

UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

**COMBATING FRAUD – THE ROLE OF FORENSIC AUDITING IN FINANCIAL
INSTITUTIONS, A CASE STUDY OF BARCLAYS BANK GHANA LIMITED,
TAMALE MAIN BRANCH, IN THE NORTHERN REGION OF GHANA**

SAMUEL RANDOLPH TAWIAH

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BY

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(UDS/MPC/0023/13)

**THESIS SUBMITTED TO THE DEPARTMENT OF ACCOUNTANCY AND
COMMERCE, SCHOOL OF BUSINESS AND LAW, UNIVERSITY FOR
DEVELOPMENT STUDIES, IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE DEGREE IN
ACCOUNTING**

MARCH, 2017



DECLARATION

CANDIDATE'S DECLARATION

I, Samuel Randolph Tawiah, hereby declare that, this thesis is entirely my own work and that it has not been previously published, neither has it been submitted anywhere for the award of any degree. All references cited here are duly acknowledged.

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SUPERVISOR'S SIGNATURE

Supervisor's signature..... Date.....

Name: Mr. Alhassan Musah



ABSTRACT

The study explores how forensic auditing tools have been employed to prevent and minimize financial fraud by Barclays Bank Tamale Main Branch in Tamale Metropolis in Northern Region of Ghana. The study adopted cross-sectional survey research design and was mainly descriptive in nature with both primary and secondary data collected for the study. The study used open ended questionnaires to gather data from 180 respondents. The findings revealed that 53.6 percent of the respondents strongly agreed that documents of value and liquid assets are exposed to ‘undisciplined’ staff or unauthorized person(s) like customer(s) in the Bank with attendant security risks. Additionally, the study established that 43.4 percent of the respondents strongly agreed that staff of the branch has some form of frustration in relation to the adequacy of measures aimed at combating fraud.

Findings from the study further reveals that 40.4 percent of the respondents agreed that staff checks for identity of clients to be sure of the authenticity of the transaction and identity of the clients in order to detect fraudulent transactions in the bank, 40.0 percent of the respondents strongly agreed that staff compare the signature on identity cards against signature on cheques or any other specimen to be sure of the authenticity of the transaction and identity of the clients in order to detect fraudulent transaction in the bank. The study recommends that training and guidance is vital in maintaining the effectiveness of the strategy for the detection and prevention of fraud and corruption. Management of Barclays Bank needs to support induction and professional training, particularly for employees involved in internal control systems and the accounting sector, to ensure their responsibilities and duties are regularly highlighted, reinforced, and that best practices are followed across lines of duty.



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DEDICATION

To the late Mr Emmanuel Attah and his surviving wife, Mrs Grace Adubea for their loving care and providence.



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LIST OF ACRONYMS

ACFE	-	Association of Certified Fraud Examinations
ATM	-	Automated Teller Machine
BAGL	-	Barclays Africa Group Limited
CBN	-	Central Bank of Nigeria
CEO	-	Chief Executive Officer
CFF	-	Certified Financial Forensic
CIMA	-	Chartered Institute of Management Accountants
EMA	-	Europe Middle East and Africa
ID	-	Identity
KPMG	-	Klynveld Peat Marwick Goerdeler
KYC	-	Know Your Customer
NASB	-	National Accounting Standards Board
NDIC	-	Nigerian Deposit Insurance Corporation
PWC	-	Price Waterhouse Coopers
SAS	-	Statements on Auditing Standards
SMS	-	Short Messages Services



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

On daily basis, issues of fraud and corruption dominate discussions in both academic and non-academic circles in Ghana. In recent times, economic and financial crimes have grown at alarming rate on account of increasing globalization and the enhanced media of communication. Economic crimes in the past, when technology and other communication media were not advanced were limited to officials or other agents who handled other people's money or other economic resources hence the name 'white collar crimes'. As the name suggested, these were crimes committed by those of the clerical and administrative class of employees and other agents by reason of their privileged positions within their set-ups. Such crimes did not require physical presence or contact with the property, only ability to have access to and deal with the property on paper. Thus the offences were mostly of a financial nature such as embezzlement, fraud by agents, fraud by false pretenses, counterfeiting, issuing false prospectuses, among others. The range of offences was also limited in sphere because the perpetrator had to be the custodian or trustee before the crime could be possible (Oduro 2010).

However, owing to the advancement in technology, globalization and improvements in communication and computers as well as the developments in financial markets, credit financing and the scope of international trade, several other economic crime possibilities have opened up. The range and variety of crimes of a financial nature have so multiplied that the term 'white collar crime' has become too narrow and the more general term '*economic or financial crime or fraud*' reflecting the current trends and nature of the activity appears to be



a more appropriate term to describe the varied nature of criminal activities within financial institutions which management, the Police and other law enforcement agencies must now contend with. ‘White Collar Crime’ has ceased to be an appropriate term for the other reason that as the categories of fraud have so been opened up by technological advancement and developments, so has the profile of the offender or perpetrator changed. With emphasis shifting from pen and paper to telephone, facsimile and computer, the perpetrator of economic crimes has ceased to be the one who has to be well-educated to have the necessary access and opportunity to commit the crime. Consequently, in economies with high illiteracy rates such as Ghana, those capable of perpetrating economic crimes may no longer be the ‘white collar’ type. The presence of “419 Scammers”¹ is an indication that knowledge of basic computing is sufficient to perpetrate gargantuan internet financial fraud. Ghana is rapidly becoming a world leader of fraud and online scams (Wymoo, 2012).

1.2 Problem Statement

The incidence of fraud and misappropriation of funds in recent times poses a threat to auditing as a branch of accounting profession because of its perennial nature. This has resulted to questions as to whether auditing actually play any significant role towards the attainment of accountability and prevention of fraud especially that which is currently happening in major or key financial institutions. Instances of corporate fraud and misconduct remain a constant threat to public trust and confidence in capital markets (KPMG Forensic, 2006).

¹ 419 Scam is a type of fraud and one of the most common type of confidence tricks. The scam typically involves promising the victim a significant share of a large sum of money, which the fraudster requires a small up-front payment to obtain. If the victim makes the payment, fraudster either invents series of further fees for the victim, or simply disappears. Also known as advance-fee scam or 419 fraud as a result of its prevalence in Nigeria in the 1990s and a section of the Nigerian Criminal code that makes these kind frauds illegal.





It is even more worrying considering the fact that in most cases it takes too long a time to detect even the least of sophisticated frauds. The eventual detection consequently leads to stakeholder outrage, loss of confidence as well as affect the reputation and solvency of these institutions. Oftentimes, the scale of actual fraud or misrepresentations counted as fraud is so enormous that it results in tax evasions which have serious repercussions not only for the affected institution but also for the national economy. For instance, directors may write off losses of fraud (including money laundering) under the general heading of “bad debt” rather than admitting that there have been a general failure to exercise or implement proper safeguards in the system of internal checks and controls or managerial negligence in applying or perfecting the appropriate oversight to routine business process where institutions’ funds and assets are at risk.

To counter, stop and prevent the perpetration of such frauds comes forensic auditing or accounting. Forensic auditing or accounting is the specialty practice area of accountancy that describes engagements that result from actual or anticipated disputes or litigation. “Forensic” means “suitable for use in a court of law” and it is to that standard and potential outcome that forensic accountants also referred to as *forensic auditors* or *investigative auditors* often have to give expert evidence at the eventual trial of persons, companies and institutions who have committed fraud, in a court of law. Thus, Forensic Audit deals with the examination and evaluation of a firm’s financial information for use as evidence in court. It is therefore, very important to study the causes of fraud of various nature in order to understand the possible remedies to eliminate the canker. In addition, and based on the above analyzed problem, this study is operationalized by sourcing answers to the following questions.

1.3 Main Research Question

Does Barclays Bank Tamale Main in Tamale Metropolis engage forensic auditing tools to prevent and minimize financial fraud?

1.3.1 Specific Research Questions:

1. What are the challenges faced in financial fraud detection by Barclays Bank Tamale Main in Tamale Metropolis in the Northern Region of Ghana?
2. What types of financial fraud are found in Barclays Bank Tamale Main in Tamale Metropolis in Northern Region of Ghana?
3. What forensic auditing tools does Barclays Bank Tamale Main in Tamale Metropolis in Northern Region of Ghana employ to detect financial fraud?

1.4 Main Research Objective

The aim of the study is to ascertain the extent to which financial institutions have engaged forensic auditing tools to prevent and minimize financial fraud with emphasis on Barclays Bank Tamale Main in Tamale Metropolis in the Northern Region of Ghana.

1.4.1 Specific Research Objectives

1. To evaluate the challenges faced in financial fraud detection by Barclays Bank Tamale Main in Tamale Metropolis in Northern Region of Ghana.
2. To explore the different types of financial fraud found in Barclays Bank Tamale Main in Tamale Metropolis in the Northern Region of Ghana.
3. To determine forensic auditing tools that Barclays Bank Tamale Main in Tamale Metropolis in Northern Region of Ghana employs to detect financial fraud.



1.5 Significance of the Study

The rationale of the research focuses on why the research is being carried out and who is likely to gain from the findings. Two categories were identified for this research and they are explained below:

1.5.1 Academic Rationale

There has been substantial academic investigation in the area of forensic auditing or accounting and challenges in combating fraud (Joshi 2003; Idowu 2012 and Izedonmi 2000). There is, however, inadequate empirical research that links forensic auditing to financial institutions in Ghana. Hence this research would contribute to enhancing the awareness, usefulness, and explore challenges in combating fraud using techniques of forensic auditing.

1.5.2 Business Rationale

Financial institutions are the main institutions which are and continue to suffer financial or economic fraud. The creation of awareness, employment of forensic auditing, identification of challenges associated with it in routine business administration will reduce fraud and other misappropriations in financial institutions. It will also enhance success and improve the corporate standing of such institutions as well as sanitize the general operational environment devoid of financial scams. This will eventually position businesses strategically to retain confidence of their stakeholders and attract venture capital when required.

1.6 Scope of the Research

The scope of this project is to identify the existence of financial fraud and how they are exposed by staff in Barclay Bank Tamale Main Branch in their core lines of business. It will focus mainly on banking and non-banking concerns and intermediaries in the finance industry. The research will not touch on governmental institutions. It will also ignore outcome



of fraud related cases in the past or on-going. It is also important to state that the coverage of the study will be limited to Barclays Bank Tamale Main Branch in the Tamale Metropolis in the Northern Region of Ghana only. The respondents to interviews will be accountants, auditors, corporate legal representatives and corporate risk analysts who are charged with the responsibilities of preventing, detecting, and handling corporate fraud.

1.7 Organization of Work

The study is organized into five chapters: Introduction, Review of Literature, Methodology, Analysis of Results, Conclusion and Recommendations. Chapter one which introduces the work contains the background to the study, problem statement, objectives of the study, scope and limitations of the study. Chapter two focuses on the review of relevant literature in previous works done on the topic. The various methodologies for the research make up the third chapter. It focuses on the research setting, population for data collection, sampling size and sampling techniques, research design, data collection and analysis procedure. The fourth chapter analyzes results of all data collected and chapter five draws conclusions and recommendations.



CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

This chapter reviews literature related to the study objectives and concepts of fraud and forensic auditing in the banking sector. The literature is reviewed in the following sections, Section 2.2 Definitions and concepts, Section 2.3 looked at theories of the study and sections 2.4 reviewed literatures on empirical evidence, which are other articles and papers on forensic auditing and fraud in the banking sector.

2.2 Definitions and Concepts

Fraud is a universal phenomenon which has been in existence for so long. It is one of the numerous enemies of the business world. Fraud is in all walks of life, in government, the export/import sectors, shipping transactions, banking, insurance among several others. Organizations have been formed to combat it and Interpol (International Police) tries to deal with it at the international level, but it has not and cannot be eradicated (Nwankwo, 1991). Its magnitude cannot be known for sure, because much of it is undiscovered or undetected and not all that is detected is published. It is a known fact that no area of banking system is immune to fraudsters, not even the security team designed to prevent it (Idowu, 2009). Its management has become a central point in banking like the management of risk because of the above facts (Idowu, 2009).

2.3 Meaning of Fraud

The term “fraud” is one which is used with variety of meanings. It is usually used as;

- a. A tort at common law.
- b. A name for false representation.



- c. A name for such unfair dealings as it will induce a court of equity to refuse specific performance against the party who has been deceived by such fraud or in some cases, to grant rescission upon the complainant's application.
- d. According to Adeniji (2010), fraud refers to "an intentional act by one or more individuals among management, employees, or third parties, which results in a misrepresentation of financial statements". It may also involve:
1. Manipulation, falsification or alteration of records or documents.
 2. Misappropriation of assets.
 3. Suppression or omission of the effects of transaction from records or documents.
 4. Recording of transactions without substance.
 5. Misapplication of accounting policies.

Adeniji (2010) further explains that among the various definitions of fraud, the most common is that "fraud is a generic term, and embraces all the multifarious means which human ingenuity can devise, which are resorted to by one individual, to get an advantage over another by false representations. No definite and invariable rule can be laid down as a general proposition in defining fraud, as it includes, surprise, trickery, cunning and unfair ways by which another is cheated. The only boundaries defining it are those which limit human knowing".

Chakrabarty (2013), in delivering his paper titled Fraud in the banking sector – causes, concerns and cures indicated that fraud can loosely be defined as "any behavior by which one person intends to gain a dishonest advantage over another". In other words, fraud is an act or omission which is intended to cause wrongful gain to one person and wrongful loss to the other, either by way of concealment of facts or otherwise. Fraud is described as an act of



deliberate deception with the intention of gaining some benefit, in other words, it is the act of dishonestly pretending to be something that one is not (Chamber English Dictionary, 2002 cited in Owolabi, 2010 p 243). The view of Adewumi (1986) is that fraud is a conscious premeditated action of a person or group of persons with the intention of altering the truth and or fact for selfish personal monetary gain. It involves the use of deceit and trick and sometimes highly intelligent cunning and know-how. The action usually takes the form of forgery, falsification of documents and unauthorized signatures and an outright theft.

2.3.1 Types of Fraud in the Banking Sector

Banking fraud is not very convenient to group into types, because it takes various dimensions, nature and forms. Nwanze (2006) submitted that bank fraud can be classified into, executive fraud and other frauds. Ogundeji (2005) as cited by Nwanze (2006) gave the following types of bank fraud: executive, foreign exchange, domestic operations, reconciliation, money market and treasury, risk assets, information technology, financial control, clearing, fund transfer, teller operations and customer services related frauds. Ojo (2006) also described fraud typology as consisting of syndicated fraud, corporate fraud, executive fraud, internal fraud, external fraud, computer fraud, electricity-failure-aided fraud ,good boy and good girl syndrome aided fraud, rotten leadership aided fraud, slow judicial aided fraud and survival politic induced aided fraud.

Also, Owho (2005) emphasized the following types of fraud: theft and embezzlement, defalcation, forgeries, suppression, fraudulent substitution ,payment against uncleared effects, unauthorized lending, lending to ghost borrowers, kite flying and cross firing, unofficial borrowing, foreign exchange malpractices, impersonation, over invoicing, manipulation of voucher, fictitious contracts, fictitious accounts, over/under valuation of properties, false



declaration of cash shortages, fraudulent use of bank documents, falsification of status report, misuse of suspense account, duplication of cheque books, drafts, mail transfers, interception of clearing cheques, interception and switching of telex messages, inflation of statistical data, laundering, computer frauds, false proceeds of collection, robberies, teeming and lading, fake payment, claim of supernatural influence, and double pledging.

The different types of fraud which includes: employee embezzlement, management fraud, investment scams, vendor fraud, customer fraud, among others were categorized into three (3) broad headings by Keshi (2011 cited in Franklyn, 2013), as internal fraud, external fraud and corruption or collusion.

2.3.1.1 Internal Fraud.

This is the most common form of fraud found in organizations. The perpetrators of this kind of fraud are managers (mostly top or middle level management) and employees.

2.3.1.2 External Fraud.

This is another form of fraud that is being perpetrated by those outside the organization, which may include customers or organized criminals.

2.3.1.3 Corruption or Collusion

This is one of the most difficult kinds of fraud to recognize. It is fraud perpetrated within the corporation by an inside employee and an outsider.

Idowu, (2009), argues that Bank frauds can be classified into three, that is: by flow, by victims and by act.

2.3.1.3.1 Flow Frauds

It is described by the frequency and the value involved in the fraud. They are of two types:



- a. Smash and Grab: these are frauds not frequently committed, but are high in value over a short period of time.
- b. Drip: this is large in number, small in value and repetitive over a long period.

2.3.1.3.2 Victims Frauds

This is a classification based on the people affected by loss from fraud. This is also of two types:

- a. Against the company (bank): In this case, the bank is the victim of any loss incurred through the fraud.
- b. Against outsiders: The victim of the fraud is an outsider to the company or bank, that is, bank customers.

2.3.1.3.3 Act of Frauds

This is the action that takes place in cases of fraud, that is the people involved in the act and the methods or forms by which these people perpetrate fraud. The perpetrators could either be the bank's employees, executive management of board, armed robbers, or theft by outsiders perhaps in collusion with insiders.

Owolabi, (2010) examines typology of fraud under the following headings: executive/corporate fraud, common fraud, and computer aided fraud as explain below.

2.3.1.4 Common Fraud

Common fraud is a classification that embodies various types of fraud that cut across most common departments in the banking industry. Mostly they are categorized into: clearing fraud, advance fee fraud, money transfer fraud counterfeit securities, Cheque kitting, theft, and embezzlement, robberies, forgeries, defalcation and letter of credit fraud.



2.3.1.5 Clearing Fraud

This is the act of stealing, depriving, duping or exploiting an individual, organization or group of institutions through criminal manipulation of clearing instruments. The clearing fraud takes the following forms:

- a. **Suppression of Clearing Instruments:** This is perpetrated by paying a cheque drawn on account with insufficient fund. The appropriate thing would have been to return such cheque, thus, the payment of such cheque is fraudulent due to suppression.
- b. **Payment against Unclear Effects:** A direct credit awarded a customer on a cheque deposit which had not been cleared is a fraud. The cheque may be returned unpaid what happens to the credit advantage of the depositor.
- c. **Conversion of Clearing Instruments:** This is common when a cheque or draft drawn in favour of one person gets into the hands of a wrong person by any fraudulent means and coincidentally the wrong person enjoyed the value on the instrument, this is a fraud due to wrong conversion of clearing instruments, that is, accepted by a bank for which it cannot fully guarantee collectability until the institution on which such cheque is drawn has confirmed that funds are available to cover them.

2.3.1.6 Letter of Credit Fraud

A letter of credit is an undertaking by an issuing bank on behalf of an importer (the applicant) that payment will be made for goods or services supplied by the exporter (the beneficiary) provided that the exporter complies with all the terms and conditions stipulated by the credit (Okororie, 2005 cited in Owolabi, 2010). This document passes through many confirmation stages through which a fraudulent banker can manipulate and defraud the bank or the exporter. The common practice is that some beneficiaries to the credits use forged or



fraudulent documents. In such cases, these documents are presented to the confirming or issuing bank. Bank payment is demanded against the credit whether or not the bank's documents appear to comply with the terms of the credit.

2.3.1.7 Executive Fraud

Executive fraud is characterized by the following: loan application through fronts, foreign exchange transfer profiteering, Business development and public relations, Loan recovery fraud, cost of fund (interest padding), property rental frauds, over-invoicing on purchases and other contracts, utilization of bank's time and other resources.

2.3.1.8 Computer-Aided Fraud

This is a process involving all acts, and the use of the computer and similar devices and their manipulations aimed at depriving persons or corporations of their property without their knowledge. This can take different forms.

- a. A computer is the main object of fraud.
- b. The computer creates a unique environment in which fraud takes place.
- c. The computer as an instrument for committing fraud.

Computer fraud can be perpetrated through input manipulation, file manipulation, program manipulation or operations manipulation. A combination of any of the above methods may end up with the following effects on operations.

- (a) Tampering with computer files.
- (b) Manipulation of input data.
- (c) Creating fictitious account.
- (d) Using password belonging to other staff.
- (e) Fixing of dummy applications.



(f) Using master passwords.

In almost the same manner, e-banking also attracts varieties of fraud such as skimming, (counter fact card fraud) stolen card, fraudulent applications, card data manipulation, Automatic Teller Machine (ATM) video, spam mails or denial service, access swift fraud, money transfer frauds, inter-bank clearing frauds, money laundering frauds, and scam mails.

2.3.2 Methods by Which Fraud can be Perpetrated

There are various methods by which fraud can be perpetrated in the banks and other organizations. The list of methods is usually not exhaustive as new methods are devised with time. The most important and common methods according to Onkagba (1993) discussed below.

2.3.2.1 Advance Fee Fraud

This may involve an agent approaching a bank, a company or individual with another to access large funds at below market interest rates often for long term (Owolabi, 2010).. This purported source of funds is not specifically identified as the only way to have access to it through the agent who must receive a commission “in advance”. As soon as the agent collects the fee, he disappears and the facility never comes through. Any bank desperate for fund especially distressed banks and banks needing large funds to bid for foreign exchange can easily fall victim to this type of fraud. When the deal fails and the fees paid in advance are lost, these victims are not likely to report the losses to the police or to the authorities (Okororie, 2005 cited in Owolabi, 2010).



2.3.2.2 Forged Cheques

This is by far the commonest method by which customers and banks are defrauded. They occur mainly in company accounts and are invariably perpetrated by staffs within the company who have access to the company's cheque book.

2.3.2.3 Fund Diversion

In this case, bank staff, for personal use, sometimes diverts customers' deposits and loan repayment. Another case of this is the tapping of funds from interest in suspense accounts in the bank.

2.3.2.4 Cheque Kitting

This happens when a depositor utilizes the time required for a cheque to clear to obtain an authorized loan without interest charge. The goal of the cheque kilter may be to use these uncollected bank funds, interest fees for a short time to overcome a temporary cash shortage or to withdraw the funds permanently for personal use. Competition among banks in the era of deregulation encourages bank to make funds available before collection of customers' cheque in order to attract special business accounts.

2.3.2.5 Account Opening Fraud

This involves the deposit and subsequent cashing of fraudulent cheques. It usually starts when a person not known to the bank asks to open a transaction account such as current and savings account with false identification but unknown to the bank.

2.3.2.6 Counterfeit Securities

Counterfeiting of commercial financial instruments is one of the oldest forms of financial crimes. Modern photographic and printing equipment has greatly aided criminals in reproducing good quality forged instruments. The documents may be total counterfeit or may



be genuine documents that are copied, forged or altered as to amount, payout date, or terms of payment. A common fraud is to present the counterfeit stocks or bonds as collateral for loan. The presenter would draw out the proceeds and disappear before the financial instruments are found to be counterfeit.

2.3.2.7 Money Transfer Fraud

Money transfer services are means of moving funds to or from a bank to beneficiary account at any bank point worldwide in accordance with the instructions from the banks' customers. Some common means of money transfer are mail, telephone, over-the-counter, electronic process and telex. Fraudulent money transfer may result from a request created solely for the purpose of committing a fraud or altered by changing the beneficiary's name or account number or changing the amount of the transfer.

2.3.2.8 Letter of Credit Fraud

This generally arises out of international trade and commerce. They stimulate trade across national borders by providing a vehicle for ensuring prompt payment by financially sound institutions. Overseas suppliers continue to receive spurious letters of credit, which are usually accompanied by spurious bank drafts with fake endorsements which guarantee payments.

2.3.2.9 Computer Fraud

This type of fraud takes the form of corruption of the programme or application packages and even breaking into the system through remote sensors. Diskettes and flash drives can also be tampered with to gain access to unauthorized areas or even give credit to accounts for which the funds were not originally intended. This kind of fraud can remain undetected for a long time.



2.3.2.10 Clearing Fraud

Most clearing frauds hinge on suppression of an instrument so that at the expiration of the clearing period application to the instrument, the collecting bank will give value as though the paying bank had confirmed the instrument is good for payment. Clearing cheques can also be substituted to enable the fraudster divert the fund to a wrong beneficiary. Misrouting of clearing cheques can also assist fraudsters to complete a clearing fraud. Asukwo, (1991) states that, a local clearing item can be routed to an up country branch; the delay entailed will give the collecting bank the impression that the paying bank had paid the instrument.

2.3.3 Causes of Fraud

Causes of Fraud can be categorized into two, which are institutional factors and environmental/societal factors. He further categorized societal/environmental factors into socio-economic lapses or inadequacies (Adewunmi, 1986).

2.3.3.1 Institutional Factors

According to Nwaze (2008), the institutional factors or causes are those that can be traced to the internal environment of the organization. They are to a great extent factors within the control of the management of the bank.

A major institutional cause of fraud is poor management. This comes in the form of inadequate supervision. A junior staff with fraudulent tendencies that is not adequately supervised would get the impression that the environment is safe for the perpetration of fraud. Poor management would also manifest in ineffective policies and procedures, which a fraudulent minded operator in the system will capitalize on. Even where there are effective policies and procedures in place, fraud could still occur with sometimes deliberate skipping of these tested policies and procedures.





Inexperienced operators are susceptible to committing unintentional fraud by falling for numerous tricks of fraudsters. An inexperienced operator is unlikely to notice any fraud attempts and take necessary precautionary measures to checkmate the fraudster or set the detection process in motion. Overstretching is another reflection of poor management. This can aid perpetration of fraud to a large extent. A staff that is overstretched is not likely to perform at optimum level of efficiency.

Ordinarily, the longer a man stays on the job, the more proficient he is likely to be. An operator who has spent so long on a particular job may be encouraged to think that no one else can uncover his fraud. The existence of this kind of situation in a bank is clear evidence of poor management and such situations encourage fraudulent practices.

Poor salaries and poor conditions of service can also cause and encourage fraud. Employees who are poorly paid are often tempted to fraudulently convert some of the employers' monies to their own use in order to meet their personal and social needs. This temptation is even stronger on bank employees who on daily basis have to deal with cash and near cash instruments. In most situations, it is argued that greed rather than poor working conditions or poor salaries is what lures most people into fraudulent acts. This explains why fraud would still exist in the banking sector, which is reputed to be one of the highest paying sectors. Some people have an insatiable appetite to accumulate wealth and would therefore steal irrespective of how good their earnings are.

Frustration could also lead to fraud. Where staffs feel short-changed in terms of promotion and other financial rewards, they become frustrated and such frustration could lead to fraud as such employee would attempt to compensate himself in his own way. Among the internal causes of fraud, the Nigerian Deposit Insurance Corporation (NDIC 1999 cited in Idowu,

(2009), states that prevalence of fraud and forgeries are an indication of weakness in bank internal control system.

2.3.3.2 External/Environmental Factors

Environmental factors are those that can be traced to the banks immediate and remote environment. If the whole society of which the bank is a part is morally bankrupt it will be difficult if not impossible to expect the banks to be insulated from the effects of such moral bankruptcy (Idowu, 2009).

The banking industry is not immune from the goings-on in its external environment. Societies are increasing verging on moral bankruptcy. Little or no premium is put on virtues 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 honoured. It is a fact of our time that fraud has its root firmly entrenched in the social setting where wealth is honoured without questions. The desire to be with the high and mighty caliber of the society, extreme want that is often characterized by need, cultural demands or the cultivation of a life too expensive for the legitimate income of the individual. With reference to fraud, criminal motivation is said to be pathological when the state of mind of the criminal disposes and impels him to commit fraud even though he is not in dire need of the resources.

Also, worth mentioning is lack of a call-over system in the banks, lack of regular and un-notified rotation of clerks, doing more than one job which is incompatible and so on are major causes of fraud. A call-over system is a system where all bank transactions are verified for accuracy, authorization and reliability. It is a system where previous day's transactions are reviewed in order to ascertain validity (Idowu, 2009).



2.3.4 Control of Fraud in Banks

In view of the gravity of fraud in banks, the management of various banks has employed different measures, such as establishment of internal control unit, fraud alerts, security measures among others. Yet fraud has continued in an upward trend, and this has called the effectiveness of these measures into question (Okubena, 1998). Though details may differ from one bank to another, it all depends on size, location and general environment nationally and internationally. Nwankwo (1991) was of the opinion that general procedures for the control should normally involve identification and detection, then lastly management.

2.3.4.1 Fraud Identification

Every bank is to be aware of and identify the types of frauds prevalent in the society, including the international society, the causes and modalities of the frauds and the potentials and prospects of some of them occurring in the bank. This will be a function of volume, types and concentration of the bank's operations and the management control systems.

There are internal and external management controls. Internal management controls are carried out within the company while external controls are carried out on the outside. Internal management control is classified into two major groups: Internal Checks and Internal Audit. Internal checks are the operational controls, which are built into the banking system to simplify the processing of entries in order to secure prompt services, to help in minimizing clerical errors and to act as insurance against collusion.

Internal Audit on the other hand involves the review of operations and records undertaken within a business by specifically assigned staff, which is usually the Internal Auditor. There also exists external auditors too who examine the books of the bank to determine its truth and



fairness. This kind of audit is mostly statutory in nature, which is called for by the law (Onkagba 1993).

2.3.4.2 Fraud Prevention and Detection

The process of identification of frauds will enable the bank to assess its susceptibility and identify which types it has to address particularly. Having done so, the next stage would be to evolve measures to prevent the occurrence of such frauds. The existing control systems can be classified into two, those aimed at prevention and those aimed at detection. Ekechi (1990) stated that measures aimed at fraud prevention include dual control, operational manual, graduated limits of authority, lending units, reporting systems, close circuit television, establishment of inspectorate units, referencing on presentation of document of value, segregation of duties, verification of signatures, controls of dormant accounts, detection of passport sized photos, close watch on the lifestyle of staff and coding/decoding and testing of telex messages.

Measures aimed at fraud detection include checking of cashiers, call-over, reconciliation and balancing of accounts at branches, interbank transactions at head office levels, periodic submission of statement of accounts, stock taking of security items and cash in the vaults and inspection by bank inspectors (Ojeigbede, 2000).

The Central Bank of Nigeria (CBN) as the supervisor and regulator of the banking systems is interested in ensuring that banks put in place comprehensive and effective internal control systems to minimize the incidence of frauds and whenever they occur to ensure that they are detected. From the point of view of supervisors, a good internal control system must have the following attributes: dual control, segregation and rotation of duties, an effective and



independent inspection functions, clearly defined levels of authority and responsibility, existence of an efficient Audit Committee and adequate fidelity insurance cover.

It is also the responsibility of the supervisor to determine the banks' compliance with rules and regulations through exhaustive review of their internal audit reports. They ensure that appropriate steps are taken by the board and management of banks to address issues raised in the audit reports. It is also their duty to ensure that fraudulent bank directors and staff are sanctioned with such report being duly circulated among banks and also that banks take advantage of Risk Management System (credit bureau) to monitor fraudulent customers and accomplices (CBN, 2000).

The supervisors are also to cooperate with the external auditors of banks to ensure that the internal audit programme of banks is comprehensive, adequate and effectively executed. The supervisors should also conduct an in-depth investigation into activities of a bank when put on enquiry.

In order to enhance the ability of supervisors to carry out their responsibility effectively, they must be adequately trained and equipped with modern tools for supervision.

2.3.4.3 Fraud Management

In devising the general preventive measures, the bank should appreciate the main feature of fraud, one of which is that fraud is rapidly increasing and it is a highly profitable industry. According to Ekeiqwe (2000), computer technology facilities and accentuates the growth. Other features are that frauds involve misappropriation of assets and manipulation or distortion of data and most frauds result from basic failure and inadequacies of internal controls. This was rightly confirmed in a report by the NDIC1999 Annual Reports and statement of accounts, where it said that most frauds are committed by insider usually in



collusion with outside third parties, and mostly are discovered by accident or tip offs rather than internal and external auditors.

It was suggested by Nwankwo (1991) that on the discussion of the anatomy of frauds, management should evolve positive attitudes towards safeguarding the bank's assets and ensuring that staff does not exploit the weakness in internal control. He further said that the policies should stress the cardinal principles of separation of duties to ensure that one person does not originate and complete an assignment or entry. The policy should also emphasize dual control of sensitive areas such as strong rooms and locks to security documents and account, the need for daily balancing of account and the various precautions which include necessary references for opening of accounts.

Ekechi (1990) was of the opinion that, in order to attain the objective of fraud management, there is need for full compliance with established policies, rules and procedures. Also employees should be made aware of the risks of attempting to defraud the bank and the action expected if caught.

Finally the policy should incorporate and emphasize investigation and possible prosecution of suspected frauds. In controlling fraud in the banks, the boards of directors play a major role because the leadership responsibilities must be clearly spelt out and formally explained to them. This responsibility should include the directing of the overall policy and management of the bank, fiduciary duty to act honestly and with utmost good faith, and exercise of skill and care in discharging the statutory obligations of the bank. In particular, the board has the collective responsibility of the members to ensure that suitable security systems exist, there are adequate accounting records and internal control measures and there are adequate



precautions to prevent falsification of accounting records and facilitate the discovery of any falsification (Asukwo, 1991 & Oyeyiola, 1996).

The CBN plays its own role in helping banks manage fraud through its monetary policy and guidelines. CBN demands that banks should make provisions for loss through frauds from its gross profit. This policy was enacted to safeguard the depositor's money since it is obvious that depositor's money will be lost when there is an incidence of fraud. According to the Monetary Policy Circular No.36 of 2002/2003, CBN requires banks to make a provision of 10% on amounts involved in fraud cases up to 6 months old of which police investigation are still on. A minimum of 50% provision should be made on outstanding fraud cases of 6 to 12 months old with slim chances of full recoveries. Finally, a full provision (100%) should be accorded to outstanding fraud cases of over 12 months with protracted litigations that is, cases that are pending in court.

2.3.5 The Fraud Management Lifecycle

Effective management of the Fraud Management Lifecycle starts with a common understanding or definition of the stages in the lifecycle. Without this awareness and understanding, fraud management professionals are unlikely to communicate effectively with each other, with their peers in other industries, and within their respective businesses. The terms "lifecycle stage" and "stage" throughout this document are used as a reference to a set of activities. The use of the term stage does, however, bring with it references to a series of sequential independent actions that is not representative of the concepts being advanced by this document. Webster's dictionary refers to a lifecycle as "a series of stages in form and functional activity through which an organism passes between successive recurrences of a specified primary stage" (Webster's, 1997, 1976, &1941). Webster also refers to a network as



“an interconnected or interrelated chain, group or system” (Webster’s, 1997 cited in Wilhelm, et al, 2004). The Fraud Management Lifecycle can be best described as a combination of these two definitions, a network lifecycle. Unlike a traditional linear lifecycle, a network lifecycle’s stages are not necessarily linked sequentially, where activities in one stage are completed and then the functioning is passed on to the next stage in the chain. To the contrary, a network lifecycle facilitates simultaneous and sequential actions within each of the lifecycle stages or network nodes. The convenient term “stage” in a network lifecycle is more specifically a reference to the activities, operations, and functions performed. One can reasonably think of the various lifecycle stages as various disciplines within fraud management. The linking of the lifecycle stages as network nodes allows the representation of non-linear, non-sequential, even recursive activity. The interrelationships and interdependence of the stages or nodes can be explained without the restriction of the traditional sequential lifecycle stage progression. The Fraud Management Lifecycle is, therefore, a network lifecycle where each node in the network, each stage in the lifecycle, is an aggregated entity that is made up of interrelated, interdependent, and independent actions, functions, and operations. These activities can, but do not necessarily, occur in a sequential or linear flow.

The Fraud Management Lifecycle is made up of eight stages. Deterrence, the first stage, is characterized by actions and activities intended to stop or prevent fraud before it is attempted; that is, to turn aside or discourage even the attempt at fraud through, for example, card activation programs. The second stage of the Fraud Management Lifecycle, prevention, involves actions and activities to prevent fraud from occurring. In detection, the third stage, actions and activities, such as statistical monitoring programmes are used to identify and locate fraud prior to, during, and subsequent to the completion of the fraudulent activity. The





intent of detection is to uncover or reveal the presence of fraud or a fraud attempt. The goal of mitigation, stage four, is to stop losses from occurring or continuing to occur and/or to hinder a fraudster from continuing or completing the fraudulent activity, by blocking an account, for example. In the next stage, analysis of the losses that occurred despite deterrence, detection, and preventive activities are identified and studied to determine the factors of the loss situation, using methods such as root cause analysis. The sixth stage of the Fraud Management Lifecycle, policy, is characterized by activities to create, evaluate, communicate, and assist in the deployment of measures to reduce the incidence of fraud. Balancing prudent fraud reduction policies with resource constraints and effective management of legitimate customer activity is also part of this stage. An example is the requirement that any cash transaction over \$10,000 be reported.

Investigation, the seventh stage, involves obtaining enough evidence and information to stop fraudulent activity, recover assets or obtain restitution, and to provide evidence and support for the successful prosecution and conviction of the fraudster(s). Covert electronic surveillance is a method used in this stage. The final stage, prosecution, is the culmination of all the successes and failures in the Fraud Management Lifecycle. There are failures because the fraud was successful and successes because the fraud was detected, a suspect was identified, apprehended, and charges filed for prosecution. The prosecution stage involves asset recovery, criminal restitution, and conviction with its attendant deterrent value.

2.3.5.1 Stage One: Deterrence

Successful deterrence is the stopping of fraud before it happens. Deterrence or “to deter,” is defined as, “to inhibit or discourage through fear; hence to prevent from action by fear of consequences” (Webster, 1997 cited in Wilhelm, et al, 2004). In the fraud arena we need to

expand this definition to include the aspect of difficulty. Fraudsters tend to migrate toward the path of most anonymity and least resistance. Therefore, increasing the difficulty of committing the fraud effectively functions as an incremental increase in deterrence. For example, when conducting an online transaction, requiring address verification provides an incremental increase in deterrent value, because the perpetrator must know how to circumvent and defeat the verification process. Adding a component to the online transaction becomes a deterrent, as it makes the fraudster work harder. For the purposes of this study deterrence will be viewed as activities designed, through fear of consequences or difficulty of perpetration, to turn aside, discourage, or prevent fraudulent activity from being attempted. The aggregate nature of deterrence is implied; deterrence is not viewed as a monolithic whole, but rather an aggregation of activities with varying degrees of deterrent value. Deterrent value is a summation of the deterrent contributions and detractions provided by each stage in the Fraud Management Lifecycle. Thus, successful deterrence is contingent upon the performance of the other stages of the Fraud Management Lifecycle.

2.3.5.2 Stage Two: Prevention

In the fraud arena, prevention, detection, and deterrence are sometimes used synonymously. This contributes to confusion within the organization, as well as in external entities, about the focus of prevention activities. The activities in the prevention stage, though closely associated with deterrence and detection, occur after deterrence has failed and before the suspicion or detection of fraud has been accomplished.

Prevention is defined as, “to prevent, to stop or keep from doing or happening, to hinder a person from acting” (Webster, 1997 cited in Wilhelm, et al, 2004). Prevention is a general term meaning hindering, checking, or stopping. In the fraud arena the use of the term



prevention emphasizes both common forms of the definition, to keep from doing and to hinder the fraudster from performing fraudulent activity. For the purposes of this study the definition of prevention is to hinder, check, or stop a fraudster from performing or perpetrating a fraudulent activity.

Prevention stage activities are intended to prevent the fraud from occurring or to secure the enterprise and its processes against fraud. The ability of prevention to stop losses from occurring versus stopping fraudulent activity from continuing is an important distinction. The latter activities are more appropriately mitigation stage activities. Prevention, when perceived from a security perspective, can be thought of as hardening the target. Prevention actions are frequently similar to security activities in the information technology area. Deploying protective procedures, processes, systems, and verifications among others that makes fraud harder to be committed duly prevents fraud. Prevention activities are designed to make fraud more difficult to commit. For example, the purpose of the many security features on credit and debit cards is to make card based fraud more difficult. Telecommunications subscription fraud is made more difficult by interactive verification and authentication procedures. Know Your Customer (KYC) processes for opening accounts in the financial industry make it more difficult for fraudsters to open fraudulent accounts. Querying historical fraud claim files in the insurance hinders the activities of fraudsters.

2.3.5.3 Stage Three: Detection

The third stage of the Fraud Management Lifecycle, detection, is characterized by actions and activities intended to identify and locate, and assess fraud prior to, during, and subsequent to the completion of the fraudulent activity. While “prior to” may sound like deterrence, it refers to the detection of testing or probing activity used by criminals to facilitate a fraud attempt.



To detect, is to uncover or reveal, or to discover the existence or presence of the fact of something hidden or obscure (Webster, 1997 cited in Wilhelm, et al, 2004). Detection encompasses three closely related activities in the fraud arena: fraud testing, fraud attempts, and fraud successes. The separation is derived from the facts that not all fraud attempts are successful and that not all perceived fraud attempts are intended to be successful. These “tests” are attempts to reverse engineer the current fraud policies and detection activities in order to locate vulnerability. Thus, detection in the fraud arena must include revealing the existence of fraud testing and fraud attempts, as well as successful frauds. The identification of testing, attempts, and successes are typically clustered in the detection, prevention, and mitigation stages, but are also relevant in each of the other stages of the Fraud Management Lifecycle. Detection includes identification of a testing component, an attempt component, and a success component. Only detection in all three of these areas provides the required support for the rest of the stages in the lifecycle. To miss any of these is to run the risk of creating a vulnerability that the fraudster will turn to his advantage.

2.3.5.4 Stage Four: Mitigation

Mitigation commences after the presence or a reasonable suspicion of fraudulent activity has been detected. In short, mitigation stops fraud. Other common and relevant terms for the activities in this stage are interdiction and intervention.

Sometimes mitigation activities are called prevention and aftercare, where the prevention is focused on stopping the ongoing fraud from continuing. Mitigation is defined as, “to cause to become less harsh or hostile” and “to make less severe or painful” (Webster, 1997 cited in Wilhelm, et al, 2004). Mitigation focuses upon fast actions that are intended to reduce the extent of the fraud, the amount of the associated fraud losses, and the effort and expense





required to recover or correct the impact of the fraudulent activity. This last goal is especially important when identity theft and the resulting identity fraud are involved. The faster the fraud activity is detected and mitigation activities initiated, the less time, effort, and expense will have to be invested in correcting the consumer's credit record. The definition of mitigation in the fraud arena is to stop a fraudster from continuing or completing the fraudulent activity, to reduce its success. Mitigation activities can range from real time to delay. Clearly the faster mitigation activities can be undertaken, the better for all involved, except, of course, the fraudster. The environment in which the business enterprise operates defines the meaning of real time. For example, real time can range from a ten second authorization in the payment card industry to a one minute phone call in the telecommunications industry, to a ten minute instant credit application in the retail industry, to a weeklong mortgage application process, to a month long insurance claim process, to an extended internal employee fraud investigation. Clearly the environment defines the mitigation activities that can be taken in real time.

The fundamental premise is to begin mitigation activities as quickly as possible. The speed with which mitigation can be initiated is constrained by the timeliness and capabilities of the detection systems and processes utilized. If the fraud involves an employee and detection is accomplished through receiving calls from a customer or tips from an external agency, the opportunity to mitigate losses, expenses, and impact will be significantly constrained. If, on the other hand, detection systems can alert or trigger special investigations before customers and outside agencies become aware of the fraud, the opportunity to mitigate losses, expenses, impact, and exposure will be significantly enhanced. Mitigation performance, then, is constrained by both the business environment and the detection tools being used. Fast

mitigation actions provide the promise of speedy termination of the fraud event, reduced losses, and reduced expenses and impact. Much of the resource balancing in the Fraud Management Lifecycle revolves around the appropriate allocation of sufficient, efficient, and early mitigation efforts.

2.3.5.5 Stage Five: Analysis

Analysis is characterized by activities to identify and understand losses that occurred despite the deterrence, detection, prevention, and mitigation stage activities. Analysis must evaluate the impact of fraud management activities upon legitimate customers. The product or service cost structures must be evaluated and understood to ensure the appropriate prioritization of casework. Analysis is defined as, “the separation of anything into its constituent parts or elements, to analyze, to make an analysis of, to study in detail the factors of situation, problem or the like, in order to determine the solution or outcome” (Webster, 199 cited in Wilhelm, et al, 20047).

The analysis stage receives data regarding performance from each of the other stages in the Fraud Management Lifecycle and provides them with feedback regarding performance. Analysis provides the performance reporting metrics that allow fraud management to make informed, calculated, and relevant decisions. Analysis processes include the evaluation of the volume and causes of losses, the evaluation and reporting of analyst and investigator performance, the evaluation and reporting of individual and aggregate rule (detection) performance, the evaluation and reporting on predictive score performance, the individual and aggregate customer service impact for each of the various stages, the analysis of staffing productivity in each of the disciplines, the appropriate mix of resources in each discipline, the performance of new and existing strategies, the comparison of the performance of competing



(champion-challenger) strategies, and supporting policy's request for retroactive and prospective hypothetical analysis.

2.3.5.6 Stage Six: Policy

Policy activities create, evaluate, communicate, and assist in the deployment of fraud policies to reduce the incidence of fraud and the inconvenience to legitimate customers, and to allocate the resources required to successfully combat fraud. Policy is defined as, "wise management, prudence or wisdom in the management of affairs, management based primarily on material interest" (Webster, 1997 cited in Wilhelm, et al, 2004). Policy must seek to balance deterrent value, loss reduction, sales volume, operational scalability, and cost effectiveness. The ability to balance all of these demands surely requires the wisdom referenced in the definition of policy. In many ways policy development is the process of constantly reassembling the situations just disassembled in the analysis stage. The reassembly needs to take advantage of the knowledge gained by analysis and combine it with internal, external, and interactive environmental factors in order to craft policies that address the whole, while leveraging the knowledge of the parts. Policy development staffs are most frequently the leaders within the fraud management organization, as they must be able to consider all the disciplines within the fraud management department, as well as the needs of the rest of the business enterprise.

2.3.5.7 Stage Seven: Investigation

Investigation activities obtain enough evidence and information to stop fraudulent activity, to obtain recovery of assets or restitution, and to provide information and support for the successful prosecution and conviction of the fraudster(s). Investigation is defined as, "to investigate; a careful search or systematic inquiry; to follow up or make research by patient inquiry, observation, and examination of facts" (Webster 1997 cited in Wilhelm, et al, 2004).



In the fraud arena the definition of investigation needs to be expanded to include the important coordination activities with law enforcement entities.

Fraud investigations are focused upon three primary areas of activity: internal investigations, external investigations, and law enforcement coordination. The first area, internal investigations, includes investigations of employees, contractors, consultants, or vendors. External investigations are conducted on “customers” (fraudulent claims), “fraudsters” (individual crooks), and “organized groups” (an association of criminals). Frequently fraud cases are neither exclusively internal nor external. In these situations, internal fraudsters and external fraudsters work in concert to commit fraud. One of the more common examples of this situation is when a fraudster or organized group targets an employee to assist them with the commission of the fraud.

Law enforcement coordination is the provision of information and resources to, and the maintenance of, a partnership with federal, state, regional, and local law enforcement authorities. Rigorous and routine investigations provide for both an incremental lift in deterrence and the maintenance of an effective relationship with law enforcement entities. A rigorous investigation includes comprehensive and detailed case documentation, complete detailed descriptions of the activity, accurate and complete interview notes, extensive contact information, and high quality physical and digital evidence documentation and storage. Each case is investigated with the idea that it will be prosecuted and case files are prepared as appropriate. The investigations stage benefits greatly from the planned, systematic search for facts and other supporting information, as well as the ingenuity, initiative, thoroughness, and responsiveness of the investigator. The law enforcement relationship is not a one-way street. An important part of the relationship is providing substantive responses, professional



assistance, and detailed documentation when calls and other inquiries are received. Depending on the business environment these requests for information can and are received twenty-four hours a day, 365 days a year. One of the most critical support components in the investigative function is the development of training on, and maintenance of, detailed investigative procedures.

2.3.5.8 Stage Eight: Prosecution

The elements in this stage are focused upon prosecutorial and judicial authorities as well as with law enforcement. Prosecution is defined as, “the act or process of prosecuting; to conduct legal action against, to pursue by legal proceedings for redress or punishment, especially because of some crime or breach of law” (Webster, 1997 cited in Wilhelm, et al, 2004). There are three aims of prosecution in the fraud arena. The first is to punish the fraudster in an attempt to prevent further theft. Secondly, prosecution seeks to establish, maintain, and enhance the business enterprise’s reputation of deterring fraud, so that the fraud community becomes aware of it. This is accomplished by the aggressive and successful apprehension and punishing of fraudsters who target the company. The third goal is to obtain recovery or restitution wherever possible. Some would argue that there is a fourth aim, that of satisfaction for punishing the fraudster. The emotional feelings of satisfaction, though positive, are fleeting and tend to obscure the realistic evaluation of prosecution activities. The importance of prosecution should be limited to deterrence, recovery, and restitution.

After a case has been forwarded to law enforcement agencies for the apprehension of a suspect, the philosophical point of no return has been crossed. From this point on, the case should be prosecuted to its natural conclusion. The charges filed should be maintained and the



case prosecuted even in the face of offers of restitution and mounting witness expenses. It is always advisable to request appropriate restitution as part of the sentencing recommendations. An additional activity important to the prosecution stage is the consistent and visible coordination of supportive legislative and regulatory activities to stop fraudulent activity. This activity frequently falls on senior managers and legal counsel due to their experience, industry contacts, and broad perspective. These efforts often require, and should receive, the support of line managers and supervisors in assessing the impact of recommendations, the creation of alternatives, and the creation of committee that give presentations and recommendations.

2.3.6 Cost and Impact of Fraud

Fraud is very costly. According to the Association of Certified Fraud Examinations (ACFE), an estimated \$3.5 trillion worldwide were lost due to fraudulent financial statements, asset misappropriation, and corruption in 2011 (ACFE, 2012). In an effort to restore public trust in the audit profession, accounting standard setters have increased the steps auditors are expected to take in order to detect fraud. As a result of the Enron and WorldCom debacles, auditors are currently required to adhere to the requirements of Statements on Auditing Standards (SAS) No. 99. (cited in Chui and Pike, 2013). Rezaee (2004) revealed that financial statement fraud has cost market participation more than USD\$500 billion during recent years, with serious litigation consequences. It will also give a view towards companies who wish to educate and increase awareness of the public regarding the seriousness of the fraud.

KPMG's Fraud Survey (2003) reveals that more companies are: recently experiencing incidents of fraud than in prior years; taking measures to combat fraud; 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 percent



of respondents in 50 countries reported significant economic crimes with the average loss per company of \$2,199, 930 (PWC 2003).

It is worthy to note the difficulty in quantifying the magnitude of fraud losses since majority of fraud go undetected and unreported (Bhasin, 2013). However, the available statistics offer useful information on the effect of fraud on organisations and the society. Bhasin (2013) presents a list of numerous financial frauds and scandals with historical significance from both the developed and developing nations. Some of these scandals include Global Crossing (Bermuda), Nortel Network (Canada), Vivendi Universal (France), Adelphia Communication, IBM, Enron, Xerox, Lehman Brothers (USA), United Engineers Bhd (Malaysia), Wiggins, Versailles (UK), Samsung Electronics among others. The fraud problem continues to plague organisations and stakeholders around the world (Ravisankar *et al* 2011). The Association of Certified Fraud Examiners' (ACFE, 2010) in its Report to the Nations on Occupational Fraud and Abuse, found that financial statement fraud though less than 5 per cent of total fraud cases reported averaged about 1.7 million dollars per incident. This was by far the most costly of all types of fraud. By implication, the figure translated to an annual loss of more than 3.5 trillion dollars when applied to the 2011 Gross World Product. Similarly, the Committee for Sponsoring Organisations of the Treadway Commission fraud report (2010) in their report of 347 cases of frauds from 1998 to 2007 discovered that an average dollar amount of each occurrence of fraud had increased from 4.1 million dollars in 1999 to 12 million dollars in 2007. In the United Kingdom, the scale of loss in 2012 against a victim is about 73 billion pounds annually and has been on the increase (National Fraud Authority (UK), Annual Fraud Indicator, 2012).



In India, fraud losses amounted to INR 66 billion in 2011-2012 (The Ernst & Young's India Fraud Indicator) while fraud loss in Nigeria for 2012 alone was more than 1.5 billion dollars (KPMG, 2012). The damage done by fraud can only be imagined than believed and when fraud is discovered it is always a surprise for the firm to believe because it is always so much that they may be forced to believe that such a loss did not occur. In most cases frauds are not always reported due to the negative impact or the risk of embarrassment and reduction in the level of confidence in customers or shareholders (KPMG, 2012). This may lead to inability to say emphatically how much has been lost to fraud. However, the estimated amount of fraud related losses reached \$650 billion in 2006 (Wells 2007).

2.3.7 Concept of Forensics

The concept forensic auditing and forensic accounting are used interchangeably. The concept has been enunciated by several authors and scholars. According to Dahli (2008), forensic comes from the Latin word for public' and specifically to 'forum'. The forum was where the Ancient Romans were taught to do business and settle disputes among other things. He further buttressed that forensic relates to the application of knowledge to legal problems such as crimes. This definition traces the history of forensic accounting and its application in litigation support. Forensic is as old as history but its usage got little attention in the past. It's now becoming prominent because of increase in financial scandals. Joshi (2003) ascribed the origination of forensic accounting to Kutilya, the first economist whom he said mentioned 40 ways of embezzlement centuries ago.

Maurice Peloubet is credited with developing the term forensic accounting in his 1946 essay "Forensic Accounting: Its place in Today's Economy". Formalized procedures of forensic accounting were not put in place until the 1980s when major academic studies in the field



were published(Rezaee et al. 1996). Forensic accounting is defined as an "accounting specialization in which investigative and analytical skills are applied forth purpose of resolving financial issues in a manner that meets standards required by courts of law" (Hopwood, et al. 2012 and Bolgnaand Lindquist (1995). The word fraud is absent from the definition. Hopwood et al. (2012) define fraud examination as an investigation undertaken to determine the facts of a suspected fraud. Thus, the two terms are not synonymous and not interchangeable. This is also emphasized by the AICPA and Covaleski, (2003) which delineate the following practice areas that fall under the relatively new certified financial forensic (CFF) credential and what is generally considered "fraud examination" is only one of seven practice areas within the forensic accounting umbrella below:

- (a) Bankruptcy, insolvency and re-organization.
- (b) Computer forensic analysis.
- (c) Economic damages calculation.
- (d) Family law.
- (e) Financial statement misrepresentations.
- (f) Fraud prevention, detection and
- (g) Business valuation.

According to Crumbley et al. (2011) forensic accounting concerns an issue that co-joins accounting and law. It is conducted within the context of the rules of evidence, and includes all activities designed to prepare a lawyer to try a case, including interviewing parties involved, document review, draws conclusions and provides an accounting analysis that is suitable to the court which will form the basis for discussion, debate and ultimately resolution of disputes that involve claims (Kranacher et al.2008 and 2011; Lexbe, 2010; American



Institute of Certified Public Accountants-AICPA, 2004 and Bolgna and Lindquist, 1995). Thus, forensic accounting is not only about investigating fraud or fraud examination. Forensic accountants serve as expert witnesses. They do not testify as to whether fraud has occurred. This is the court's decision and the expert witness presents evidence (Gray, 2008).

A forensic auditor is viewed as a combination of an auditor and private investigator. He should possess the knowledge and expertise to interpret financial statements or to work under circumstances where financial information has been destroyed or tampered with, necessitating the creation of information to determine if appropriate actions have taken place. The potential significance of forensic accounting is described by Neal Batson, the former United States Department of Justice Examiner who was assigned to investigate the Enron Corporation scandal. He stated that, "There has been no other time in the legal and accounting professions when it has been more important for the two to work together". This indicates that forensic accounting and fraud examination are important areas and will likely continue to be important.

2.3.8 Forensic Auditing

Forensic auditing is a blend of traditional accounting, auditing, and financial detective work. Technology has an increasingly important role to play, with complex data analysis techniques employed to help flag areas that warrant further investigation (QFINANCE, 2009).

Forensic auditing offers a toolset that company managers can use to help detect and investigate various forms of white-collar financial impropriety and inappropriate or inefficient use of resources. As company structures and controls become ever more complex, so too does the scope for employees with specialized knowledge of the way control systems work to bypass them. In the past, various forms of auditing have been employed after a major control



breach has come to light, but executives are now increasingly looking at forensic auditing to help identify vulnerabilities in financial control (QFINANCE, 2009).

Forensic auditing is defined as the application of auditing skills to situations that have legal consequences Chatterji (2007). Mobile Greek (2011), defined forensic auditing as an examination and evaluation of a firm's or individual financial information for use as evidence in court. It can be conducted in order to prosecute a party for fraud, embezzlement or other financial claims. It is also seen as "an examination and evaluation of a firm's or individual's financial information's for use as evidence in event". During a forensic auditing, professionals compile and assess financial information to be used in legal proceedings, whereas the auditing is conducted by forensic auditors who rely on the principles of law, business and ethics. These reports are sometimes used to prepare legal defenses as well as prosecuting a party for fraud, embezzlement or other financial claims (Investopedia, 2011).

In relation to this, Scott (2008 cited in Franklyn, 2013) defined forensic auditing as a special practice of accounting that involves using auditing techniques to specifically look for financial misconduct. Forensic auditing has been seen as a specialization within the field of accounting, whereby forensic auditors provides experts testimony during trial proceedings (Nigrini, 2011).

Forensic accounting, also called investigative accounting or fraud audit, is a merger of forensic science and accounting. Forensic science according to Crumbley(2003) "may be defined as application of the laws of nature to the laws of man". He refers to forensic scientists as examiners and interpreters of evidence and facts in legal cases that also offers expert opinions regarding their findings in court of law. The science in question here is accounting science, meaning that the examination and interpretation will be of economic





information. Joshi (2003) defined Forensic accounting as the application of specialized knowledge and specific skill to stumble up on the evidence of economic transactions. Zysman (2004) put Forensic accounting as the integration of accounting, auditing, and investigative skills. Simply put, forensic accounting is accounting that is suitable for legal review offering the highest level of assurance and including the now generally accepted connotation of having been arrived at in scientific fashion (Crumbley, 2006).

Coenen (2005) stated that forensic accounting involves the application of accounting concepts and techniques to legal problem. It demands reporting, where the accountability of the fraud is established and the report is considered as evidence in the court of law or in the administrative proceeding (Joshi). It provides an accounting analysis that is suitable to the court, which will form the basis of discussion, debate and ultimately dispute resolution (Zysman, 2004).

These means that forensic accounting is a field of specialization that has to do with provision of information that is meant to be used as evidence especially for legal purposes. The persons practicing in this field (i.e. forensic accountants) investigate and document financial fraud and white-collar crimes such as embezzlement and investigate allegations of fraud, estimates losses damages and assets and analyses complex financial transaction. They provide those services for corporation, attorneys, criminal investigators and the Government (Coenen, 2005).

Their engagements are usually geared towards finding where money went, how it got there, and who was responsible. They are trained to look beyond the numbers and deal with business reality of the situation (Zysman, 2004).

2.3.8.1 Advantages

- (a) Forensic auditing strengthens control mechanisms, with the objective of protecting the business against financial crimes, be they potentially catastrophic one-off events that

could threaten the viability of the business, or smaller-scale but repetitive misappropriations of company assets over a number of years.

(b) Forensic auditing can play an important role for companies under review by regulatory authorities and can also be invaluable to ensure regulatory compliance. For example, forensic auditing can be useful in helping companies to ensure that their anti-money laundering procedures are both effective and robust.

(c) Forensic auditing can help protect organizations from the long-term damage to reputation caused by the publicity associated with insider crimes. A forensic audit also provides a sound base of factual information that can be used to help resolve disputes, and can be used in court should the victim seek legal redress.

(d) Forensic auditing can improve efficiency by identifying areas of waste.

(e) Forensic auditing can help with the detection and recording of potential conflicts of interest for executives by improving transparency and probity in the way resources are used, in both private and public entities.

2.3.8.2 Disadvantages

(a) A poorly managed forensic audit could consume excessive management time and become an unwelcome distraction for the business.

(b) Forensic audits can have wide-ranging scope across the business. Under certain circumstances, the scope of the audit may need to be extended, with an increase in its budget.

(c) Some employees can interpret a proactive forensic audit as a slight on their integrity, rather than as a means to improve control procedures for the benefit of the business.



- (d) Understand your risks, routes to their potential exploitation, and the tools available to detect abuses, fraud, or wastage.
- (e) Analyze numerical data, comparing actual costs against expected costs.
- (f) Investigate possible reasons for inconsistencies.
- (g) Consider whether covert detection techniques might be more appropriate when investigating cases of possible fraud. Higher-profile full forensic audits can deter future fraud but could also reduce the likelihood of witnessing the culprit carrying out a fraudulent act.
- (h) External auditing specialists with extensive experience of complex forensic audits can offer industry specific experience, auditing management expertise, and advanced interviewing techniques. A combination of these external specialists and companies' internal accountants/auditors can achieve shorter audit timescales and lower levels of disruption to the business.

2.3.8.3 *Dos and Don'ts*

2.3.8.3.1 *Do*

- (a) Remember that well-resourced forensic auditing processes can help to identify misreporting at many levels of an organization.
- (b) Bear in mind that regular proactive forensic audits can help businesses to ensure that their processes stay robust.
- (c) Be prepared to widen the scope of a forensic audit to ensure maximum effectiveness.
- (d) See forensic auditing as a continuous process, rather than a one-off event. On completing one audit, restarting the process could uncover something that was previously overlooked.



- (e) Be prepared to share the findings of the forensic audit with other areas of your company, and take into account industry best practice to improve efficiency and combat fraud.

2.3.8.3.2 Don'ts

- (a) Don't lose sight of the objective of a forensic audit. The cost can be high, but the potential cost of not undertaking an audit and implementing its findings can be even higher.
- (b) Don't fall into the trap of overlooking the importance of the "forensic" element of the audit. With the results of such a process deemed suitable for inclusion in legal proceedings, the high potential costs of the forensic audit process could easily be recovered from dispute resolution or higher levels of loss recovery (QFINANCE, 2009).

2.3.8.4 Application of Forensic Audit

Due to the increase of fraudulent practices, there has been increasing risk of auditing skills to prevent fraud by identifying and rectifying situations which could lead to fraud been perpetrated. It has been observed that the cost of implementing procedures to monitor and restrict the fraudulent acts are far less than the fraud risk that companies face each day (Chatterji, 2007). It will be useful therefore to discuss forensic as being either "proactive or reactive".

2.3.8.4.1 Proactive Forensic: This audit helps businessmen to ensure that the processes stay robust, and it can be viewed from different aspects depending on its application (Ezeilo, 2010).

2.3.8.4.2 Statutory Audit: In this case, auditing standard prescribe that internal control



should be studied and evaluated in respect of safeguarding assets and resources when performing regularity and financial audit, and in assisting management in complying with laws and regulations when performing compliance auditing(Asosai, 2011).

2.3.8.5 Regulatory Compliance: This technique is usually used by government departments or agencies to access compliance with regulations governing payments or grants or subsidies. Performance auditors could also use this technique while auditing such governmental programs (Ezeilo, 2010).

2.3.8.6 Diagnostic Tool: Forensic auditing can be used either by management or by auditors to carry out general reviews of activities to highlight risk arising either out of fraud or from any other source, with the purpose of initiating focused reviews on particular areas and targeting specific threats to the organization(Asosai, 2011).

2.3.8.7 Investigation of Allegation: The techniques of forensic auditing are useful in this case in the sense that various complaints and allegations could be used as a guild for gathering evidence used in investigation. This is cited as being proactive because it is widely felt that the existence of a system of investigation in such cases is significant deterrent to fraud and corruption (Ezeilo, 2010).

2.3.8.8 Reactive Forensic: They objective of this audit is to investigate cases of suspected fraud so as to prove or disprove the suspicious and if proven, the person involved is to be identified, the findings are to be supported by evidence, after which it is presented in an acceptable format in any subsequent discipline or criminal proceedings (Ezeilo, 2010).

Due to the processes involved in reactive forensic audit, it is important therefore to keep in view the following:

- a. Working relations with the investigating prosecuting agencies.



- b. Authorization and control of the audit investigation.
- c. Documentation of relevant information and safeguarding all prime records pertaining to the case.
- d. Rules of evidence on government admissibility or authentication of records.
- e. Confidentiality of evidential document.
- f. Evaluation of the evidence to assess whether the case is sustainable.
- g. Legal advice where appropriate.
- h. Reporting the findings in a manner that needs legal requirements (Chatterji, 2007).

2.3.9 Investigative Audits

Ezeilo (2010) defined investigative audit as “audit that are performed to investigate incident of possible fraud or misappropriation of institution funds.” It is usually seen as an audit that takes place as a result of report of unusual or suspicious activity on the part of an individual or a department. It usually focuses on specific aspects of the work of a department or individual in relation to fraud and corruption, so as to examine how the systems can be reinforced for fraud prevention and detection.

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



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

- a. Information (informants).
- b. Interviews (witnesses).
- c. Interrogation (suspects).
- d. Instrumentation (crime laboratory, comparison microscopes, polygraph etc).

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

2.3.10 Fraud Investigation Steps

There is a common tendency to interpret a successful investigation as one in which the fraud is detected, but for this to be achieved certain steps are usually involved in investigation and they include; planning, data/Evidence collection, evaluation of evidence and report writing(Ekeigwe, 2011).

- a. **Planning:** This ensures that a guide of what needs to be done is put to place. It is the foremost step to be taken if a substantial result is required for it is the processes by which an organization solves problem of determining its relationship with its environment (Anyago, 2011).
- b. **Data/Evidence collection:** In order to present the formation obtained, the evidence collected needs to be evaluated using different methods, including automated tools so that an easy conclusion can be made (Driven et al, 2003 cited in Franklyn, 2013).



- c. **Evaluation of Evidence:** In order to present the formation obtained, the evidence collected needs to be evaluated using different method, including automated tools so that an easy conclusion can be made(Driven et al, 2003 cited in Franklyn, 2013).
- d. **Report Writing:** If the investigation confirms that fraud has been perpetrated or attempted, a formal report has to be written on the outcome of the investigation for presentation to senior management with a copy of it presented to anti-fraud officer (Driven et al, 2003 cited in Franklyn, 2013).

2.3.11 Responsibilities of a Forensic Auditor

A forensic auditor is expected to perform the following responsibilities as listed below:

2.3.11.6 Conducting Investigation

In the views of Owojori & Asaolu (2009), the failure of the statutory audit and the sophisticated financial fraud in recent times had led to the need for forensic audit. Thus, the forensic accountant could be said to have special tools for conducting investigation as to detect and prevent fraudulent activities thereby combating financial fraud. Zimbleman(1997), states that a forensic accountant being a fraud investigator is very much likened to a physician who requires significant amount of agnostic and explanatory work to discover what really is happening. In view of the above, it can be said that a forensic accountant goes beyond the normal audit as to unveil fraudulent activities by using forensic software tools in conducting and investigating transactions and events.

2.3.11.7 Reconstruction of Incomplete Accounting Records

A forensic accountant in carrying out his function reconstructs incomplete accounting records to settle for example insurance claims, over/under valuation of inventory, proving money laundering activities by reconstructing cash transactions (Owojori and Asaolu, 2009).



2.3.11.8 Financial Transactions Analyses

A forensic accountant is required to have special skills in inspecting documents for authenticity, alteration, forgery or counterfeiting (Cole2009). Thus, by possessing such skills, the forensic accountant in carrying out his duties can easily detect errors, fraudulent activities and omissions thereby preventing and reducing fraudulent activities. According to Zimbleman et al. (2012), a forensic accountant is responsible for analyzing and identifying the kinds of fraud that could occur and their symptoms.

2.3.11.9 Investigation of Embezzlement

Cabole (2009), states that a forensic accountant does the following:

- (a) Fraud detection, documentation and presentation in criminal trials and claims.
- (b) Calculate economic damages, trace income and assets, often in an attempt to find hidden assets or incomes.
- (c) Reconstruction of financial statements that may have been destroyed or manipulated.
- (d) Expert witness.

These responsibilities listed by Cabole (2009) show that a forensic auditor must be an expert in financial matters and must have legal knowledge which could enable him detect fraudulent activities which are to be presented in a law suit.

2.3.12 Challenges of the Forensic Auditor

Crumbley (2001), Grippo and Ibex (2003), reveal the following challenges confronting the application of forensic accounting:

- (a) A significant challenge that faces a forensic auditor is the task of gathering information that is admissible in a court of law.



- (b) The admissibility of evidence in compliance with the laws of evidence is crucial to successful prosecutions of criminal and civil claims.
- (c) 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 & 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 auditing 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. Besides, forensic accounting is a new trend particularly in developing economies. Hence, accountants with adequate technical know-how on forensic issues are hardly available.

Previous research on forensic accounting practices, certifications, education and research indicate that it is a rapidly growing accounting discipline. Research provides evidence that forensic accounting education has evolved from being limited, to continuing professional education sessions for practicing accountants, to a current state of being offered as a credit course by many universities (Razae 2002; Crumbley 2001; Peterson and Reider 1999, 2001; Rezaee et al. 1996; Rezaee and Burton 1997). Buckhoff and Schrader (2000) found that forensic accounting is very popular and students rating it 9.14 on a ten-point satisfaction scale in the US. Peterson & Reider (2001) and Ramazani & Rafiei (2010) reviewed course syllabi of universities offering forensic accounting courses and analyzed the level of the course contents, learning objectives and course requirements and course coverage. They found that accounting educators agree that there is a need for universities to provide forensic accounting education.





Rezaee et al. (1996) examined course syllabi to determine the curriculum coverage of forensic accounting and fraud investigation. They suggested that the accounting curriculum provides a knowledge acquisition base in forensic accounting as part of curriculum changes in response to the mandated (AICPA) 150-hour accounting program. Rezaee and Burton (1997) concluded that the demand for forensic accounting education and practice will continue to increase and that forensic accounting education should be integrated into accounting curricula as a separate course or as a module in auditing or other accounting courses. In addition, they found that academics preferred to integrate forensic auditing topics in the existing accounting courses, whereas the certified fraud examiners preferred offering it as a separate course.

Kleyman (2006) reviewed examples of some universities and the forensic accounting education they offer. He noticed that California State University has been teaching forensic accounting course as part of its regular accounting program and the result has been quite impressive. Rezaee et al. (2006) examined the opinions of academics and practitioners regarding the importance, relevance, and delivery of forensic accounting education. Their results indicated that the demand for and interest in forensic accounting will continue to increase. They also found that the number of universities planning to include forensic accounting education in their program is increasing. Both academics and practitioners viewed forensic accounting as relevant and beneficial to accounting students, accounting programs, the accounting profession and the business community. DiGabriele (2008) found that universities and colleges are currently considering adding forensic accounting to their curriculum. His results provide needed guidance to educators for the development of forensic accounting curriculum by identifying relevant skills to accompany a programme of study.

Evan Zadeh & Ramazani (2012) found that accountants are not familiar with the services offered by forensic accounting. They relate this to poor training provided by firms' financial managers who have limited knowledge of forensic accounting. Efiog, (2012) examined the degree of awareness of forensic accounting among accounting undergraduates in Nigeria and found a very low level of awareness of forensic accounting among respondents.

Buckhoff & Schrader (2000, 135) state that "adding a forensic accounting course to the accounting curriculum can greatly benefit the three major stakeholders in accounting education: academic institutions that are considering integrating forensic accounting into the accounting curriculum, accounting students and employers of accounting graduates. Professional accounting institutions, auditing firms, clients, regulatory agencies and the business community are also concerned with forensic accounting. Kleyman (2006) argues that enrollment in a forensic accounting course can show such a renowned discipline as accounting. In addition, forensic accounting provides the practitioner with profound knowledge of both accounting and law which will enable him/her not only to investigate accounting issues, but also collect evidence, provide litigation support, as well as testify in court (Efiog, 2012). Rezaee (2002) found that students believe that forensic accounting is a sound career option but should be promoted in universities because it is not getting the proper attention. Finally, Rezaee et al. (2006) found that both practitioners and academicians perceive the following benefits of forensic accounting: strengthen the credibility of financial reporting; promote responsible corporate governance; make students more desirable in the market place; satisfy society's demand for forensic accounting; prepare students to engage in fraud investigation, litigation support and expert witnessing.



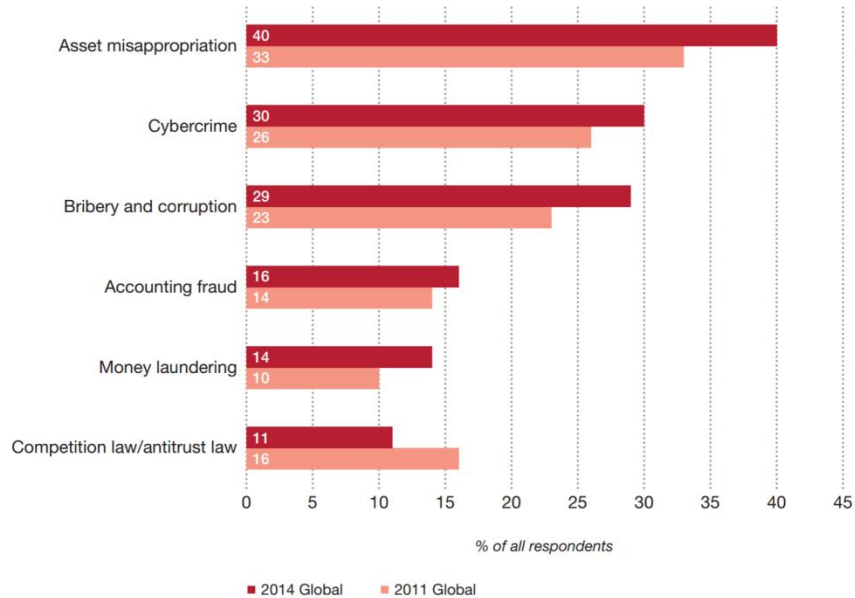
Thus, the academic literature identifies forensic accounting courses and contents in the accounting curriculum. The literature have also empirically identified that accounting academics will educate future students who will become competent forensic accountants. This study adds the necessary contribution to the literature that identifies practitioners' views regarding forensic accounting education. It also sheds light on the increasing importance of forensic accounting in business and academic community.

2.3.13 Trends in Expectations of Economic Crime

It is highly envisaged that financial institutions will continue to be confronted with the enormous challenges of economic crime in the foreseeable future. Recent PricewaterhouseCoopers' (PWC) 2014 Global Crime Survey indicates “the schemes evolve with trends and technology – but the overall threat level remains. In addition to looking at economic crimes suffered in the past, we asked our respondents to look forward and tell us which economic crimes they believe pose the highest risks to their companies in the coming years. In virtually every category, respondents said they expect their organizations will experience more fraud in the coming periods.” The figure below shows global predictions for key crimes in 2014, along with comparable responses from 2011.



Figure 2. 1: Trends in Expectations of Global Economic Crime



Source: PricewaterhouseCoopers’ (PWC) 2014 Global Crime Survey

The survey results appear to reflect the mega trends of global expansion into less-developed markets, and the expectation of increasing incidents of cybercrime as more technology is deployed in all areas of business. It also notes that expectations of future competition law/antitrust law issues fell approximately 5%. These survey results underscore the importance of forensic accounting practice and education.

This research will lead to the awareness and acceptance level of forensic accounting. 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 & Ezi (2000) are of the view that studies have shown that on the average six (6) out of every ten (10) staff would look for ways to steal if given the opportunity and thus only could four (4) be normally honest. The widespread frauds in





modern organizations have made traditional auditing and investigation inefficient and ineffective in the detection and prevention of the various types of frauds confronting businesses world-wide. Oyejide (2008) opines that fraud is a subject that has received a lot of attention both globally and in sub-saharan Africa. This interest has been heightened by several high profile cases involving several organizations. Issues relating to fraud have also been the subject of rigorous theoretical and empirical analysis in the academic literature (Appah & Appiah, 2010). In the words of Adesola (2008), the threat of fraud to the global economy is better illustrated by the statistics released by Criminologists at a consultancy: over two hundred thousand cases of online frauds were committed in the United Kingdom in 2006, double the amount of real world robberies. The study revealed that 75% of credit card fraud was committed on-line in 2006. The global market is concerned about fraud in high and low places. We are very familiar with Enron, WorldCom among others. Organizations are all experiencing more and more frauds committed in the society.

The primary responsibility of an auditor, therefore, is to verify whether the financial statements exhibit a true and fair view of state of affair of the business and their secondary responsibility is the prevention and detection of errors and frauds. The primary responsibility for the prevention and detection of fraud and error rests with both those charged with governance and the management of an entity in spite of the fact that financial statements are the representations of the management. Some authors have acknowledged that there are limitations in the way individual auditors make fraud judgments (Wilks & Zimbelman, 2004). Furthermore, fraud, in whatever nature and guise, has to be detected first, since detection is an important prerequisite of rooting out any sort of fraud. On their own, auditors are not necessarily the most suitable group to perform the task of fraud detection. Financial

institutions, by instituting appropriate fraud prevention measures within its organization, can detect and prevent non-management fraud (Hemraj, 2004). It is the duty of the forensic auditors to detect fraud. An increasing number of studies examine the factors that tempt firms to commit fraud, such as high-powered executive incentives (Bergstresser and Philippon, 2006; Efendi, Srivastava, & Swanson, 2006), and weak board structure (Beasley, 1996; Agrawal & Chadha, 2005). However, firms with the largest defence contracts have less negative abnormal returns than those with smaller contracts. Dyck, Morse, & Zingales (2006) examine the role of different monitoring devices in fraud detection and find that market-based institutions play a more significant role than regulatory-based institutions.

2.4 Theoretical Framework

2.4.8 Theories of Fraud

The study adopted four theories of fraud as put forward by Comer (1986 cited in Owolabi, 2010) which explains frauds from various angles as applied in this study.

2.4.9 Differential Opportunity

This theory puts forward the fact that all people have the opportunity to commit fraud, against their employers, against suppliers and customers of their employer, against third parties and against government departments. However such opportunity is guided or regulated by

- (a) Accessibility of the perpetrator to the accounts, assets, premises and to computer systems.
- (b) Skill required to identify that such opportunity exists and to be used.
- (c) Availability of sufficient time to plan and execute the fraud.



2.4.10 Theory of Concealment

Concealment is an essential ingredient of most systematic fraud. It can be defined as a manipulation of an accounting record or misrepresentation of physical, personal or commercial reality intended to;

- (a) Hide, disguise or alter an account/inventory discrepancy before, during or after a fraudulent act.
- (b) Disguise, confuse, or delay the recognition the perpetrators guilt (to avoid location of blame) or to establish a plausible excuse for dishonesty;
- (c) Enable the perpetrator to obtain, a dishonest advantage by deception.

The theory explains the fact that the perpetrators deliberately introduce confusion during, or after the act, to conceal it or assist in its omission. Greed motivates this type of fraud to exploit any opportunities available. Self-preservation is crucial when it comes to concealment. The perpetrator usually tries to hide the loss and the evidence which indicates that he is responsible for it. He will strive to conceal the fraud in the best way available to him and may adopt optimum concealment course.

2.4.11 Theory of Deviations

Fraud is deviant behavior and perpetrators often conceal their dishonesty as plausible breaches of rules or procedures. It is a variance from a normal

2.5 Conceptual Frame Work

2.5.8 Fraud Triangle

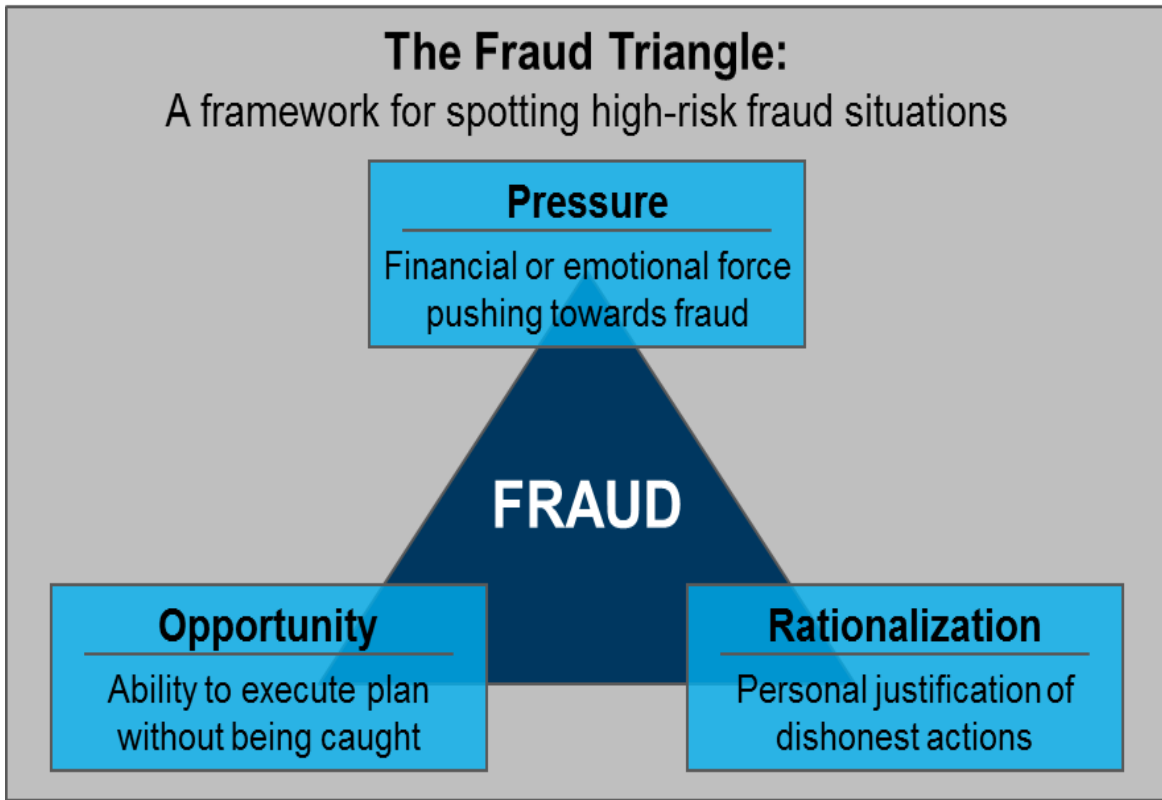
With so many fraud cases making the news headlines on a daily basis, the economic and social impact of fraudulent behaviors can no longer be downplayed by governments and business organizations. The question then is what can be done to address effectively the issue





of fraud? Fraud is about deception, and deception is part of human behavior. Human behaviour, according to psychologists, criminologists and social scientists is the product of a complex interaction among a wide range of factors. It is quite disheartening these experts agree that pretty much anybody could potentially engage in unethical and even fraudulent behaviors provided that certain set of circumstances or factors are present in a given situation. A good understanding of those particular circumstances or factors is crucial to prevention or investigation of fraud cases. These factors are either personal to the individual or related to the environment in which the individual operates. For the personal-related factors, the issue is about why certain people might be more or less inclined to commit fraud depending on personality types, social background, self-interests, psychological programming, value system and so forth. With the environment-related factors, the focus centres on the available crime opportunities, such as presence of easy and vulnerable targets, lack of physical protection, weak controls and oversight, lenient attitudes towards crime and uncooperative witnesses. Hence, there is need for recognized fraud risk assessment model that explicitly structures the analysis around these key circumstances or factors. A Risk Assessment and Management Model called the Fraud Triangle, developed by American Criminologist, Donald Cressey, is one of the models that explain the circumstances or factors mentioned above. The Fraud Triangle model postulates that unethical and fraudulent behaviors are very likely to occur if the following three (3) factors are present in a given situation:

Figure 2. 2: The Fraud Triangle



Source: <http://blog.umb.com>

2.5.9 Pressure

The perpetrator is under very strong financial or work related pressures; the need for money, desire to achieve targets, and self-sustenance. These factors may make the perpetrator believe it is in his self-interest to break the rules (hiding mistakes, gaining something). Often this need/problem seems non-sharable in the view of the fraudster. That is, the fraudster believes, for whatever reason, that the problem must be solved in secret. However, some frauds are committed out of greed alone.



2.5.10 Opportunities

This is where the fraudster has by himself (or with accomplices) the authority and the means to take whatever actions needed to make the cheating possible. The fraudster must also believe that he can conceal his actions to avoid being caught, for example, due to a weak management control system and a permissive organizational culture and/or through one's own position or authority. Of the three elements in the fraud triangle, opportunity is the one that management has the most control over. Thus, it is very essential that organizations build processes, procedures and controls so that employees are not needlessly put in positions that make them inclined to commit fraud and also such systems that effectively detects crime.

2.5.11 Rationalization

Finally, because practically nobody likes to think about himself as a fraudster, perpetrators of fraud must be able to rationalize their unethical or fraudulent behaviors to be somewhat congruent with commonly accepted moral principles. This is basically the attempt by the fraudster to reconcile his actions with commonly accepted notions of decency and trust.

The Fraud Triangle has seen countless applications in practical cases and works well to explain the *why* and *how* people can be tempted to act unethically or even to commit a fraud.

It also provides a framework on how to prevent, detect and manage unethical or fraudulent behaviors in organizations (from a CEO making fraudulent statements down to a clerical staff stealing company equipment). Hence, based on the findings of a Fraud Triangle assessment, organizations are able to develop a pretty comprehensive and effective Ethical Compliance and Fraud Risk Management programmes. Over time, the importance of initial detection of fraud has increased because the number of fraudulent events has equally increased. Detection of fraud begins with the notification of red flags which indicates that something is wrong



(Ozkul and Pamukc, 2012). This might come to light as a result of trends in the number of employees, managers, and victims concerned about the loss in business assets. There are two main ways to detect frauds: detection by chance and conducting a proactive research and encouraging initial identification of symptoms. Many fraudulent acts have been detected in the past by chance. Unfortunately, the incidence of fraud proceeds during detection and losses consequently increase. In many cases, people who are exposed to fraud in the organization do know that fraud was being committed, but could not bring it to light either because they are not sure and unwilling to blame someone directly or are unsure of how to go about reporting it and might also be afraid of being labelled as whistleblower (Ozkul and Pamukc, 2012).

2.6 Empirical Evidence

There have been an extensive studies conducted in many countries on fraud and its effect on bank performance. In a study conducted by Wole and Couisa (2009 cited in Odi, 2013) tested the attributes of the theory of diffusion of innovation empirically, using automated teller machines (ATMs) as the target innovation. The study found that attitudinal dispositions significantly influence the use of ATM in any bank and thereby affecting the performance of the bank. Adewunmi (2007) in his explanation of bank fraud identify socio-economic lapse in society such as misplacement of societal values, the unquestioning attitude of society towards the sources of wealth, the rising societal expectations from bank staff and the subsequent desire of the staff to live up to such explanations as contributory factors of fraud. Akinfala (2005cited in Odi, 2013) conduct a research on job involvement/ experience factors and fraudulent behaviors among serving and convicted bank staffs. The study found that the level of job involvement has function of three factors: motivation, identification and a feeling of pride that people achieve in their jobs. Nwude (2006 cited in Odi, 2013) carried out a bank



frauds using methodology of an interaction with bank staff of various cadres with structured questionnaire to identify the fraud forms and characteristics in the banking industry. The study reveals that some staff involve in fraud due to greediness and arrogance.

In a different study, Otusanya (2009) carried out a study on the role of Bank CEO in the perpetration of corporate executive frauds in the Nigerian Banking sector. The study reveals that recent banking crises in Nigeria have exposed the activities of bank executives in corruption and fraudulent practices using institutional anomie theory called American dream theory, whereby the pursuit of monetary success has come to dominate society.

Idowu (2009) did a research on the means of minimizing the incidence of fraud in Nigerian banking industry. Findings of the study revealed that, so many factors contributed to the incidence of frauds in banks amongst which are poor management of policies and procedures, inadequate working conditions, bank staff staying longer on a particular job and staff feeling frustrated as a result of poor remunerations. Adepoju and Alhassan(2010) opined that bank customers have come to depend on and trust the Automatic teller machine (ATM) to conveniently meet their banking needs, but that in recent times; there have been a proliferation of ATM frauds in the country. Managing the risks associated with ATM fraud as well as diminishing its impact is an important issue that face banks as fraud techniques have become more advanced with increased occurrences. Akindele(2011) conducted a research on the “challenges of automated teller machine (ATM) usage and fraud occurrence in Nigeria banking industry”. The study posits that lack of adequate training, communication gap, and poor leadership skills were the greatest causes of fraud in banks. He advised that adequate internal control mechanism be put in place and that workers satisfaction and comfort be taking care of. Onuorah and Ebimobowei (2011) investigate fraudulent activities and forensic



accounting in Nigeria. The study found that there is need for the banks in Nigeria to adopt more proactive measures such as the use of forensic accounting techniques in banks.

Chi-Chi and Ebimobowei (2012) in their study on Fraudulent Activities and Forensic Accounting Services of Banks in Port Harcourt, Nigeria find out that the result reveals that the application of forensic accounting services affects the level of fraudulent activities of banks. On the basis of this finding, the paper concludes that forensic accounting services provide banks with the necessary tools to deter fraudulent activities. Abdul Rasheed, Babaitu and Yinusa (2012) examined the impact of fraud on bank performance in Nigeria. Result of the study shows that, there is a significant relationship between banks profit and total amount of funds involved in fraud. Kanu and Okorafor (2013) did a work on the nature, extent and economic impact of fraud on bank deposit in Nigeria using descriptive and inference statistics. The study revealed that there is apposite significant relationship between bank deposit and fraud in Nigerian banking industry.

Impersonation by third parties to fraudulently obtain new cheque books which are subsequently utilized to commit fraud is another peculiar dimension of bank fraud. Impersonation involves assuming the role of another with the intent of deceitfully committing fraud. Cases of impersonation have been known to be particularly successful when done with conniving bank employees who can readily make available the specimen signature and passport photograph of the unsuspecting customer. NDIC (2011) report reveals that 78.26 percent of fraud which was perpetuated with staff connivance amounted to N900 million losses to the affected banks in Nigeria.

CBN (1995) special report on distressed banks showed that top management staffs were involved in fraudulent activities. It showed that there was a lot of insider abuse in several



banks. In some cases, the CEOs set up Special Purpose Vehicles (SPV) to lend money to themselves for stock price manipulation or the purchase of estates. The report cited a case in which the CEO of a bank borrowed money and purchased private jets which were registered in the name of the son. In another bank, the management set up 100 fake companies for the purpose of perpetrating fraud. CBN also disclosed that 30% of the share capital of one bank was purchased with customers' deposits, while another bank used depositor's funds to purchase 80% of its Initial Primary Offer. It paid N25 per share while the shares were trading at N11 on the Nigerian Stock Exchange which later collapsed to less than N3 per share. In another instance, the CEO of a bank controlled over 35% of the bank through SPVs borrowing customer's deposits.

The increase in bank staff involvement may be connected with the reluctance to report and prosecute cases by the affected banks. Gold (2009) and Olasanmi (2010) opine that because many fraud cases escape detection, it encourages many others to join in perpetuating it.



CHAPTER THREE

METHODOLOGY

3.1 Introduction

The chapter looked at the research design, profile of the study area, target population, sample size of the study. It further looked at the source of data, data analysis, validity and reliability of the as well as ethical consideration of the study.

3.2 Research Design

Research design constitutes the blueprint for fulfilling research objectives and answering questions. The plan is the overall scheme or programme of the research. It includes an outline of what the researcher did from the writing of research questions and the operational implication to the final data analysis.

The study adopted cross-sectional survey research design and was mainly descriptive in nature. Due to limited time and resources, the researcher chose this method because it would reduce time wasting and ensure that representation of respondents was done according to those found at the Bank. Both qualitative and quantitative data was collected by use of this design and further subjected to scientific and descriptive analyses.

3.3 Study Area Profile

3.3.1 *Country Overview-Barclays Bank Ghana*

Barclays Bank is a leading financial services provider with over 97 years of banking in Ghana and a well-established local presence. Barclays Ghana is a member of the Barclays Africa Group Limited (BAGL), which is majority-owned by Barclays Bank PLC. Barclays Africa Group Limited is one of Africa's major financial services institutions offering personal and business banking, credit cards, corporate & Investment banking and wealth management



products and services as well as bancassurance. Barclays Bank combines global expertise and product knowledge with the rich experience and appreciation of the local environment to bring the best of banking to the people like no other.

Barclays has 75 service outlets nationwide: 57 branches, 3 Agencies, 10 Prestige Centres and 2 Premier Suites. Barclays Ghana also has over 155 ATMs spread across the country. In addition to these, there is an array of free e-banking solutions (Internet Banking, Hello Money - Mobile Banking, Smartphone Banking, SMS Alerts and e-Statements) which customers can access any time of the day. The Retail function has a three-tier personal banking proposition (Personal, Prestige & Premier) for individual customers. All Retail customers enjoy free access to our range of e-banking solutions. Corporate clients can also use the Barclays Integrator (our online banking application for corporate customers) to manage their corporate transactions from wherever they are.

3.3.2 Barclays e-Banking Services – Easy ways of Banking

Barclays offers a whole range of options that will enable clients to enjoy banking services wherever and whenever they need it. With just a mobile phone, laptop, tablet or PC, you can access your accounts and transact anytime, using Internet Banking, Hello Money - Mobile Banking, Smartphone Banking, SMS Alerts and e-Statements. Barclay's e-banking platforms are secure, fast, convenient and reliable, so you can do your banking when it suits you - 24 hours a day, 7 days a week. The e-banking services are free.

3.3.3 Supporting our Communities & Economy

Barclays continues to support the development and growth of the local economy, through cocoa syndication and financing. Barclays is also one of the lead managers for Ghana's second Eurobond, which was issued in July 2013, to raise US\$1 billion for the government of



Ghana. Barclays is committed to investing its resources, including employee time and expertise in community programmes to enhance the employability, enterprise and financial literacy skills of the youth – the next generation.

Barclays Bank Tamale main branch is part of Barclays Ghana limited which is also part of Barclays Africa group limited. It shears all the financial service it offers to personal and business banking, credit cards, corporate & Investment banking and wealth management products and services as well as bancassurance with 20,000 customers (both personal and business accounts).

3.4 Target Population

The population of the study is made up of customers and staff of the bank. The total sample population of the study is 180. However, the population was restricted to the Barclays Bank Tamale Main Branch in Tamale in the Northern Region of Ghana. One hundred and eighty (180) questionnaires was distributed to both the customers and staff of the branch

3.5 Sampling Procedure

In designing the research study, the researcher took into consideration the need to make inferences from the sample of the population in order to answer the research questions and also meet the research objectives. Purposive sampling was adopted since the intention was to gain an insight into the phenomena hence, the need to choose personnel who were well versed with the service and operation of the bank and its regulation. This was guided by the fact that all the staffs are supposed to protect the bank against fraud so have been chosen for the study.

3.6 Determination of Sample Size

Since the total population of the staff²² and a purposive sample method was use to choose 158 customers which made up of a total of 180 sample populations for the study. The study



used the census method where all the population of the staff are been use in addition to selected customers of the bank as the sample size for the study.

3.7 Data Collection Instruments

In view of the nature of the topic, it was realized that questionnaire would be the main and the most appropriate instrument to use. Questionnaires are less inexpensive way to gather data from a potentially large number of respondents. The research gave a serious thought to the wording of individual questions. This was done to ensure that respondents answer objectively to the questionnaire.

The questions were in the open ended and closed or forced choice-format. In the open ended question, the respondents formulated their own answers. In closed format, respondents are forced to choose between several given options. The open ended format allowed exploration of the range of possible themes arising from an issue. It was used where a comprehensive range of alternative choices could not be compiled.

The closed or forced choice-format was easy and quick to fill in. It minimized discrimination against the less literate (in self-administered questionnaire) or the less articulate (in interview questionnaire). It was easy to code, record, and analyze results quantitatively and easy to report results (Leung, 2001). The order of the questions was also given serious consideration.

Responses categories mainly ranged from strongly disagree, disagree, neutral, agree to strongly agree.



3.8 Sources of Data Collection

The two main sources of data collection are:

Primary sources of data: Anyanwu (2000) defines primary data as original data assembled specifically for the problem under consideration. Based on this, data were derived primarily through research questionnaires distributed to the staff of Barclays bank Tamale main Branch.

Secondary sources of data: This can be defined as data originally collected for some other purpose, which are usually obtained from published and unpublished source (Egbulonu, 2001). Secondary data used in the research work include; textbooks, journals, internet, and articles.

3.9 Data Analysis

The data gathered from the field of study was edited and coded by the researcher to ensure that all questionnaires were completed and contained accurate information. The data were then entered into SPSS Version 20 template for analysis. The output of the data was then exported to Microsoft Excel software for simple tables, pie charts, bar charts, frequencies and percentage.

3.10 Pre-test

The main research was preceded by a pre-test using five persons each from GCB branch and ADB branch both in Tamale, where they were given the questionnaire to administer and base on their responses changes were made to some aspects of the question before the final survey was then conducted. The main aim of the pre-test was to improve upon the items of the questions for readability and also to cancel any item which did not yield useable data. It was also to improve the validity of the instruments.



3.11 Ethical Considerations and Dissemination of Information

In undertaking this study, the researcher took into consideration good ethical principles. Brynard, et al., (1997:4) stated that a researcher should at all times and under all circumstances report the truth and should never present the truth in a biased manner. Participants were informed about the purpose of the interview and assured that results would remain anonymous. This strategy assisted in ensuring that people were open and honest with their comments, without fear of being identified. Huysamen as cited in Shafudah, (2011) indicates that interested parties often claim access to information obtained during the research. He argues that regardless of how much such requests are intended, it would be unethical to disclose such information to them. The selected methods and techniques were correctly applied and the resulting data analysis is presented in the next Chapter.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The study ascertained the extent to which financial institutions have engaged forensic auditing tools to prevent and minimize financial fraud by Barclays Bank Tamale Main in Tamale Metropolis in the Northern Region of Ghana. This chapter presents the findings of the study in four sections. Section one presents respondent's characteristics such as sex, age, and educational status, Section two evaluates the challenges faced in financial fraud detection by Barclays Bank Tamale Main in Tamale Metropolis in Northern Region of Ghana, Section three explores the extent to which forensic audit mechanisms are been used to uncover financial fraud and Section four determines forensic auditing tools that Barclays Bank Tamale Main in Tamale Metropolis in Northern Region of Ghana employed to detect financial fraud.

4.2 Socio-Demographic Characteristics of Respondents

This section presents demographic characteristics of respondents who participated in the research work, their age and other relevant socio-cultural data pertinent to the study were looked at. This information is very important for the interpretation of the results emanating from the analysis made in respect of the extent to which financial institutions have engaged forensic auditing tools to prevent and minimize financial fraud by Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana.

4.2.1 Sex Distribution of Respondents

Table 4.1 shows sex category of respondents of the study area. On the sex distribution of staff of Barclays bank, males dominate as compared to females. Males make up 69.0 percent whiles 31.0 percent of staff that responded to the survey question were female. On sex of



customers who responded to the survey, 75.3 percent were males, while 24.7 percent of the customers were females. This means that Tamale branch of Barclays Bank Ghana limited female staff are less as compared to their male counterparts, therefore Tamale branch of Barclays Bank Ghana limited should consider a policy of employing more females staff or professionals into the branch so as to improve on the male to female ratio, and for gender based decision making that will be well represent the interest of all stake holders in the institution and also to serve as role model for other young female students to emulate in their future career (See Table 4.1). Additionally, bridging the gender gap is an important step in addressing the perpetration or occurrence of fraud. While men were found to be more likely perpetrators of detected fraud (85 percent in 2007 and 87 percent in the 2011 analysis), women in the Americas (22 percent) and Asia Pacific (23 percent) are almost three times more likely to be involved in fraud than in EMA (8 percent), (KPMG, 2007). This might be due, perhaps, to fewer women in senior positions in “old Europe” and Africa compared with other regions of the world. KPMG (2007) finding that men commit more fraud than women seems a reflection on the gender make-up of companies generally. The gender gap in fraud perpetration may reflect women’s under-representation in senior management positions and, as a consequence, fewer opportunities to commit fraud.



Table 4. 1: Sex of Respondents

Sex	Staff		Customers	
	Frequency	Valid Percent	Frequency	Valid Percent
Male	15	69	119	75.3
Female	7	31	39	24.7
Total	22	100	158	100

Sources: Field Survey, 2016

4.2.2 Age Distribution of Respondents

The study on age distribution of customers revealed that 46.2 percent of the customers are between 31-40 years, 40.5 percent are between the ages of 41-50 years, and 13.3 percent were between 20-30 years. Age distribution of staff reveals that 66.4 percent is between 31-40 years, 23.1 percent is between 20-30 years, while 10.5 percent is between 41-50 years of age (See Table 4.2 below). This data shows that the staff who are between the ages 31-40 years are more than any age group among the staff, which is an indication that there is younger generation of professionals who can still work for the next 10 years in the organization, thus suggest that more is needed in terms of encouraging and motivating them on how to improve on their skills and knowledge level so as to be able to guarantee their retention as employees of Barclays bank. However, the 31-40 age bracket is mostly where typical fraudsters are found. Our survey finds that the typical fraudster is between the ages of 36 and 45. This group rose from 39 percent of cases in 2007 to 41 percent in 2011 (KPMG, 2007). Thus, the age distribution merely exposes the bank to potential fraud.



Table 4. 2: Ages of Respondents

Age	Customers		Staff	
	Frequency	Valid Percent	Frequency	Valid Percent
20-30 years	21	13.3	5	23.1
31-40 years	73	46.2	15	66.4
41-50 years	64	40.5	2	10.5
Total	158	100	22	100

Sources: Field Survey, 2016

4.2.3 Level of Education of Employees

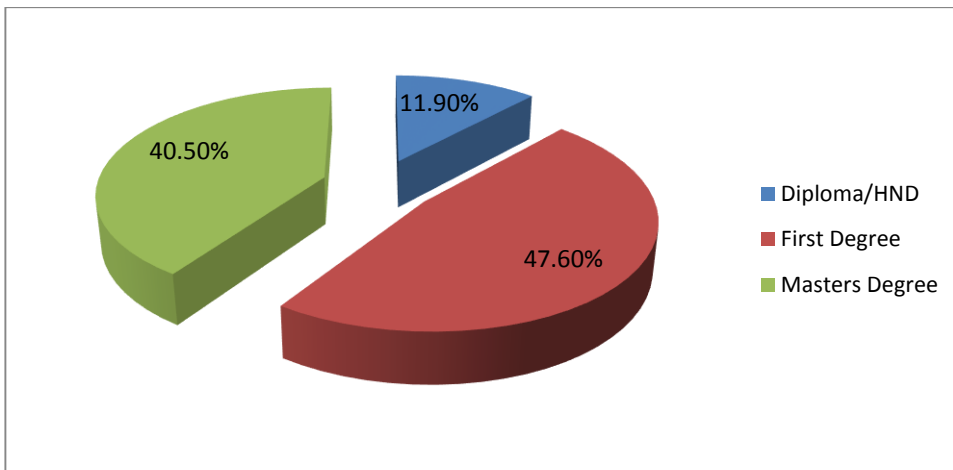
Educational background plays a vital role in service provision; it thus increases the ability to understand issues relating to the field and increase the skills level of employees. It also enhances the understanding and compliance of ethics and laws like surrounding quality service provision in the banking sector. From the study 47.6 percent of the staff had master’s degree; 40.5 percent of the staff had first degree, while 11.9 percent of the staff had Diploma/HND (See Figure 4.1 below). Though higher level of education is no requirement to commission of crime it is worthy to note that it gives access to would-be fraudsters as fraud are perpetrated by senior level managers who have considerably higher education. Within the fraud matters we analyzed, we found the people most often entrusted with a company’s sensitive information and able to override controls are statistically more likely to become



perpetrators. This is borne out by survey evidence that senior management is more frequently implicated in fraud than junior staff.

In KPMG(2007), the EMA survey found that 49 percent of all fraudsters held senior management positions. While senior managers remain the most likely fraudsters according to the 2011 analysis, the overall percentage fell to 35 percent. Conversely, however, board level perpetrators increased from 11 percent to 18 percent 2007 and 2011.

Figure 4. 1: Level of Education of Employee



Sources: Field Survey, 2016

4.2.4 Length of Service of Employees

The study also looked at the period under which staff worked in the institution, 39.0 percent of the staff worked in the organization between 6-10 years, 28.0 percent of the staff worked in the organization between 11-15 years, 24.4 percent of the respondents worked in the organization between 1-5 years while 8.5 percent of the staff had worked over 16 years in the organization. The finding means that the staff has enough experience in terms of length of service they served in the organization, which can help in decision making with regards to management of the various units and departments. At least no staff in the institution has



worked in the organization for less than 1 year (See Table 4.3). Typically, a fraudster is perceived as someone who is greedy and deceitful by nature. However, as this survey reveals, many fraudsters work within entities for several years without committing any fraud, before an influencing factor—financial worries, job dissatisfaction, aggressive targets, or simply an opportunity to commit fraud—tips the balance.

Table 4. 3: Length of Service of Employee

Length of Service	Frequency	Valid Percent
1-5 years	4	24.4
6-10 years	6	39.0
11-15 years	4	28.0
16+ years	1	8.5
Total	22	100.0

Sources: Field Survey, 2016

4.3 To evaluate the challenges faces in financial fraud detection

On the issue of challenges financial fraud detection by Barclays bank limited in the Tamale metropolis, the study looked at inadequate infrastructure hindering the detection of financial fraud. Data from the study reveals that 55.1 percent of the respondents strongly agreed that the bank lacks infrastructure to detect financial fraud, 27.4 percent of the respondents agreed that Barclays bank Tamale branch lacks infrastructure to detect financial fraud, 7.1 percent of the respondents are not certain that Barclays bank Tamale branch lack infrastructure to detect financial fraud, 6.8 percent of the respondents disagreed that Barclays bank Tamale branch lack infrastructure to detect financial fraud, while 3.6 percent of the respondent strongly





disagreed that Barclays bank Tamale branch lack infrastructure to detect financial fraud (See Table 4.4 below). This means that the bank lacks certain facilities to detect fraudulent activities in the bank and outside the bank of criminal activities. This is a major concern as even the presence of adequate and most sophisticated risk management infrastructure does not isolate an institution from fraud. CIMA (2009) finds that as fraud prevention techniques may not stop all potential perpetrators, organisations should ensure that systems are in place that will highlight occurrences of fraud in a timely manner. This is achieved through fraud detection. A fraud detection strategy should involve use of analytical and other procedures to highlight anomalies, and the introduction of reporting mechanisms that provide for communication of suspected fraudulent acts. Key elements of comprehensive fraud detection system would include exception reporting, data mining, trend analysis and ongoing risk assessment. Fraud detection may highlight ongoing frauds that are taking place or offences that have already happened. Such schemes may not be affected by the introduction of prevention techniques or infrastructure and, even if the fraudsters are hindered in the future, recovery of historical losses will only be possible through fraud detection. Potential recovery of losses is not the only objective of a detection programme though, and fraudulent behavior should not be ignored just because there may be no recovery of losses. Fraud detection also allows for the improvement of internal systems and controls. Many frauds exploit deficiencies in control systems. Through detection of such frauds, controls can be tightened making it more difficult for potential perpetrators to act. Fraud prevention and fraud detection both have a role to play and it is unlikely that either will fully succeed without the other. Therefore, it is important that organisations consider both fraud prevention and fraud detection in designing an effective strategy to manage the risk of fraud.

Table 4. 4: Inadequate Infrastructure

Response	Frequency	Valid Percent
Strongly Agreed	99	55.1
Agreed	49	27.4
Neutral	13	7.1
Disagreed	12	6.8
Strongly Disagreed	7	3.6
Total	180	100.0

Sources: Field Survey, 2016

The study further looked at the issue of the nature of service provided by Barclays bank Tamale branch in the Tamale metropolis. From the view point of the respondents 34.9 percent of the respondents agreed that the nature of service provided by the bank will cause financial fraud, 32.5 percent of the respondent also strongly agreed that the nature of service provided by the bank will cause financial fraud, 20.5 percent of the respondent are not sure that the nature of service provided by the bank will cause financial fraud, 10.8 percent of the respondent disagreed that the nature of service provided by the bank will cause financial fraud, 1.2 percent of the respondent strongly agreed that the nature of service provided by the bank will cause financial fraud (See table 4.5 below).



Table 4. 5: Nature of Service

Response	Frequency	Valid Percent
Strongly Agreed	59	32.5
Agreed	63	34.9
Neutral	37	20.5
Disagreed	19	10.8
Strongly Disagreed	2	1.2
Total	180	100.0

Sources: Field Survey, 2016

The study also looked at how fraud may be perpetrated where documents of value and liquid assets are exposed to an undisciplined staff or unauthorized person(s) like customer(s) in the bank. Data from the study reveals that 53.6 percent of the respondents strongly agreed that documents of value and liquid assets are exposed to an undisciplined staff or unauthorized person(s) like customer(s) in the Bank, 29.8 percent of the respondent agreed that documents of value and liquid assets are exposed to an undisciplined staff or unauthorized person(s) like customer(s) in the Bank, 14.3 percent of the respondent sure not sure that documents of value and liquid assets are exposed to an undisciplined staff or unauthorized person(s) like customer(s) in the Bank, 1.2 percent of the respondent disagreed that documents of value and liquid assets are exposed to an undisciplined staff or unauthorized person(s) like customer(s) in the Bank, and also 1.2 percent of the respondent s again strongly agreed that documents of value and liquid assets are exposed to an undisciplined staff or unauthorized person(s) like customer(s) in the Bank (See Table 4.6 below).



Table 4. 6: Exposure to Documents of Value and Liquid Assets

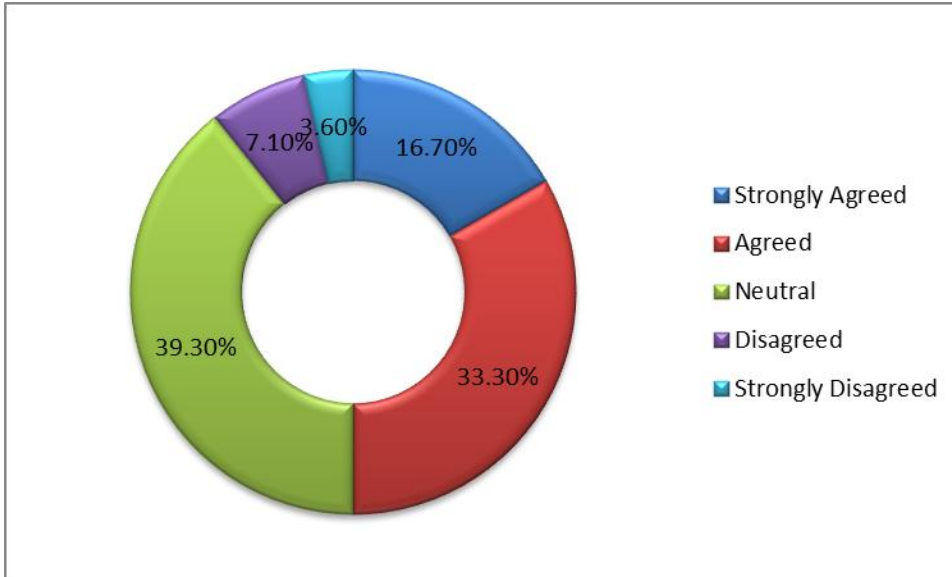
Response	Frequency	Valid Percent
Strongly Agreed	97	53.6
Agreed	54	29.8
Neutral	25	14.3
Disagreed	2	1.2
Strongly Disagreed	2	1.2
Total	180	100.0

Sources: Field Survey, 2016

Poor management comes in the form of inadequate supervision. A junior staff with fraudulent tendencies who is not adequately supervised would get the impression that the environment is safe for the perpetration of fraud especially ATM. Findings from the study reveals that 39.3 percent of the respondent are not sure that Barclays Bank Tamale branch has poor management, 33.3 percent of the respondent agree that Barclays Bank Tamale branch has poor management, 16.7 percent of the respondents strongly agreed that Barclays Bank Tamale branch has poor management, 7.1 percent of the respondent disagreed that Barclays Bank Tamale branch has poor management, and 3.6 percent of the respondent s strongly disagreed that Barclays bank Tamale branch has poor management (See Figure 2 below). This means that staff can really point out to the fact that there is poor management of the branch and thus cannot be the course of fraudulent activities in the bank.



Figure 2: Poor Management



Sources: Field Survey, 2016

Proper and adequate security arrangement in banks is very important when it comes to detecting fraudulent activities of criminals. If the banks security arrangements for valuable documents are weak, poor and vulnerable, it is easy for fraudsters to have their way undetected in the bank. As a result the study questioned respondents on the security arrangement of the bank to check fraudulent activities. Data from the study indicated that 41.8 percent of the respondent do not disagree that there is poor security arrangement in the bank, 18.2 percent of the respondents agreed that the bank has poor security arrangement, another 18.2 percent of the respondents are not sure that the bank has poor security arrangement, 16.4 percent of the respondent strongly disagreed that the bank has poor security arrangement (See table 4.7 below). This means that Barclays bank Tamale branch security arrangement is perfectly and that any fraudulent activities by any staff member of customer or any outsider who attempt to by-pass security and act on their way will nabbed by the security.



Table 4. 7: Poor Security Arrangement of the Tamale Branch

Response	Frequency	Valid Percent
Strongly Agreed	10	5.5
Agreed	33	18.2
Neutral	33	18.2
Disagreed	75	41.8
Strongly Disagreed	30	16.4
Total	180	100

Sources: Field Survey, 2016

When employees are poorly paid, they are often tempted to fraudulently convert some of the customer's monies to their own use in order to meet their personal and social needs. This temptation is stronger on bank employees who on daily basis have to deal with cash and near cash instruments. Data from the study reveals that 31.5 percent of the respondent disagreed that employees of the branch is poor and cannot lead to fraudulent activities of the staff, 29.6 percent of the respondents further strongly disagreed that employees of the branch is poor paid and cannot lead to fraudulent activities of the staff, 20.4 percent of the respondents agreed that employees of the branch is poor and cannot lead to fraudulent activities of the staff, 9.3 percent of the respondents strongly agreed that employees of the branch is not poorly paid and cannot lead to fraudulent activities of the staff, equally 9.3 percent of the respondents are not sure that employees of the branch is poor and cannot lead to fraudulent activities of the staff (See Table 4.8 below).



Table 4. 8: Poor Salaries of Employees of the Branch

Response	Frequency	Valid Percent
Strongly Agreed	17	9.3
Agreed	37	20.4
Neutral	17	9.3
Disagreed	56	31.5
Strongly Disagreed	53	29.6
Total	180	100

Sources: Field Survey, 2016

Employee frustration can lead to fraudulent activities in the bank. Is a situation where a staff feels short-changes in terms of promotion and other financial reward, they become frustrated and such frustration could lead to fraud as much as such employee would attempt to compensate himself in his own way and it is an indication of weakness in bank internal control system. Data from the study reveals that 43.4 percent of the respondents strongly agreed that staff of the branch has some form of frustration, 28.3 percent of the staff agreed that staff of the branch has some form of frustration, 15.1 percent of the staff are not sure of some form of frustration in the bank, 9.4 percent of the respondent strongly disagreed that staff of the branch feel some form of frustration, while 3.8 percent of the respondents also disagreed that staff fee some form frustration (See Table 4.9 below).



Table 4. 9: Frustration of Staff of the Branch

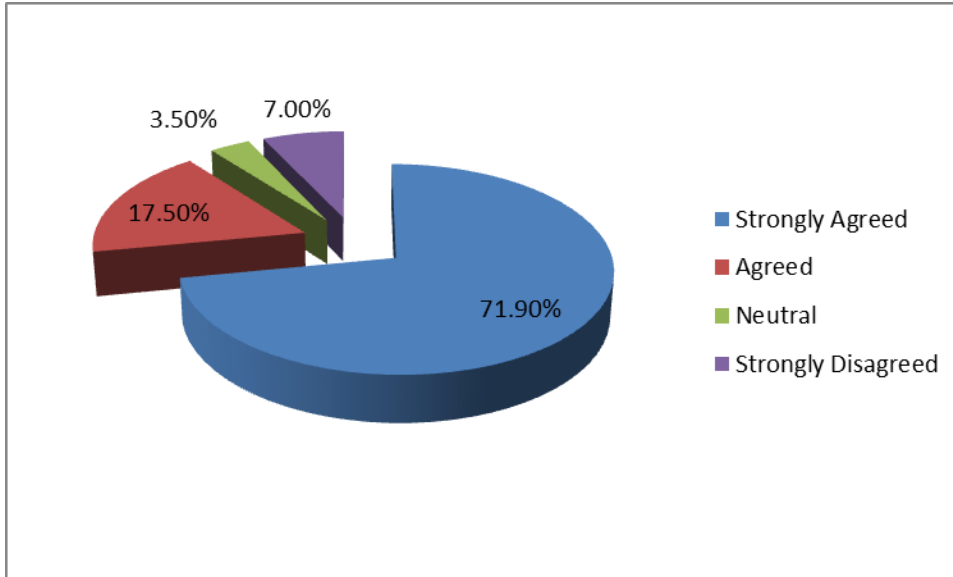
Response	Frequency	Valid Percent
Strongly Agreed	10	43.4
Agreed	6	28.3
Neutral	3	15.1
Disagreed	1	3.8
Strongly Disagreed	2	9.4
Total	22	100

Sources: Field Survey, 2016

Negative publicity of banks gives them bad image which affects their credibility and consequently, their ability to attract investors and customers. As a result banks do not allow fraudulent activities in the banks to go to the public domain, and this situation has some effects on the banks operations. This information was sought from respondents and data from the investigation reveals that 71.9 percent of the respondents strongly agreed that Barclays bank Tamale branch has fear of negative publicity which affect its detection of fraudulent activities, 17.5 percent of the respondents agreed that Barclays bank Tamale branch has fear of negative publicity which affect its detection of fraudulent activities, 7.0 percent of the respondent strongly disagreed that Barclays bank Tamale branch has fear of negative publicity which affect its detection of fraudulent activities, while 3.5 percent of the respondent are not sure that Barclays bank Tamale branch has fear of negative publicity which affect its detection of fraudulent activities (See Figure 4.3 below).



Figure 4. 3: Fear of Negative Publicity

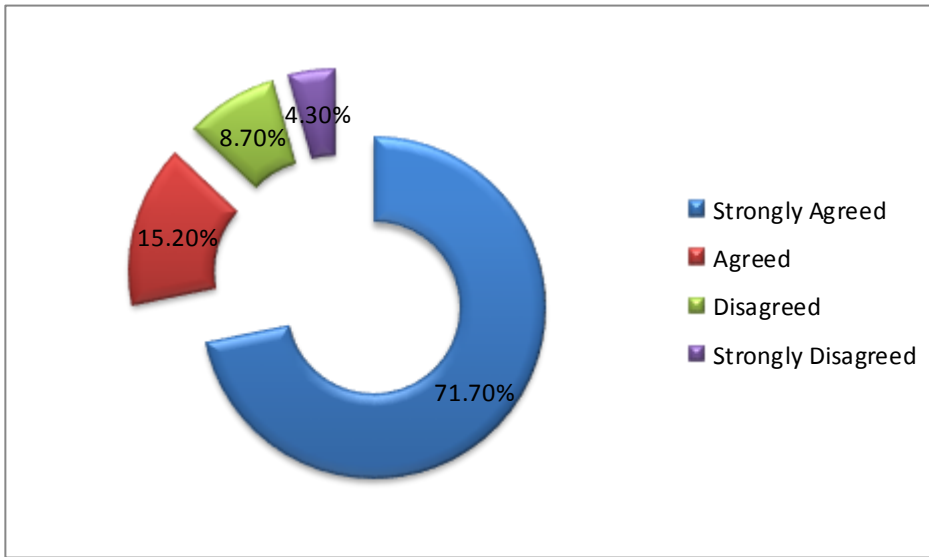


Sources: Field Survey, 2016

When people are unemployed some of them are engaged in all activities including fraud and thievery. This situation has some effects on the operation of banks and other institutions engage in resource management. On that issue of unemployment and the level of poverty, data from the study reveals that 71.7 percent of the respondent strongly agreed that unemployment and high level of poverty leads to more fraudulent activities, 15.2 percent of the respondents agreed that unemployment and high level of poverty leads to more fraudulent activities, 8.7 percent of the respondents disagreed that unemployment and high level of poverty leads to more fraudulent activities, while 4.3 percent of the respondent strongly disagreed that unemployment and high level of poverty leads to more fraudulent activities (See Figure 4.4 below).



Figure 4. 4: Unemployment and High level of Poverty



Sources: Field Survey, 2016

Table 4.10 Assesses challenges faces in financial fraud detection by Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana. Some of the procedures were evaluated on an individual basis. The first item (questions) in the table is “Lack of understanding of the concept of Forensic auditing”, the mean score of 3.27 which is not certain and the standard deviation is 1.045. Lack of daily balancing of transaction was also the next in question for respondents in table 4.6, has a mean score of 2.05 which is agreed with a 41.7 percent of the respondents and standard deviation of 1.181. The 3rd item in line of the questions in table 4.6 was “Lack of deterrent punishment of staff involved in fraud” with a mean score of 1.70 which is agreed with 48.8 percent and standard deviation of 0.195, also the next in line question is “Doing more than one job which are incompatible” with a mean score of 1.61 which is agreed with 53.0 percent and standard deviation of 0.867, “Lack of deterrent punishment of staff involved in fraud” was also the follow up question to



respondents of which the mean score is 1.58 which is agreed with 52.4 percent of the respondents agreed and standard deviation of 0.764.

Table 4. 10: Challenges in Financial Fraud Detection

	Minimum	Maximum	Mean	Std. Deviation	Valid percent (%)
Lack of understanding the concept of Forensic auditing	1	5	3.27	1.045	33.3
Lack of daily balancing of transaction	1	5	2.05	1.181	41.7
Lack of deterrent punishment of staff involved in fraud.	1	5	1.65	0.857	51.2
Doing more than one job which are incompatible	1	5	1.79	0.793	53.6
Lack of deterrent punishment of staff involved in fraud	1	5	2.21	0.970	50.0

Sources: Field Survey, 2016

4.4 To explore the different types of financial fraud found



Forensic audit is a mechanism that is being used to uncover financial fraud, by banks to ensure that customers' money are safe from fraudsters. The study looked at the different forms of fraud captured by the mechanisms used by management to uncover financial fraud by Barclays bank Tamale main branch in the Tamale metropolis. Findings from the study reveals that 45.7 percent of the respondents strongly agreed that advance free fraud is a type of financial fraud in Barclays bank Tamale main branch, 22.1 percent of the respondents

agreed that advance free fraud is financial fraud in Barclays bank Tamale main branch, 15.0 percent of the respondents are not sure that advance free fraud is financial fraud in Barclays bank Tamale main branch, 10.9 percent of the respondents disagreed that advance free fraud is a financial fraud in Barclays bank Tamale main branch, 6.3 percent of the respondents strongly agree that advance free fraud is a financial fraud in Barclays bank Tamale main branch (See table 4.11 below).

Table 4. 11: Advance Fee Fraud

Response	Frequency	Valid Percent
Strongly Agreed	82	45.7
Agreed	40	22.1
Neutral	27	15.0
Disagreed	20	10.9
Strongly Disagreed	11	6.3
Total	180	100.0

Sources: Field Survey, 2016

Data from the study also reveals that 34.5 percent of the respondents strongly agreed that forged cheque fraud is a financial fraud found in Barclays bank Tamale Main branch, 23.8 percent of the respondents agreed that forged cheque fraud is a financial fraud found in Barclays bank Tamale main branch, 26.2 percent of the respondents disagreed that forged cheque fraud is a financial fraud found in Barclays bank Tamale main branch, 10.7 percent of the respondents strongly disagreed that forged cheque fraud is a financial fraud found in Barclays bank Tamale main branch, while 4.8 percent of the respondents are not sure that



forged cheque fraud is a financial fraud found in Barclays Bank Tamale Main branch (See Table 4.12 below).

Table 4. 12: Forged Cheques

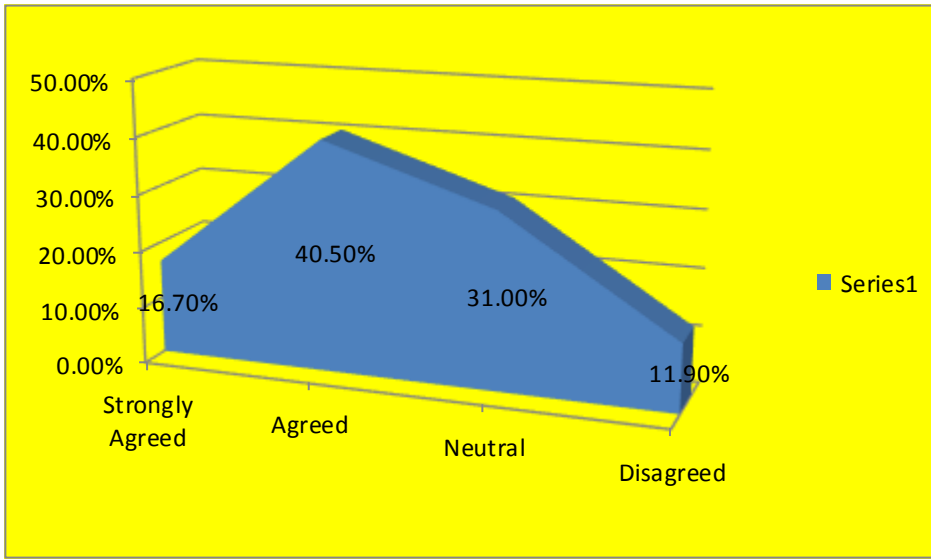
Response	Frequency	Valid Percent
Strongly Agreed	62	34.5
Agreed	43	23.8
Neutral	9	4.8
Disagreed	47	26.2
Strongly Disagreed	19	10.7
Total	180	100.0

Sources: Field Survey, 2016

Additionally 40.5 percent of the respondents agreed that fund diversion fraud is a financial fraud found in Barclays bank Tamale main branch, 31.0 percent of the respondents are not sure that fund diversion fraud is financial fraud in Barclays bank Tamale main branch, 16.7 percent of the respondents strongly agreed that found diversion fraud is a financial fraud in Barclays bank Tamale main branch, while 11.9 percent of the respondent disagreed that found diversion fraud is a financial fraud in Barclays bank Tamale main branch (See Figure 4.5 below).



Figure 4. 5: Fund Diversion

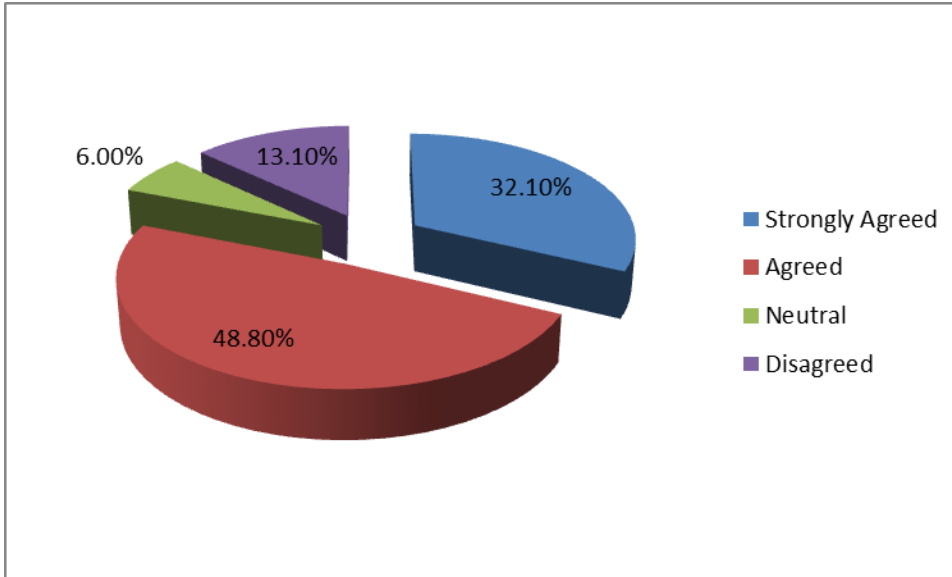


Sources: Field Survey, 2016

The study further fine out that 48.8 percent of the respondents agreed that cheque kitting fraud is been uncovered as a financial fraud in Barclays Bank Tamale Main branch, 32.1 percent of the respondents strongly agreed that cheque kitting fraud has been uncovered as a financial fraud in Barclays Bank Tamale Main branch, 13.1 percent of the respondents disagreed that cheque kitting fraud is been uncovered as a financial fraud in Barclays Bank Tamale Main branch, while 6.0 percent of the respondents are not sure that cheque kitting fraud is been uncovered as a financial fraud in Barclays Bank Tamale Main branch (See figure 4.6 below).



Figure 4. 6: Cheque Kitting

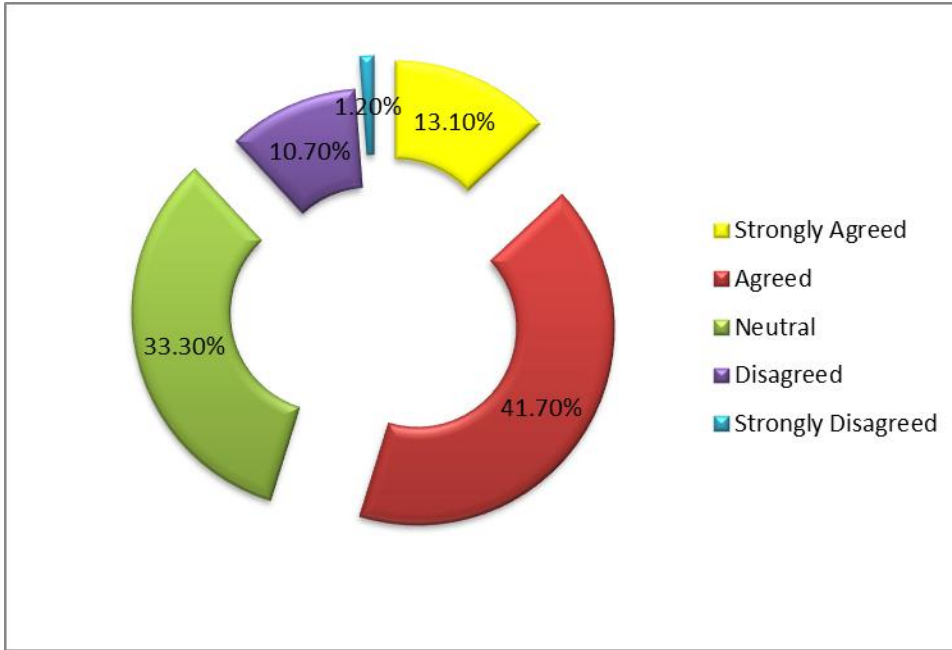


Sources: Field Survey, 2016

On the issue of account opening as a fraud, the study reveals that 41.7 percent of the respondents agreed that account opening fraud has been uncovered as a financial fraud in Barclays Bank Tamale Main branch, 33.3 percent of the respondent are not sure that account opening fraud is been uncovered as a financial fraud in Barclays Bank Tamale Main branch, 13.1 percent of the respondents strongly agreed that account opening fraud is been uncovered as a financial fraud in Barclays Bank Tamale Main branch, 10.7 percent of the respondents disagreed that account opening fraud has been uncovered as a financial fraud in Barclays bank Tamale main branch, and 1.2 percent of the respondents strongly disagreed that account opening fraud has been uncovered as a financial fraud in Barclays bank Tamale main branch (See figure 4.7 below).



Figure 4. 7: Account Opening Fraud

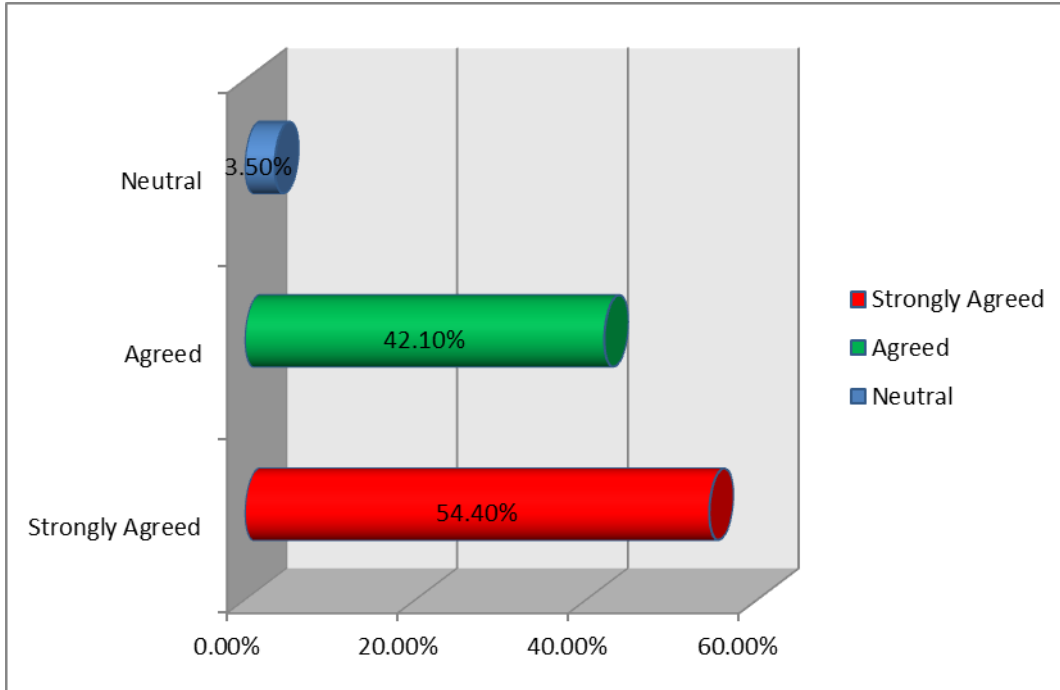


Sources: Field Survey, 2016

The study also investigated counterfeit securities as fraud in the banking sector, the study reveals that 54.4 percent of the respondent strongly agreed that counterfeit security fraud has been uncovered as a financial fraud in Barclays bank Tamale main branch, 42.1 percent of the respondent agreed that counterfeit security fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch, 3.5 percent of the respondent are not sure that counterfeit security fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch (see Figure 4.8 below).



Figure 4. 8: Counterfeit Securities



Sources: Field Survey, 2016

Data from Table 4.13 reveals that 55.2 percent of the respondents strongly agreed that money transfer fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch, 22.4 percent of the respondents agreed that money transfer fraud is been uncovered as a financial fraud in Barclays Bank Tamale Main branch, 10.0 percent of the respondents disagreed that money transfer fraud is been uncovered as a financial fraud in Barclays Bank Tamale main branch, 7.0 percent of the respondents are not sure that money transfer fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch, and 5.4 percent of the respondents strongly disagreed that money transfer fraud is been uncovered as a financial fraud in Barclays Bank Tamale Main branch (See Table 4.13 below).



Table 4. 13: Money Transfer Fraud

Response	Frequency	Valid Percent
Strongly Agreed	99	55.2
Agreed	40	22.4
Neutral	13	7.0
Disagreed	18	10.0
Strongly Disagreed	10	5.4
Total	180	100

Sources: Field Survey, 2016

Table 4.14 of the study looked at forensic audit mechanisms are being used to uncover financial fraud, by Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana. Some of the procedures were evaluated on an individual basis. There 1st question in the table is “Computer Fraud”, the mean score of the question is 2.87 with percentage of 57.1 and standard deviation of 0.818. The minimum score for this question is 1 i.e. “Strongly agreed” and maximum score is 5 i.e. “strongly disagree”. This means that respondents are not sure that computer fraud is been regarded as a financial fraud in Barclays bank Tamale main branch. The next question in line “Clearing Fraud” also has mean score of 2.43 with percentage of 50.0 which is agreed and the standard deviation of 0.834. This means that respondents are not sure that clearing fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch. Stolen cheques is also the next in question for respondents in table 4.14, has a mean score of 1.33 which is strongly agreed with a 53.6 percent of the respondents and standard deviation of 1.053. This means that respondents strongly agreed that stolen cheques fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch.



The 4th item in line of the questions in table 4.14 was “Overpaid cheques” with a mean score of 3.25 which is neutral with 40.5 percent and standard deviation of 1.221. This means that respondents strongly agreed that overpaid cheques fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch.

Table 4. 14: Forensic audit mechanisms been used to uncover financial fraud

	Minimum	Maximum	Mean	Std. Deviation	Valid percent (%)
Computer Fraud	1	5	2.87	0.818	57.1
Clearing Fraud	1	5	2.43	0.834	50.0
Stolen cheques	1	5	1.33	1.053	53.6
Overpaid cheques	1	5	1.81	1.070	56.3

Sources: Field Survey, 2016

4.5 Determination of Forensic Auditing Tools

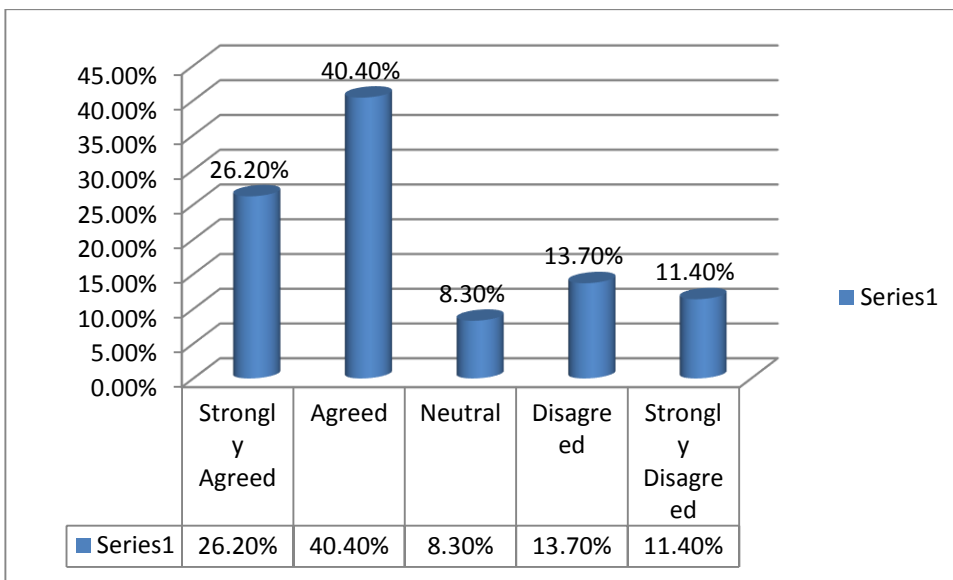
This section looked at forensic auditing tools that Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana employed to detect financial fraud. These are the procedures and steps staff are taken to detect fraud activities by criminals to defraud the bank.

Data from the study reveals that 40.4 percent of the respondents agreed that staff checks for identification (ID) of clients to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 26.2 percent of the respondents strongly agreed that staff checks for ID of clients to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 13.7 percent of the respondents disagreed that staff checks for ID of clients to be sure of the



authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 11.4 percent of the respondents strongly agreed that staff checks for ID of clients to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, while 8.3 percent of the respondents are not sure that staff checks for ID of clients to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank (See figure 4.9 below).

Figure 4. 9: Check for an ID



Sources: Field Survey, 2016



On the issue of compare the signature on ID against cheque signature of any other specimen, the study reveals that 40.0 percent of the respondents strongly agreed that staff compare the signature on ID against cheque signature any other specimen to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 30.4 percent of the respondents agreed that staff compare the signature on ID against cheque signature any other specimen to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 11.0 percent of the respondents

are not sure that staff compare the signature on ID against cheque signature any other specimen to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, also 11.0 percent of the respondents agreed that staff compare the signature on ID against cheque signature any other specimen to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, and 7.6 percent of the respondent strongly disagreed that staff compare the signature on ID against cheque signature any other specimen to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank (See table 4.15 below).

Table 4. 15: Compare the signature on ID against cheque signature and other specimen

Response	Frequency	Valid Percent
Strongly Agreed	72	40.0
Agreed	55	30.4
Neutral	20	11.0
Disagreed	20	11.0
Strongly Disagreed	13	7.6
Total	180	100.0

Sources: Field Survey, 2016

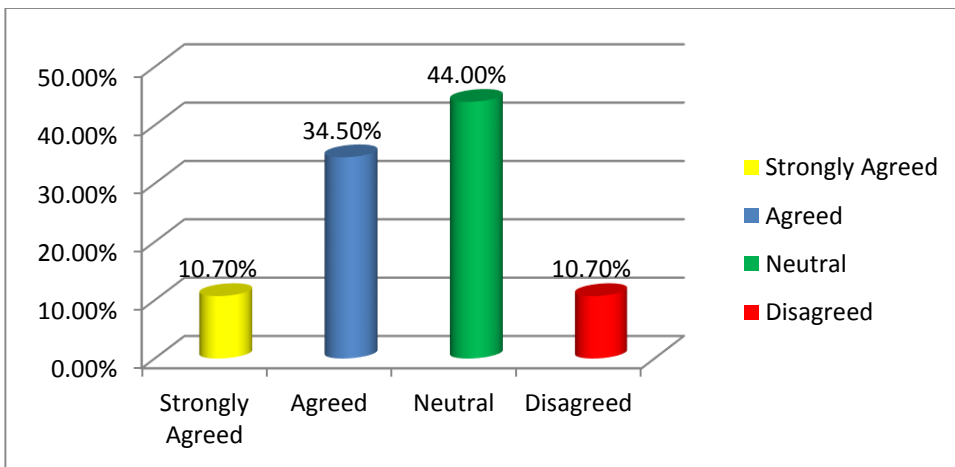
Furthermore as part of the study respondents were asked to rate the question “Ask the issuer of the Cheque to give you their home telephone number and may be some sort of personal information” as a way of detecting fraudulent activities in the bank. Information from the study reveals that 44.0 percent of the respondents are not sure that staff of the bank ask customers to provide telephone numbers in addition to the issuer of cheques to be sure of the





authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 34.5 percent of the respondents agreed that that staff of the bank ask customers to provide telephone numbers in addition to the issuer of cheques to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 10.7 percent of the respondents strongly agreed that staff of the bank ask customers to provide telephone numbers in addition to the issuer of cheques to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, and another 10.7 percent of the respondents disagreed that staff of the bank ask customers to provide telephone numbers in addition to the issuer of cheques to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank. In all 45.2 percent of the respondents accept the fact that staffs of the bank ask customers to provide telephone numbers in addition to the issuer of cheques to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank (See figure 4.10 below).

Figure 4. 10: Ask the issuer of the Cheque for personal information

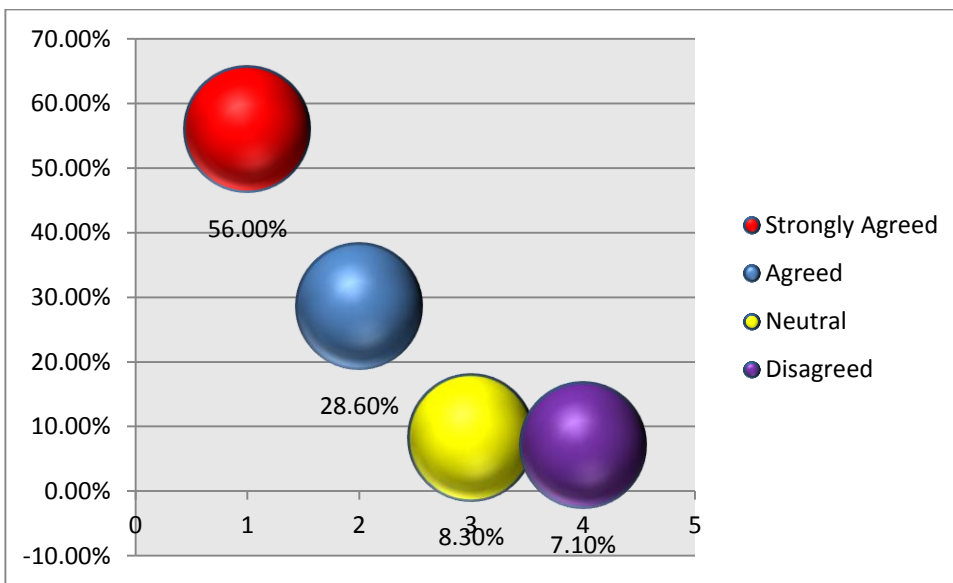


Sources: Field Survey, 2016



Data from figure 4.12 also reveals that 56.0 percent of the respondents strongly agreed that staff refuse cheques written with pencil or with signs of being altered to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 28.6 percent of the respondents agreed that staff refuse cheques written with pencil or with signs of being altered to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 8.3 percent of the respondents are not sure that staff refuse cheques written with pencil or with signs of being altered to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, and 7.1 percent of the respondents disagreed that staff refuse cheques written with pencil or with signs of being altered to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank (See figure 4.11 below).

Figure 4. 11: Dishonoured/Altered Cheques and Cheques written with a pencil

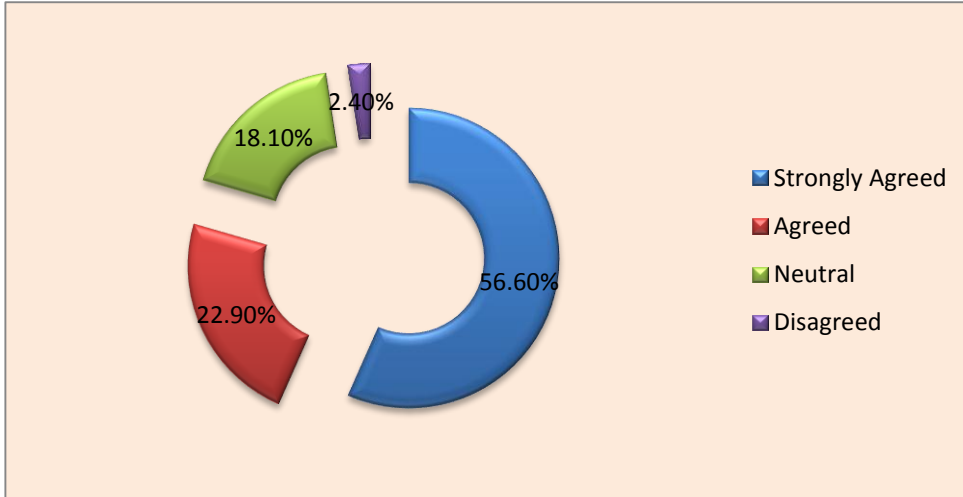


Sources: Field Survey, 2016

Also as measure to detect fraud staff of the bank are made to be aware of Cheques not signed in front of them or single cheques not being torn out of the checkbook. The study reveals that 56.6 percent of the respondents strongly agreed that staffs of the bank are aware of Cheques not signed in front of them or single cheques not being torn out of the checkbook to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 22.9 percent of the respondents agreed that staffs of the bank are aware of Cheques not signed in front of them or single cheques not being torn out of the checkbook to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 18.1 percent of the respondents are not sure that staffs of the bank are aware of Cheques not signed in front of them or single cheques not being torn out of the checkbook to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, and 2.4 percent of the respondents disagreed that staffs of the bank are aware of Cheques not signed in front of them or single cheques not being torn out of the checkbook to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank (See figure 4.12 below).



Figure 4. 12: Be wary of unsigned cheques or single cheques left in the checkbook

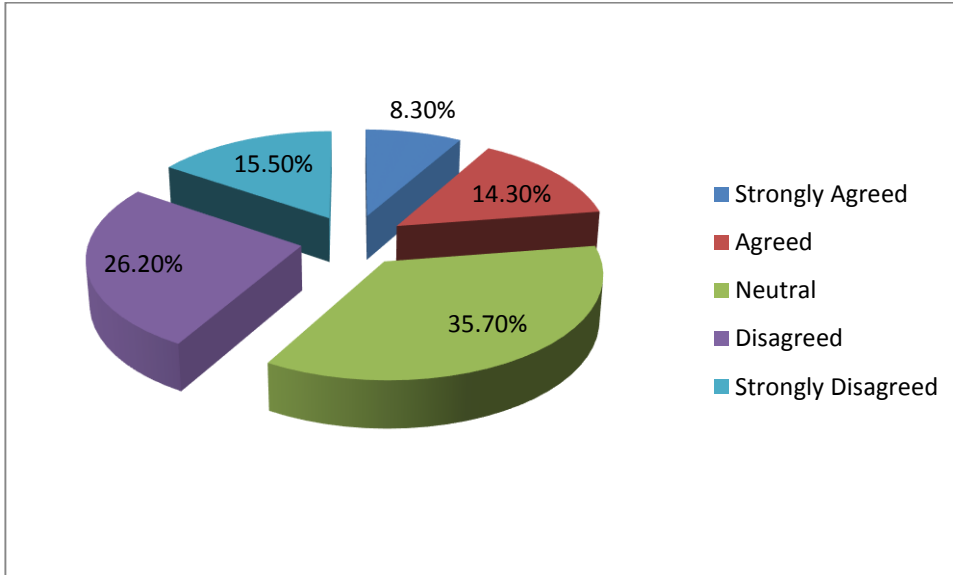


Sources: Field Survey, 2016

Figure 4.13 also shows that 35.7 percent of the respondents are not sure that staff don't give change on cheques to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 26.2 percent of the respondents disagreed that staff don't give change on cheques to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 15.5 percent of the respondents strongly disagreed that staff don't give change on cheques to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 14.3 percent of the respondents agreed that staff don't give change on cheques to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, and 8.3 percent of the respondents strongly agreed that staff don't give change on cheques to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank (See figure 4.13 below).



Figure 4. 13: Don't give Change on Cheques



Sources: Field Survey, 2016

Table 4.16 of the survey assesses forensic auditing tools that Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana employed to detect financial fraud. There 1st item (questions) in the table is “Insider must beware of cheques gifts”, the mean score of the question is 2.80 with 59.0 percent of the respondents were uncertain and standard deviation of 0.838. The minimum score for this question is 1 i.e. “Strongly agreed” and maximum score is 5 i.e. “strongly disagree”. The next question in line is “Forensic audit is a useful method of fraud detection and prevention in financial institution” also has mean score of 2.10 which is agreed with 47.0 percent of the respondents agreed and the standard deviation is 0.0838. Forensic auditing technique, fraud prevention and detection becomes easier was also the next in question for respondents in table 4.10, has a mean score of 2.08 which is agreed with a 48.2 percent of the respondents and standard deviation of 0.768. The 4th item in line of the questions in table 4.16 was “Forensic accountants attend the examination for discovery to review the testimony, assist with understanding the financial issues and to formulate



additional questions to be asked” with a mean score of 2.45 which is uncertain with 49.4 percent and standard deviation of 0.703, also the next in line question is “Forensic accountant obtain document necessary to support or refute a claim” with a mean score of 2.01 which is agreed with 44.6 percent and standard deviation of 0.867, “The forensic accountant provides relevant parties with report to judge the expert’s opinion and the basis for these opinions” was also the follow up question to respondents of which the mean score is 2.24 which is agreed with 38.6 percent of the respondents agreed and standard deviation of 0.905.

Table 4. 16: Forensic auditing tools employed to detect financial fraud

	Minimum	Maximum	Mean	Std. Deviation	Valid percent (%)
Insider must beware of cheque gifts	1	5	2.80	0.838	59.0
Forensic audit is a useful method of fraud detection and prevention in financial institution	1	5	2.10	0.838	47.0
forensic auditing technique, fraud prevention and detection becomes easier	1	5	2.08	0.768	48.2
Forensic accountants attend the examination for discovery to review the testimony, assist with understanding the financial issues and to formulate additional questions to be asked	1	5	2.45	0.703	49.4
Forensic accountant obtain document necessary to support or refute a claim	1	5	2.01	0.876	44.6
The forensic accountant provides relevant parties with report to judge the expert’s opinion and the basis for these opinions	1	5	3.08	1.242	33.7



Sources: Field Survey, 2016

Another issue of investigation is forensic accounting provides assistance with the protection and recovery of assets. Data from the study reveals that 35.1 percent of the respondents agreed that forensic accounting provides assistance with the protection and recovery of assets through fraud detection in the Barclays bank branch, Tamale main as a measure to detect fraudulent action and in action, 20.4 percent of the respondents are not sure that forensic accounting provides assistance with the protection and recovery of assets through fraud detection in the Barclays bank branch, Tamale main as a measure to detect fraudulent action and in action, 17.3 percent of the respondents disagreed that forensic accounting provides assistance with the protection and recovery of assets through fraud detection in the Barclays bank branch, Tamale main as a measure to detect fraudulent action and in action, 16.2 percent of the respondents strongly disagreed that forensic accounting provides assistance with the protection and recovery of assets through fraud detection in the Barclays bank branch, Tamale main as a measure to detect fraudulent action and in action, and 11.0 percent of the respondents strongly agreed that forensic accounting provides assistance with the protection and recovery of assets through fraud detection in the Barclays bank branch, Tamale main as a measure to detect fraudulent action and in action (See Table 4.15 below).



Table 4.15 Forensic accounting provides assistance in assets recovery

	Frequency	Valid Percent
Strongly Agreed	20	11.0
Agreed	63	35.1
Neutral	37	20.4
Disagreed	31	17.3
Strongly Disagreed	29	16.2
Total	180	100.0

Sources: Field Survey, 2016

The study also looked at forensic accountant searches for evidences of criminal conduct or assist in the determination of or rebuttal of claimed damages in the case fraud detection. Data from table 4.16 reveals that 33.7 percent of the respondents disagree that forensic accountant searches for evidences of criminal conduct or assist in the determination of or rebuttal of claimed damages, 24.5 percent of the respondents are not sure that Forensic accountant searches for evidences of criminal conduct or assist in the determination of or rebuttal of claimed damages, 18.5 percent of the respondents strongly agreed that forensic accountant searches for evidences of criminal conduct or assist in the determination of or rebuttal of claimed damages, 12.0 percent of the respondents agreed that forensic accountant searches for evidences of criminal conduct or assist in the determination of or rebuttal of claimed damages, and 11.4 percent of the respondents strongly disagreed that Forensic accountant searches for evidences of criminal conduct or assist in the determination of or rebuttal of claimed damages (See Table 4.16 below).



Table 4.16 Forensic accountant searches for evidences of criminal conduct

Responses	Frequency	Valid Percent
Strongly Agreed	33	18.5
Agreed	22	12.0
Neutral	44	24.5
Disagreed	61	33.7
Strongly Disagreed	20	11.4
Total	180	100.0

Sources: Field Survey, 2016

Data from table 4.17 indicates that 42.4 percent of the respondents strongly agreed that forensic accountants review factual situation and provide suggestions regarding possible courses of action against fraudsters, 24.7 percent of the respondents agreed that forensic accountants review factual situation and provide suggestions regarding possible courses of action against fraudsters, 15.2 percent of the respondents strongly disagreed that forensic accountants review factual situation and provide suggestions regarding possible courses of action against fraudsters, 10.9 percent of the respondents disagreed that forensic accountants review factual situation and provide suggestions regarding possible courses of action against fraudsters, and 6.8 percent of the respondents are not sure that forensic accountants review factual situation and provide suggestions regarding possible courses of action against fraudsters (See table 4.17 below).



Table 4.17 Forensic accountants review factual situations

Responses	Frequency	Valid Percent
Strongly Agreed	76	42.4
Agreed	45	24.7
Neutral	12	6.8
Disagreed	20	10.9
Strongly Disagreed	27	15.2
Total	180	100.0

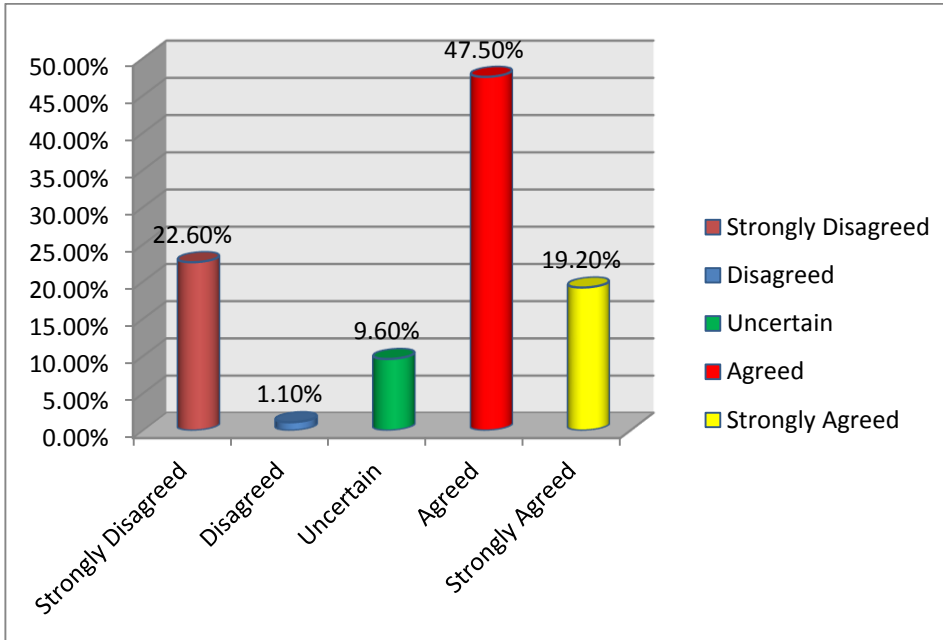
Sources: Field Survey, 2016

On the issue of forensic accountant's report in Barclays bank Tamale main is designed to support the client and rebut his opponent facts, issues, answers to detect fraudulent activities. The study reveals that 47.5 percent of the respondents agreed that forensic accountant's report in Barclays bank Tamale main is designed to support the client and rebut his opponent facts, issues, answers to detect fraudulent activities, 22.6 percent of the respondents strongly disagreed that forensic accountant's report in Barclays bank Tamale main is designed to support the client and rebut his opponent facts, issues, answers to detect fraudulent activities, 19.2 percent of the respondents strongly agreed that forensic accountant's report in Barclays bank Tamale main is designed to support the client and rebut his opponent facts, issues, answers to detect fraudulent activities, 9.6 percent of the respondents are not sure that forensic accountant's report in Barclays bank Tamale main is designed to support the client and rebut his opponent facts, issues, answers to detect fraudulent activities, 1.1 percent of the respondents disagreed that forensic accountant's report in Barclays bank Tamale main is



designed to support the client and rebut his opponent facts, issues, answers to detect fraudulent activities (See figure 4.17 below).

Figure 4.17 Forensic Accountant’s report support clients to rebut their opponents

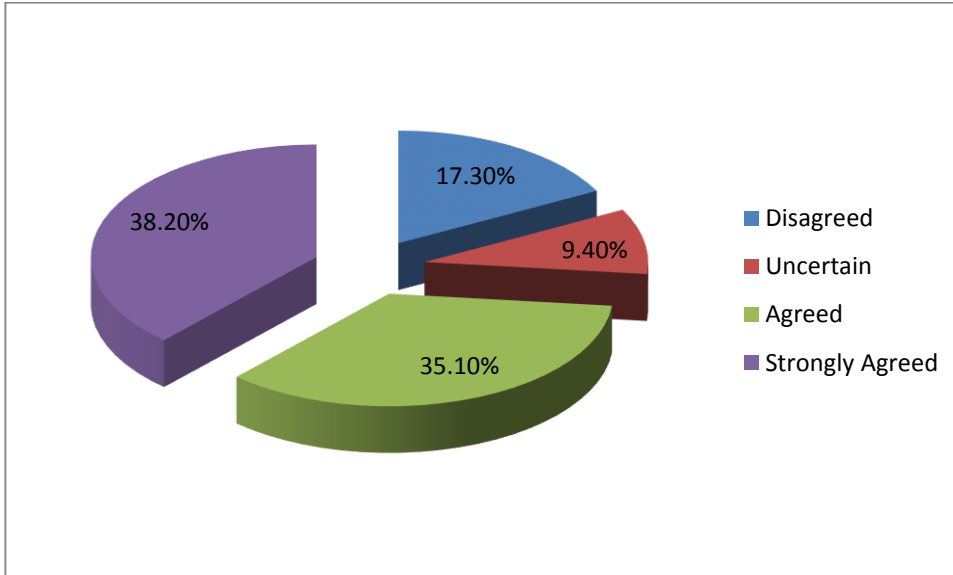


Sources: Field Survey, 2016

The study also reveals that 35.1 percent of the respondent agreed that forensic accountant provides relevant parties with report, 38.2 percent of the respondents strongly agreed that Forensic accountant provides relevant parties with report, 17.3 percent of the respondents disagreed that forensic accountant provides relevant parties with report, and 9.4 percent of the respondent are not sure that forensic accountant provides relevant parties with report (Figure 4.19 below).



Figure 4.19 Forensic accountant provides relevant parties with report

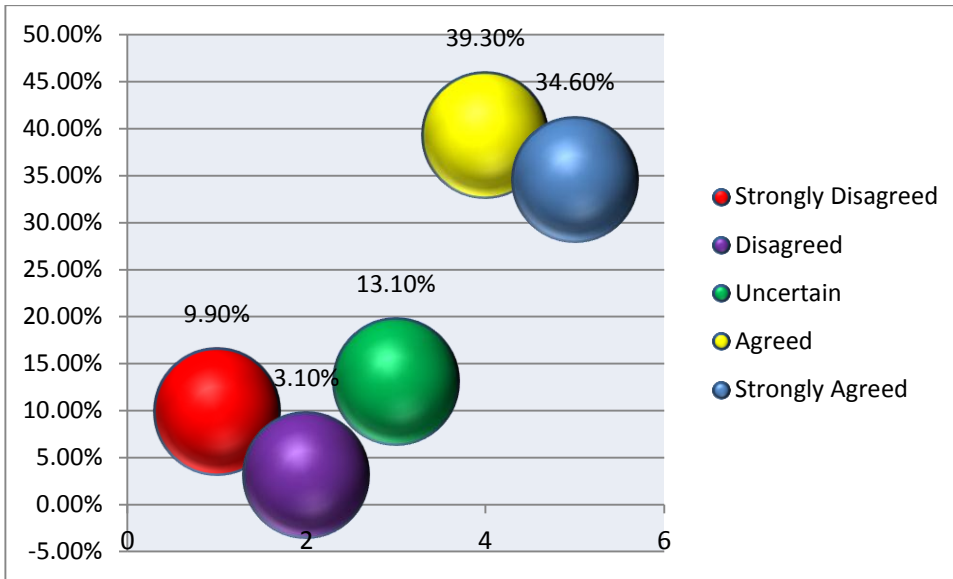


Sources: Field Survey, 2016

Also on the issue of forensic accountants obtain documents necessary to support or refute a claim, the study reveals that 39.3 percent of the respondents agreed that forensic accountants obtain documents necessary to support or refute a claim, 34.6 percent of the respondents strongly agreed that forensic accountants obtain documents necessary to support or refute a claim, 13.1 percent of the respondents are not sure that forensic accountants obtain documents necessary to support or refute a claim, 9.9 percent of the respondents strongly disagreed that forensic accountants obtain documents necessary to support or refute a claim, and 3.1 percent of the respondent disagreed that forensic accountants obtain documents necessary to support or refute a claim (See Figure 4.20 below).



Figure 4.20 Forensic accountants obtain documents necessary to support or refute a claim



Sources: Field Survey, 2016



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Summary of major findings of the study, conclusions and recommendations are presented in this chapter. The study ascertained the extent to which financial institutions engaged forensic auditing tools to prevent and minimize financial fraud with focus on Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana. First, the study evaluated the challenges faced in financial fraud detection by Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana. Second, the study explored the different types of financial fraud found in Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana. It further determined forensic auditing tools that Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana employed to detect financial fraud.

5.2 Summary of Findings

5.2.1 To evaluate the challenges faced in financial fraud detection

On the issue of challenges faced in financial fraud detection by Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana, the study shows that 55.1 percent of the respondents strongly agreed that the bank lacks infrastructure to detect financial fraud; also the study revealed that 53.6 percent of the respondents strongly agreed that documents of value and liquid assets are exposed to undisciplined staff or unauthorized person(s) like customer(s) in the Bank. Additionally, the study established that, 43.4 percent of the respondents strongly agreed that staff of the branch has some form of frustration. Similarly,



the study found out that, 71.9 percent of the respondents strongly agreed that Barclays bank Tamale branch has fear of negative publicity which affects its detection of fraudulent activities. Findings from the study also revealed that, 71.7 percent of the respondent strongly agreed that unemployment and high level of poverty leads to more fraudulent activities. It further revealed that 41.7 percent of the respondents agreed that lack of daily balancing of transaction affects financial fraud detection.

5.2.2 To explore the different types of financial fraud

The study revealed that, 45.7 percent of the respondents strongly agreed that advance fee fraud is a type of financial fraud in Barclays bank Tamale main branch. The study further revealed that, 34.5 percent of the respondents strongly agreed that forged cheque is a financial fraud found in Barclays bank Tamale main branch. Data from the study also revealed that, 40.5 percent of the respondents agreed that funds diversion is a financial fraud found in Barclays bank Tamale main branch. The study further revealed that, 41.7 percent of the respondents agreed that account opening fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch, 54.4 percent of the respondent strongly agreed that counterfeit security fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch, 55.2 percent of the respondents strongly agreed that money transfer fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch. Respondents strongly agreed that stolen cheques fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch and This means that respondents strongly agreed that overpaid cheques fraud is been uncovered as a financial fraud in Barclays bank Tamale main branch.



5.2.3 To determine forensic auditing tools

In an investigation conducted to fine out the forensic auditing tools that Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana employed to detect financial fraud. The study reveals that 40.4 percent of the respondents agreed that staff checks for ID of clients to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 40.0 percent of the respondents strongly agreed that staff compare the signature on ID against cheque signature any other specimen to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank. However, 44.0 percent of the respondents are not sure that staff of the bank asks customers to provide telephone numbers in addition to the issuer of cheques to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank. Also 56.0 percent of the respondents strongly agreed that staff refuse cheques written with pencil or with signs of being altered to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank, 35.1 percent of the respondents agreed that forensic accounting provides assistance with the protection and recovery of assets through fraud detection in the Barclays bank branch, Tamale main as a measure to detect fraudulent action and in action. It further reveals that 42.4 percent of the respondents strongly agreed that forensic accountants review factual situation and provide suggestions regarding possible courses of action against fraudsters.



5.3 Conclusions

The study drew the following conclusions:

5.3.1 To evaluate the challenges faced in financial fraud detection

The research established the challenges faced in financial fraud detection by Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana. The research drew the following conclusions: lack of infrastructure to detect financial fraud, documents of value and liquid assets are exposed to an undisciplined staff or unauthorized person(s) like customer(s) in the Bank, staff of the branch has some form of frustration, negative publicity which affects its detection of fraudulent activities, unemployment and high level of poverty leads to more fraudulent activities and lack of daily balancing of transaction which affects financial fraud detection.

5.3.2 To explore the different types of financial fraud found

The research established the following as the types of financial fraud found in Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana; advance fee fraud, forged cheque, funds diversion, account opening fraud, counterfeit security fraud, money transfer fraud, stolen cheques and overpaid cheques.

5.3.3 To determine forensic auditing tools

The study also concluded on the following; checks for identification of clients to be sure of the authenticity of the transaction and identity of the clients in order to detect fraudulent transactions in the bank; staff compare the signature on ID cards against cheque signature or any other specimen to be sure of the authenticity of the transaction and identity of the clients



in other detect fraudulent transaction in the bank; staff refuse cheques written with pencil or with signs of being altered to be sure of the authenticity of the transaction and identity of the clients in other detect fraudulent transaction in the bank; forensic accounting provides assistance with the protection and recovery of assets through fraud detection in the Barclays bank branch, Tamale main as a measure to detect fraudulent action; and forensic accountants review factual situation and provide suggestions regarding possible courses of action against fraudsters as forensic auditing tools that Barclays Bank Tamale main in Tamale Metropolis in Northern Region of Ghana employed to detect financial fraud.

5.4 Recommendations

On the basis of the conclusions, the following recommendations are proposed for consideration:

- (a) The research recommends the urgent need for effective monitoring of bank fraud through the use of ATM. This is necessary especially in this era that Ghana is moving towards a cashless economy with the ATM as the main instrument for cashless banking system of payment. There could be ATM fraud though not so pronounced now.
- (b) The study also recommends that efforts aimed at preventing forged cheque be strengthened through effective supervision and regulation of the financial system by the monetary authorities.
- (c) There should be consistency in implementation of relevant banking regulations in Barclays bank. This is to ensure adequate performance of the bank and its contribution to the growth of the economy as a whole.



- (d) Action and Recovery: appropriate sanctions should be applied when fraud is detected. Where persecution is considered to be the appropriate sanction, proper forensic procedures need to be followed during investigation and trained experts like the Professional Forensic Accountants should conduct the investigation. Where there is evidence of fraud, appropriate disciplinary action in accordance with the relevant regulations should be implemented.
- (e) Criminal prosecution may also be instituted as well as civil action to recover any losses of public funds and property.
- (f) Training and guidance is vital in maintaining the effectiveness of the strategy for the detection and prevention of fraud and corruption and its general credibility. Management of Barclays Bank needs to support induction and work related training, particularly for employees involved in internal control system and the accounting sector, to ensure their responsibilities and duties are regularly highlighted and reinforced and that best practices is followed across all levels.
- (g) Significantly, forensic auditing or any anti-fraud and corruption strategy can only work if heads of departments and senior managers are committed to it. The anti-graft agencies like the BNI should ensure they have their technical, investigative and accounting staff trained in the field of Forensic Accounting. Adequate structure and mechanism must be put in place.
- (h) Standards: For Ghana to properly embrace the practice of Forensic Accounting, the standard setting process should be modernized and



streamlined to ensure that guidelines can be altered, created, or eliminated as changing conditions dictate.

- (i) Accordingly, Ghana should embrace the practice or implementation of the Ghana Accounting Standard Board (NABS) guidelines. This should be strengthened for accounting standard setting toward broad principles aimed at elevating the quality of financial report.
- (j) Information Technology: Banks should take advantage of the modern accounting and auditing software to enhance efficiency and smooth operation of Forensic Accounting.
- (k) Adherence to the above recommendations will make a contribution to unhindered fraud detection and prevention in Barclays bank Tamale main branch.



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