

**CHALLENGES FACING MANAGEMENT OF FRAUD CASES IN COMMERCIAL
BANKS IN KENYA: A CASE STUDY OF NAIROBI CBD**

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**A Thesis Submitted to the Graduate School in Partial Fulfillment of the Requirement
for the Master of Arts Degree in Security Management of Egerton University**

EGERTON UNIVERSITY

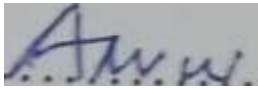
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DECLARATION AND RECOMMENDATIONS

Declaration

This thesis is my original work and to the best of my knowledge has not been presented for an examination for any academic award in any Institution or University.

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DEDICATION

I dedicate this research projects to my parents and my brothers who supported me both morally and financially. I thank you all for your encouragement and your inspiration throughout this research period.

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It is by the grace of the Almighty God that I was able to complete this thesis. I appreciate all those who contributed in various capacities to enable me complete my studies. My sincere gratitude go to Prof. Eric Kiprono Bor and Prof. Samson Mwangi Wokabi for their dedicated guidance, Perseverance, understanding, scholarly advice and opinions, which has made me to be in this level.

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ABSTRACT

This study focused on influence of Bank Fraud Investigations Unit in management of fraud cases. Fraud is a major problem in the world that is not set to end in the near future. Supervision and regulation have not been sufficient in dealing with fraud related challenges in banks due to lack of participation by policymakers, financial institutions and consumer society groups. This study aims to contribute to the knowledge and understanding of factors influencing Banking Fraud Investigation Unit mandated to investigation and management of fraud risk in Kenya. The specific objectives for this study are; to establish characteristics and factors influencing banking fraud cases; to establish the influence of investigation mechanisms on security risk management of banking fraud cases; and to determine the challenges that influence security risk management in prevention of banking fraud cases in Kenya. This study was anchored on Rational Choice Theory and Social Control Theory. This study used a sample size of 150. This study used descriptive research survey design that enabled the use of both qualitative and quantitative data from the CBK's BFIU officers who were included in the study. Key informants were selected by snow ball sampling from former BFIU officers and staff from Commercial banks. Data were collected using both questionnaires and interview methods. Data was analyzed both descriptively and inferentially using Statistical Packages for Social Sciences (SPSS) software. Analyzed data were presented in tables, charts. The Qualitative data from the interview guide was analyzed by content analysis and presented as verbatim reports and narratives. Both the quantitative and qualitative data were then be interpreted by the Researcher and presented as research findings in prose form. The study found out that indicates that BFIU has succeeded (60%) in fight against bank fraud in Commercial Banks of Kenya. This implies that the use of BFIU in prevention of bank fraud is important because of trained skills and knowledge. Further, the finding indicated that low or non-existent fraud budgets for detecting and preventing fraud, ineffective judicial systems, insufficient industry co-operation, inadequately educated police and prosecutors, and weak government regulatory frameworks are among the internal and external elements involved in commercial Bank fraud in Kenya. The study is expected to inform on review of Banking Fraud Investigation Unit and contribute knowledge gap on fraud risk management mechanism. The research could also help personnel, particularly top policymakers, make better judgments in the future when it comes to fraud detection and prevention.

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LIST OF ABBREVIATIONS AND ACRONYMS

BFIUs	-	Banking Fraud Investigation Units
CBK	-	Central Bank of Kenya
DCI	-	Directorate of Criminal Investigations
EFT	-	Electronic Funds Transfer
PwC	-	PricewaterhouseCoopers
RTGS	-	Real Time Gross Settlement
SWIFT	-	Society for World Wide Interbank Financial Telecommunication

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Risk assessment studies have been inconsistent due to geographical location, timing and methodologies adopted. Studies in developed countries differ with those in developing countries because the countries are at different risk management stages. Risk management therefore addresses activities planned and actions taken to minimize risk arising from the potential and actual cases of fraud. It consists of control mechanisms that include financial control, safety, risk assessment, quality, inspections and compliance (Skoczylas-Tworek, 2019). According to Bell and Jhang (2011), some of the key benefits of fraud risk assessment are reduction of fraud exposure, supplementing internal controls in fight against fraud and assisting towards meeting regulatory requirement.

In Europe, fraud rose from 40% to 44%, from 37% to 54% in in the US and in Asia it rose from 30% to 46% (PwC, 2018a). In the United Kingdom, financial fraud amounted to £2 billion equivalent to Kshs 200 billion in 2017 (Experian, 2017). Banks in the US lost a total of USD 2 billion equivalent to Kshs 180 billion in 2017 (Kovaleski, 2018). Africa had the largest increase in fraud cases rising from 57% to 62% (PwC, 2018a). South Africa had a 77% rate of reported economic crime followed by Kenya at 75% among countries in the world (PwC, 2018b). According to a report by Banking Fraud Investigations Unit (BFIU), the number of fraud cases reported and amount of money lost by business enterprises, financial institutions and individuals in Kenya have continued to rise steadily over the past three years. Banks have continued to report the majority of cases with 59% and 60.5% of cases reported for investigations in the year 2017 and 2018 respectively (BFIU, 2018).

A crime survey conducted by Deloitte, East Africa (2012) indicated that East African banks lost USD 48.3m to fraud in one and a half years that ended in June 2012 due to insider collaboration with fraudsters. Most of these frauds were perpetuated using the electronic systems that were introduced in banks to increase clearance of paper cheques (the Guardian Reporter, 2012). To address the electronic fraud menace, the Central Banks of East Africa announced plans to harmonize the East African banking systems. The harmonization is expected to create integrated regional financial institutions to enable them to develop proper integrated mechanisms for fighting vices like fraud and improving credit management system among other service and efficiency improving functions. However, the harmonization alone cannot fully address the fraud problem in banks (Mwaura & Thiong'o, 2013). The ICS allows

the financial institutions to foresee potential problems which may cause financial losses through fraud thereby prevent or reduce future losses (Hayali *et al.*, 2013).

Laws relating to fraud vary from one country to another but there are universal principles on effective fraud risk management. These principles are prevention, governance, detection, response and monitoring (CGMA, 2012). According to ACFE (2016), organizations lose approximately 5% of their annual income to fraud but risk management professionals underestimate the role of fraud in their duties. Banking Fraud Investigations Department (BFID) has indicated that Kenya's banking system has become vulnerable to fraud according to reports generated by the Department on fraud; the financial institutions have become a soft spot for staff to steal. In the report by BFID, banking fraud in Kenya had increased by more than three times in the third quarter of 2010, to Sh1.7 billion (BFID, 2011). Mukanda (2013) in his report also concurred with BFID report and he observed that Kenya's banking industry has become a very easy target for fraudsters who have been stealing a lot of money from banks on monthly basis. In the month of December 2013 alone, nearly KSh 500 million was reported stolen from 33 financial institutions in the country. This has been attributed to the facts that banks sometimes prefer internal disciplinary mechanism in cases involving employees' theft (BFID, 2011).

The financial markets have become innovative, creative and as well complex which has presented opportunities for fraud. According to Pan *et al.* (2011), though the fraud triangle provides a framework for understanding fraud, not all types, causes and drivers of fraud are captured in the model. According to Pan *et al.* (2011) trends, patterns and statistics such as personal characteristics have an impact on the levels of fraud though this is not captured in the model. Essentially, this requires additional investigation of the factors that drive fraud including personal characteristics. Furthermore, Pan recommended in their study that the study of fraud should seek to explore how personal traits and characteristics can be used to explain fraud and fraudsters. Furthermore, researchers ought to develop into a model how individual, firm and industry statistics motivate and drive fraud in organizations (Pan *et al.*, 2011).

While the research and recommendations by Pan *et al.* (2011), were undertaken in the European continent, very few studies have focused on fraud management and prevention in the African region and especially the East African region. Existing literature is concentrated in the West African region (Abdul & Tinusa 2012; Adenji, 2004; Adewumi, 2011) especially

in Kenya with sparse studies in other regions in Africa. This has created a shortage in empirical evidence and studies on the local scene.

Fraud impacts organizations financially and operationally while individuals may in addition to loss of finances, also be affected psychologically. The impact of fraud on organizations extends past monetary loss to negative effects on reputation, goodwill and customer relations which may be devastating (Bhasin, 2016). Growth in the size of organizations and increased number of workers and transactions has led to increases in the possibility of committing fraud (Enofe *et al.*, 2017). Frauds in the banking sector include insider fraud, control fraud and external fraud (Greenbaum & Thakor, 2015). The most prevalent of these is electronic banking frauds involving automated machine (ATM), point of payment (POS), internet and mobile banking platforms (Eneji *et al.*, 2019).

Frauds interfere with proper functioning of the banking sector and therefore strongly affect the entire economy (Enofe *et al.*, 2017). Beyond the real loss, there are additional costs which include security expenditure, insurance and lost output while massive frauds may lead to collapse of banks and reputational losses (Eneji *et al.*, 2019). According to PwC (2018a), the rate of economic crime including banking fraud globally has increased from 39% in 2016 to 42% in 2018 leading to a corresponding rise of increased spending by organizations to combat fraud.

Gottschalk (2018) states that an investigation may involve events that occurred or those that did not occur while information is collected and knowledge is applied to reconstruct the past. Common fraud preventive measures include engaging forensic accountants or auditors, acquisition of skills in forensic accounting, auditing, law and investigation by investigators and regular internal and external auditing of banks' financial records and information (Bhasin, 2015; Wells, 2014). The Central Bank of Kenya (CBK) has attributed fraud cases to failure of banks to detect and control fraud, poor surveillance of banking halls and automated teller machines (ATM) and inadequate forensic auditing systems (CBK, 2013). Investigation is a response mechanism for fraud investigation and may involve law enforcement teams and internal fraud investigators (Uniamikogbo *et al.*, 2019). Conventional investigations have failed to prevent and detect fraud leading to fraud becoming a norm and widespread. The increasing complexity of fraud requires that forensic auditing be included as specialized investigative skills for success (Uniamikogbo *et al.*, 2019).

Price Waterhouse Coopers (PwC) (2018) reveal that the rapid advance of technology has helped fraudsters to become more sophisticated in their methods and more strategic in

their goals. Cases where technology-savvy bank employees are party to fraud pose many challenges to the institutions affected and investigators. According to BFIU (2018) culprits could be working in key departments where they are the only ones capable of providing useful information and facilitating the collection of evidence for fraud incidents they have participated. The situation points to the need for developing new approaches including investigation techniques for solving the problem of fraud (Ivaniuk & Vyshnevskiy, 2016). Therefore, it is from the above background information that the current study seeks to assess the influence of BFIU in mitigation of fraud risk in Nairobi County, Kenya.

1.2 Statement of the Problem

Fraud is a global problem that has increased exponentially in total value and volume for both external and internal frauds. This has attracted a lot of attention both at the organization and state levels leading to emphasis placed on security risk management on fraud investigation. Fraud within the banking sector negatively affects the organization financially and operationally while reputation may also be dented. The important place held by banks in the financial system dictates that negative effects of fraud will also have an impact on the wellbeing of the country's economy. The government prevention efforts have failed to control the prevalence of bank fraud despite the present security risk management and fraud investigation mechanisms put in place. Therefore, it was imperative for the current study to examine the challenges facing Bank Fraud Investigation Unit in investigation and management of fraud cases in Nairobi County, Kenya,

1.3 Broad Objective

The broad objective of the study was to assess the challenges facing Banking Fraud Investigations Unit's in the management of fraud cases in Commercial banks, Nairobi County, Kenya.

1.3.1 Specific Objectives

- i. To explore the characteristics and factors influencing fraud cases in Commercial banks, Nairobi County, Kenya.
- ii. To assess the challenges facing Banking Fraud Investigations Unit in management of fraud cases in Commercial banks, Nairobi County, Kenya
- iii. To determine the mitigation strategies employed in management of banking fraud cases in Commercial banks, Nairobi County, Kenya

1.4 Research Questions

- i. What are the types and effects of fraud cases in Commercial banks, Nairobi County, Kenya?
- ii. What are the challenges facing Banking Fraud Investigations Unit in management of fraud cases in commercial banks, Nairobi County, Kenya?
- iii. Which are the mitigation strategies in management of banking fraud cases in commercial banks, Nairobi County, Kenya?

1.5 Justification of the study

High prevalence of banking fraud cases in the country has been attributed to ineffective control measures, poor system of internal control and poor corporate governance practice in the banking sector. Advances in technology and cross border collaborations have enabled fraudsters to achieve their goals. There have been increased cases of information communication technology related frauds and cyber-crime. The existing prevention efforts including internal control systems have failed to reduce the prevalence of fraud cases. Consequently, fraud cases within the banking sector have continued to negatively affect these organizations financially and operationally while denting their reputations in some instances. As banks hold an important place in the financial system, it follows that negative effects of fraud will also have an impact on the well-being of the country's economy. Thus, the information on the nexus between security risk management and investigation of banking fraud cases will be useful to the security agencies and the Central Bank of Kenya.

Effective and efficient internal control systems are one of the best measures for preventing fraud. Banking Fraud Investigations Unit utilizes investigation mechanisms in security risk management for banking fraud cases. Among these are interviews with individuals, document review and collection of evidence. Prompt detection of fraud, location of electronic evidence and cross-border tracing of suspects are some of the strategies employed in security risk management for banking fraud cases. Despite these efforts, high prevalence of cases has continued pointing to failure of the prevention efforts to control the prevalence of fraud. This has been attributed to modernization, sophistication and technological changes adopted by fraudsters. Not much is also known about the obstacle that influences security risk management for investigation of banking fraud cases.

Prevalence of frauds has been attributed to ineffective control measures, poor system of internal control and poor corporate governance practice. Lack of technical expertise for investigating bank frauds present barriers to investigation while complex bank systems create new opportunities for perpetration of frauds. Technological advancements that enable online perpetration of frauds globally present challenges as is employee collusion. Despite investigations efforts by BFIU, high prevalence of banking fraud has continued pointing to the need to determine relationship between security risk management and investigation of banking fraud cases. The results will provide information to policy makers and stakeholders, contribute to the body of knowledge and create opportunities for further research.

1.6 Scope and limitation of the study

The scope of the study was in commercial banks in Kenya: a case study of Nairobi CBD. This study focused on the challenges in the management of bank fraud cases commercial bank in Nairobi. The study was conducted at BFIU in Nairobi, targeting fraud investigators attached to the Unit. This included fraud investigation mechanisms, identifying security risks and obstacles and implementing plans to address them. BFIU is a suitable area for the study since it is mandated by both the Directorate of Criminal Investigations (DCI) and CBK to investigate fraud including banking fraud in commercial banks in Kenya. The major limitation of the study is the issue of confidentiality which is expected to arise. This limitation was addressed by obtaining appropriate permissions and assuring respondents that any information obtained was treated with confidentiality. Key respondents were required to respond to an interview schedule which supported and ensure the accuracy of the information obtained from the questionnaires.

1.7 Definition of Key Terms

Banking Fraud Investigations:	Are mechanisms consisting of interviews with individuals, document review, cross-border tracing of suspects and collection of evidence including location of electronic evidence for prompt detection of fraud.
Banking Fraud:	Are frauds perpetrated in banking institutions including insider fraud, control fraud and external fraud. Examples are falsifying of loan documents, theft of cash or cheques, misuse of bank assets and electronic theft.
Challenges	Are drawbacks that hinder investigation of banking frauds.
Control system:	Consists of sub-systems and processes put together for the purpose of controlling the outputs of the process (Ganesh & Raghurama., 2008).
Fraud:	Refers to a deliberate deception to obtain illicit material gain, and includes embezzlement and asset misappropriation (Pan <i>et al.</i> , 2011).
Investigation Mechanisms	Refers to the system of methods utilized to conduct banking fraud investigations.
Security Risk Management:	Ongoing process of identifying security risks including fraud trends, fraud structures, mechanisms of commission, obstacles met in fraud prevention and implementing plans to address them.
Trends:	The measure of significant changes in banking fraud.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This Chapter presents relevant literature on security risk management and investigations of banking fraud cases both globally and here in Kenya. The chapter begins with an overview of bank fraud in global context. It is organized along three thematic areas namely: structures in banking fraud cases, mechanisms on security risk management in banking fraud and obstacles that influence security risk management in investigating banking fraud. Besides, relevant gaps to be filled by this study, the Chapter culminate with both theoretical and conceptual frameworks.

2.2 Characteristics and Factors Influencing Fraud Cases

Fraud has been classified in various ways using various parameters: Management fraud, Insiders who are purely employees of the banks, outsiders who are customers or non - customers of the banks and insiders /outsiders, which is a partnership of the employees (insiders) and outsiders. This is frequently committed by management staff e.g. general managers, managing directors. The victims of this kind of fraud are investors and creditors and this is done via financial statements. Management fraud is driven by the need to acquire more resources from new and existing share capital holders or suppliers. Management fraud may also be driven by the need to create a good corporate image/standing of the business in the eyes of the regulator or supervisor e.g. Central Bank and Kenya Bankers Association.

Management in most organizations is perpetrated through two major avenues: deception and deprivation. Management can overstate its assets or and revenues or understate liabilities and or expenses. ACFE (2011) believes that it is carried out through fictitious revenues, timing difference, improper asset valuation concealed liabilities and expenses and improper or inadequate disclosure (Kingsley, 2012).

Employee fraud often referred to as non-management fraud is primarily committed by the employees of the banks (Kingsley, 2012; Tchankova, 2002). Employee fraud is mainly characterized by cash theft from bank tills, forgeries of customers signatures with the intention of withdrawing monies from the customer account, opening and operating fictitious accounts and illegal transfer of funds to other accounts (Akinyomi, 2012; Kingsely, 2012; Tchankova, 2002). Employee fraud can also be driven through illegal transfer of funds and assets, false

balance crediting, opening, use and management of fictional accounts, claiming of overtime for hours not worked, fund diversion (tapping funds from interest into a suspense account) computer fraud via compromising log in credentials of an e-banking user (Akinyomi, 2012).

Kingsely (2012) and Akinyomi (2012) in their respective studies on fraud in the financial and banking sector noted that staff can also collude to misappropriate organizations assets e.g. cash, inventory customer information. Therefore, banks must take into consideration the location, place and security of assets and the responsible employees for the assets. Common employee fraud schemes include employees creating and paying for non-existent goods and services, payment of invoices that are inflated or made up, presentation of inflated and fake credit notes, customer list theft and unlawful acquisition of proprietary information (Kingsley, 2012).

Bank staff that have access to tangible assets and the accounting systems that record and track the activities of an employee. However, technologically savvy employees can use the same systems to conceal their identities and theft. This is especially so when the staff establish fake vendor accounts and embed them in the master file to enhance payment processing. Furthermore, employees can steal products or assets of the company and charge the same to the cost of sales which reduces the profitability of the company while asset sales and removal for asset list will reduce the asset of the company (AFCE, 2009). Given the transition to a service based, knowledge economy and more valuable assets of a bank are intangible e.g. customer lists and copy righted material. Intangible assets theft may include the unauthorized copying and use of software's and other intellectual property (AFCE, 2009).

Frauds perpetrated by customers and non-customers of banks are outsider fraud. These may include the following: Cheque Fraud. This is the oldest financial crime. It is the commonest method by which customers and the bank are defrauded. Counterfeit cheques not written or authorized by legitimate account holder, forged cheques where a stolen cheque not signed by account holder, or altered cheque where an item that has been properly issued by the account holder but has been intercepted and the payee and/or the amount of the item have been altered (Onkagba,1993).

Forgeries is one entrenched mode of fraud where employees forge and copy a customer's signature with the aim of withdrawing funds from the customer's account. The major target accounts for forgeries are targeted savings account, deposit accounts, current accounts or transfer instruments. Experience has shown that most of such forgeries are

perpetrated by internal staff in partnership with outsiders with the employees providing sample signatures of the customers (Akinyomi, 2012).

Kitting involves the use of the time that normally lapses between depositing and clearing a cheque to acquire authorized loans without any interest. The primary objective of kitting is to utilize funds and interest fees to conceal short term cash deficiencies and shortages or to acquire funds for personal use. Competition among banks encourages bank to make funds available before time in order to attract special business accounts (Onkagba, 1993).

Fraudsters make false statements and or submit falsified documents including rent rolls, lien waivers and financial statements to boost loan applications. They may also make fraudulent disbursement requests to receive loan proceeds. This fraud activity may occur across simple banks using multiple accounts by opening an account with false identification (Onkagba, 1993). In impersonation and misrepresentation, the fraudster always assumes the identity of another individual with the goal of committing a fraud or dishonest activity. Impersonation may be done to acquire cheque books to commit fraud or acquisition of cheque leafs for fraud purposes. According to Akinyomi (2012) impersonation is particularly very successful where the outsider works in collaboration with an insider.

Counterfeit Securities occurs when a good quality instrument is forged and used as an alternative to the stocks or assets as security for a loan. The fraudster gets the funds and disappears before the bank notes the documents are counterfeit. Counterfeits are one of the oldest forms of crime which has proliferated due to the advancement of photographic equipment and tools which has helped criminals to produce counterfeit documents that are of high quality and resemble original documents. According to Onkagba (1993) counterfeit documents may be copied, forged or simply changed in its details e.g. dates, terms of payment or holder.

Money Transfer Fraud; Money transfer services refers to the movement of financial assets and resources from one account to another mostly the beneficiary account. Money transfer can occur through mail, telephone or at the counter, mobile phones or through other electronic systems. Money transfer fraud occurs when the beneficiaries detailed are changed or altered to reflect those of a different individual or beneficiary (Onkagba, 1993).

Clearing fraud can be committed by substituting cheques to enable a fraudster divert funds to a wrong beneficiary. There is also suppression of cheques such that at the end of the

time required to clear a cheque the bank gives value as like authorizing bank had accepted payment of the value of the instrument (Onkagba, 1993).

Letter of credit (also documentary credit) is a well-known payment method in international trade. This instrument has two fundamental principles: the autonomy or independent principle and the doctrine of strict compliance. Such principles intending to facilitate international transactions make letter of credit easy to be abused by fraudsters. Traders from developing countries who lack sufficient experience and knowledge of letters of credit are often the targets from an economic point of view; it is true that checking credibility involved information costs. It is better to incur the cost that the potential cost that would be involved if fraud were to occur. Apart from carefully checking the credibility of the seller beforehand, the buyer must cautiously choose suitable trade terms which allocate the risk of goods, cost, liability between buyer and seller (Zhang, 2013).

The Letter of Credit fraud occurs mostly in international trade where a supplier receives a spurious letter of credit, which is usually accompanied by bank drafts with fake endorsements which guarantees payments (Onkagba, 1993). This is committed at ATMS and postterminals. Fraudsters create a replica of a legitimate card or copying data contained in the cards magnetic stripe. Using this information, the criminals then use the cards (Onkagba, 1993). A fraudster can also use a giraffe method to monitor the information the customer keys into the ATM machine unknown to customers.

A jammed ATM card can cause a customer to lose money. A fraudster pretending to be a genuine sympathizer will suggest that a victim reenter his or her security code. When the card holder leaves, the fraudster retrieves the card and reenters the code that he has doctored clandestinely. Fraudsters can also use data collected from tiny cameras and devices called skimmers that capture card information (Adeoti, 2011). According to Chartered Institute of Management Accountants (CIMA) bank Fraud cannot be attributed to one factor only (CIMA, 2009). On the contrary, a multifaceted and multifactor approach to the study of fraud must be undertaken. Looking at a fraudster's perspectives, it is necessary to take account of motivation of potential offenders, condition under which people can rationalize their prospective crimes away, opportunities to commit crimes, perceived suitability of targets for fraud, technical ability of the fraudster, the possibility and likelihood of fraud discovery and carrying out, expectations and consequences job loss, family stigma and proceeds of crime confiscation and actual consequences of discovery.

According to Pan *et al.* (2011) the current increase in fraud cases stems from the intense pressure faced by individuals. According to their study, fraud grows and thrives under three major factors: pressure on employees to commit, availability of opportunities for fraud and the ability of the employee to rationalize the act of fraud. However, this factor may drive fraud under differing conditions and environments. The factors may lead to proliferation of fraud during economic hardships especially when the organization and or the employees are undergoing times of economic and financial strain. Similarly, as companies seek to reduce their level of employees or reduce their expenditure especially on employee allowances and remuneration, the opportunities for fraud may increase due to a reduction in the effectiveness of internal controls. This is in fact grounded in the findings of the study of the Association of Certified Fraud Examiners (ACFE, 2009) in which over 80% of the respondents indicated that economic hardships were a reason for the increase in fraud. Employee layoff has the effect of establishing gaps in the internal control systems which promote fraud. In effect the ACFE (2009) concluded that there exists an inverse relationship between fraud in the organization and its economic strength. Thus, it was imperative for the current study to explore unknown reasons for bank fraud in Commercial banks, Nairobi County Kenya.

The prevalence of banking frauds has been on the rise affecting many sectors of economies and resulting into major financial losses (PwC, 2018a). The prevalence of frauds worldwide has been attributed to ineffective control measures, poor system of internal control and poor corporate governance practice (ACFE, 2014). Due to rapid advances in technology, fraudsters have continued to be sophisticated through the methods used while collaborating internationally to achieve their goals more strategically (PwC, 2018a). The banking sector in Kenya is regulated by CBK which manages bank supervision and monetary policy as governed by the Banking Act and the CBK Act (CBK, 2017). According to the CBK (2017), electronic methods of payment include EFT, direct debits, SWIFT and customized banking services such as office-banking, home-banking, internet banking, tele-banking and mobile banking.

Through internal or insider fraud, employees in the banking sector have also been linked to the crime on many occasions. Frauds that are perpetrated in banking institutions are categorized into insider fraud, control fraud and external fraud (Greenbaum & Thakor, 2015). Insider fraud is perpetrated by a member of the bank's staff and may also involve interaction with outside individuals, such as customers who offer an incentive to the employee to facilitate the fraud (Greenbaum & Thakor, 2015). Zahra *et al.* (2016) gave examples of insider fraud to

include falsifying of loan documents, disclosure of bank or customer information which may result in fraudulent activity, theft of cash or cheques, misuse of bank assets, identity theft and electronic theft among others.

Control fraud is a type of insider fraud but is executed at the highest levels of the company, with the company itself designed to hide and facilitate the fraudulent activities. It involves subversion of the corporate culture and control systems of the bank in order to perpetrate systemic fraud (Bhasin, 2005b). Breuer (2006) reveals that an example of control fraud is when at the individual bank level; poor quality bank loans are offered to acquaintances of bank officers with a direct personal or business interest and which may precipitate a conflict of interest. In Kenya, the most common fraud recently has been insider fraud due to knowledge and accessibility of systems by employees.

External fraud is perpetrated by customers, suppliers, organized criminals and even ex-employees of the bank. It can result either from theft of personal data of legitimate customers of the bank or falsification of personal data in order to increase the likelihood of loans being made to customers that would not otherwise qualify (Mishkin, 2016). An example of external fraud is new account fraud which involves the criminal using a false identity which is made-up or stolen to open a new account and obtain a credit card or loan (Hartmann-Wendels *et al.*, 2014). The authors further gave another example of an existing account fraud where the criminal gains access to an existing account or set of accounts and uses them for fraudulent purposes. The frauds perpetrated in Kenya are mainly insider and external frauds.

2.3 Challenges in management of Banking Fraud Cases

There are several obstacles that hinder investigation of banking fraud cases to a successful conclusion. Banking frauds have become numerous and complex, involving use by criminals of advanced technology that is constantly evolving and posing a challenge to investigators. These new fraud opportunities can often be extremely difficult to detect due to their technological sophistication (Akelola, 2014). The crimes often require specialized technical knowledge and skills but the police especially in developing economies lack appropriate training and competence. According to Akelola (2014), most investigators therefore lack the technical expertise needed for resolving certain frauds committed in banks thus presenting barriers to investigation.

Bank systems are also more complex with multiple channels through which banks deliver their services that include online banking platforms, websites, mobile phone

applications (Akelola, 2014). These channels create new opportunities through which criminals gain access into banking information systems and perpetrate frauds (Akelola, 2014). Areas that present challenges include weak internal controls, employee collusion, overriding of controls and lack of segregation of duties (Akelola, 2014). The author concluded that insider involvement makes it difficult to uncover fraud as suspects can override the controls.

Cases where technology-savvy bank employees are party to fraud pose many challenges to the institutions affected and investigators. Culprits could be working in key departments where they are the only ones capable of providing useful information and facilitating the collection of evidence for fraud incidents they have participated (BFIU, 2018). In most of the cases, investigators arrive when the scenes of crime are already compromised and only opt for circumstantial evidence to support prosecution (BFIU, 2018). CBK (2013) adds that fraud has also been attributed to delayed execution of arrest warrants, constraints in the legal framework that hinder fraud investigations, customer confidentiality and lack of data on fraud.

Frauds which are transnational and involve multinational banks or actors in different countries are a challenge to investigators. Enforcement agencies may be unable to collaborate due to absence of the requisite laws in one or more countries (Gottschalks, 2011). Customer confidentiality may also impede investigations of banking frauds since banks deliberately decide not to share information for fear of spoiling bank-customer relationship (Gottschalks, 2011). Alao (2016) adds that a slow investigation system by the police, outright corruption and delay in the prosecution of fraudsters may also become impediments to investigations. Inadequate personnel, technological capacity and inter-state collaboration have been regarded as drawbacks in banking fraud investigations in Nairobi (BFIU, 2018).

Unwillingness by banks to pursue fraud cases which they consider small negatively impacts on investigations while lack of appropriate laws to combat fraud negatively impacts on investigations (Akelola, 2014). CBK has attributed fraud to failure of banks to detect and control fraud, poor surveillance of banking halls and automated teller machines (ATM), and inadequate forensic auditing systems (CBK, 2013). Akelola (2014) concludes that inadequate skills or knowledge on fraud by investigators and lack of specialized forensic expertise hampers fraud investigations. Risks of poor investigation include the lack of future deterrence and eroding confidence of Banking Fraud Investigation Units. There is also possibility of litigations by employees who feel that their reputation has been damaged from investigations.

However, there are several strategies to mitigate against these obstacles in the investigation of Banking Fraud Cases.

2.4 Fraud Risk Management Mechanism

Fraud risk management studies in banks have taken different approaches. Some researchers have looked at developing tools to manage risks (Bell & Jhang, 2011; Bishop, 2004; Kovacs & David, 2016; Prabowo, 2012; Wright, 2007) while others focused at how FRM impacts activity levels in Commercial banks (Hoffmann & Birnbrich, 2012; Shen & Hartarska, 2013). Others authors (Button *et al.*, 2015; Dedman & Robert-Tissot, 2008; Khalid & Amjad, 2012; Pearce, 2011; Sharifi *et al.*, 2016) evaluated the extent to which banks use risk management practices held that governments, regulators and financial infrastructure should work towards achievement of financial inclusion by managing the risks which act as hindrances.

Positive and good working environments enhances the compliance of employees to established rules, policies and procedures which are set for the success and sustainability of the business. A good working environment enhances communication between employees and management and guarantees positive employee recognition and great reward system. This kind of working atmosphere reduces the levels of internal fraud in the organization (Kingsley, 2012). A workforce culture includes having adequate and sufficient policies, rules, regulations, procedures, protocols and practices human resource management of employees (recruitment, selection, orientation, development, remuneration, career advancement, motivation, training and termination) to deter fraudulent and corrupt behaviors include practices that deal swiftly with incidents and protect whistle blowers (ACFE, 2009).

Kingsely (2012) and Douglass and Malthus (2009) similarly noted that to guarantee effective strategies of fraud prevention and control, banks are to ensure that operational systems are designed with inbuilt control devices. Banks can reduce or better still eradicate frauds and forgeries if all control devices built into the system are respected. Some of the effective strategies identified include: An encouraging working atmosphere makes employees follow established policies and procedures and operate in the best interest of the organization; an ethical culture includes defining principles and values that reflect a desire for high ethical standards and a no tolerance position on fraud.

Furthermore, companies should ensure they conduct a background check that covers criminal history, education, previous employment, civil history for possible lawsuits before employing anyone, unannounced financial audits and fraud assessments, sound internal control, implementing a fraud policy, a confidential 24/7 hotline, anonymous tips, mandatory vacation policy, use of risk management information system, use of analytical views and proper password use (ACFE, 2009; Bierstake *et al.*, 2006; CIMA, 2009; Douglass & Malthus, 2009; Gates & Jacob, 2009; Hillison *et al.*, 1999; Kingsley 2012). Fraud risk is a contributor to the operational risks of a business. Operational risks refer to the errors and events in a transaction or process that put the assets of the business at risk. Some of the risks considered as operational risks include: incorrect and intentional false accounting, theft of assets or misappropriation of assets. Most banks focus on a limited number of risks mostly commonly of third-party thefts but it's important to classify risks to possible type of offence and the potential perpetrators (Gates & Jacob, 2009).

It is important to assets fraud risk in each and every area of the business. However, special attention must be granted to high risk areas and departments such as cash and cash management, payments, sales and fixed assets. Management and acquisition of loans is also a key area of fraud risk management. As most researchers have found, fraud has a significant negative impact on the sustainability and profitability of a business. Businesses must therefore invest time and resources to the identification, management and control of fraud (CIMA, 2009). Further, existing studies have shown that the most effective methods of combating fraud include: reducing the motive of employees, enhancing internal controls thus reducing opportunities and ensuring that there is no justification of acts of fraud through proper supervision and implementation of rules and regulation plus punitive action against fraud (CIMA, 2009).

Kingsley (2012) noted that to reduce cases of fraud while enhancing the fraud detection and prevention strategies, businesses must have internal control systems embedded in the operational framework. Fraud in the banking sector and in deed in all businesses can be reduced if all control devices built into the system are implemented, enhanced and respected. Banks incur substantial operating costs by refunding customers' monetary losses (Gates & Jacob, 2009), while bank customers experience considerable time and emotional losses. They have to detect the fraudulent transactions, communicate them to their bank, initiate the blocking and re-issuance or re-opening of a card or account, and dispute the reimbursement of

their monetary losses (Douglass & Malthus, 2009). It is therefore in a bank's self-interest to put measures to prevent fraud or detect it as soon as it happens

An anti-fraud strategy includes elements of prevention, detection, deterrence and response. Business must develop concise and clear strategic responses towards fraud. This will include effective communication on the seriousness of fraud and the probable punitive measures taken due to fraud in the business. Identified cases must form case studies and examples of the stern action taken by the business against fraud. This is one of the most effective ways to combat fraud in the organization (CIMA, 2009). Most governments utilize legal, organizational and technological approaches to fight banking frauds whereby the legal approach aims to prevent banking fraud activities through legislation (Salifu, 2017). The organizational approach aims to enforce laws to promote cooperation among stakeholders while the technological approach aims to increase the effectiveness and efficiency of banking fraud investigation with the help of new technologies (Salifu, 2017). Njuguna and Etemesi (2010) reveal that in Kenya, Kenya Bankers Association (KBA) has explored ways of facilitating the establishment of a fraud management system, strengthening the investigative capacity of CBK's BFIU and enhancing judicial consequences of fraud.

According to Muteti (2014) banks should control their credit risk through non-performing loans, and hedge against foreign exchange and interest risks. His study also showed a positive relationship between capital management, bank size and deposits. This variance in results was attributed to methodologies adopted. Waigumo (2003) coded data into SPSS software, where descriptive and statistical frequencies were used and she concluded that unapproved loans increased fraud levels while credit cards, computer fraud and account opening manifested high to very high fraud levels. On the other hand, counterfeit money, account opening and money transfers led to little occurrence of fraud. Wanga (2013), found that the highest fraud risk facing banks was identity theft. These studies agreed there is need for information sharing on fraud issues and that banks should approach fraud issues as a sector as opposed to individual banks. This is because there are times when banks suffer fraud from same fraudsters due to lack of information sharing. However, regulation is required to combat growth of financial fraud including online fraud and the laws therefore need to be amended to deal with the technological changes.

Fraudsters have become more sophisticated hence technology must be reflective of this sophistication (Fletcher, 2017). For example, it should be possible to collect enough evidence

for prosecution of transnational online financial fraud given its international nature as far as jurisdiction is concerned (Fletcher, 2017). Like any other investigation, fraud investigation endeavors to find out what happened in the past (Gottschalk, 2018). For example, a negative event or a sequence of negative events can be at the core of an investigation. Gottschalk (2018) states that lack of certainty about events, or failure to detect signals about aspects of events leads to a failed investigation. Cross- border fraud has been one of the key challenges facing banking fraud investigations in Nairobi.

An investigation may involve events that occurred or those that did not occur while information is collected and knowledge is applied to reconstruct the past (Gottschalk, 2018). Like any other investigation, fraud investigation endeavors to find out what happened in the past (Gottschalk, 2018). For example, a negative event or a sequence of negative events can be at the core of an investigation. However, lack of certainty about events, or failure to detect signals about aspects of events leads to a failed investigation. An investigation may involve events that occurred or those that did not occur while information is collected and knowledge is applied to reconstruct the past (Gottschalk, 2018). In India, investigators examine the fraud case in detail after it is reported and advise the concerned bank to take prompt action to recover the amount involved from the fraudster. Bhasin (2015) reveals that the investigation agency also issues notifications and circulars sensitizing banks about common types of fraud, fraud prone areas and issues caution notices against repeat offenders.

The banking sector in Kenya as at the end of June 2016 was made up of 42 Commercial banks, one mortgage finance company, 13 micro-finance banks, 73 foreign exchange bureaus and 19 money remittance providers (CBK, 2019). Banking Fraud Investigations Unit within CBK is tasked with investigations of fraud incidents that occur in the banking industry (CBK, 2019). The three investigative procedures that are most commonly used are interviews with individuals, document review and collection of evidence (Files & Liu, 2015). Investigators need to learn how to locate electronic evidence and deal with cross-border issues in tracing suspects (Files & Liu, 2015). However, the long period taken to detect fraud and long duration taken by banks to report fraud after exhausting chances for recovery of money negatively impacts on investigations (Bhasin, 2015). Ivaniuk and Vyshnevskiy (2016) proposed tactical operations as a method of investigation that included search operations, early detection of attempts and preventing them and the establishment of availability and location of money and property. Therefore, the current study seeks to establish the challenges facing BFIU

personnel capacity, stakeholder cooperation and use of technology to investigate fraud in Commercial Banks, Nairobi County, Kenya.

Investigations engaging forensic accountants or auditors or acquiring skills themselves in forensic accounting in addition to auditing, legal and investigative skills assist in detection and prevention of frauds in the banking sector (Bhasin, 2015). The services of forensic auditors should be sought to compliment that of the traditional audit to reduce the level of fraud (Alao, 2016). Wells (2014) reveals that internal and external auditing of banks' financial records and information has potential to avert cases of fraud.

The biggest barrier in pursuing fraudsters is proving criminal intent on their part in the court of law. This is because most of the bank frauds are detected very late and by that time, fraudsters get enough time to wipe out trails and it becomes very difficult to establish criminal intent due to loss of relevant documents and non-availability of witnesses (Singh *et al*, 2016). Singh *et al* (2016) add that in absence of a dedicated department handling fraud matters, investigating officers have to deal with multiple departments and people within the bank, which often results into poor coordination and delay of investigations. This results in very low conviction rate for fraudsters.

Studies by Greenbaum and Thakor (2015) and Zahra *et al*. (2016) found that insider fraud in banks is done by staff assisted by outsiders. The studies failed to look into mechanisms on security risk management. Mishkin (2016) also found that external fraud is perpetrated by customers, suppliers and organized criminals but failed to identify the mechanisms on security risk management. Salifu (2017) identified legal, organizational and technological approaches as mechanisms for investigation of banking fraud cases. He however did not look into obstacles that influence investigation of banking fraud cases. Gottschalk (2018) and Files and Liu (2015) studied how investigation skills assist in prevention of bank fraud but do not identify obstacles that are faced. Akelola (2014) found that complex bank systems and use of advanced technology by criminals overwhelm most investigators lacking technical expertise. The study did not look into investigation mechanisms that can alleviate the security risk management. Studies by Gottschalks (2011) and Alao (2016) identified challenges in trans-boundary crime and slow investigations as impeding investigations of banking fraud cases. These studies did not go further to look into the role played by investigation mechanisms on security risk management. This study therefore seeks to assess security risk management and investigation of banking fraud cases.

2.7 Theoretical Framework

This study was informed by the Rational Choice Theory and Social Control Theory. This study is informed by two theories of crime that were relevant and informs the nexus between security risk management and investigation of banking fraud cases in Kenya. The theories put into perspective how these variables are related.

2.7.1 Rational Choice Theory

The proponents of the Rational Choice Theory are Talcott Parsons and James Cohen who held that action is rational in so far as it pursues ends possible within the conditions of the situation. These actions are done by the means which among those available to the actor are intrinsically best adapted to the ends. Wallace (1969) explains that the actor knows the facts of the situation in which he acts and the conditions necessary for the realization of his ends or goals.

The theory holds that persons act purposively toward a goal which is shaped by values and preferences (Ritzer, 1992). Criminals evaluate the targets and risks of apprehension, the seriousness of punishments and the potential value or gains they are likely to derive from engaging in criminal activities (Siegel, 1995). The decision to commit crime is therefore a matter of personal choice based on weighing of the available opportunities and risks. Criminals who engage in banking fraud consider the risks of apprehension to be low and possibilities of high financial gains which act as motivation for the commission of fraud. However, the weakness of this theory is that it over estimates the extent to which offenders calculate the relative costs and benefits of committing a particular crime.

Moreover, critics point out that while committing a crime may be a rational decision under certain circumstances, it does not necessarily follow that severe punishment will deter such criminality. If, for example, an unemployed person decides that it makes more sense to sell drugs than work full-time at a fast-food restaurant for the minimum wage, then the solution is not to impose severe punishment for drug selling, but rather to increase employment opportunities with wages that raise workers above the poverty line. Indeed, most research on the deterrence principle indicates that the decision to commit a crime is not significantly affected by the perceived severity of punishment by the legal system, but rather by peer and parental sanctions. Therefore, this is need for social control theory to complement on understanding the individual motives to commit fraud.

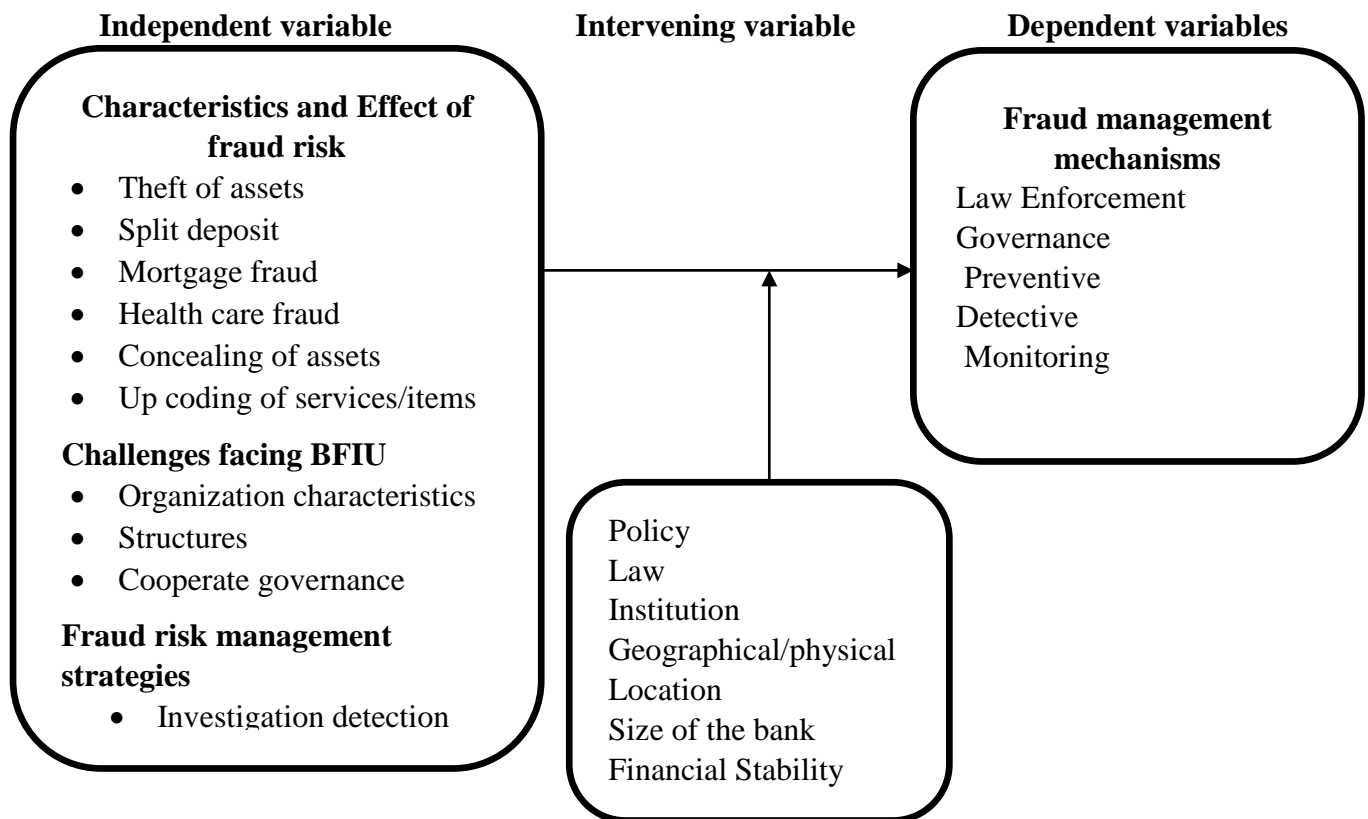
2.7.2 Social Control Theory

Proponents of Social Control Theory are Hirshi (1969) and Williams (2001) who suggested that delinquent acts result when an individual's bond to society is weak or broken. Internal restraints and external restraints determine the strength of this kind of bond. These internal and external constraints develop as a result of families and communities setting certain standards of behaviour and rewarding conformity or punishing nonconformity (Abadinsky, 1990). The extent of an individual's social bond in his or her society such as attachment to other people determines his or her chances to deviate (Williams, 2001). Criminals, including dishonest employees who engage in banking fraud have weak or no bonds to society therefore commit crimes. Investigation mechanisms in banking fraud cases aim to prevent fraud and alleviate the security risk management.

Both the Rational Choice Theory and Social Control Theory provide explanations on the motivations and reasons behind individuals' involvement in fraud. The Rational Choice Theory explains that individuals make a personal choice to be involved in fraud after evaluating the risks of arrest and punishments and the subsequent gains. Similarly, Social control theory attributes fraud to criminals lacking bonds with society thus committing fraud in banks. Both theories therefore emphasize on the criminals' ability to understand all the elements of the crime and consider them favorable and beneficial to their situation as shown in Figure 2.1.

2.8 Conceptual Framework

This study conceptualizes the nexus between security risk management and investigation performance of banking fraud cases. The independent variable is Security Risk Management in banking fraud investigations indicated by structures for investigation, mechanisms or methods of investigation and obstacles faced in fraud investigations as shown in Figure 2.1.



Source: (Author, 2020)

Figure 2.1: Conceptual Framework

From the above figure 2.1, the above conceptual framework diagrammatically presents the relationship between the variables. The current study has BFIU as the independent variable. The independent variable is conceptualized to affect reduction of fraud in banking sector. Security risk management in banking fraud investigations may be impacted by the presence or absence of intervening variables that include legal provisions, policies and regulations and training and equipment. The dependent variable is effectiveness of investigations in banking fraud cases which was influenced by security risk management. The

indicators of effectiveness of investigations in banking fraud cases were types of banking frauds committed, frequency of frauds and amount of money lost or recovered from fraud incidents. Therefore, positive intervention by the intervening variables on the independent variable lead to a corresponding positive effect on the dependent variable.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This Chapter presents the study area, research design, and sample design, methods of data collection, data analysis and ethical considerations.

3.2 Research Design

This study used descriptive survey design approach, non- experimental design where the independent and dependent variables are measured at the same time or at once (Oladipo *et al* 2015). These methods are relevant since the study seeks to examine influence of BFIUs on the management of fraud case. This design integrated both a quantitative and qualitative finding from a cross section of respondents. The design is preferred as it portrays an accurate profile of situations and utilizes a questionnaire to derive both qualitative and quantitative information from respondents (Orodho, 2002). An interview schedule was also used to obtain qualitative data. Descriptive research involves assessment of attitudes and opinions from individuals, organizations and procedures.

3.3 Study Area

The study area was in Nairobi County. BFIU is situated at CBK Pension House along Harambee Avenue in Nairobi and comprises of 60 investigations personnel drawn from Directorate of Criminal Investigations. The site consists of a large population of market intermediaries of all sectors at the capital market. The study area shown in Figure 3.1 is ideal due to easy accessibility and presence of investigators with knowledge on security risk management in banking fraud.

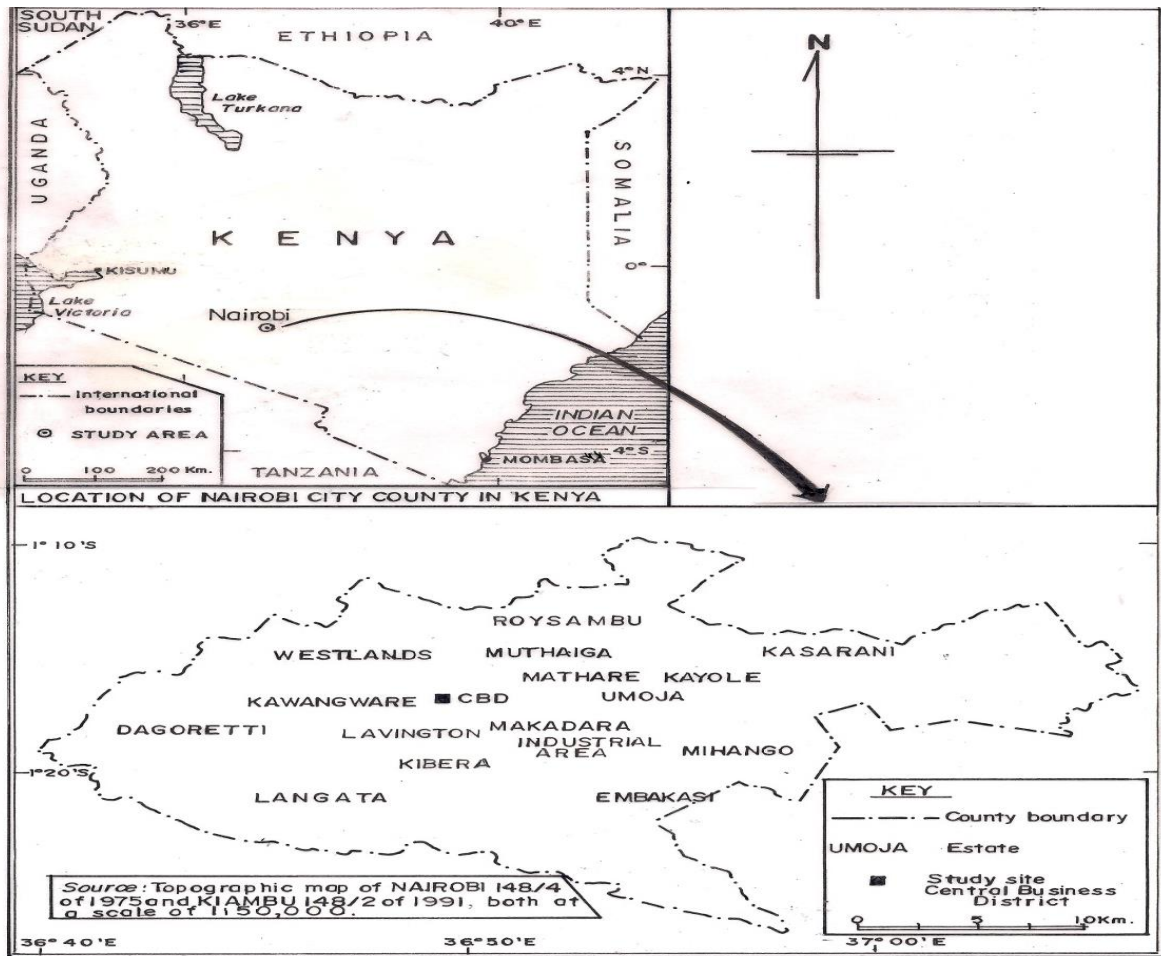


Figure 3.1: A Map of Nairobi County

3.4 Target Population

The study targeted CBK’s BFIU officers while the specific target population was sampled from the investigators, former officers of BFIU and the bank staff. All these parties possess relevant information on the study objectives. The sampling frame for the investigators were obtained from the personnel register and it represented the target population.

3.5 Sampling Procedure and Sample Size

3.5.1 Sample Size

This study used a census of all the CBK’s BFIU officers due to their limited number. To enrich the information received from the main respondents, the researcher selected key informants by snow ball sampling. The researcher randomly approaches former BFIU officers based on knowledge and experience and commercial bank staff and request for names of other

suitable respondents to obtain the required sample size of the respondents. The researcher sampled seven (7) former BFIU officers and 7 Commercial bank staff.

Table 3.1: Target Population and Sample Size

Category	Population	Sample
CBK's BFIU officers	60	60
Former BFIU officers	300	55
Commercial banks staff	2100	35
Total	2460	150

3.5.2 Sampling Procedure

The study used multi stage sampling technique (Kothari, 2014) Different guidelines are proposed on selecting the right sample sizes. Creswell (2008) and Goes (2012) advocate for sample sizes of 20- 30 participants. Kothari (2004) argues that data saturation may happen when the researcher feels additional participants are represented in the existing categories and themes. The sample size in this study was 150 respondents since higher number of answers would be a true reflection of the population but avoiding saturation. A sample design is the technique or plan that a researcher uses to obtain a sample, given a population. This involves selection of items from a population. The sample design should be appropriate and reliable (Kothari, 2004). For this study, simple random sampling was used.

3.6 Unit of Analysis

The unit of analysis is CBK'S BFIU officers mandated for investigation and prevention of fraud cases in commercial banks, Nairobi County, Kenya who comprised of investigators, former officers of BFIU and the bank staff.

3.7 Methods of Data Collection

3.7.1 Sources of Data

The research utilized both primary and secondary data. The secondary data were obtained from textbooks related to the study, journals, presented conferences papers and government reports as well as the internet. The primary data on the other hand were obtained from the respondents using interview schedules and focused group discussions.

3.7.2 Interview Schedule

According to Kothari (2004) interview schedule is the most appropriate tool for investigations that are thorough. Interview schedule enable the researcher to get in-depth details and required data by asking probing questions. An interview schedule makes it possible to obtain information necessary to meet exact goals of the study (Orodho, 2009). The interview schedules consisted of both open and closed ended questions and were used to collect quantitative and qualitative data from BFIU officers and CBKs staff.

3.7.2 Semi Structured Questionnaires to Key Informants

The study used semi structured questionnaire which is a method where the researcher administered the questions personally to the respondents, explain the expectations of the study and the questions and record the answers (Oladipo *et al.*, 2016). According to De Vaus (2014), Nassiuma and Mwangi (2004) and Kothari (2004), questionnaires represent a set of questions designed to extract information relating to the survey in a defined order and can either be delivered to the respondent to fill, emailed or self-administered This method has advantage of high response rate and the information is likely to be correct since the researcher was interacting with respondents. The key respondents were eight (8) managers of the banks in Nairobi County.

3.8 Reliability Test and Validity Test

In order to ensure that reliability is promoted, the study used Cronbach alpha to determine the internal consistency of the instruments. Cronbach Alpha is commonly used in studies with multiple Likert questions where the researcher wishes to determine if the scale is reliable (George & Mallery, 2003).

Based on the formula $\alpha = rk/[1 + (k - 1)r]$ where k is the number of items considered and r is the mean of the inter-item correlations, the size of alpha is determined by both the number of items in the scale and the mean inter-item correlations. George and Mallery (2003) indicate that rule of thumb is as follows: “ $\alpha > 0.9$ – Excellent, $\alpha > 0.8$ – Good, $\alpha > 0.7$ - Acceptable, $\alpha > 0.6$ Questionable, $\alpha > 0.5$ – Poor and $\alpha > 0.4$ Unacceptable”.

The importance of Cronbach Alpha is that it is a single number that tells how well a set of items measure a single characteristic. This statistic is and overall item where values range between 0 and 1. Values above 0.7 are often considered to be acceptable.

Validity on the other hand refers to the degree to which a measure and a scale accurately represent the social phenomena under study or domain of indicators (Kothari, 2004; Oladipo *et al.*, 2015; Silverman 2006). The study focused on content validity: the ability to include all the content of a particular construct. The study ensured that the sample size is a representative as possible, avoided leading questions and every effort was made to minimize interview bias. In addition, the study sought expert opinion to validate the data collection tools.

3.9 Data Analysis

The data were analyzed using descriptive statistics; means, frequencies and percentages and inferential statistics using regression analysis. The major data collection instrument in this study was the questionnaires; the filled questionnaires from the respondents were scrutinized for accuracy and completeness. The data collected were analyzed using descriptive statistics, frequencies and percentages. The data were analyzed with the aid of Statistical Package for Social Sciences (SPSS) version 20. The results were presented using tables, graphs and charts. A summary of data matrix is as below.

Table 3.2: Data Analysis Matrix

Specific Objective	Independent Variable	Dependent Variable	Statistical Analysis
To explore types and effects of bank fraud cases in Commercial banks, Nairobi County, Kenya	Characteristics of bank fraud cases	Fraud Risk Management	Chi-square analysis Content analysis Descriptive analysis
To assess the challenges influencing Banking Fraud Investigations Unit management in of fraud cases in commercial banks, Nairobi County, Kenya	challenges in management BFI	Fraud Risk management	Chi-square analysis Content analysis Descriptive analysis
To determine the appropriate mechanisms for management of banking fraud cases in Commercial banks, Nairobi County, Kenya	mechanisms for investigation	Fraud risk management	Chi-square analysis Content analysis Descriptive analysis

Source: Researcher; 2020

3.9 Ethical consideration

The researcher sought approval from Egerton University graduate school and also obtain a transmittal letter from the National Commission for Science, Technology and Innovation (NACOSTI). The researcher also sought consent from BFIU to be allowed to conduct the study. Participants were consulted and only those who are willing were included in the study. The researcher observed professional guidelines considering that BFIU is a specialized unit dealing with sensitive cases of fraud. The researcher also ensured confidentiality and privacy of respondents' views and identities by making them anonymous in the final report. All the instruments were carefully structured to avoid questions that might embarrass or place the participants in an awkward situation.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

Raw data, descriptive statistics and data analysis are presented on this Chapter. This study was qualitative in nature but the qualitative responses have been converted into quantitative terms for ease of analysis and interpretation of the results. The objective of this study was to find out the combined effect of fraud prevention and fraud detection on fraud risk incidence among Commercial banks in Kenya. A questionnaire was used to gather opinions of various employees in the banking sector in Kenya.

4.2 Responses rate

A total of 150 duly filled questionnaires were obtained from respondents for the study. This represented 100% response rate According to Mugenda and Mugenda (2003), this was sufficient for doing the analysis. All the tables and graphs presented in this Chapter have a sample size of 150.

4.3 Demographic characteristics

This section presents demographic information of respondents namely: age, gender designation, and duration in service, duration in BFIU and education of respondents.

4.3.1 Age of the respondents

The researcher requested the respondents to indicate their age bracket. The results are shown in Table 4.1 below;

Table 4.1: Age of the Respondents

Age bracket	Frequency	Percent
25-31 Years	38	25.3
32-38 years	58	38.7
39-45 years	11	7.3
Above 45 years	43	28.7
Total	150	100.0

Table 4.1 above presents the respondent's age, whereby majority (38.7%) of respondents were aged between 32 and 38 years. The findings also show that 28.7% were

above 45 years and, 25.3% were aged 25-31 years and 7.3% were aged 39-45 years. The findings show that majority of participants were young.

4.3.2 Gender of the respondents

The study sought to determine the gender of the respondents. According to Tannenbaum, Greaves & Graham (2016), gender is important in decision-making, communication, stakeholder engagement and preferences for the uptake of interventions and thus the need to consider it in research studies. The findings are shown in Figure 4.2 below;

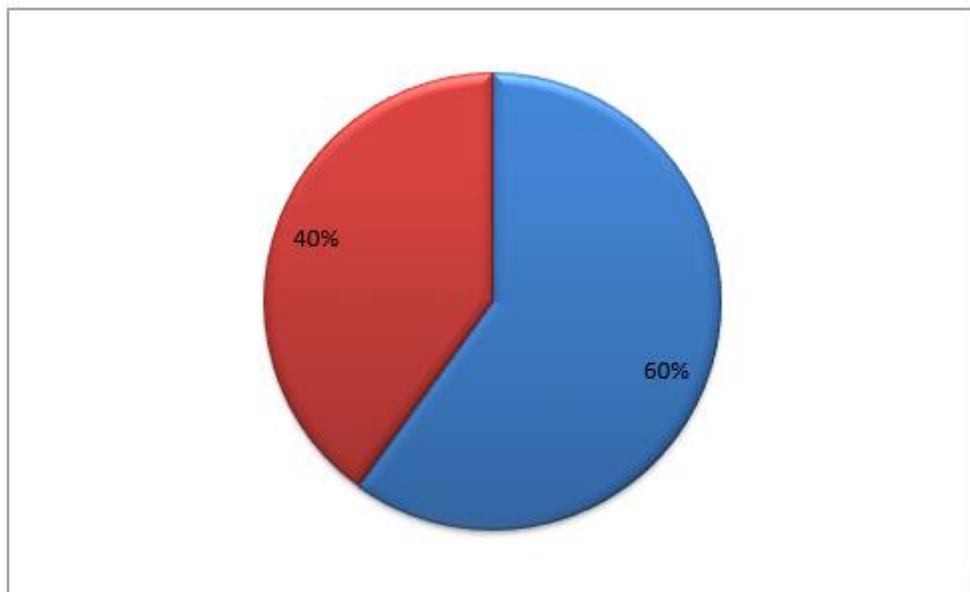


Figure 4.1: Gender of the respondents

From the findings presented in Figure 4.1, 60% of the respondents covered in this study were male while 40% were female. This indicates that majority of the respondents were male.

4.3.3 Duration of service in the Police Service

The study sought to determine the length of services of the respondent in the Police Service and the results are presented in the Figure 4.3 below;

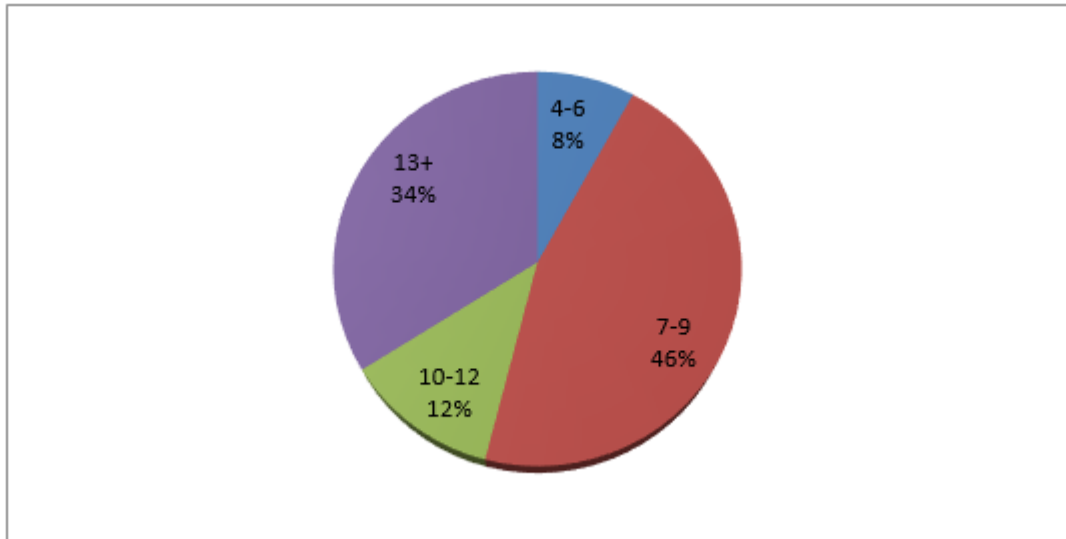


Figure 4.2: Duration of service in the Police Service

From the figure 4.2 above, 46% had served for 7-9 years, 34% for 13 years and above, 12% 10-12 years while 8% for 4-6 years had served in the Police Service. This was to help in gauging whether the respondents understood the subject matter and their knowledge on police operations.

4.3.4 Duration served in BFIU

The study sought to determine the length of services of the respondent in BFIU and the results are presented in the Figure 4.3 below;

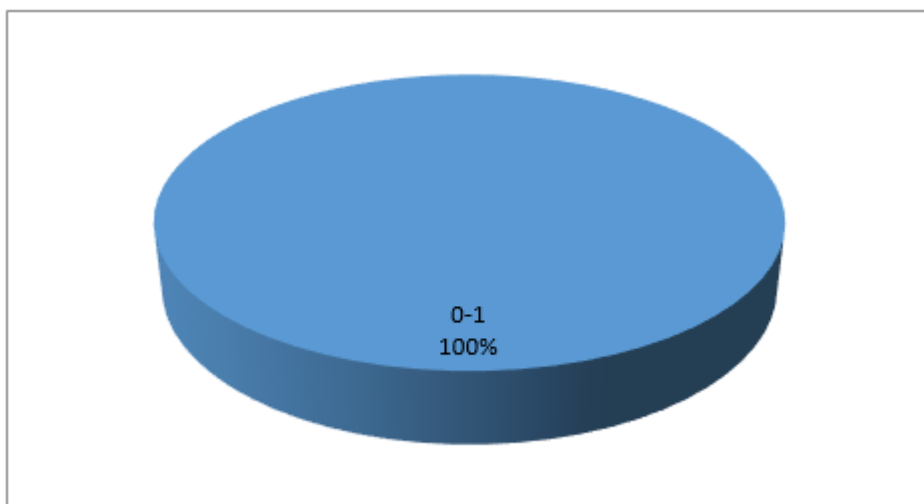


Figure 4.3: Duration served in BFIU

From the figure 4.3 above, majority of the officers (58%) had served in the BIFU for more than 4 years, 38% for 2-3 years and few (4%) had served 0-1 year. The information was relevant in in determining whether the respondents understood the role of officers in BFIU and their knowledge on police operations.

4.3.5 Designation of the respondents

The designation of the respondents who participated in the study were as shown in Fig

6

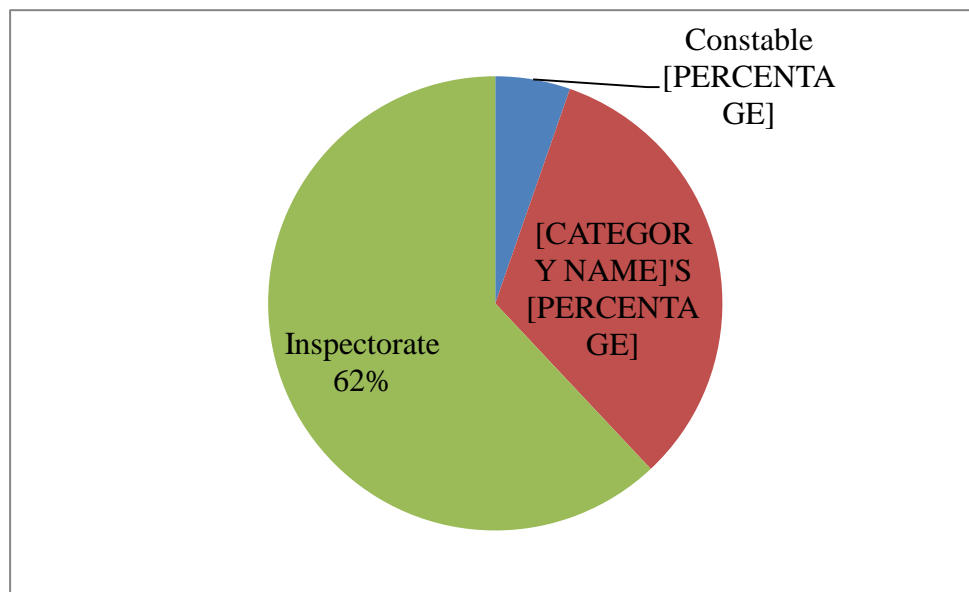


Figure 4.4: Designation of the respondents

As shown in figure 4.4 above, majority (62%) of the respondents were members of inspectorate, NCOs were 33% and 5% of the respondents were police constables.

4.3.6 Education Level

The respondents were asked to indicate their education level and the findings are shown in the Figure 4.5 below;

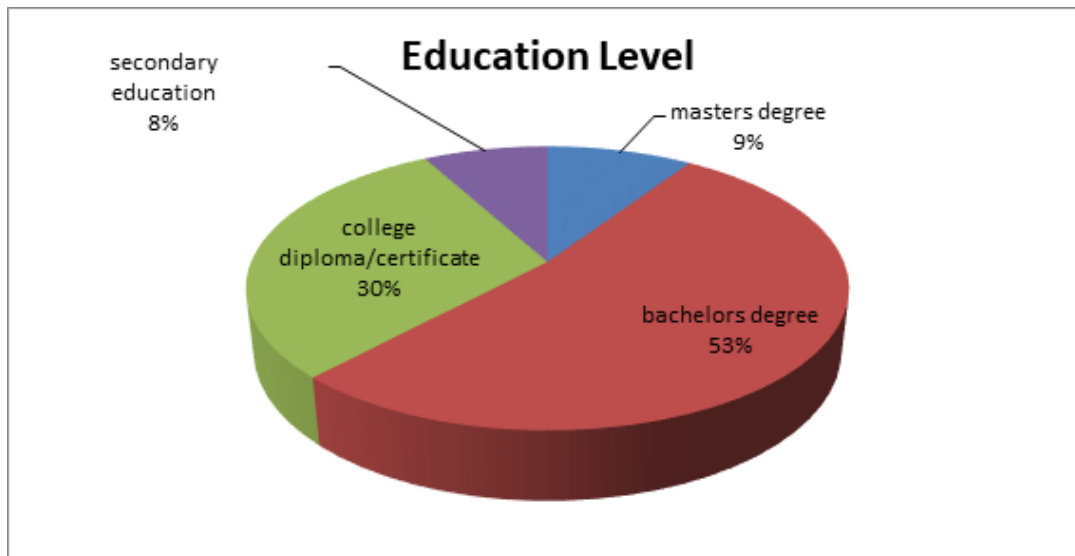


Figure 4.5: Respondents' Level of Education

From the figure 4.5 above, a majority of the respondents had attained a Bachelor degree (53%), followed by 30% of the respondents reaching College Diploma/Certificate, 9% having Masters and just 8% having attained Secondary Education.

4.3.7 Role of respondents

This study sought to establish the different role among the bank employees and managers. The results are presented in figure 4.6 below;

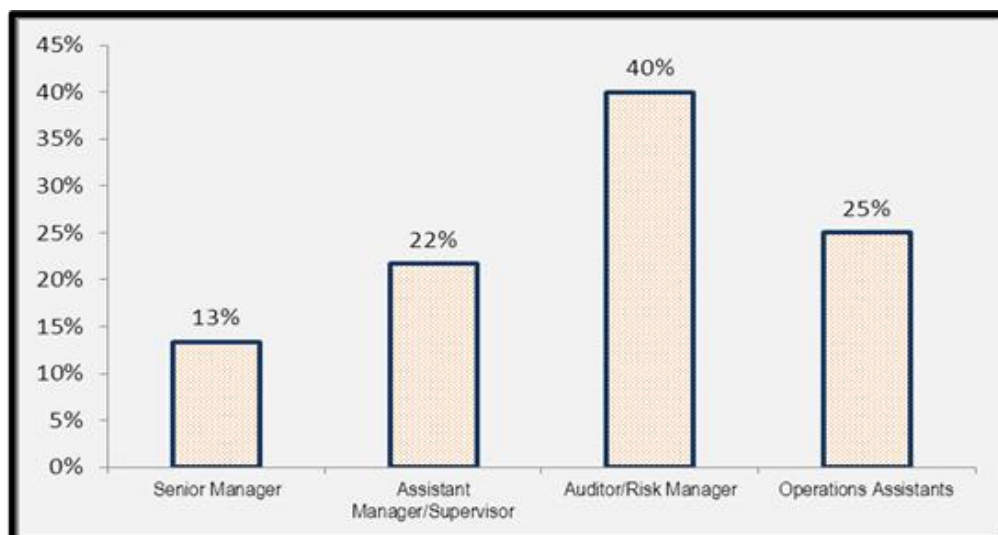


Figure 4.6: Respondents Roles

Majority of the respondents to this study were risk managers/auditors (40%). Furthermore, 25% of the respondents were operational assistants/clerks, 22% were assistant

managers and supervisors while 13% were senior managers. These distributions of respondents ensure validity of findings since the auditors (representing the largest proportion of respondents) are responsible for the detection and reporting of frauds.

4.4 Trends in Security Risk Management of Banking Fraud Cases

The first objective of the study sought to establish the trends in security risk management of bank fraud cases in Commercial Banks, Nairobi County, Kenya. The objective focused on establishing the success of BFIU in fighting bank fraud, incidents of bank fraud, reduction of bank fraud due to intervention, cases/types of bank fraud/ resolved bank fraud cases, unresolved bank fraud cases, factors leading to banking fraud and prevalence of banking fraud.

4.4.1 Success of BFIU in fighting bank fraud.

The study sought to examine whether BFIU has succeeded in fighting bank fraud in Commercial banks of Kenya. The findings are indicated as follow in figure 4.7 below;

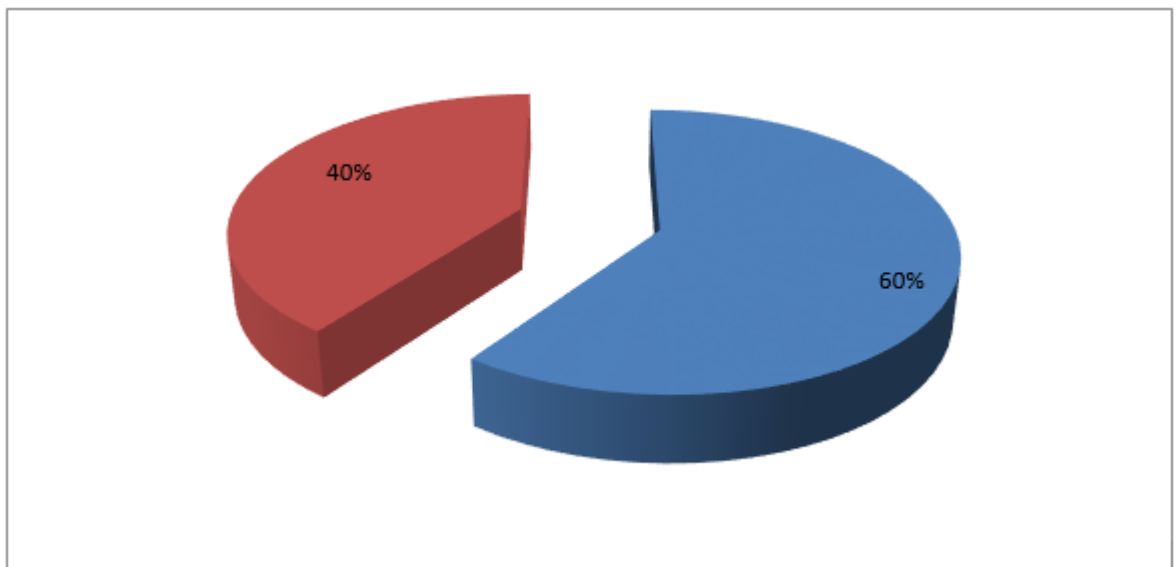


Figure 4.7: The Success of BFIU in Fighting Bank Fraud

Results in Figure 4.7 indicates that BFIU has succeeded (60%) in fight against bank fraud in Commercial Banks of Kenya. This implies that the use of BFIU in prevention of bank fraud is important because of trained skills and knowledge. The respondents were further asked to explain the reasons for successful fight against bank fraud in Commercial banks of Kenya.

One of the respondents from interview schedule asserted that;

“Fraud suspects are arrested either before or after committing a crime and taken to court and convicted... sometimes the fraudsters refund the stolen cash...”

Another informant said;

“This is observable from the reducing cases and continuous fight against frauds by the government mechanism with use of cyber security fraudster have been detected early in the process of act...”

This implies that there is a strong cooperation between BFIU and Bank operators. However, Kenya bank crime incidences continue to face crime insecurity challenges.

4.4.2 Frequency of incidents of Bank Fraud

The study sought to determine the frequency level of incidents of bank fraud in Commercial banks of Kenya. The results are presented in Table 4.2 below;

Table 3.2: Frequency of incidents of banking fraud

Scale	Frequency	Percent
Low	38	25.3
Moderate	69	46.0
High	43	28.7
Total	150	100.0

Table 4.2 above shows the frequency of incidents of banking fraud (46%) moderate, (28.7%) high and (25.3%) low. This implies that intervention of BFIU in fraud cases has helped in mitigating bank fraud cases.

4.4.3 Types of cases of banking fraud

The study sought to establish types of bank fraud cases that BFIU had intervened in the past. The results are presented as follows in table 4.3.

Table 4.3: Cases banking fraud investigates

Cases	Frequency	Percent
Mobile banking	44	29.3
Online Banking	33	22.0
Employee fraud	34	22.7
Counterfeits securities	14	9.3
Money transfer/laundering fraud	14	9.3
Account opening fraud	11	7.3
Total	150	100.0

As evident in table 4.3 above the highest number of cases (29.3%) mobile banking (22.7%) employee fraud, (22%) online banking, (9.3%) counterfeit securities and money transfer and (7.3%) account opening fraud.

4.4.4 Cases resolved by Bank Fraud

The study sought to investigate types of case that BFIU have been able to resolve in their investigation. The results are presented in table 4.4 below.

Table 4.4: Cases resolved by Bank Fraud

Cases Resolved	Frequency	Valid Percent
Mobile banking	45	30.0
Personation	18	12.0
Employee fraud	55	36.7
Forgeries	32	21.3
Total	150	100

Table 4.4 above shows the cases resolved in Bank Fraud and most of the officers (36.7%) employee fraud, (30%) mobile banking, (21.3%) forgeries and (12%) personation.

4.4.5 Unresolved cases

The respondents were requested to indicate some of the unsolved cases by BFIU. The results are summarized in Table 4.5 below. The respondent highest unresolved cases (58%) mobile banking and (42%) online fraud.

Table 4.5: Unresolved cases

Unresolved bank cases	Frequency	Percent
Mobile banking	87	58
Online fraud	63	42
Total	150	100

4.4.6 Factors leading to banking fraud

The study sought to establish factors leading to bank fraud cases in Commercial banks of Kenya. The respondents were provided with 11 statements to rate the extent of prevalence to banking fraud on a scale of one to five where 5 is very high, 4 high, 3 low, 2 very low and 1 not at all. The results were analyzed descriptively and presented in Table 4.6 below;

Table 4.6: Prevalence of bank fraud

Rank	Frequency	Percent
Not at all	10	7
Very low	42	27
Low	10	7
High	76	51
Very high	12	8
Total	150	100

From the response rate in the table 4.7, almost half of the respondent rated (51%) high, (28%) very low, (8%) very high and equally (7%) low and not at all. This implies that inadequate training has contributed to prevalence of bank fraud.

Table 4.7: Globalization

Scale	Frequency	Percent
Not at all	6	4
Very low	8	5.3
Low	37	24.7
High	56	37.3
Very high	43	28.7
Total	150	100

As depicted in the Table above, most of the respondents (37%) high (29%) very high (25%) low, (5%) very low and (4%) not at all. Globalization has contributed to prevalence of bank fraud as shown by the response.

Table 4.8: Improvements in communication

Rank	Frequency	Percent
Very low	35	23.3
Low	3	2.0
High	96	64.0
Very high	16	10.7
Total	150	100

The results in Table 4.8 demonstrate that more than half of the officers agreed (64%) high, (23%) very low, (11%) very high and 2% low. It is evident that improved communication has led to prevalence of fraud cases.

Table 4.9: Spread of international bank

Scale	Frequency	Percent
Very low	3	2.0
Low	63	42.0
High	79	52.7
Very high	5	3.3

Table above displays the results of the respondents' spread of international bank and most of the respondents (53%) high, 42% low, 3% very high and 2% very low. This implies that the spread of international bank has led to prevalence of bank fraud.

Table 4.10: Technological innovations

Scale	Frequency	Percent
low	52	35
high	78	52
very high	20	13
Total	150	100

The responses, as displayed in the Table 4.10 above indicate that half of the respondents (52%) high, 35% low, 13% very high. Technological innovation has led to prevalence of bank fraud.

Table 4.11: Inefficiencies in coordination among stakeholders

Scale	Frequency	Percent
low	61	41
high	54	36
very high	35	23
Total	150	100

Table above 4.11 shows the responses to the question on the inefficiencies in coordination among stakeholders. The results demonstrate that most of the officers (41%) low, (36%) high and (23%) very high. It is evident that the inefficiencies in coordination among stakeholders has not led to prevalence of fraud cases.

Table 4.12: Poor statistics and information imbalance

Scale	Frequency	Percent
Very low	90	60
Low	49	33
High	6	4
Very high	5	3
Total	150	100

As depicted in the Table 4.12 above, most of the respondents (60%) very low, (33%) low, (4%) high and (3%) very high. Poor statistics and information imbalance have not contributed to prevalence of bank fraud as shown by the response.

Table 4.13: Cross-border criminal links

Rank	Frequency	Percent
very low	52	35
low	6	4
high	49	33
very high	43	29
Total	150	100

The responses, as displayed in Table 4.13 above indicate that respondents (35%) very low, 33% high, 29% very high and 4% low. Cross border criminal links has not led to prevalence of bank fraud.

Table 4.14: Emerging fraud trends

Scale	Frequency	Percent
Very low	87	58
High	53	35
Very high	10	7
Total	150	100

Table 4.15 above displays the results of the respondents emerging fraud trends and most of the respondents (58%) very low, 35% high and 7% very high. This implies that the emerging fraud trends have not led to prevalence of bank fraud.

Table 4.15: Unqualified fraud investigators

Scale	Frequency	Percent
Not at all	6	4
Very low	52	35
Low	82	55
High	10	7
Total	150	100

Table above sets out the responses to the question on the unqualified fraud investigators. The results demonstrate that half of the officers do not agree (55%) low, (35%) very low, (7%) high and 4% not at all. It is evident that the unqualified fraud investigators have not led to prevalence of fraud cases.

4.4.7 Factors leading to prevalence in bank fraud

The study sought to establish factors leading to prevalence in bank fraud. The results are presented in figure 4.8 below.

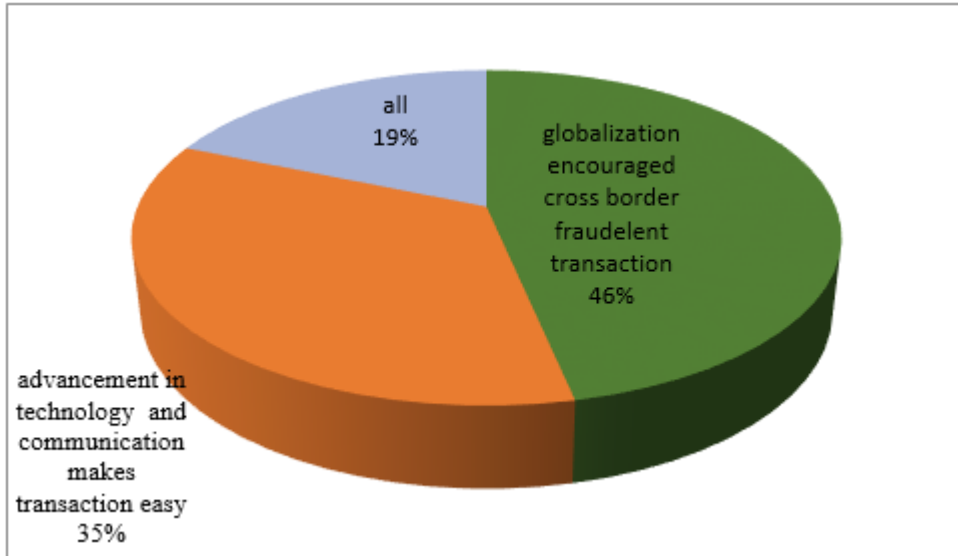


Figure 4.8: Factors leading to prevalence in bank fraud

The results in the figure above shows that the highest factor leading to prevalence in bank fraud is the globalization which encouraged cross border fraudulent transaction (46%) while those saying it is caused by the advancement in technology and communication makes transaction easy is 35% and those agreeing that it is as a result of both factors are 19%.

4.5 Mechanism for Investigation of Banking Fraud Cases

The second objective of the study sought to establish mechanism for investigation of banking fraud cases in Commercial Banks, Nairobi County, Kenya. The objective focused on establishing the level of training in banking fraud investigation, training that officers have received, responsibilities in their present post, resources they require to function effectively, resources that are adequately supplied, liaisons that BFIU holds with other organizations in prevention of bank fraud and the extent that Commercial banks has contributed to banking fraud investigation.

4.5.1 The level of training in banking fraud investigation

The study sought to establish the level of training in banking fraud investigation that officers have received. The results are presented in figure 4.9 below.

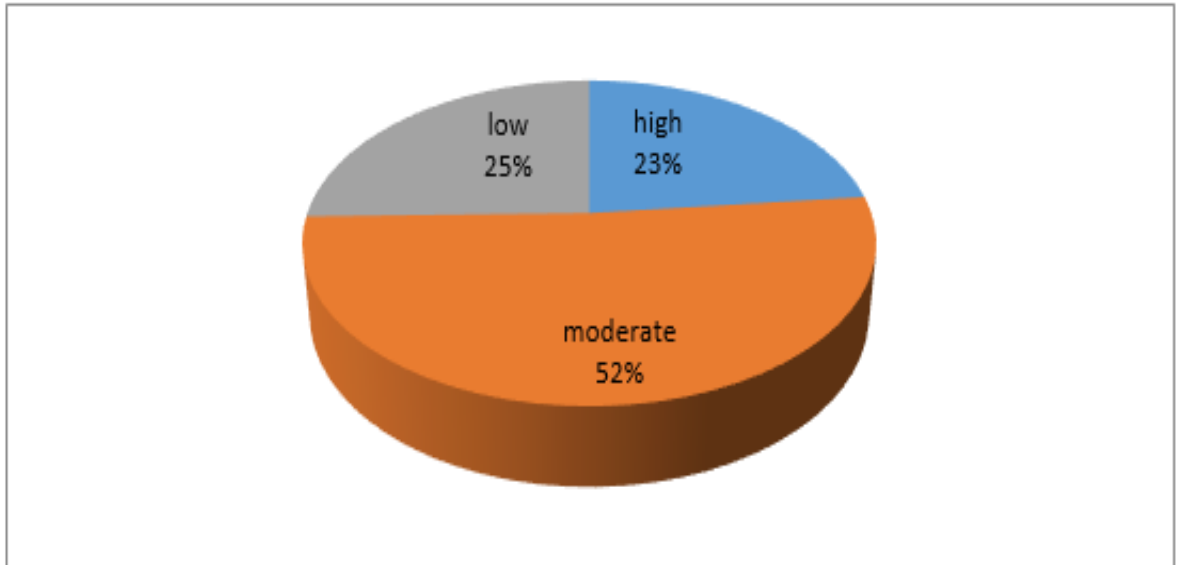


Figure 4.9: The level of training in banking fraud investigation

The results above show that high numbers of officers have received moderate training (52%) and few officers have received low level of training (25%) while high level of training is (23%).

4.5.2 Training that officers have received

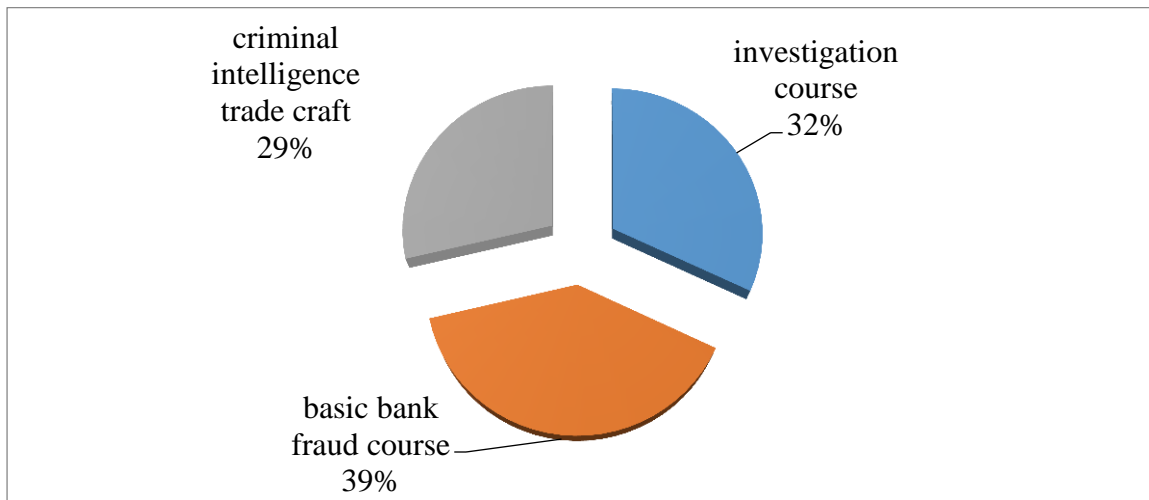


Figure 4.10: Training that officers have received

The results in figure 4.10 shows that majority of officers have been trained in basic bank fraud course (39%) while those who have been trained in investigation course are (32%) and the lowest number have been trained in criminal intelligence trade craft (29%).

The results in figure 4.11 shows that majority of officers have been trained in basic bank fraud course (39%) while those who have been trained in investigation course are (32%) and the lowest number have been trained in criminal intelligence trade craft (29%).

4.5.3 Responsibilities assigned in present post

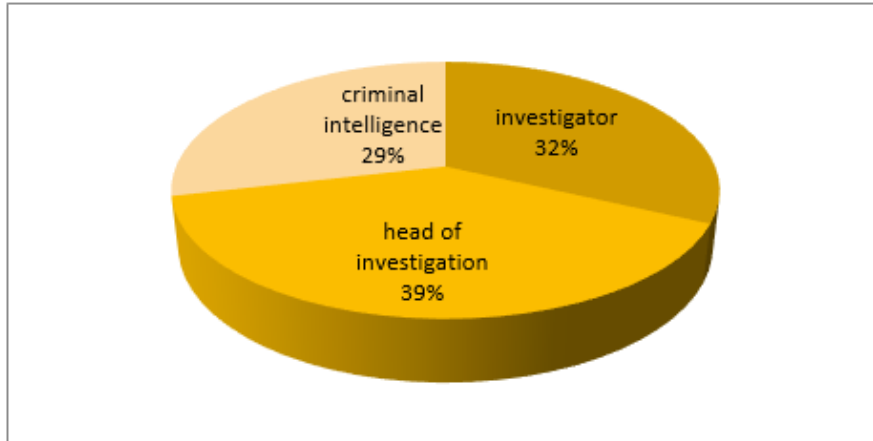


Figure 4.11: Responsibilities assigned in present post

Figure 4.11 above shows the responsibilities that the respondent had been assigned in their present post and majority (39%) head of investigation, (32%) investigator and (29%) criminal intelligence.

4.5.4 Resources that are adequately supplied

Figure 4.12 shows which resources are adequately supplied (38%) file covers and (31%) on writing materials and tracking gadget.

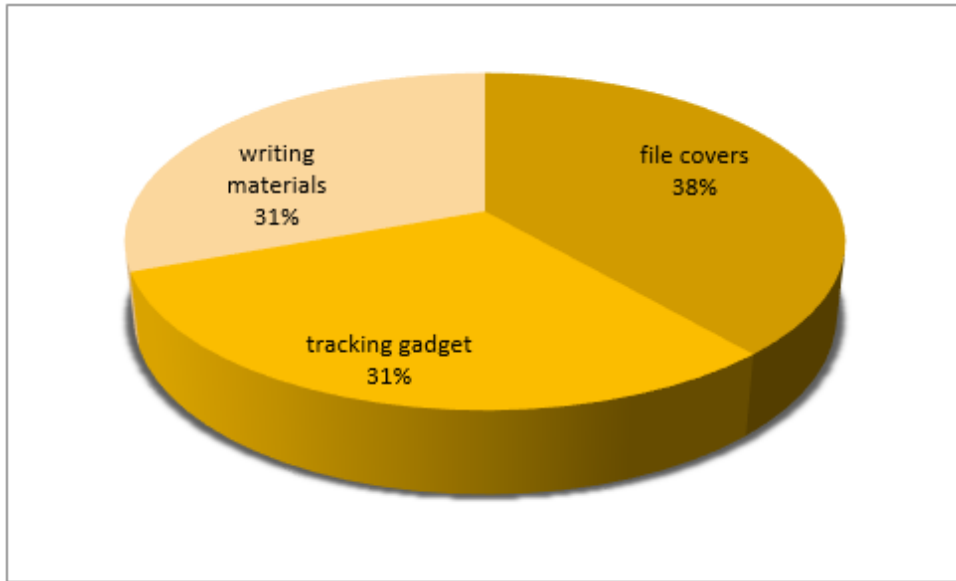


Figure 4.12: Resources that are adequately supplied

4.5.5 Resources they require to function effectively

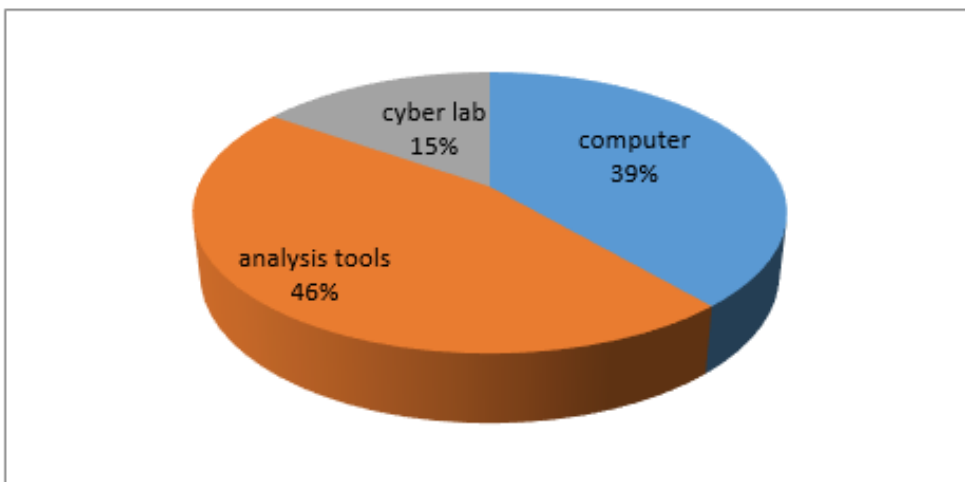


Figure 4.13: Resources they require to function effectively

On the question of what resources, they require to function effectively (46%) analysis tool, (39%) computer and (15%) cyber lab.

4.5.6 Liaison that BFIU holds with other organizations in prevention of banking fraud

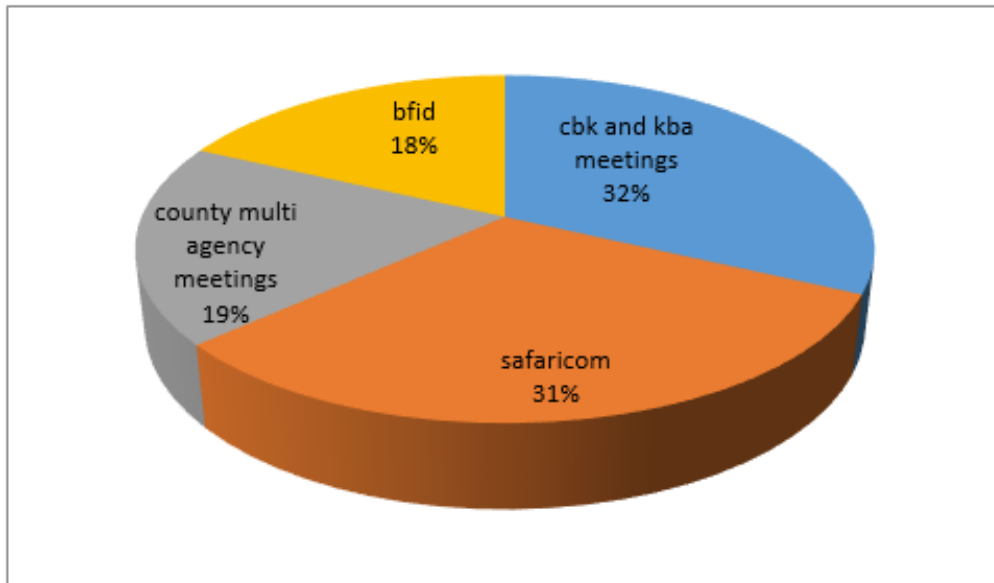


Figure 4.14: Liaison that BFIU holds with other organizations in prevention of banking fraud

On the question on liaison that BFIU holds with other organizations in prevention of banking fraud (32%) CBK and KBA meetings, (31%) Safaricom, (19%) County agency meetings and (18%) BFID

4.5.7 To what extent have commercial bank contributed to banking fraud investigation

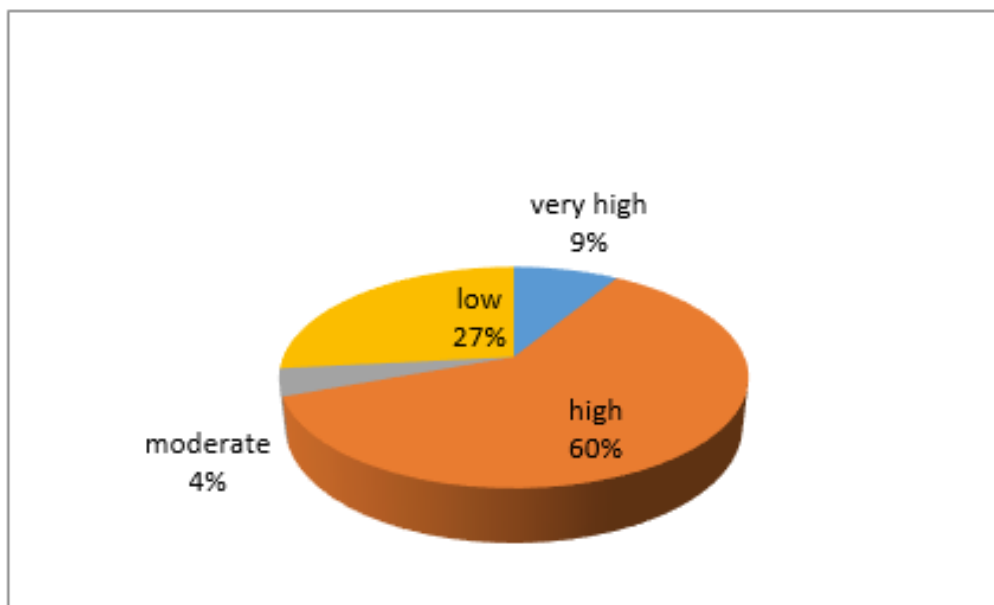


Figure 4.15: Extent of contribution of commercial Bank to banking fraud investigation

Figure 4.15 above shows the extent that Commercial banks contributed to banking fraud investigation and majority of officers (60%) high, (27%) low, (9%) very high and (4%) moderate.

4.5.8 Obstacle to the investigation of banking fraud

The respondents were given eleven statements to give the level of importance to the strategies using scale of one to five which 5 is very high, 4 high, 3 low, 2 very low and 1 not at all.

Table 4.16: inadequate training in banking fraud investigation

Scale	Frequency	Percent
Very low	3	2
Low	55	36.7
High	92	61.3
Total	150	100

Table 4.16 above demonstrates that a majority of the officers (61%) high, 37% low and 2% very low. It is therefore evident that inadequate training in banking fraud investigation is important in combating obstacle in banking fraud.

Table 4: Poor communications

Rank	Frequency	Percent
Very low	3	2
Low	101	67
High	11	7
Very high	35	23
Total	150	100

As illustrated, Table 4.16 above sets out the responses to the question on poor communication. Nearly half of the officers (67%) low, 23% very high, 7% high and 2% very low. It is therefore evident that poor communication does not help in combating obstacle in banking fraud.

Table 4.17: Inferior technological knowledge/skills

Scale	Frequency	Percent
Very low	38	25
Low	99	66
High	10	7
Very high	3	2
Total	150	100

Table 4.17 above displays the results of the respondents on inferior technological knowledge/skills. Most of respondent (66%) low, 25% very low and 7% high and 2% very high. It is therefore evident that inferior technological knowledge/skills are an obstacle to combating banking fraud.

Table 4.18: Inefficiencies in coordination

Scale	Frequency	Percent
Very low	6	4
Low	136	90.7
High	8	5.3
Total	150	100

Table 4.18 sets out the responses to the question on the inefficiency in coordination. The results demonstrate that most of the officers (91%) low, 5% high and 4% very low. This implies that inefficiency in coordination is not important in combating obstacle in banking fraud.

Table 4.19: Poor statistics and information imbalance

Scale	Frequency	Percent
Not at all	6	4
Very low	38	25.3
Low	95	63.3
High	11	7.3
Total	150	100

Table 4.19 above displays the results of the respondents on poor statistics and information imbalance. Most of respondent (63%) low, 25% very low and 7% high and 4% not at all. It is therefore evident that poor statistics and information imbalance is an obstacle to combating banking fraud.

Table 4.20: Failure to enforce the banking fraud rules and regulations

Scale	Frequency	Percent
Very low	5	3.3
Low	58	38.7
High	87	58
Total	150	100

Table 4.20 sets out the responses to the question on the failure to enforce banking fraud rules and regulations. The results demonstrate that almost half of the officers (58%) high, (39%) low and 3% very low. This implies that failure to enforce banking fraud rules and regulations is an obstacle in combating banking fraud.

Table 4.21: Poor sharing of information

Scale	Frequency	Percent
Very low	11	7
Low	93	62
High	11	7
Very high	35	24
Total	150	100

As illustrated, Table 4.21 above sets out the responses to the question on poor sharing of information. Majority of the officers (62%) low, 24% very high while 7% high and very low. It is therefore evident that poor sharing of information is an obstacle in combating banking fraud.

Table 4.22: Lack of cross border cooperation

Scale	Frequency	Percent
very low	57	38
high	50	33.3
very high	43	28.7
Total	150	100

Table 4.22 above demonstrates that majority of the officers (38%) very low, 33%, high and 29% very high. It is therefore evident that cross border cooperation should be implemented to combat banking fraud.

Table 4.23: Failure to update bank personnel on emerging fraud trends

Scale	Frequency	Percent
Not at all	6	4
Very low	57	38
Low	35	23.3
High	11	7.3
Very high	41	27.3
Total	150	100

Table 4.23 sets out the responses to the question on failure to update bank personnel on emerging fraud trends. The results demonstrate that (38%) very low, (27%) very high, 23% low, 7% high and 4% not at all. This implies that BFIU should consider implementing a system of updating bank personnel on emerging fraud trends.

Table 4.24: Failure to recruit qualified personnel to investigate fraud

Scale	Frequency	Percent
Not at all	6	4
Very low	57	38
Low	46	30.7
High	38	25.3
Very high	3	2
Total	150	100

As illustrated, Table 4.24 above sets out the responses to the question on failure to recruit qualified personnel to investigate fraud. Most of the officers (38%) very low, 31% low, 25% high, 4% not at all and 2% very high. It is therefore evident that recruiting qualified personnel is important in combating obstacle in banking fraud.

Table 4.25: Lack of interest to pursue all fraud cases

Rank	Frequency	Percent
Not at all	46	30.7
Very low	8	5.3
Low	6	4
High	90	60
Total	150	100

Table 4.25 sets out the responses to the question on lack of interest to pursue all fraud cases the results demonstrate that most of the officers (60%) high, (31%) not at all 5%low and 4% low. This implies that lack of interest to pursue all fraud cases by the officers is an obstacle to combating banking fraud.

4.5.9 Resources required that are not adequately supplied

Figure 4.15 below shows that the most resource they that are not adequately supplied (46%) training,(31%) cyber lab and (23%) poor information

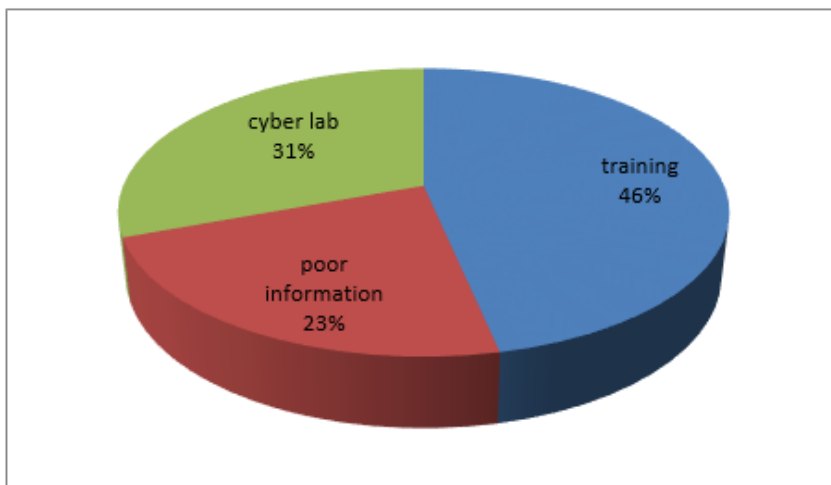


Figure 4.16: Resources required that are not adequately supplied

4.5.10 Correlation Analysis of Causes of Fraud

This study sought to investigate the relationship between the various variables causing fraud in banks. The correlation analysis using the Pearson correlation statistic shows that the opportunities to commit fraud and rationalization of the act of fraud had a negative correlation (-.415) which was significant at 0.01 significance levels. Weak internal controls had a positive correlation to opportunities to commit the fraud crime (.269) which was significant at 0.05 significance levels. Inadequate supervision had a negative correlation with pressure to commit (-.543) significant at 0.01 levels, rationalization of the act (-0.504) significant at 0.01 levels and a positive relationship with opportunities to commit crime (0.319) significant at 0.05 levels and weak internal controls (.499) significant at 0.01 levels.

Disregard of customer knowledge rules had correlation of -0.543, -0.447, 0.611 and 0.916 which were significant at 0.01 significance levels to pressure to commit, rationalization of the act, opportunities to commit and weak internal controls. Poor IT structures were negatively correlated to pressure to commit (-0.543) and rationalization of the act (-0.447). On the other hand, IT structures had a positive correlation to weak internal controls (0.611), and inadequate supervision (0.916) all of which were significant at 0.01 significance levels.

Poor Personnel Policies were correlated to pressure to commit (-0.423), rationalization of the act (-0.504), inadequate supervision (0.852) and disregard of customer knowledge rules (0.870) at 0.01 significance levels. Similarly, poor personnel policies were correlated to weak internal controls (0.326) at 0.05 significance levels. Low employee remuneration was correlated to rationalization of the act (-0.682), opportunities to commit (0.342), weak internal controls (0.304), inadequate supervision (0.852), customer knowledge rules (0.828), poor IT structures (0.828) and poor personnel policies (0.871) at 0.01 significance levels.

These findings imply that the factors that greatly lead to an increase in fraud in the banking sector since they had a strong positive correlation were: inadequate supervision and weak internal controls, disregard of customer knowledge rules and inadequate supervision, poor IT structures and disregard of customer knowledge rules, poor IT structures, poor supervision, poor personnel policies and inadequate supervision, poor personnel policies and disregard of customer knowledge rules, poor employee remuneration, inadequate supervision, disregard of customer knowledge rules and poor IT structures. These were the major factors leading to an increase in the occurrence and frequency of fraud in the banking sector. The Correlation analysis is as shown in Table 4.9

Table 4.26: Correlation Analysis

	Pressure to Commit	Rationalization of Act	Opportunities to Commit	Weak Internal Controls	Inadequate Supervision	Disregard of Customer Knowledge	Poor IT Structures	Poor Personnel	Low Remuneration
Pressure to Commit	1	.087	-.116	-.244	-.513**	-.543**	-.543**	-.423**	-.251
Pearson Fraud		.509	.376	.060	.000	.000	.000	.001	.053
Rationalization of	.087	1	-.415**	.60	-.504**	-.447**	-.447**	-.504**	-.682**
Opportunities to	.509	-.415**	1	.865	.000	.000	.000	.000	.000
Weak Internal	-.116	.001	.269*	1	.319*	.199	.199	.081	.342**
Pearson Inadequate	.376	.022	.269*	.038	.013	.127	.127	.539	.007
Pearson Disregard of	-.244	.001	.269*	.499**	.611**	.611**	.611**	.326*	.304*
Pearson Poor IT Structures	-.513**	-.504**	.319*	.499**	.916**	.916**	.916**	.852**	.852**
Pearson Poor Personnel	.000	.000	.013	.000	.000	.000	.000	.000	.000
Pearson Low Remuneration	-.543**	-.447**	.199	.611**	.916**	1	1.000**	.870**	.828**
Pearson	.000	.000	.127	.000	.000	.000	.000	.000	.000
Pearson	-.543**	-.447**	.199	.611**	.916**	1.000**	.870**	.870**	.828**
Pearson	.000	.000	.127	.000	.000	.000	.000	.000	.000
Pearson	-.423**	-.504**	.081	.326*	.852**	.870**	.870**	1	.871**
Pearson	.001	.000	.539	.011	.000	.000	.000	.000	.000
Pearson	-.251	-.682**	.342**	.304*	.852**	.828**	.828**	.871**	.828**
Pearson	.053	.000	.007	.018	.000	.000	.000	.000	.000

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

4.6 Mitigation strategies for investigation of banking fraud cases

The third objective of the study sought to examine the mitigation strategies for investigation of banking fraud cases in Commercial banks. The objective focused on how BFIU contributed towards prevention of bank fraud, strategies in combating obstacles and ways of addressing limitation in BFIU.

4.6.1 Fraud Management Strategies

The study sought to find out the fraud management strategies in the Commercial Bank. The respondents were asked to put their degree of agreement to the statements regarding fraud management strategies in the capital markets industry. The choices provided were strongly disagree, disagree and strongly agree. The results are shown on table 4.26.

Table 4.26: Strategies undertaken by the Bank Fraud Unit to manage fraud

Strategies	Strongly Agree	Disagree	Strongly Disagree	Total
Arrest of offenders	18	41	41	100
Collection of Criminal Intelligence	34	38	28	100
Covert Operations	24	26	50	100
Anti-fraud Policy Framework	26	25	49	100
Quick Response to fraud	49	32	19	100
Complaints				100
Impromptu Visits	25	37	38	100
Sharing of Information	68	25	7	100
Fraud Detection	27	23	49	100
Surveillance	26	23	51	100
Know-your –Client Structure	72	5	23	100

Respondents were asked to indicate the extent to which they agreed with the effectiveness of strategies employed by the Investigation Unit in managing fraud. As the analysis result indicate, a majority of the respondents (41.1%) felt that arrest of had no effect on reduction of fraud in Central Bank

Over 72% of the respondents agreed that collection and analysis of criminal intelligence could raise caution on would be fraudsters while covert operations and anti-fraud policy measures received a moderate agreement of 50%. With over 68% and 72% respectively, Information sharing and know-your-client structure came out strongly as strategies that Fraud Investigations Unit can rely on in fraud management within the CMA. Further, with a majority response of 49.3%, quick response was felt to be an appropriate response to fraudulent conduct within the Authority. This finding corroborates Tsegaye's (2015) observation that information sharing and quick response create confidence in the system.

The findings are in line with the research by Mwose (2012) who found out that the formation of the BFIU provided a roadmap for the industry to engage and attempt to formulate or implement suitable strategies to manage risks associated with fraud through prevention, detection and response mechanisms. Employee theft and money laundering standing at 38.4% and 30.1% respectively were cited as the highest forms of fraud in the CMI. According to one key informant those two are inseparable. "Money laundering is outright theft where perpetrators disguise their acts as genuine. From my experience, if those two are adequately addressed, all other avenues of fraud will be reduced by over 90%". An inference can therefore be drawn to the effect that fraud in financial statements and transfer of securities could be greatly managed by addressing employee theft and money laundering.

4.6.2 Fraud Management

Respondents to this study agreed that CBA had been successful in fighting fraud with a mean rating of 3.84 and a mode of 3. In addition, respondents disagreed that at CBA fraud investigations were undertaken and completed with good time for decisive action (mean of 2.29 and a mode of 2). Respondents agreed that fraud prevention was engrained in the organization culture of CBA (Mean of 4.17 and a mode of 4). Further, respondents strongly agreed that fraud incidences were accorded due importance and investigation (Mean of 4.61 and mode of 5). Respondents were neutral that the organization fraud policy was well communicated (mean of 3.45 and a mode of 4). Finally, respondents agreed that CBA was up to date with emerging trends in fraud (mean of 4.12 and a mode of 4). This is as shown in Table 4.3 below.

Table 4.27: Challenges towards BFIU

Challenges	Frequency	Mean	Mode	Std. Deviation
CBA has been successful in fighting fraud	60	3.84	3	0.241
Fraud investigations are completed in good time	60	2.29	2	0.365
Fraud prevention is engrained in Organization culture	60	4.17	4	0.187
Importance is accorded to fraud incidence	60	4.61	5	0.279
Fraud policy is well communicated	60	3.45	4	0.246

Table 4.28: Types of Management Fraud

	Frequency	Mean	Mode	Std. Deviation
Overstatement of assets	60	2.58	2	0.045
Overstatement of revenues	60	2.21	2	0.081
Understatement of liabilities	60	2.38	2	0.066
Understatement of expenses	60	2.37	2	0.059

4.7 Challenges Facing Bank Fraud Investigations Units

The study also sought to find out the challenges facing Bank fraud investigation Unit in the central bank in its endeavor to manage fraud. The respondents were asked to put their degree of agreement to the statements regarding the role of Investigations Unit and the strategies of fraud management within the Central Bank in Nairobi County. The choices were represented as follows: strongly disagree, disagree, neutral, agree and strongly agree. This was calculated in terms of percentages.

Table 4.29: Challenges towards Central Bank

Challenges	Strongly Agree	Disagree	Strongly Disagree	Total
Inadequate Funding	2.2	15.6	82.2	100
Bureaucracy of The Justice System	1.4	19.8	72.8	94
Perceived Negative Police Image	0.1	36.8	63.1	100
Incompetence of officers	6.8	49.9	43.3	100
Irregular Transfer of officers	2.7	40.8	56.5	100
Lack of investigations experience	64.4	22.3	13.3	100
External Interference	5.5	39	55.5	100
Bureaucratic police system	1.1	40.5	58.4	100

From table 4.29, it can be observed that majority (82.2%) of the respondents felt strongly that inadequate funding was the biggest challenge towards Capital Markets Fraud investigations. Indeed, this finding closely corroborates the OECD Principles of Corporate Governance which cites low funding as impediment CMA fraud investigations (Organization for Economic Cooperation and Development, 2014). An inference can therefore be drawn to indicate that the Unit’s capacity to maintain an effective intelligence system is highly hampered by inadequate funding from the exchequer.

Standing at 72.8%, a bureaucratic Justice system came out as the second fundamental challenge to CMA fraud investigations. This is likely to affect law enforcement in ways that may interfere with the smooth and efficient processing of cases arising from CMA crimes. This finding supports the observation that fraud detectives works through a procedure of bureaucracies. Regulations and legal provisions linking the DCI, the Judiciary and the correctional facilities are at times unclear and overlapping.

This presents gaps in law enforcement apparatus leading to delayed or derailment of fraud cases (Raharjo & Saefudin, 2017).

With a rating of 63.1% and 58.4% negative police image and police bureaucracy respectively appeared to be very strong barriers to the ability of the Investigations to initiate and pursue fraud case to a conclusive end. This practice is likely to affect the consistency of guardianship as envisaged by Cohen and Felson (1979). Consequently, a week, potential fraudsters' target the CMA may aptly capitalize on this weakness to commit fraud and allied offences within the Authority.

With regard to the experience of the investigators, majority (64.4%) of the respondents indicated that the investigators were qualified enough to handle fraud cases falling within their jurisdiction. This was supported by an interviewee who categorically stated;

“Officers here have a vast experience and skills in the detection of fraud offences, collection and processing of evidence. In cases where our investigation process is not interfered with ‘intervention’ calls, we have more often than not sustained a case in court. The budgetary allocation we receive is too lean to support officers in carrying out quality investigations. We mostly investigate white colour crimes which occur in an organized and structured manner. This requires adequate financial facilitation to collect and authenticate our intelligence”

The impression created here is of a situation in which the investigators would competently handle fraud in the BFIU.

4.7.1 Other challenges Faced by BFIU in managing fraud

The study sought to find out other challenges the BFIU faces managing fraud in the capital markets industry.

Table 4.30: Which Other management strategies can be adopted

Strategy		
Prosecution of Fraud cases	5	7
Whistle blowing	10	14
Proper litigation of Fraud	18	25
Use of Modern technology	23	32
Increase public awareness	17	23
Total	73	100

From the findings in Table 4.30, a majority of the respondents (30.1%) suggested bureaucracy, 19.3% suggested political interference, 15.1% suggested inadequate work force, 11% suggested lack of national Fraud database, lack of appropriate technology, poor management skills and 2.7% suggested poor investigations and prosecutions. This is attributed to the government regulations on the growing capital markets. Several changes in the market demands have justified the challenges facing the Unit.

A respondent said:

“CMI unlike any other industry has varied market mechanics and economics, the existing laws is part of the problem hence political interferences in management of crimes...”

4.7.2 Contribution of BFIU towards prevention of banking fraud

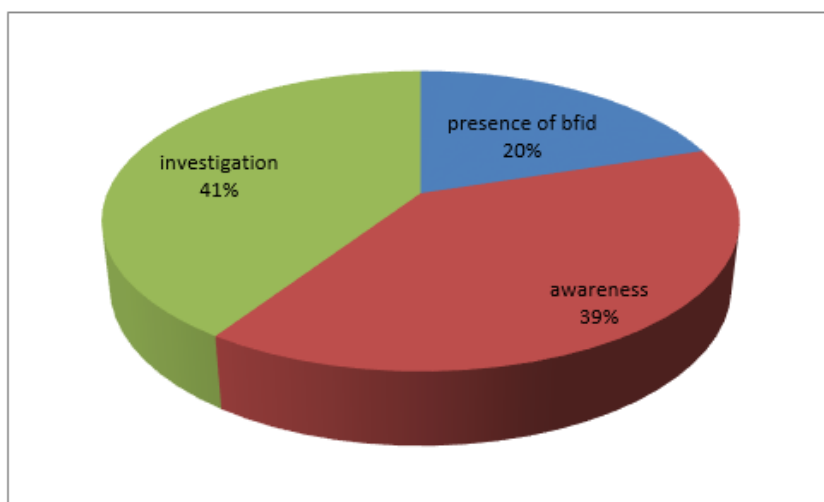


Figure 4.17: Contribution of BFIU towards prevention of banking fraud

As evident in the Figure 4.16 above, BFIU has contributed towards prevention of bank fraud by (41%) through investigation, (39%) awareness and (20%) presence of BFID.

4.7.3 Tracking of fraud cases

Tracking of fraud cases was an effective strategy towards prevention and control of fraud. This is deduced from the 48% of the respondents indicating that it was the most effective while 43% indicated that it was effective. Eight percent of the respondents indicated that it was least effective. From the findings, tracking of fraud cases was a highly effective strategy towards prevention and control of fraud.

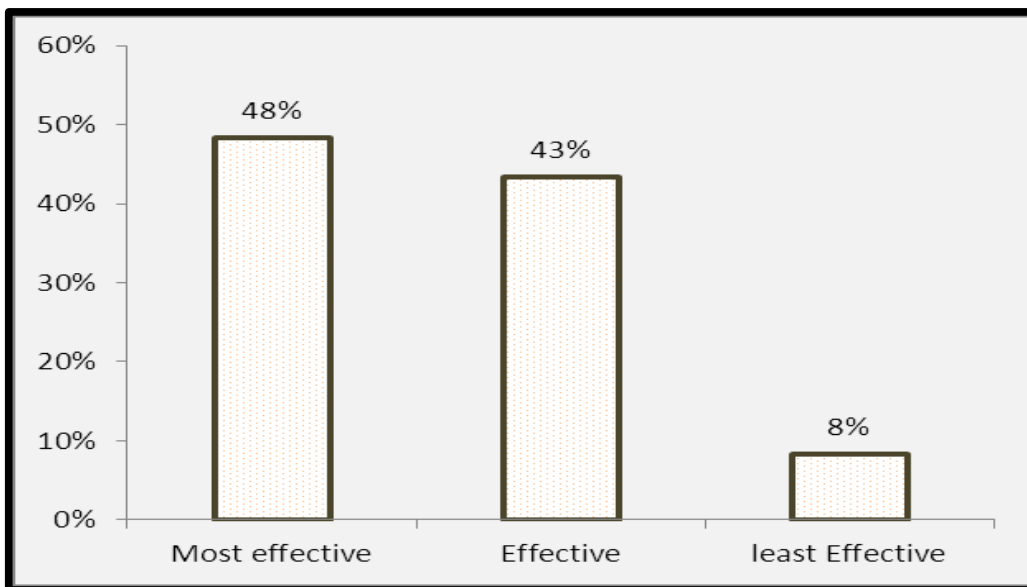


Figure 4.18: Level of prevention of bank fraud

The respondents were given 11 statements to respond yes or no and the results are presented in the table below.

Table 4.31: Adequate training in banking fraud

	Frequency	Percent
Yes	25	16.7
No	125	83.3
Total	150	100

Adequate training and education for the police officers improves officer conduct while greatly developing their interpersonal skills by improving competence, communications, and confidence. The table 4.31 above shows that most of the respondents agree that BFIU has not done adequate training in banking fraud (83.3%) and (16.7%) no. This implies that officers have not been trained adequately and therefore there is need to train officers to prevent cases of bank fraud.

Table 4.32: Criminal proceedings to prevent banking fraud

Rank	Frequency	Percent
Yes	150	100
Total	150	100

All the respondents agree that criminal proceedings are a good strategy to prevent banking fraud.

Table 4.33: Legislation

Rank	Frequency	Percent
Yes	69	46.0
No	81	54.0
Total	150	100

On the question of legislation (54%) 81 no and (46%) 69 yes. BFIU should implement strategies that will mitigate the rising number of banking fraud.

Table 4.34: Good communication between stakeholders

Rank	Frequency	Percent
Yes	144	96.0
No	6	4.0

Total	150	100
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On the question of good communication between stakeholders, majority of officers (96%) yes and (4%) no. Good communication between stakeholders is a good strategy in mitigating bank fraud.

Table 4.35: Improved technology and innovation

Rank	Frequency	Percent
Yes	58	38.7
No	92	61.3
Total	150	100

Table 4.35 above shows that improved technology and innovation is not a good strategy in preventing bank fraud cases (61.3%) no and (38.7%) yes.

Table 4.36: Efficiency in coordination

Rank	Frequency	Percent
Yes	141	94
No	9	6
Total	150	100

As illustrated in the table 4.36 above efficiency in coordination is a good strategy in preventing fraud cases (94%) yes and (6%) no.

Table 4.37: Good statistics

Rank	Frequency	Percent
Yes	150	100
Total	150	100

From the response in the table 4.37 above all the respondent agree that good statistics is a good strategy in prevention of bank fraud cases.

Table 4.38: Sharing of information

Rank	Frequency	Percent
Yes	147	98.0
No	3	2.0
Total	150	100.0

Results revealed that most of the officers agreed that sharing of information contribute to the prevention of fraud cases.

Table 4.39: Cross border cooperation

Rank	Frequency	Percent
Yes	41	27.3
No	109	72.7
Total	150	100

On the question of cross border cooperation most of the respondents (73%) no and (28%) yes.

Table 4.40: Updating bank personnel on emerging fraud trends

Rank	Frequency	Percent
Yes	94	62.7
No	56	37.3
Total	150	100

As evident in table 4.40 above the respondents agree that updating bank personnel on emerging fraud trends help in curbing cases of bank fraud (63%) yes and (38%) no.

Table 4.41: Recruitment of qualified personnel

Rank	Frequency	Percent
Yes	150	100
Total	150	100

Recruitment of qualified personnel is crucial to any organization because it affects success of the organization due to quality performance. The entire respondent agreed that recruiting qualified personnel is a good way of preventing fraud cases.

4.7.3 Strategies in combating obstacles

The respondents were given eleven statements to give the level of importance to the strategies using scale of one to five which 5 is very high, 4 high, 3 low, 2 very low and 1 not at all.

Table 4.42: Legislation

Rank	Frequency	Percent
low	90	60
high	14	9.3
very high	46	30.7
Total	150	100

As depicted in Table 4.42, most of the respondents (60%) low, 31% very high and 9% high. It is evident that legislation is not an important strategy in combating obstacle in bank fraud.

Table 4.43: Criminal proceedings to prevent banking fraud

Rank	Frequency	Percent
Not at all	38	25.3
High	19	12.7
Very high	93	62
Total	150	100

Table 4.43 sets out the responses to the question on the Criminal proceedings to prevent banking fraud. The results demonstrate that most of the officers (62%) very high, (25%) not at all and 13% high. This implies that Criminal proceedings to prevent banking fraud is important in combating obstacle in banking fraud.

Table 4.44: Adequate training in banking fraud investigation

Rank	Frequency	Percent
Very low	38	25
Low	6	4
High	11	7
Very high	95	63
Total	150	100

Table 4.44 above demonstrates that a majority of the officers (63%) very high, 25% very low, 7% high and 4% low. It is therefore evident that adequate training in banking fraud investigation is important in combating obstacle in banking fraud.

Table 4.45: Good communication between stakeholders

Rank	Frequency	Percent
Very low	38	25.3
Low	6	4
High	16	10.7
Very high	90	60
Total	150	100

As illustrated, Table 4.45 above sets out the responses to the question on good communication between stakeholders. Nearly half of the officers (60%) very high, 25% very low, 11% high and 4% low. It is therefore evident that good communication between stakeholders is important in combating obstacle in banking fraud.

Table 4.46: Improved technology and innovation

Rank	Frequency	Percent
Very low	38	25
Low	11	7
High	63	43
Very high	38	25
Total	150	100

Figure 4.46 above displays the results of the respondents on improved technology and innovation. Most of respondent (42%) high, 25% very high and very low and and7% low. It is therefore evident that improved technology and innovation is important in combating obstacle in banking fraud.

Table 4.47: Efficiency in coordination

Rank	Frequency	Percent
Very low	38	25
Low	12	8
High	13	9
Very high	87	58
Total	150	100

Table 4.47 sets out the responses to the question on the efficiency in coordination. The results demonstrate that almost half of the officers (58%) very high, (25%) very low, 9% high and 8% low. This implies that efficiency in coordination is important in combating obstacle in banking fraud.

Table 4.48: Good statistics and sharing of information

Rank	Frequency	Percent
Very low	38	25
High	77	51
Very high	35	23
Total	150	100

Figure 4.48 above displays the results of the respondents on good statistics and sharing of information. Most of respondent (51%) high, 25% very low and 23% very high. It is therefore evident that good statistics and sharing of information is important in combating obstacle in banking fraud.

Table 4.49: Sharing of information

Rank	Frequency	Percent
Very low	38	25.3
High	25	16.7
Very high	87	58
Total	150	100

As illustrated, Table 4.49 above sets out the responses to the question on sharing of information. Nearly half of the officers (58%) very high, 25% very low while 17% high. It is therefore evident that sharing of information is important in combating obstacle in banking fraud.

Table 4.50: Cross border cooperation

Rank	Frequency	Percent
Not at all	5	3.3
Very low	6	4
Low	52	34.7
High	52	34.7
Very high	35	23.3
Total	150	100

Table 4.50 above demonstrates that equal number of the officers (35%) high and low, 23% very high, 4% very low and 3% not at all. It is therefore evident that cross border cooperation is important in combating obstacle in banking fraud.

Table 4.51: Updating bank personnel on emerging fraud trends

Rank	Frequency	Percent
Very low	38	25
Low	5	3
High	72	48
Very high	35	23
Total	150	100

Table 4.51 sets out the responses to the question on the updating bank personnel on emerging fraud trends. The results demonstrate that almost half of the officers (48%) high,

(25%) very low, 23% very high and 3% low. This implies that updating bank personnel on emerging fraud trends is important in combating obstacle in banking fraud.

Table 4.52: Recruitment of qualified personnel

Rank	Frequency	Percent
Very low	38	25
High	25	17
Very high	87	58
Total	150	100

As depicted in Table 4.52, almost half of the respondents (58%) very high, 25% very low and 17% high. It is evident that recruitment of qualified personnel is an important strategy in combating obstacle in bank fraud (Figure 4.18).

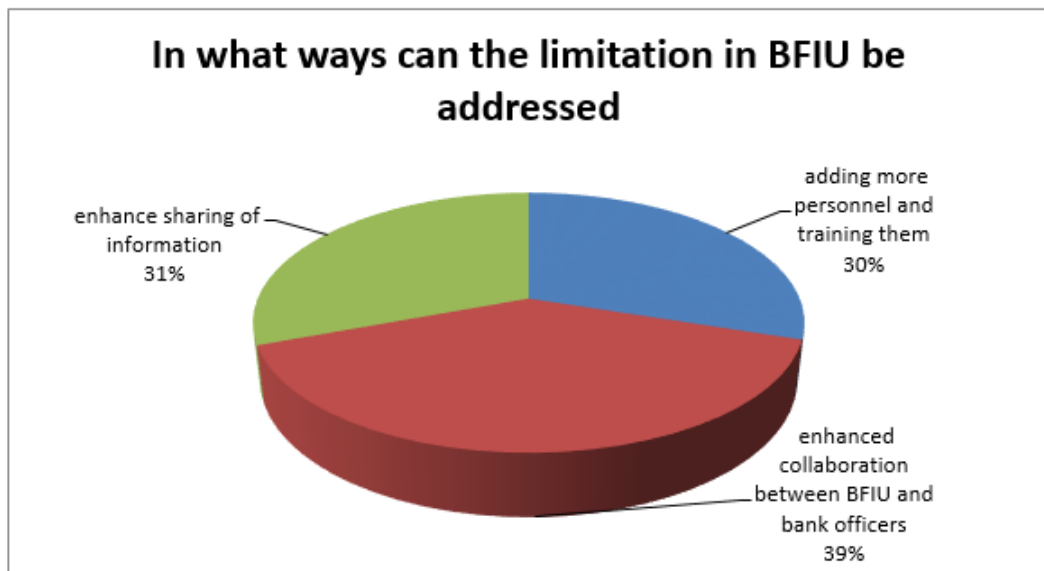


Figure 4.19: Ways of eliminating BFIU Limitations

Figure above shows how BFIU limitation can be addressed and majority of respondent (39%) enhance collaboration between BFIU and bank officers (31%) enhance sharing of information and (30%) adding more personnel and training them.

4.7.4 Use of ICT

The use of ICT tools such as passwords and firewalls were the most effective strategy for prevention and control and fraud. This is due to the high proportion of

respondents (82%) who indicated that it was the most effective. Eighteen percent of the respondents indicated that it was effective.

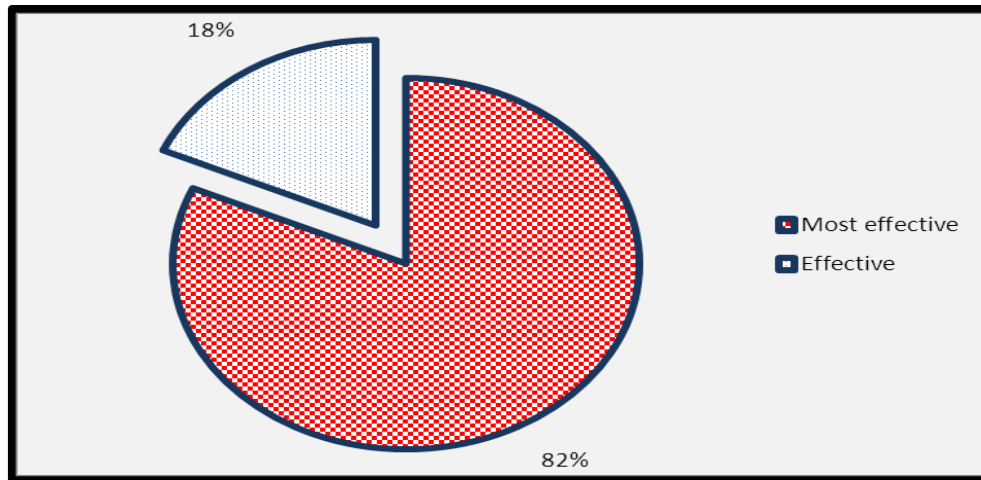


Figure 4.20: Use of ICT Tools

4.7.5 Use of Analytical Tools

According to 60% of the respondents, the use of analytical tools to detect and prevent fraud was very effective in controlling and preventing fraud. Twenty percent indicated that it was effective while a similar proportion indicated that it was least effective. This implies that the use of analytical tools to detect and prevent fraud was very effective in controlling and preventing fraud.

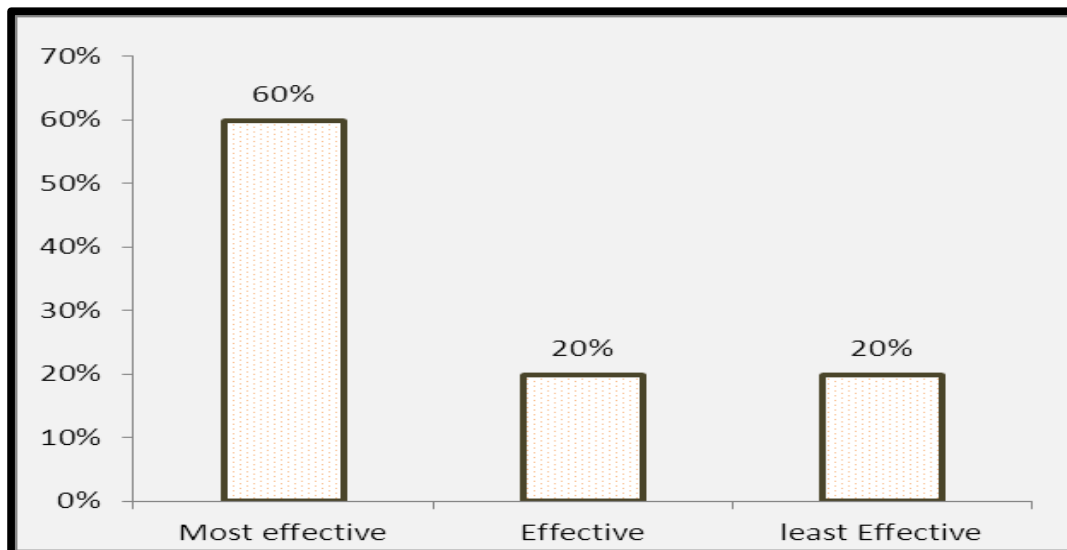


Figure 4.21: Use of Analytical Tools

4.7 Discussion of Results

This Section discusses the findings above in relation to other research studies conducted. The present study found out that several factors influenced Banking Fraud Investigations Unit in the management of fraud cases in Commercial banks, Nairobi County, Kenya. These influencing factors include trends in security risk management, mechanism and mitigation strategies. The section is organized as per the objectives and include comparison with other studies.

4.7.1 Characteristics and Factors Influencing Fraud Cases

Results indicates that BFIU has succeeded (60%) in fight against bank fraud in Commercial Banks of Kenya. This implies that the use of BFIU in prevention of bank fraud in important because of trained skills and knowledge. One of the respondents from interview schedule asserted that Fraud suspects are arrested either before or after committing a crime and taken to court and convicted and sometimes the fraudsters refund the stolen cash. Another informant said that it is evident from the reducing cases and continuous fight against frauds by the government mechanism with use of cyber security fraudster have been detected in process of act.

Inadequate training has contributed to prevalence of bank fraud as evident in the response rate in the table, almost half of the respondent rated (51%) high, (28%) very low, (8%) very high and equally (7%) low and not at all. Training and education improve the overall effectiveness and efficiency of the officers. If officers begin to realize that their skills are not improving and education does not seem to be a priority, then officer's morale and motivation becomes stagnant. Training officers is important as this shows that officers are more office-friendly due to motivations (Axelrod, 2010).

When it comes to improvement in communication, the results demonstrate that more than half of the officers agreed (64%) high, (23%) very low, (11%) very high and 2% low. It is evident that improved communication has led to prevalence of fraud cases. According to Wanjiru (2011) adoption of improved communication by banks have increased bank efficiency and at the same give fraudsters an opportunity to commit fraud. The Bank's infrastructure is designed to support the monitoring process by producing daily reports and auctioning alerts.

The results indicate that unqualified fraud investigators have led to prevalence of bank fraud cases as follows; half of the officers (55%) low, (35%) very low, (7%) high and 4% not at all. This collaborates with the research by Moran (2014), observes that Fraud Investigation

and management is complex and challenging, thus investigation team must be skilled and competent. Respondents also indicated that there is external interference on the investigations and lack of experience among officers in investigations is limiting their performance. Lack of qualified investigators limited their performance due to bureaucratic procedures which create delays on investigations.

The results indicate that cross border payment have not led to prevalence of bank fraud (35%) very low, 33% high, 29% very high and 4% low. Cross border payment facilitates the growth of internet and mobile technologies which provide flexible and efficient money transfer options to customers who don't have access to credit options. Money is often transferred overseas and cross border payment expose large financial institutions to fraud cases. Fraudsters have capitalized on the rapid adoption of money transfer technology thereby exploiting systemic vulnerabilities. Without fraud protection, cross border payments stand to encourage fraud cases.

4.7.2 Challenges in management of Banking Fraud Cases

The results show that high numbers of officers have received moderate training (52%) and few officers have received low level of training (25%) while high level of training is (23%) Training and education improve the overall effectiveness and efficiency of the officer's performance. If officers begin to realize that their skills are not improving and education does not seem to be a priority, then officer's morale and motivation becomes stagnant. The findings on recruitment showed that most of the officers (38%) very low, 31% low, 25% high, 4% not at all and 2% very high. It is therefore evident that recruiting qualified personnel is important in combating obstacle in banking fraud. Recruitment of qualified personnel is crucial to any organization because it affects success of the organization due to quality performance. It is evident that recruitment of qualified personnel is an important strategy in combating obstacle in bank fraud. This study concurs with research by Moran (2014) criminals greatly cover their tracks for the investigation to be useful in a legal case and therefore making the investigation complex and challenging an investigation must be able to prove that a fraud was committed. Skilled investigators are the only ones that successfully complete this complex fraud investigation. Thus, qualified personnel are needed for the investigation to be effective and efficient.

4.7.3 Fraud risk management mechanism

Knowledge is the foundation for establishing objectives and accomplishing goals and without it, one was ineffective, unproductive and unable to accomplish tasks at maximum efficiency. Adequate training improves officer conduct and help develop their interpersonal skills by improving competence, communications, and confidence. The results show that most of the respondents agree that BFIU has not done adequate training in banking fraud (83.3%) and (16.7%) no. This implies that officers have not been trained adequately and therefore there is need to train officers to prevent cases of bank fraud.

According to Sirigaga (2014), advancement in technology has made it easy for fraud to be perpetrated globally and executed anywhere and anytime. As technology advance, fraudsters also put in new techniques of technology to commit crime at minimal risk. The results of the respondents on improved technology and innovation shows that most of respondent (42%) high, 25% very high and very low and and7% low. It is therefore evident that improved technology and innovation is important in combating obstacle in banking fraud.

Recruitment of qualified personnel is crucial to any organization because it affects success of the organization due to quality performance. The entire respondent agreed that recruiting qualified personnel is a good way of preventing fraud cases. As depicted in the results, almost half of the respondents (58%) very high, 25% very low and 17% high. It is evident that recruitment of qualified personnel is an important strategy in combating obstacle in bank fraud. This study concurs with research by Moran (2014) criminals greatly cover their tracks for the investigation to be useful in a legal case and therefore making the investigation complex and challenging an investigation must be able to prove that a fraud was committed. Skilled investigators are the only ones that successfully complete this complex fraud investigation. Thus, qualified personnel are needed for the investigation to be effective and efficient.

Sharing of information is important in combating obstacle in banking fraud as illustrated from the results. Nearly half of the officers (58%) very high, 25% very low while 17% high. The findings are in line with the research by Mwose (2012) who found out that sharing of information on fraudster database has increased fraud awareness and officers indicated that they lacked a well-structured know your clients (KYC) procedure which has prevented fraud, lacks of quick response to fraud complaints and inquiries which enables quick action. BFIU will provide a guideline to implement suitable strategies to manage risks

associated with fraud through prevention, detection and response mechanisms keeping data on criminals through police clearance certificate has enhanced Know Your Client (KYC) guidelines. These findings are similar to the findings of Kingsley (2012) in his study on banking fraud in Nigeria. In the study by Kingsley (2012) and Wang and Klenier (2005) found out that institutional factors that lead to fraud may include but are not limited to weak accounting system control systems, inadequate supervision of subordinates, disregarding for Know Your Customer rule, poor information technology and data base management, hapless personnel policies, poor salaries and general frustration occasioned by management unfulfilled promises.

Other factors identified by Kingsley (2012), ACFE (2009) and Cressey (1973) include, failure to engage in regular call over, employees refusal to abide with laid down procedures without any penalty, banks reluctant to report fraud due to the perceived negative publicity, banking experience of staff and inadequate infrastructure that may include poor communication systems result to a buildup of unbalanced posting, inadequate training, poor book keeping and genetic traits like kleptomaniac who pathologically steals for fund. This study sought to investigate how and the extent to which CBA manages fraud in the organization. The study found that the CBA has been very successful in fighting fraud. In addition, the study found that fraud prevention is engrained in the organization culture, importance is accorded to fraud incidences and CBA is up to date with current and emerging fraud trends in the environment. However, the study found that fraud investigations were not undertaken and completed in good time.

Management fraud which was the least common was manifested in the form of overstatement of revenues. Other managerial level frauds occurring though at a reduced frequency include: understatement of expenses, understatement of liabilities and overstatement of assets. However, these cases of management fraud were very rarely identified. This could be attributed to stringent reporting rules and regulations imposed on the bank by the Central Bank of Kenya and the International Financial Reporting and Accounting regulations. These findings are in line with Kingsley (2012), who noted that management fraud is aimed at painting the bank in good light to the investors, creditors and regulatory authorities. Though management fraud manifests though overstatement of assets or revenues and understatement of liabilities and expenses, the Association of Certified Fraud Examiners believes that it is carried out through fictitious revenues, timing difference, improper asset

valuation concealed liabilities and expenses and improper or inadequate discourse (Kingsley, 2012).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This Chapter looks into the summary of the study, conclusions based on the findings and recommendations.

5.2 Summary

The study focused on the need to determine the influence of Bank Fraud Investigations Unit in management of fraud cases in Commercial banks Nairobi County. Specifically, the study aimed to examine the characteristics and factors influencing fraud, challenges and fraud risk management mechanism in prevention of bank fraud cases in Nairobi County, Kenya. The study used descriptive survey design approach which is suitable for examining the influence of BFIU on the management of bank fraud case. The study also used both quantitative and qualitative findings from a cross section of respondents selected in the study area to bring an accurate profile of situations from respondents.

From the findings, under the first objective on the characteristics and factors influencing fraud, it was evident that a majority of the police officers agreed that BFIU has succeeded in fighting bank fraud cases by arresting the fraudsters and convicting them in court. BFIU success is also evident by the reducing number of fraud cases. However, there is a major concern on the factors leading to bank fraud that police officers have inadequate training, inefficiencies in coordination, unqualified fraud investigators and poor statistics. From the findings, the police officers further acknowledged that they were able to resolve bank fraud cases which play a huge part in the prevention of fraud cases. The findings also revealed that the frequency of incidents of bank fraud is moderate.

Under the second objective on the challenges in management of fraud cases, the findings showed that half of the respondents have received training. When it comes to what extent have Commercial banks contributed to prevention of fraud cases, majority of officers (60%) high, (27%) low, (9%) very high and (4%) moderate. In line with the second objective, the study assessed some of the fraud management strategies adopted by the organization. Further participants indicated that the existence of capital market surveillance system within CMA has increased fraud detection measures (67.1%). The covert operations and surveillance by officers has reduced the number of frauds reported (68.5%) the arrests of offenders have significantly reduced the number of frauds within the organization, (68.5%) participants also indicated that the collection and analysis of

criminal intelligence has increased the level and conscience of fraud with the organization (67.1%).

The results further indicated that majority of officers have been trained in basic bank fraud course (39%) while those who have been trained in investigation course are (32%) and the lowest number have been trained in criminal intelligence trade craft (29%). The results further indicated that on the question of liaison that BFIU holds with other organization in prevention of banking fraud (32%) CBK and KBA meetings, (31%) Safaricom, (19%) County agency meetings and (18%) BFID.

Under the third objective on fraud risk management mechanism, the results indicated that BFIU has contributed towards prevention of bank fraud by (41%) through investigation, (39%) awareness and (20%) presence of BFID. This shows that these strategies were effective in mitigating fraud cases in the bank. The findings also show that most of the respondents agree that BFIU has not done adequate training in banking fraud (83.3%) no and (16.7%) yes. This implies that officers have not been trained adequately and therefore there is need to train officers to prevent cases of bank fraud. Adequate training and education for the police officers improves officer conduct while greatly developing their interpersonal skills by improving competence, communications, and confidence.

The findings further indicated that almost half of the respondents (58%) very high, 25% very low and 17% high. Recruitment of qualified personnel is crucial to any organization because it affects success of the organization due to quality performance. The entire respondent agreed that recruiting qualified personnel is a good way of preventing fraud cases. It is evident that recruitment of qualified personnel is an important strategy in combating obstacle in bank fraud as criminals greatly cover their tracks for the investigation to be useful in a legal case and therefore making the investigation complex and challenging. An investigation must be able to prove that a fraud was committed. Skilled investigators are the only ones that successfully complete this complex fraud investigation. Thus, qualified personnel are needed for the investigation to be the effective and efficient.

5.3 Conclusions

This Section covers conclusions of this study based on research findings. The conclusions are divided into two categories namely: theoretical conclusions; and empirical conclusions.

5.3.1 Theoretical Conclusions

Rational Choice Theory pursues possible ends within the conditions of the situation in which available actor are best adapted to the ends and knows the facts of the situation in which he acts and the conditions necessary for the realization of his ends or goals.

The theory proposes that criminals evaluate the targets and risks of apprehension, the seriousness of punishments and the potential value or gains they are likely to derive from engaging in criminal activities. The decision to commit crime is therefore a matter of personal choice based on weighing of the available opportunities and risks. Criminals who engage in banking fraud consider the risks of apprehension to be low and possibilities of high financial gains which act as motivation for the commission of fraud. Committing a crime may be a rational decision under certain circumstances which does not necessarily follow that severe punishment will deter such criminality. Deterrence principle indicates that decision to commit a crime is not significantly affected by the perceived severity of punishment by the legal system, but rather by peer and parental sanctions.

On the other hand, Social Control Theory suggested that delinquent acts result when an individual's bond to society is weak or broken. Internal restraints and external restraints determine the strength of this kind of bond. These internal and external constraints develop as a result of families and communities setting certain standards of behavior and rewarding conformity or punishing nonconformity. The extent of an individual's social bond in his or her society such as attachment to other people determines his or her chances to deviate. Criminals, including dishonest employees who engage in banking fraud have weak or no bonds to society therefore commit crimes. Investigation mechanisms in banking fraud cases aim to prevent fraud and alleviate the security risk management.

5.3.2 Empirical Conclusions

The findings of this study confirm the need to determine the influence of Bank Fraud Investigations Unit in management of fraud cases in Commercial banks, Nairobi County, Kenya. The first objective of the study focused on examining characteristics and factors influencing fraud cases. From the findings, the study concluded that the frequency of incidents, types of bank fraud cases, resolved cases, unresolved cases and the factors leading to banking fraud affected the management and influenced police performance in the prevention of bank fraud cases.

The second objective of the study sought to assess the challenges in management of bank fraud cases. From the findings, the study identified that despite the BFIU effort in

managing the bank fraud cases; there are still more to be done when it comes to inadequate training to officers, cross border criminal links, unqualified fraud investigators, improvement in communication and technological innovation.

In regard to the third objective, the study sought to determine the fraud risk management mechanism. From the findings, the study concluded that adequate training, sharing of information, recruitment of qualified personnel, good communication between stakeholders, improved technology, efficiency in coordination and good statistics strategies should be put in place to manage fraud cases. The findings also identified that BFIU has contributed towards prevention of bank fraud through investigation, awareness and presence of BFID

5.4 Recommendations

In order to address the challenges facing BFIU in managing bank fraud cases in Nairobi County, this study makes the following recommendations:

- i. The government should facilitate more training for all police officers to enhance their performance and knowledge in mitigation strategies to combat fraud cases
- ii. There is need to avail adequate resources needed by the officers to discharge their duties effectively and ensure smooth running of the investigation.
- iii. Officers should undergo training on basic bank fraud cases to equip them with knowledge and skills for handling fraud cases.
- iv. There is need to recruit qualified fraud investigators who are competent, skilled and have ability to successfully handle challenging and complex fraud investigation. Thus, qualified personnel are needed for the investigation to be the effective and deliver quality performance.
- v. Addressing limitation of BFIU by enhancing collaboration between BFIU and bank officers
- vi. There is need for all banks to have an anti-fraud unit that employs various strategies to curb fraud like the KYC (Know Your Customer) with frequent periodic customer risk rating is important and if applied together with regular auditing, will be a good strategy to curb cases of fraud. The internal controls within the banks should also be looked at keenly to ensure that they are in line with fraud prevention
- vii. Banking institution should be equipped with automated reporting capability to generate regular filing reports with minimal human inputs.

5.5 Suggestions for Further Research

This study has only focused on how characteristics, challenges and management mechanism influence the Bank Fraud Investigations Unit in management of fraud cases. To this end therefore a further study should be carried out to assess the other challenges that may affect the performance of BFIU in management of fraud cases across the country as well as how the serving officers could be adequately trained and educated in order to discharge their duties efficiently. The study also focused on addressing the limitation of BFIU and therefore further research should be done on improving the performance of BFIU.

REFERENCES

- Aduda, J. and Kabue, L.N. (2017). Effect of Internal Controls on Fraud Detection and Prevention among Commercial Banks in Kenya. *European Journal of Business and Strategic Management*, 2(4), 52- 68.
- Akelola, S. (2012). *Fraud in the Banking Industry*. Unpublished PhD Thesis, Nottingham Trent University, UK.
- Alao, A.A. (2016). Analysis of Fraud in Banks: Evidence from Nigeria. *International Journal of Innovative Finance and Economics Research*, 4(2), 16-25.
- Banking Fraud Investigation Unit (BFIU) (2018). *Three Years Fraud Landscape Report*. BFIU-CBK
- Bhasin. M.L. (2016a). The Fight against Bank Frauds: Current Scenario and Future Challenges. *Science and Technology*, 31(2), 56-85.
- Bhasin, M.L. (2016b). Fraudulent Reporting Practices: The Inside Story of India's Enron *International Journal of Management Sciences and Business Research*, 5(10), 2226-2235.
- Breuer, J. B. (2006). Problem Bank Loans, Conflicts of Interest, and Institutions. *Journal of Financial Institutions*, 2, 266-285.
- CBK (2013). *Financial Institutions in Kenya*. From www.cbk.go.ke
- CBK (2017). *Bank Supervision Annual Report*. From www.cbk.go.ke
- Eneji, E.S., Udie, A.M., Eyong, I.W., & Chimdike, E.K. (2019). A Study of Electronic Banking Fraud, Fraud Detection and Control. *International Journal of Innovative Science and Research Technology*, 4(3), 708-711.
- Enofe, A.O., Abilogun, T.O., Omoolorun, A. J., & Elaiho, E. M. (2017). Bank Fraud and Preventive Measures in Nigeria: An Empirical Review. *International Journal of Academic Research in Business and Social Sciences*, 7(7), 40-51.
- Experian (2017). *Fraud Still Costing the UK more than £190bn – New Analysis Released in the Annual Fraud Indicator*. From <https://www.experian.co.uk/blogs/>
- Fletcher, N. (2017). Challenges for Regulating Financial Fraud in Cyber Space. *Journal of Financial Crime* 14(2), 190-207. Emerald Group Publishing Ltd.
- Gottschalk, P. (2018). *Fraud Investigation: Case Studies of Crime Signal Detection*. London: Routledge.
- Greenbaum, S., & Thakor, A. (2015). *Contemporary Financial Intermediation*, 3rd Edition. London: Academic Press.

- Hakami, T.A. & Rahmat, M.M. (2019). Fraud Prevention Strategies: The Perception of Saudi Arabian Banks Employees. *Asian Journal of Accounting and Governance*, 11, 71–83.
- Hartmann-Wendels, T., Mahlmann, T., & Versen, T. (2009). Determinants of banks' risk exposure to new account fraud – Evidence from Germany. *Journal of Banking & Finance*, 33, 347-357
- Institute of Internal Auditors (2009). *International Professional Practices Framework*.
Institute of Internal Auditors.
- Ivaniuk, I., & Vyshnevskiy, S. (2016). Tactical Operations Used In Investigating of Financial Fraud. *Law and Security*, 3(7), 93-96
- Konde, J.H. (2017). *Effectiveness of Fraud Control at BFIU*. Unpublished MA Project. University of Nairobi.
- Kovaleski, D. (2018). Banking Industry Suffered \$2.2 Billion In Fraud Losses In 2017. From <https://financialregnews.com/>
- Mishkin, F. S. (2016). *The Economics of Money, Banking, and Financial Markets* (11th ed.). England: Pearson.
- Njuguna, N. and Etemesi, R. (2010), “How Local Banks are coping with fraud”. Daily Nation, 10th August, 2010. Pp. 26.
- Nyakarimi, S.N., Kariuki, S.M., & Kariuki, P.W. (2020). Risk Assessment and Fraud Prevention in Banking Sector. *The Journal of Social Sciences Research*, 6(1), 13-20.
- PwC (2018a). *Pulling Fraud Out of the Shadows*. Global Economic Crime and Fraud Survey. PwCUS.
- PwC (2018b). *The dawn of proactivity: Countering threats from inside and out*. Global Economic Crime and Fraud Survey 2018, Sixth South African Edition. PwC SA.
- Salifu, A. (2017). The Impact of Internet Crime on Development. *Journal of Financial Crime*, 15(4), 432-443.
- Singh, S.N., Bansai, R., & Gaur, N. (2016). Outlier Detection: Applications and techniques in Data Mining. 2016 6th International Conference- Cloud System and Big Data Engineering.
- Skoczylas-Tworek, A. (2019). *The Application of the Three Lines of Defense Concept in Risk Management and Fraud Risk on the Example Selected Listed Companies*. 44th International Scientific Conference on Economic and Social Development – Split, 19-20 September 2019.

Uniamikogbo, E., Adeusi, A.S., & Amu, C. (2019). Forensic audit and fraud detection and prevention in the Nigerian Banking sector. *Accounting and Taxation Review*, 3(3), 121-139.

Zahra S.A., Priem, R.L., & Rasheed, A.A. (2016). The Antecedents and Consequences of Top Management Fraud. *Journal of Management*, 31(6), 803-828.

Online Sources

ACFE (2014). *Report to the Nations on Occupational Fraud and Abuse*. Global Fraud Survey. From <https://www.acfe.com/rtnn/docs/2014-report-to-nations.pdf>

CBK (2019). From www.cbk.go.ke

APPENDICES

APPENDIX A: Questionnaire for Investigators at BFIU

Kindly, respond to the following questions to the best of your ability. This is an academic research geared towards fulfilling the requirement for the award of Master of Arts degree in security management of Egerton University. The information provided will only be used for this study on “Challenges facing Fraud Investigation Unit in Management of Fraud Cases in Commercial Banks, Nairobi County, Kenya”. The information you give will be treated with utmost confidentiality. Tick (✓) as appropriate or write down your answer.

I. Background Information

1. Name(Optional)
2. Age
 - (1) 25 -31 years []
 - (2) 32-38 []
 - (3) 39-45 []
 - (4) Above 45 years []
3. Gender:
 - (i) Male []
 - (ii) Female [] (Tick one)
4. What is your Designation?
 - (a) Constable []
 - (b) NCO []
 - (c) Inspectorate []
 - (d) Gazetted Officer []
5. How long have you served in the Police Force?
 - (a) 1– 3 years []
 - (b) 4 – 6 years []
 - (c) 7 – 9 years []
 - (d) 10 – 12years []
 - (e) 13+ years []
6. How long have you served in BFIU?
 - (a) 0– 1 year []

- (b) 2 – 3 years []
 - (c) 4+ years []
7. How long have you served in BFIU?
- (a) 1– 3 years []
 - (b) 4 – 6 years []
 - (c) 7 – 9 years []
 - (d) 10 – 12years []
 - (e) 13+ years []
8. Highest level of education
- (a) Master’s Degree []
 - (b) Bachelor’s Degree []
 - (c) College Diploma/Certificate []
 - (d) Secondary Education []

II. Trends in Security Risk Management of Banking Fraud Cases

9. Has the Banking Fraud Investigations Unit succeeded in fighting banking fraud?
 Yes [] No []

10. Please explain the reason for your answer above

11. What is the frequency of incidents of banking fraud?
 (5) Very High [] (4) High [] (3) Moderate [] (2) Low [] (1) Very Low []

12. Have the incidents of banking fraud reduced due to interventions by the BFIU?
- (1) Yes []
 - (2) No []

If yes, by how much?

13. What cases of banking fraud have you had to investigate in your position?

.....

14. What cases were you able to resolve?

.....

15. What cases were you not able to resolve? Why?

.....

16. How would you rate the extent to which the following have led to prevalence of Banking Fraud? Please use the following key; (5) Very High (4) High (3) Low (2) Very Low (1) Not at all

Factor leading to Banking Fraud	Extent to prevalence of Banking Fraud				
	1	2	3	4	5
Inadequate training					

Globalization					
Improvements in communications					
Spread of international banks					
Technological innovation					
Inefficiencies in coordination among stakeholders					
Poor statistics and information imbalance					
Cross-border criminal links					
Emerging fraud trends					
Unqualified fraud investigators					
Disinterest to pursue all fraud cases					

17. Describe how the factors listed in 16 above have led to prevalence of Banking Fraud
-
-

III. Mechanisms for Investigation of Banking Fraud Cases

18. What is the level of training in banking fraud investigations that you have received?
 (1) Very High [] (2) High [] (3) Moderate [] (4) Low [] (5) Very Low []
19. Please describe the training you have so far received
-
-
-
-
20. What responsibilities are you assigned in your present post?
-
-
21. What resources do you require to function effectively in your position?
-
-

22. Which of these resources are adequately supplied?

.....
.....

23. Describe the liaisons that BFIU holds with other organizations in the prevention of banking fraud.

.....
.....
.....

24. To what extent have commercial banks contributed to banking fraud investigations?

(1) Very High [] (2) High [] (3) Moderate [] (4) Low [] (5) Very Low []

III. Obstacles to the Investigation of Banking Fraud Cases

25. Which are the underlying obstacles to the investigation of banking fraud cases?

Give the level of importance that you have given to these obstacles. Please use the following key; (5) Very High (4) High (3) Low (2) Very Low (1) Not at all

Obstacles to the investigation of banking fraud cases	Extent of importance to banking fraud				
	1	2	3	4	5
Inadequate training in banking fraud investigations					
Poor communications					
Inferior technological knowledge/skills					
Inefficiencies in coordination					
Poor statistics and information imbalance					
Failure to enforce the banking fraud rules and regulations					
Poor sharing of information					
Lack of cross-border cooperation					
Failure to update bank personnel on emerging fraud trends					
Failure to recruit qualified personnel to investigate fraud					
Lack of interest to pursue all fraud cases					

26. Please give an explanation for your answers in 25 above

.....
.....
.....

27. Which of the resources that you require are not adequately supplied?

.....
.....
.....

28. What causes this deficiency?

.....

IV. Mitigation Strategies for Investigation of Banking Fraud Cases

29. (a) How has BFIU contributed towards the prevention of banking fraud?

.....

(b) Has BFIU done the following towards the prevention of banking fraud?

Statement	Yes	No
i. Adequate training in banking fraud		
ii. Criminal proceedings to prevent banking fraud		
iii. Legislation		
iv. Good communication between stakeholders		
v. Improved Technology and Innovation		
vi. Efficiency in coordination		
viii. Good statistics		
ix. Sharing of Information		
x. Cross-border cooperation		
xi. Updating bank personnel on emerging fraud trends		
xii. Recruitment of qualified personnel		

30. Give the level of importance that you have given to the following strategies in combating obstacles to the prevention of banking fraud. Please use the following key; (5) Very High [] (4) High [] (3) Low [] (2) Very Low [] (1) Not at all []

Strategies in combating obstacles	Extent of importance in combat obstacles in banking fraud				
	1	2	3	4	5
Legislation					
Criminal proceedings to prevent banking fraud					
Adequate training in banking fraud investigations					
Good communication between stakeholders					
Improved technology and Innovation					
Efficiency in coordination					
Good statistics and sharing of information					
Sharing of Information					
Cross-border cooperation					
Updating bank personnel on emerging fraud trends					
Recruitment of qualified personnel					

31. In what ways can the limitations in BFIU be addressed?

.....

.....

.....

.....

APPENDIX B: Interview Guide

1. Please explain whether the Banking Fraud Investigations Unit has succeeded in fighting banking fraud and give reasons for your answer.
2. Describe the frequency of incidents of banking fraud.
3. Explain the extent to which incidents of banking fraud have reduced due to interventions by the BFIU.
4. Please describe the cases of banking fraud that your unit has investigated and whether they were resolved.
5. Explain to what extent that factors that lead to banking fraud have led to prevalence of fraud?
6. Describe the level and type of training in banking fraud investigations that has been received at BFIU.
7. Explain the resources that are required for officers to function effectively and whether they are adequately supplied.
8. Describe the liaisons BFIU holds with other organizations in the prevention of banking fraud.
9. Explain the extent that commercial banks have contributed to banking fraud investigations.
10. Describe the underlying obstacles to the investigation of banking fraud cases and give their level of importance.
11. Please list the resources required at BFIU which are not adequately supplied and explain reasons for the deficiency.
12. Explain how BFIU has contributed towards the prevention of banking fraud through strategies in combating obstacles.
13. List the ways by which limitations in BFIU can be addressed.

APPENDIX D: Published Paper

European Journal of Humanities and Social Sciences
www.ej-social.org

Mitigation Strategies Employed In Management Of Banking Fraud Cases In Commercial Banks, Nairobi County, Kenya

M. I. Amin, W. Mwangi, and E.K Bor

ABSTRACT

This study focused on influence of Bank Fraud Investigations Unit in management of fraud cases. Fraud is a major problem in the world that is not set to end in the near future. Supervision and regulation have not been sufficient in dealing with fraud related challenges in banks due to lack of participation by policymakers, financial institutions and consumer society groups. This study aims to contribute to the knowledge and understanding of factors influencing Banking Fraud Investigation Unit mandated to investigation and management of fraud risk in Kenya. The specific objectives for this study are; to establish characteristics and factors influencing banking fraud cases; to establish the influence of investigation mechanisms on security risk management of banking fraud cases; and to determine the challenges that influence security risk management in prevention of banking fraud cases in Kenya. This study is anchored on Rational Choice Theory and Social Control Theory. This study used descriptive research survey design that enabled the use of both qualitative and quantitative data from the CBK's BFIU officers who were included in the study. Key informants were selected by snow ball sampling from former BFIU officers and staff from Commercial banks. Data were collected using both questionnaires and interview methods. Data was analyzed both descriptively and inferentially using Statistical Packages for Social Sciences (SPSS) software. Analyzed data were presented in tables, charts. The Qualitative data from the interview guide was analyzed by content analysis and presented as verbatim reports and narratives. Both the quantitative and qualitative data were then be interpreted by the Researcher and presented as research findings in prose form. The study found out that indicates that BFIU has succeeded (60%) in fight against bank fraud in Commercial Banks of Kenya. This implies that the use of BFIU in prevention of bank fraud is important because of trained skills and knowledge. Further, the finding indicated that low or non-existent fraud budgets for detecting and preventing fraud, ineffective judicial systems, insufficient industry co-operation, inadequately educated police and prosecutors, and weak government regulatory frameworks are among the internal and external elements involved in commercial Bank fraud in Kenya. The study is expected to inform on review of Banking Fraud Investigation Unit and contribute knowledge gap on fraud risk management mechanism. The research could also help personnel, particularly top policymakers, make better judgments in the future when it comes to fraud detection and prevention.

Keywords: Mitigation Strategies, Management, Banking Fraud Cases, Commercial Banks

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