the amounts involved in fraud, the most frequent types of fraud, and the losses sustained by Banks. The descriptive analysis revealed that there are up and down movements in fraud cases. Since Banks continually lose huge sums of money as a result of the inability of the auditors and the supervisory regulators to curtail the trend, there is therefore the need to devise different means of tackling frauds in the Banks. According to the authors, Nigerian Banks over the past decades had suffered from the menace of fraud which resulted to distresses and liquidation which hamper the roles of Banks in the economy. The study therefore suggested employment of forensic auditing in Nigerian Banks by amending the existing status, in such a way that forensic auditors are included in the audit team.

Onodi, Okafor & Onyali (2015), examined the effect of forensic investigation methods in corporate fraud deterrence in Nigerian Banks. This study adopted a survey research design and data from primary source were collected through interviews and administration of questionnaires, while secondary source consists of reports on fraud and forgery in the banking sector. Statistical tools used to analyze the data include percentages, mean score, frequency tables, regression analysis and Z-test. The result revealed that there is a significant relationship between the forensic investigative methods and corporate fraud deterrence. The finding revealed that expert services of forensic investigators are normally required in the prosecution of fraud, but majority of the audit and accounting personnel in Nigeria are suffering from poor perception and knowledge of forensic investigative methods.

Njanike, Dube and Mashayanye (2009), worked on "the effectiveness of forensic auditing in detecting, investigating and preventing Bank frauds". The study dwelt on the effectiveness of forensic auditing in detecting, investigating and preventing Bank frauds. The paper used questionnaires, personal interviews, and document review to gather data. Data for the research was gathered from forensic auditors from thirteen commercial banks, four building societies, and four audit firms in Harare, Zimbabwe. A sample of thirty forensic auditors was used from thirteen commercial Banks, four building sectors/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. The study concluded that forensic auditors must be capacitated materially and technically to improve their effectiveness. In addition, the forensic auditors should create a constituted body that serves their interests and regulate the activities just like any other profession.

Okoye and Gbengi (2013), conducted a research titled "forensic accounting: a tool for fraud detection and prevention in the public sector of Kogi State". The population consists of 5 ministries with a total of 5,015 respondents of which 370 formed the sample size. The use of ANOVA was used in testing the hypotheses. It was discovered that forensic accounting significantly reduces occurrence of fraud in the public sector.

Akhidime and Uagbala-Ekatak (2014), in their exploration of the growing relevance of forensic accounting in Nigeria, found that though forensic accounting in Nigeria have helped fraud detection, it is lacking statutory back up. Hence, it has no significant impact in tackling corruption in Nigeria.

Pamuke and Ozkul (2012), in their investigation into fraud detection and forensic accounting concluded that forensic accounting will be one of the best careers in the future and urge Companies and government around the world to make material and moral investment for this profession, in order to ensure better world economy free of fraud.

Finally, Enofe, Okpako & Atube (2013) conducted a study on the impact of Forensic Accounting on fraud detection. In their research work, they adopted ordinary least square method. The choice of this technique arises as a result of the fact that it is subject to some crucial assumption of the error term and this provides the best of the parameter estimates of a single equation model. Based on the finding, their study reveals that forensic accounting services provide firms with the necessary tools to determine fraudulent activities but does not curb fraudulent activities.

This research is a deviance from the above stated researches. Hence this study examined the effect of forensic accounting on management of fraud in Microfinance sector, with a particular focus on Microfinance Banks in Calabar Metropolis.

2.3 Conceptual framework

2.3.1 Concept of forensic accounting

Peloubet is credited with developing the term Forensic accounting in his 1946 essay "Forensic Accounting: Its place in today's economy". By the late 1940s, Forensic accounting had proven its worth during World War II; however, formalized procedures were not put in place until the 1980s when major academic studies in the field were published (Rasey, 2009). Forensic accounting is the integration of accounting, auditing and investigative skills (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 established and the report is considered as evidence in the court of law or in administrative proceedings.

In the words of Owojori and Asaolu (2009), forensic accounting can be seen as the integration of accounting, auditing and investigative skills to obtain a particular result. Manning (2010) is not left out hence he sees forensic accounting as the application of financial accounting and investigative skills are acceptable by the courts to address issues in disputes in the context of civil and criminal litigation. In this manner, Ramaswamy (2007) sees Forensic accounting as accounting analysis that can uncover possible fraud that is suitable for presentation in court; he maintained that such analysis will form the basis for discussion, debate and dispute resolution.

To Owem and Hussey (2005), forensic accounting is undertaken in relation to proceedings in a court of law. In such circumstances, Accountants may be called on to provide expert investigations and evidence. They further see forensic accounting as that set out to determine the nature of past business activity, often on the basis of incomplete documentation.

Forensic accounting to Okoye & Gbengi (2013) includes the use of accounting, auditing and investigative skills to assist in legal matters. It consists of two components; Litigation services that recognized the role of an accountant as an expert consultant, and investigative source that uses forensic accounting skills and may require possible court room testimony. They further reiterated that forensic accounting may involve the application of special skills in accounting, auditing, finance, quantitative methods, the law and research. It also involves qualitative skill to collect, analyze and evaluate financial evidence, as well as the ability to interpret and communicate findings.

Forensic accounting is the fastest growing and highest paying field of accounting, with the integration and complexity of the global market and financial institutions, it would be in greater demand within the next few decades. The need for government regulatory authorities and courts for high level of expertise for the analysis of intricately devised frauds underlie the importance of forensic accounting (Ramaswamy, 2005).

2.3.2 Forensic accounting techniques

i. Data mining: Data mining is the process of finding anomalies, patterns and correlations within large data sets to predict outcomes. Data mining can also be used by Companies to turn raw data into useful information. By using software to look for patterns in large batches of data, Businesses can learn more about their customers and develop more effective marketing strategies as well as increase sales and decrease costs. Data mining, the extraction of hidden predictive information from large database, is a powerful new technology with great potential to help Companies focus on the most important information in their warehouses. Data mining tool predicts future trends and behaviors allowing Businesses to make proactive knowledge driven decisions. The automated prospective analyses offered by data mining move beyond the analyses of past events provided by retrospective tools typical of decision support systems. Data mining help Banks understand their customer base as well as the billions of transactions at the heart of the financial system. Data mining helps financial services Companies get better view of market risks, detect fraud faster, manage regulatory compliance obligations and get optimal returns on their marketing investments.

ii. Relative Size factor - The purpose of this is to identify anomalies where the largest amount for subsets in a given key is outside the range for those subsets. This test compares the top two amounts for each subset and calculates the Relative size factor (RSF) for each. This factor test is based on Chapter 11 of Mark J. Nigrini's book, entitled, "Forensic Analytics: methods and Techniques for Forensic Accounting Investigation" utilizing the largest and the second largest amount to calculate a ratio based on purchases which are grouped by vendors, in order to identify potential fraudulent activities in Invoice payment data, has often been suggested in Fraud examination literature. One of such reference is the "Principle of fraud examination "written by Joseph T. Wells. In Chapter 11 of Dr. Mark Nigrini's Forensic analytical book, he introduces the RSF test which further expands the concept. In this chapter, he compared large amounts to a benchmark to see how large they are relative to some norm, hence the name relative size factor test. The relative size factor test is a powerful test for detecting

errors. The test identifies subsets where the large amount is out of line with the other amounts for that subset. This difference could be because the largest record either (a) actually belongs to another subset, or (b) belongs to the subset in question, but the numeric amount is incorrectly recorded. The relative size factor test is an important error detecting test.

In the light of the above analysis, it can be summed up that relative size factor detects outliers or unusual data, which may be due to either simple errors or frauds based on the basic concept that each field in any transaction has a normal range and any data falling outside the range is unusual or an outlier and need to be further investigated. Of course, an important caveat is that these measures are not foolproof and hence one needs to be aware of its limitations so that they are only applied to certain sets of applicable data sets.

iii. Computer Assisted audit Techniques (CAATs): CAATs are computer programs and data the auditors uses as part of the audit procedures to process data of audit significance contained in a client computer information system (CIS). It therefore means that CAATS is a tool used by Auditors. These tool facilities them to make search from the irregularities from the given data, with the help of this tool, the internal Accounting department of any firm will be able to provide more analytical results. These tools are used throughout every business environment and also in the industrial sectors too. With the help of CAATs, more Forensic Accounting with more analysis can be done. It's really a helpful tool that helps the firm Auditor to work in an efficient and productive manner. The Computer Assisted Audit Techniques is made of two types. The first type is Audit software which comprises computer programs used for audit purposes to process data and audit purposes to process data and audit significance from the client accounting system. It is used by the auditor to examine the entity computer file and may be used during both test of control and substantive testing of transactions and balances as the program can scrutinize large volume of data and extract information, leaving skilled manual resources to concentrate upon the investigation of the results. The second type of Computer Assisted Audit Techniques is Test data, which is data submitted by the Auditor for Processing by the client's computer based accounting system in order to test the operation of the enterprise's computer programs.

It may be processed during a normal production run (running test data live) or during a special run at a point in time outside the normal cycle (running the test data dead).

From the above analysis, it is important to realize that working with CAATs tools is very much tricky and technical especially in the selection of right data. For this reason, forensic Accountants or Auditors need to be professionals for it.

iv. Benford's Law: Benford's law is considered as an effective and single tool in the hands of the auditors for fraud detection (Durtschi, 2004). The fact that approximately 150 articles regarding this law are published during the last five decades indicates its application to real cases. Benford's law is based on the unique observation that certain digits appear more frequently than others in data sets. For example, it has been observed that more than 30% of numbers begins with the digit one. Benford (1983) collected more than 20,000 observations from such diverse data sets as areas of rivers, atomic weights of elements, and numbers appearing in magazine articles.

Nigrini & Mittermaier (1997) show the logic of using Benford's Law to help discover unusual patterns in accounting transaction activities. It is very likely that an individual making fraudulent entries will enter the same amount or similar amounts many times. In that case, the resulting variation of first and second digits from the Benford's law probability distribution may lead the Auditor to discover the fraudulent transactions. Nigrini also outlined several practical applications where a fraud auditor could effectively employ Benford's law: Accounts payable data, general ledger estimations, duplicate payments and customer refunds (Nigrini, 1999). Other applications of Benford's law include detecting vendor kickbacks, detecting fictitious vendors, and detecting overstated divisional performance (Tapp & Burg, 2001).

Benford's law as a Forensic Accounting tool is a truly blend of the old and the new. The technology keeps advancing, allowing us to cast a wider net with greater speed and precision. It is a complement to the best efforts of fraud investigators and attorneys alike and can be a powerful tool.

2.2.3 Concept of financial fraud

Financial fraud has been variously described in literature but no one description suffices. Wikipedia dictionary describes fraud as a crime against property, involving the unlawful conversion of property belonging to another to one's own. Fraud according to Black law dictionary 1997 in Okoye and Gbengi (2013), includes all the multifarious means human ingenuity can devise that are resorted to by the individual to get an advantage over another by false suggestions or suppression of the truth. It includes surprises, tricks, cunning or dissembling and unfair ways by which another is cheated.

Mahdi and Zhila (2008) defined fraud as the intentional misrepresentation, concealment or omission of the truth for the purpose of deception or manipulation to the financial detriment of an individual or an Organization such as a Bank, which also includes embezzlement, theft or any attempt to steal or unlawfully obtain or misuse

the asset of the bank. Fraud can increase the operating cost of a Bank because of the added cost of installing the necessary machinery for its provision, detection and protection of Assets.

It was noted by Nwaze (2008) that fraud is perpetrated in many forms and usually has insiders (staff) and outsiders conniving together to successfully implement the act. 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 labor, 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.

The incidence of fraud continues to increase across private and public sector organizations across nations. Fraud is a universal problem as no nation is immune although, developing countries and their various states suffer the most pain.

2.4 Basic skills of forensic accountants

There are numerous opinions on the skills a forensic accountant should have. Harris and Brown (2000) while investigating the qualities of a forensic accountant, identifies specialized skills and abilities that should be possessed by experts of their nature. They discovered that a forensic accountant should be conversant with civil and criminal law. Also, they stressed the need for understanding of court room procedures and expectations, investigative skills, creative thinking as well as clear and precise communication skills.

According to Grippo and Ibex (2003), the most important skills of a forensic accountant arise from experience in accounting, internal controls, auditing, taxation management, interpersonal relationships, business operations and communication.

A set of competencies required by a forensic accountant have been identified by DiGabriele (2009). These skills include deductive analysis ability, creative thinking skill, and unstructured problem solving competence, investigative flexibility, and analytical proficiency including oral communication ability, written communication ability, specific legal knowledge and good composure.

In a study conducted by Davis, Farrell and Ogilby (2010), on the features and skills of a forensic accountant; the views of attorneys, academics and CPAs were sought on the basic skills that a forensic accountant should possess. The results arrived at showed that a forensic accountant should be analytical, detailed-oriented, ethical, responsive, insightful, and persistent and skeptic. Ghosh and Banerjee (2011) identified three fold approaches of skills required by a forensic accountant to include the base, middle and top layer. The base layer comprises mainly accounting knowledge. The middle layer has to do with knowledge in the fields of auditing, internal controls, risk assessment and fraud detection. While at the top layer a strong knowledge of the legal environment is required including a strong communication skill. Based on their research, a forensic accountant is expected to have competence in a broad spectrum of disciplines including accounting, law, auditing, criminology, and information technology and communication skills. Knowledge and skills required in forensic accounting include the following: Investigative skills, research, law, quantitative methods, finance, auditing, accounting, and law enforcement officer insights (Hopwood, Leiner & Young, 2012). Hence, a forensic accountant must have deep analytical ability, develop critical thinking, knowledge and skills in organizational behaviour and applied psychology.

2.5 Challenges of forensic accounting application in Nigeria

Enyi (2009) undertook a study to offer suggestions using real case problem on how to apply forensic accounting in investigating variances and suspected fraudulent activities in manufacturing processes and thus suggests that the application of forensic accounting applies to all scenes where fraud is a possibility.

Grippo and Ibex (2003), reveal the following challenges confronting the application of forensic accounting.

- i. A significant challenge that faces a forensic accountant is the task of gathering information that is admissible in a court of law.
- ii. The admissibility of evidence in compliance with the laws of evidence is crucial to successful prosecutions of criminal and civil claims
- iii. Globalization of the economy and the fact that a fraudster can be based anywhere in the world has led to the problem of inter-jurisdiction.

Degboro and Olofinsola (2007) noted that an important challenge to the application of forensic accounting in Nigeria is that the law is not always up to date with the latest advancements in technology. Also, forensic accounting is seen as an expensive service that only big companies can afford. Thus, most companies prefer to settle the issue outside the court to avoid the expensive cost and the risk of bad publicity on their corporate image. In additions, forensic accounting is a new trend particularly in developing economies. Hence, accountants with adequate technical know-how on forensic issue are hardly available.

2.6 Conceptual framework of the variables

A Conceptual frame work is a hypothesized model identifying the concepts under study and their relationships. According to Mugenda and Mugenda (2003), the purpose of a conceptual framework is to help the reader to quickly see the proposed relationship between the independent and dependent variables. Conceptual framework is a virtual or written product. It explains either graphically or in narrative form, the main things to be studied- the key factors, concepts, or variables and the presumed relationships among them. It is structured from a set of broad ideas and theories that help a researcher to properly identify the problem they are looking at, frame their questions and find suitable literature. Most academic research uses a conceptual framework at the outset because it helps the researcher to clarify its research question and aim. This study adopted a conceptual framework to describe the relationship between the forensic accounting and fraud management in micro finance bank in Calabar metropolis.

2.6.1 Litigation support

When a person, business or entity enters into a lawsuit, whether they have filed the lawsuit or are responding to it, they are entering into a process known as "litigation". The term "litigation" refers to the process of seeking a resolution of a dispute through a civil lawsuit. The process of litigation is actually a series of steps taken to resolve the matter, whether through negotiations towards a settlement or a court trial.

Litigation support therefore is all activities, usually within the law firm, that is designed to prepare a lawyer to try a case, including document review, interviewing witnesses, and case preparation. Litigation support involves using accounting and Auditing techniques to qualify economic damaged pursuant to existing or pending litigation. It provided assistance of an accounting nature in a matter involving existing or pending litigation. It deals primarily with issues related to the quantification of economic damages.

Indeed, it can be gathered that litigation support enhance effective intervention of the legal services to provide legislations, rules and regulations to govern the proper conducts of forensic accounting system and their techniques in carrying out these practices.

2.6.2 Forensic investigation

Forensic investigation in this context refers to fraud investigation. Fraud investigation involves a variety of steps designed to protect an individual or a business minimizes disruptions and preserve evidence. Fraud investigation can be seen as the utilization of specialized investigative skills in carrying out an inquiry conducted in such a manner the outcome will have application to a court of law.

Investigation is the official examination of fact about a situation crimes etc. When an error or fraud is detected, audit (investigation) is done and the culprits are apprehended and controlled and thereby preventing fraud in the system. This implies that a Successful prosecution depends ultimately on the effective investigation.

Thus, effective investigation involves the utilization of different methods and techniques during the investigation process. These methods are identification, interviewing and securing of evidence. For effective investigation to be executed, the investigator must adopt the following steps; identify the type of fraud, create an investigative plan, interview and re-interview the victim and securing evidence. fraud investigations pose numerous problems and pitfalls. Investigators must remain professional at all times, no matter how frustrating these cases are, they must be focused. There are many steps to take during complex fraud investigations, but keeping to a few basic investigative steps mentioned above can make all the difference.

From the analysis of this concept, it can be inferred that fraud investigation is to discover if a fraud had actually taken place, to identify the monetary amount of the fraud (suffered by client) and to ultimate present finding to the client.

2.6.3 Fraud prevention

Fraud prevention is an aspect of fraud management. For a more comprehensive view of the concept, it would be expedient to look at it from the aspect of fraud management.

Fraud management is a system where corporate bodies seek tools that will help them to pro-actively prevent, detect and stop fraudulent activities on their network (Paul, 2002).

To Koh (2009) when a company undergo severe financial problems and end up in Bankruptcy, Fraud by Senior Management may be involved. Fraud management detects known fraud types and patterns of unusual behavior, helps investigate these unusual patterns for potential fraud, and uses the knowledge thus generated and protect against future intrusion.

From the above definition of fraud management, it implies that fraud management involves both manual and automated actions aimed to curb fraud losses and protect card holders (ATM Users) from unauthorized use of their accounts. The present economy therefore calls for the use of higher technology to combat fraud by management.

To sum it all, fraud management approach is seen as a deliberate effort of preventing fraud can be achieved using the following measures;

- i. Taking steps to create and maintain a culture of honesty and high ethics.
- ii. Assessing the risk of fraud and developing concrete response to mitigate the risk and eliminate the opportunity for fraud.
- iii. Periodic location of Staff.
- iv. Reinforcement of control system.
- v. Installation of machine or mercury light that are capable of detecting forge notes.
- vi. Strict disciplinary actions to deter staff.
- vii. Moving Company of good friends.
- viii. Audit function - internal audit.
- ix. Effective use of policy personnel.
- x. Managers showing interest in the life of staff without necessary policing.

III. Research Methods

3.1 Research design

This study adopted a survey research design. It is a method of design that describes or predicts some phenomenon by asking questions. This is to say that the study used questionnaire to solicit responses from persons/respondents believing to have the desired information. Adopting a survey method requires researchers to construct a questionnaire needed to collect data from respondents. This facilitates the investigation of the relationship between the variables under study.

The population of this study was the entire management staff of selected microfinance banks in Calabar, Cross River State as at November, 2017. Through a pilot survey, there was sixty five (65) management staff from the selected micro finance banks. This is used as the population of the study.

The sample size for this study was fifty five (55) staff chosen from the selected Microfinance banks in Calabar, Cross River State. The Taro Yamane formular was used in determining the sample size as it avoids biasness in the study Yamane (1967) as cited in Tapang, Bessong and Ujah (2015).

3.2 Model specification

A mathematical model was used for this a study. This was expressed below as:

$$FP = f(FI, LS) \dots \dots \dots (1)$$

It is stated econometrically as;

$$FP = b_0 + b_1FI + b_2LS + Ut \dots \dots \dots (2)$$

Where FP= Fraud Prevention

FI = Forensic investigation

LS = Litigation Support

Bo= Constant term

b₁ and b₂= Coefficients of the independents variables

Ut = Stochastic error term.

IV. Regression Result

The regression analysis is conducted to show the effects of the independent variables on the response variable. For the ordered estimation conducted in this study, the main statistics of interest are the coefficient estimates and their corresponding significance. The diagnostic statistics (such as the McFadden Pseudo R-squared values) provide less useful representation of the models. However, the Lagrangian ratio (LR) statistic, provide some information on the performance of the estimated model. The estimation of the censored model involved three approaches. The choice of the best model to interpret is based on the size of the LR value for each of the reports. The model with the least LR probability value performs better. The regression results and analysis are presented in table 4.1.

Table 4.1: Regression results

Variable	Probit			Logit			Extreme value		
	Coeff.	z-Stat.	Prob.	Coeff.	z-Stat.	Prob.	Coeff.	z-Stat.	Prob.
FI	-0.14	-2.394	0.017	-0.233	-2.343	0.019	-0.17	-2.658	0.008
LS	-0.118	-2.188	0.029	-0.226	-2.431	0.015	-0.08	-1.558	0.112
Pseudo R-squared		0.073			0.075			0.062	
LR statistic		20.09	0.000040		20.82	0.000030		17.23	0.000

Source: Researchers' computation (2018) from E-view 9.5

Table 4.1 showed that the LR value for both the probit and logit models at 20.09 and 20.82 respectively have probability values less than 1%. However, because the logit model has the least value (0.000030 as against the probit model (0.000040), we focus on the logit result for analysis and conclusion. In table 4.20, the coefficients of forensic investigation (FI) (-0.233) is negative and significant at less than 5 percent level (the probability of z-values is 0.019). The general implication of this results is that FI passed the significance test and therefore contributes significantly to fraud prevention. Similarly, the coefficient of litigation support (LI) is negative (-0.226) and significant at less than 5 percent level. This shows that LI assists in fraud prevention.

4.2 Findings

Based on the empirical analysis, the regression results showed that the estimated coefficients of the regression parameter are all negative signs. The implication of these signs was that the actively engagement of forensic investigation and litigation support reduces fraud in the selected microfinance banks in Calabar, Cross River State. This corroborates with the study of Okafor and Agbiogwo (2016) that possession of basic forensic skills significantly reduce the occurrence of fraud cases in the banking sector and that there is a significant difference between forensic accountant and internal auditor. He also added that the presence of forensic accountants in banks can aid in reducing fraud cases. This also support the works of Srivastava, Mock and Turner (2003), who found that forensic audit procedures significantly lowered fraud risks.

Individual test of the independent variables was carried out so as to know the significant effects of each of the variables, result shows both forensic investigation and litigation support were significant.

V. Conclusion/Recommendations

5.1 Conclusion

The role of a forensic accountant under contemporary conditions no doubt is very important because they help professional and regulatory bodies and other institutions in investigating and documenting frauds. The increasing occurrence of fraud in modern day business environment requires the services of forensic accountants to unearth fraudulent activities within and outside an organization. The continued audit failures over decades have prompted a paradigm shift in accounting. It is generally accepted that an auditor has the duty to perform tests to detect material defalcation and errors if they exist. However, fraud detection experts called forensic accountants are now been hired in developed economies to investigate cases of fraud. It is concluded that forensic accounting play a significant roles in the prevention of crimes and corruption in the selected micro finance banks in Calabar, Cross River State.

5.2 Recommendations

Based on the findings and conclusion of this study, the following are recommended;

- i.** Managements of micro finance banks in Calabar should develop more interest in forensic accounting for monitoring and investigating suspected culprits in fraud cases
- ii.** Managers appointed to manage and run microfinance banks should be tested and the integrity ad trustworthiness should be proven before they are appointed to manage and oversee the affairs and the activities of the banks.
- iii.** Financial laws should be up to date with latest advancement in technology to ensure admissibility of evidence in a law court for successful prosecution of criminal cases.
- iv.** The accountancy professional bodies should increase their effort in providing functional and cutting edge education to their client and develop curriculum that would incorporate forensic accounting with a view to make them globally competitive in financial sectors.

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Bassey Eyo Bassey. “Effect of Forensic Accounting On the Management of Fraud In Microfinance Institutions In Cross River State.” *IOSR Journal of Economics and Finance (IOSR-JEF)* , vol. 9, no. 4, 2018, pp. 79-89.