

**EFFECTS OF FORENSIC ACCOUNTING PRACTICES ON FRAUD  
PREVENTION IN COMMERCIAL BANKS IN KENYA**

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## DECLARATION

This research project is my own original work and has never been presented for a degree at any other university for examination.

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This research project has been presented for examination with my approval as the University Supervisor.

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## **ABBREVIATIONS**

ACFE:	Association of Certified Fraud Examiners.
AICPA:	American institute of certified public accountants.
ACFE:	Association of Certified Fraud Examiners.
APB:	Auditing practices Board
BFID:	Banking Fraud Investigation Department
BOD:	Board of Directors
CBK:	Central bank of Kenya
COSO:	Committee of Sponsoring Organization.
DIT:	Dublin Institute of Technology
ICS:	Internal control system
KPMG:	Klyneld Peat Marwick Goerdeler
NSE:	Nairobi Security Exchange
PCAOB:	Public Company Accounting Oversight board
PWC:	Price Waterhouse Coopers

## ABSTRACT

The general objective was to assess the impact of forensic accounting practices on fraud prevention in commercial banks in Kenya. Explicit objectives included; to determine effect of proactive fraud audits on fraud prevention in commercial banks, finding out the influence of management override controls of fraud prevention in commercial banks, establishing effective risk management on curbing deception in banks and to assess effective of internal control on curbing fraud in commercial banks. The research used of a descriptive design approach. The research utilized primary established with using questionnaires. To ensure comprehensiveness and consistency of the research the data was edited, coded then put into the data processor to be processed using Statistical Package for Social Sciences (SPSS v.17.0). Answers were edited to recognize and eradicate faults done by interviewers. Descriptive statistics which involve the use of frequencies, percentage and means were used to analyses information extracted from the respondents. Regression outcomes exhibited an affirmative and substantial impact amongst proactive audit function, robust internal control, management override controls and risk management and fraud prevention. The study concluded that proactive fraud audit helps in checking routine transaction and also in investigating errors. In addition, conducting fraud risk assessment regularly helps in preventing fraud. Banks should ensure they have experienced and skilled auditors. This is because role of an auditor essential in fraud prevention and detection. Banks should also regularly conduct fraud risk assessment. Internal controls therefore need to be reviewed and rectified frequently as infrequent review may increase the fraud risk, as the fraudster can identify and exploit the weaknesses in internal control. To ensure effective risk management in the organization, the management should be an integral part of organization process, transparent and continual improvement of internal control system.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of Study**

Recent escalation of criminal doings in Kenyan private banks which are initiated by the bank executives running the corporations on behalf of the shareholders has lowered the credibility of the bank's statements resulting in losses and collapse of some commercial banks. According to Gichira and Thambo (2003), most enterprises have crumbled in Kenya as a result of the unlawful undertakings committed by the stakeholders. National and Chase bank are example of the most current and scandalous fraud cases in Kenya where the bank management could not account for the losses amounting to 4 billion Kenya shillings, one of the executives took a loan worth 7.9 million with no any specific collateral granted to the bank respectively (Abdi & Okiro, 2017). The incapacity of the traditional auditors to identify and mitigate fraud has caused concern in the Kenyan banking industry. This has, therefore, necessitated the adoption of forensic accounting practices as an alternative measure of suppressing doubtful dealings (Peter, Aliyu-Dadi, Ebonginyang & Gabriel, 2014). According to Bhasin, (2013) the current increment in financial misconduct has raised doubts in the traditional financial auditors' ability to detect and prevent fraud. Numerous measures have been set up to detect and prevent crime in many organizations but most workers have not been frightened by those measures (Sudti, 2008).

A survey by KPMG (2002) in Australia revealed that fraud is becoming a capital white-collar crime in today's commercial context and as a result, many businesses are exposed to fraud. The impact of fraud towards the services of bank should not be underrated since the

crime is becoming adverse to banks, It has financially traumatized the investors by increasing the audit cost due to frequent auditing with the hope of uncovering the perpetrator, company morale has also been shattered leading to employees' low productivity which has reduced the general profitability of the bank and critically injuring the bank's reputation (Mahinda, 2012). Due to this, effective forensic accounting practices have been put in place which entails among others, ensuring a positive tone above, application of reliable internal control system, provision of risk management services, and management override controls to increase the efficiency and effectiveness of monitoring, detecting and preventing occurrence of fraud. According to Omondi (2013), forensic accounting is becoming popular in Africa due to the increase in economic crimes being perpetrated by the employees and management in several institutions.

The research is anchored on the Agency, white-collar crime, Cressey fraud triangle, and internal control theories. Agency stipulates that agents do not work in the best interests of the principles hence their activities need to be monitored to be in line with the expectations of their principles. This may be achieved through the application of forensic accounting practices e.g. proactive fraud audit, robust internal control, risk management, and management override controls. White-collar crimes stipulate that felony is not only a preserve of the needy and lowly placed employees but fraud is also committed by the educated and people holding respectable positions in the organization. This theory shapes the attitudes of fraud auditors in that they adopt professional skepticism while conducting their investigations.

Internal control theory, on the other hand, stipulates that for an organization to attain its goals, there must be rules and regulations implemented in an organization to ensure efficiency. The theory guides in the application of robust internal control by forensic accountants in fraud prevention

Fraud in banks has become an issue of concern in Kenya as a result of recent exposures to fraudulent activities like financial reporting fraud, corruption and embezzlement funds leading to the collapse of e.g. Chase Bank, Imperial Bank, and National Bank. The collapse of these banks led to adverse effects e.g. job losses, loss of investor confidence in the country's financial systems and loss of investments. According to the foregoing, this research will be focused on how private financial institutions in Kenya combat fraud through the application of investigative accounting practices. Incorporation of financial examination into daily business activities will intensify fraud deterrence; this is because most fraudsters fear committing fraud when there are effective measures established by firms to examine any duplicitous happenings undertaken by employees (Opiyo, 2017).

### **1.1.1 Forensic Accounting Practices**

This entails using knowledge to evaluate legal matters (Gray, 2008). According to Omondi (2013), it means utilization of accounting, exploratory and assessing techniques to come up with evidence that is admissible in the legal proceedings. Forensic accounting practices involve the use of accounting, investigative and legal expertise to confirm whether the accounting transactions were done per regulatory requirements. These procedures are conducted to identify the existence of any fraud incidence (Yahaya, Suleiman & Abba 2018).

The extent of fraud in organizations has forced the management to come up with various anti-fraud strategies namely: anti-money laundering, ethics helpline and data analysis services (Deloitte's India Banking Fraud Survey, 2012). Forensic accounting duties and responsibilities include; assessment of losses and potential damage awards, application of tax law knowledge, conduct and assisting with internal investigation, acting as proficient eyewitnesses in law courts (Roufa, 2019). The traditional Auditors' inability in meeting the organizations' requirements has reduced the public confidence in the quality of audit reports; auditors must, therefore, exhibit a skeptical mindset especially in sensitive areas that require estimation like financial statements (Temitope, Muturi & Nasieku, 2016).

Omondi (2013) researched on how forensic accounting services influenced fraud prevention among banks in Kenya and found applying these methods prevented fraud. His study did not, however, consider the effects of internal and management overrides control on fraud. Wahinya (2015) researched on the mitigating effect on corporate crime upon use of these practices among firms registered at the NSE and concluded using forensic accounting services minimizes scams. Njuguna (2013) researched on reaction approaches to scams by registered banks in the country and conclude fraud prevention can be enhanced through training, detection strategy and prosecution of the fraudsters. It is however noted from the above studies that they did not consider use of the forensic accounting practices namely, use of strong interior control, administration dominate controls and expert witnessing in fraud detection and prevention.

### **1.1.2 Fraud Prevention**

Fraud is an action that occurs in a social framework and impacts negatively on individuals and the economy. (Silverton & Sheets, 2007). Fraud is defined by the International Standard on Auditing (ISA No.240) as a deliberate act by employees in an organization which results in material misrepresentation of facts. Fraud consists of employees' embezzlement, Ponzi schemes, vendor fraud and many more, which are based on the company activities, sale and collection, purchase and payment, and warehousing (Silverstone and Sheetz 2007). BFID report indicated that Kenyan banks lost approximately Kshs1.5 billion due to fraud perpetrated by the employees in the year 2012. This lost was attributed to poor management and weak internal control system (Olongo, 2010). A case study on fraud by Rezaee (2004) indicated fiscal report scam charge most of the marketplace associates financial losses amounting to more than \$500 billion due to auditors' incompetence in detecting and mitigating fraud. Temitope, Muturi, and Nasieku (2016) the world is trying to free from the frequent rise in white-collar crime by introducing various anticrime strategies to fight financial crimes, irregularities, and other fraudulent activities in all sectors of the economy. Gottschalk (2010) concluded that detection and evidence of fraud are comparatively more obscure and difficult. According to (Levi, 2008) crime can be very costly.

According to Cressey (1950) incentive to commit felony arises when a perpetrator possesses the ability to rationalize fraud. The major factors that contribute to fraud are incentive on the individual, chance to carry out deception and ability to rationalize fraud by the perpetrator (Well, 2007). To mitigate fraud the firm must ensure all or any of the

elements of fraud are eliminated since the prevention of the fraud is cheaper than the detection of fraud (Levy, 2008).

The survey conducted in major companies in 1986 in collaboration with Arthur Young and the police foundation indicated that three-quarter of fraud are committed by employees. The management must ensure a strong internal control system in the organization to eliminate any possible opportunity to facilitate existence of deception (Shah, 2013). Complexity of deception has however made it impossible for the management to address fraud. The inability of the internal control system to minimize deception has led to rise of forensic accounting as an alternative measure for addressing fraud in the corporation (Onodi, Okafor & Onyali, 2015).

Forensic accounting ensures safety of assets, prosecution of the fraudsters, program a better education system for company's directors to learn and practice their duties as per the requirement of company's act, reduce the risk of collusion in account department by changing the counter signatories regularly and conducting proper background check before recruiting new employees to ensure they are fitted professionally for the position (Levi, 2008). Forensic auditors can enhance the detection and prevention of fraud by employing effective investigative techniques (Baird & Zelin, 2009). The failure of the traditional financial auditors to detect and prevent fraud has therefore forced most of the banks like Dubai, Chase bank and National Bank to adopt forensic accounting as an instrument of uncovering fraud (Ogutu & Ngahu, 2016). Popoola, Che-Ahmad & Samsudin, 2014) stated forensic accounting significantly reduces fraud in organizations. The organizations should, therefore, adopt forensic accounting practices as means of extenuating scam.

### **1.1.3 Forensic Accounting Practices and Fraud Deterrence**

Fraud is one of the world major concerns that need to be addressed because not only does it ruin the reputation of the organization but it also minimizes profitability when perpetrated (Rossouw, 2000). Fraud has become a capital crime in every country regardless of the continent or part of the world (Vassiljev, 2016). The inability of the traditional financial statement auditors to detect fraud has led to the practice of critical professional skepticism in the banking industry by the auditors (Peecher, 1996). Professional skepticism entails a critical assessment of audit evidence, this helps the auditors draw an appropriate conclusion in the context of their work (APB, 2010).

Fraud can be executed both internally and externally, examples of frauds executed internally are such as general ledger fraud: where Insiders take advantage of their ample knowledge about the company to execute a crime and conceal it, and account takeover which entails workers colluding with outsiders to perpetrate a fraud. Whereas external fraud includes; fraudulent loan transfer which involves earnings quality management. The Banks should, therefore, look for the red flags that may indicate the possibility of internal and external fraud before it occurs. Most of the fraudsters approximately 64% display red flag behaviors, for instance, living beyond one's financial ability (Abdi & Okiro, 2017). According to Dinapoli (2016), the success of a company lies with the appropriate identification of red flags. These red flags include Employees seeking to disguise asset misappropriation and Employees' access to customer's financial details.

Kabue (2012) researched on the influence of interior controls on prevention of deception in private segment and concluded that implementation of forensic accountings methods leads to uncovering and deterrence of fraud among commercial banks. A study by (Waigumo, 2012) on the impact of fraud risk in management practices in Kenyan commercial banks revealed appropriate deception extenuation methods leads to a reduction of fraudulent activities in the commercial banks. (Okpako & Arube, 2013) on influence of forensic accounting on fraud prevention concluded that the application of the services minimizes the incidence of crimes in the firms. (Ezejiofor, Nwakoby & Okoye, 2016) examine the impact of forensic accounting in combating deception among Nigerian banks and exposed this as an effective and efficient mechanism for mitigating fraud in the banks. They further revealed that the employment of corporate governance increases fraud prevention.

The frequent urge for fairness, honesty, and transparency by the public has necessitated the need for forensic accountants (Ramaswamy, 2011). The author emphasized the difference between forensic accounting skills and financial accountants and he settled on the importance of qualified forensic auditors in meeting future needs and this can be attained through effective education programs. From this study, it can be established that forensic accounting should be embraced to aid in deception stoppage that is increasingly becoming a threat to the banking systems.

#### **1.1.4 Commercial Banks in Kenya**

It is a vibrant link between the flow of funds and the functions of trade investments (Ndungu, 2013). There are 43 banks in the country which includes, 14 money payment suppliers, 3 credit reference agencies, 14 money remittance providers, 86 external exchange bureaus and 1 mortgage finance company, (Cytonn,2016). It is a financial institution that offers a wide range of services namely, deposits acceptance from the investors, provision of short term loans to potential businesses and trusted customers. Banks accumulate capital by extending loans to their customers and businesses at an estimated interest rate (Mbogo, 2003). They contribute to a republic by safeguarding customers' resources, facilitating the transfer of money and assisting traders trading internationally (Saucer membership, 2012). They similarly act as a mobilization point for funds that facilitate the economic activities of a country. Banks also ensure proper utilization of the resources through creating a proper equilibrium spending unit in an economy (Johnson & Johnson, 1985).

In spite of critical role of banks in Kenyan economy, there are emerging incidences of fraud that threaten the investors' confidence in financial institutions, (Ndungu, 2013) this industry is controlled by CBK (CAP.488). The CBK supervises the banking industry by reviewing banking laws and policies, issuing licenses to financial service providers and banking agencies and exercise oversight authority over the industry. The constant review of the banking laws and policies ensures transparency and reduced costs in the banking industry. CBK's inability to oversee most of the banks' daily activities due to diversity in banks and political influence by the government officials has created a loophole in the

banking system, therefore encouraging the exploitation of the banking sector by the fraudsters. The oversight weaknesses by CBK and the traditional financial statement audits have led to the adoption of these practices as complementary means of averting deception among financial institutions (Abdi & Okiro, 2017). These entail proactive audits, management designed robust internal controls, application, and enforcement of management override controls and evaluation and identification of risks and taking proactive actions to mitigate the identified risks. Lack of cooperation or complicity from the top management has made it almost impossible to uncover and prevent fraud in institutions (Wahiya, 2015). It therefore created need application of forensic accounting practices as stringent measure for curbing such criminal activities (Forensic, 2003).

The negative impact of fraud in financial institutions on the economy has necessitated the need to prevent fraud. Recent cases of fraud in Kenyan banks comprise National bank, and Chase bank financial cases that led to their collapse and loss of jobs and investors' savings. Commercial Banks in Kenya recorded a loss of 9.4 million shillings within six months in the year 2014 as a result of fraud (Abdi, 2014). The parting of possession and regulation in banks due to increasing banks in Kenya has created rampant development of fraud practices. Fraud institutes a liquidity trap in the general banking system of a country leading to possible bank dissolution if proper measures are not taken in time to deter it (NDIC, 2010). According to BFID forgery of document fraud and credit card fraud are examples of fraud practices in banks. Fraud tends to trembles creditors' and investors' reliability on banks causing distress in some banks which do not poses strong internal control mechanisms for mitigating fraud (Inaya, 2016). Olongo (2013) researched on how fiscal

fraud and liquidity on monetary standards in Kenyan banks and concluded that fraud and liquidity ratio had significant influence on performance of Kenyan banks.

## **1.2 Research problem**

The recent studies conducted by researchers have shown a drastic increase in the fraudulent activities in Kenyan banks. According to (PwC, 2011) Kenya is the leading country in the world with the highest level of occupational fraud rate; the frequency of fraud in Kenya is sixty-six percent, almost twice the global average of the occupational fraud rate which is 34% (Mahinda, 2012). The occurrences of occupational fraud in Kenya which are executed by the firms' participants have led to the dissolution of most corporations. (Gichira & Thambo, 2003). Gitau and Gatihi (2016) point out that most of the stakeholders have lost trust and confidence in the banking system because of the continual rise of fraud rate in banking industry. As per BFID commercial banks recorded losses totaling to 850 million shillings in the year 2014. This is evident in the recent cases of Imperial, national, and Chase bank which have been put under receivership by CBK (Abdi, 2017). Such events have necessitated the need for forensic accounting interventions which helps in early detection and prevention of fraud. Commercial banks being corporations that provide various financial services are vulnerable to occupational fraud making them the most vulnerable to fraudulent activities among the listed industries in Kenya (ACFE, 2010). Staff complication and collusion with third parties is an example of the challenges faced by banks because of the existence of deception. (Wanemba, 2010). This study therefore, looks at effect of forensic accounting practices on deception stoppage in banks in the country.

Intensive studies have been conducted across the globe and locally on how forensic accounting practices determine deception. For instance (Suleiman, Abba & Yahaya, 2018) scrutinized consequence of accounting practices on alleviation of fraud on listed corporations in Nigeria and revealed that employment of forensic accounting greatly decreases level of deception in banking industry. Another instance, Osunwole, Kunle, Henry and Ponle, (2018) on how forensic accounting facilitates deception uncovering and deterrence in Nigeria's banking revealed that forensic accounting is a crucial instrument for discovery and stoppage on this. Oyebisi, Wisdom, Olwogo, and Ifeoluwa (2018) on similar research concluded there was substantial influence upon use of forensic accounting procedures in Nigerian Banking industry. Bassey (2018) focused his study on mitigation of deception in microfinance institution in Cross River State, Nigeria upon application of forensic accounting methods and resolved forensic accounting supports in crime mitigation.

The three local empirical studies that were done recently in Kenyan context include; (Ng'ang'a, 2015) on consequence of these services on deception deterrence among insurance firms he established that they help prevent occurrence of corporate crimes in firms. Opiyo (2017) scrutinized contribution of these services in battling corruption amid Kenyan institutes and concluded that fraud mitigation can be conducted with the help of investigative techniques by the forensic auditors. (Njuguna, 2013) examined the response strategy to fraud by the selected Kenyan financial institutions. The study concluded that commercial banks manage fraud through various forensic accounting approaches that

include prosecution of fraudsters, training on fraud, application of preventive methods and fraud investigations.

Despite global and local researches on how forensic accounting methods influenced fraud, none has been conducted specifically on impact of the practices on deception mitigation among Kenyan commercial banking institutions. With rampant growth of the fraudulent activities in commercial banks arising to the collapse of most banks, the major focus of the study is to find out how forensic accounting enhances fraud prevention in commercial banks. The work aimed to satisfy the study gap by answering the query: Is forensic accounting practices helpful on fraud deterrence in banks in the country?

### **1.3 The Objectives of the Study**

#### **1.3.1 Main Objective**

To establish how forensic accounting practices impacted fraud prevention in banking institutions in the country.

#### **1.3.2 Specific Objectives**

- i. To assess impact of proactive fraud audits in fraud prevention in banking institutions.
- ii. To assess influence of management override controls in fraud prevention in banking institutions.
- iii. To determine effective risk management in curbing fraud in banking institutions.
- iv. To scrutinize effective internal regulations in curbing fraud in banking institutions.

#### **1.4 Value of Study**

It enables policymakers in coming up with most effective roles of forensic accountants. The study seeks to inform the forensic accountants on the possibility of the fraud in commercial banks and should, therefore, put in effective measures to prevent fraud. The study will be of value to investors guiding on the importance of forensic accountants in deception deterrence and also inform them about the risk which is associated with the banking services and the initiative that they should take to avoid such fraudulent activities. The studies also benefit the financial institution in formulating the policies and giving relevant and reliable advice to banks. It also helps them knowledge the importance of forensic accountants in relation to uncovering crime and combat it in banks. It will also be of value to academicians and researchers by providing data for further research and theory formulation.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The section helped researcher understand whatever has been done before on the subject under study, the methods used, the challenges that were faced and how they were overcome and areas that need further research

#### **2.2 Theoretical Foundation**

Ng'etich (2017) identified theory as a set of principles and concept that provide a logical explanation about the existing relationship between the observed phenomenon.

##### **2.2.1 Agency Theory**

This was first developed by Alchian and Demsetz (1972) then later advanced by Jensen and Meckling (1976). It refers to an association that lies between agent and principal. The latter is shareholder appoints agent (the management and directors) to act on his behalf and in return an agent is expected to act in accordance with the principal's interest to avoid any misunderstanding that may arise due to conflict of interest, the agent does not, however, comply with this principle most of the time because of self-interest (Jensen & Meckling, 1976). According to (Mahinda, 2012) agency theory explains how separation of activities from ownership leads to conflict between investor and administration, the agent exploit the power and the position accorded to them by the shareholders to satisfy their interests instead of maximizing the shareholders wealth which is the key purpose of the

organization. It is very difficult to persuade an agent to act for benefit of principal (Wangare, 2014)

Diversity of the share capital in the corporation makes it difficult to monitor the agent's actions (Jensen & Meckling, 1976). The theory outlines the mechanisms an organization can adopt to be a diminish losses associated with agency problems, they include, frequent monitoring of the activities to ensure they are aligned with the principal interest, incentive schemes which involves promoting and rewarding the agent, and lastly threat of takeover (Klein, 2000). Since the main cause of the agency problem is the agent's inability to act per the principal requirements because of the conflict of interest and asymmetric information which normally occurs due to principle's inability to monitor agent's behavior, this therefore calls for the employment of forensic accounting methods which facilitates the monitoring of the agents action to ensure they are consistent with principle's interest.

### **2.2.2 White Collar Crime Fraud Theory**

This theory is defined an offense enacted by someone with an impeccable social status and respectability during their work (Sutherland 1939). white-collar crime is considered a subclass of fraud because it entails cybercrime, money laundering, bribery, wage theft, embezzlement, copyright infringement, forgery, and identity theft.

Sutherland was aware that crime was not limited to the inner-city streets only and as a result, he developed white-collar crime theory so that people could understand that well-educated and respectful individual commit crime as well. The concept, therefore, availed him to dispute conventional stereotypes.

This concept assumes that prosecutors are extra sparing to white-collar in comparison to the street convicts. The theory emphasizes on the practices of professional skepticism by the financial statement auditors to ensure that all their attention is not only limited to the people of the low ranking in the organization but the directors and managers as well because they are likely to use their high ranking position to execute fraud and conceal it.

### **2.2.3 Cressey Fraud Triangle Theory**

Fraud is made up of three components such as perceived opportunity, perceived pressure and the ability to rationalize the act of fraud (Albrecht & Albrecht, 2008). The three elements of fraud include opportunity which presents itself where there is a chance to execute a felony with a minimal possibility of being detected. This element usually occurs due to the availability of loopholes in the system, for example, weak internal control system, weak governance structures, failure to discipline the fraud perpetrators and lack of the management to stick to the stipulated rules and regulations of the organization. (Cressey, 1950) argued that the opportunity for a fraudster to commit a felony arises due to the high likelihood of not being caught because of the existing trust.

For an organization to circumvent the fraudulent opportunities they should give the internal control system factors a priority and these factors entail environmental control, assessment of risk, monitoring, information and communication among others. These factors will enable them to reduce the general cost of detecting the fraud that has already occurred. Pressure, as the second element of fraud, is generally, a need to commit fraud. It can be due to real financial need for instance debt or just a perceived need which is motivated by greed or alcohol and drug addiction. Cressey (1953) classified pressure as arising from

difficulty in honoring one's obligations, uncontrollable business failures like recession and unfair treatment of the employees by the managers. (Cressey, 1950) also identified that people tend to violate the existing decrees of a company when they incur financial obligations which can only be fulfilled through individual means.

The third element of fraud according to Cressey is rationalization. This is the ability to justify your reasons for committing fraud. The individual committing the fraud possesses an attitude that enables them to rationalize fraud. Albrecht, et al. (2006) pinpointed that perpetrators of the offense must always look for ways to justify their illegal acts as allowable in the society. (Waigumo, 2012) defined rationalization as the element that keeps the fire blazing. He farther explained that auditors can access the personal values of each worker by evaluating the general culture adopted by the entity since it is impossible to access each employee individually. (Cressey, 1950) concluded that fraud rationalization possess no problem with dishonest people but prove to be a hard task to people with high social status and they always perceive themselves as victims of the circumstances The fraud triangle theory enlightens about the dangers associated with the fraud and provides appropriate mechanisms such as forensic accounting practices as means of fighting dangers that comes with the fraudulent activities.

#### **2.2.4 Internal Control Theory**

According to American institutes of Certificated Accounts (AICPA, 1949), internal auditing contains policies, rules, and procedures that are implemented by the organization to give direction, strengthen adherence to the prescribe policies and enhance efficiency. ICS ensures adequate compliance with required laws and regulations to control risks that

are associated with an organization's reputation (Razaee, 1995). COSO describes the internal control system as a procedure formulated by the management and the BoD to facilitate the reliability and efficiency of the firm financial statements. Internal control in other word is a plan which helps the enterprise safeguards its resources, review the concealment and consistency of facts to improve its effectiveness and ensure management conforms to the available policies. Strong ICS leads to efficiency in organizational operations (Kabue, 2012). The internal control structure of a company comprises the policies and procedures which enable it to achieve its missions, visions, and objectives.

ICS comprises five elements which include; risk administration, info and communiqué, control environment, regulation actions and monitoring ( Abdi & Okiro, 2017) risk management determines and evaluates the potential risks in the organization that interrupts the achievement of the organization goal. They enhance distribution of the truths in the organization. The regulation atmosphere forms basis of ICS because it's states integrity and values that an organization should conform to, duties and obligations of the BoD of directors and the chain of authority within the organization. Control activities seek to identify and mitigate the existing risks in the organization whereas monitoring assesses and evaluates the effectiveness of ICS. The continual increase in the fraudulent activities in the banks has seen the bank adopting ICS as an alternative defense mechanism for mitigating fraud. ICS is essential in deception uncovering and deterrence in financial institutions. It is therefore admissible in this research because it outlines rules, policies, and procedures to be met by the commercial banks to operate efficiently. The applicability of Forensic Accounting in this research lies with the fact that forensic accounting tools

oversee compliance with the policies, procedures, rules, and regulations by the organizations to ensure the achievement of its objective, mission, and vision.

## **2.3 Determinants of Fraud**

### **2.3.1 Proactive Fraud Audit**

According to Afandi (2015), the main role of a financial statement check is to create a platform where the auditors can convey their individualistic and objective opinion on financial that is, whether it is formulated in agreement with the designated financial statement structure and whether it gives accurate and just view of the financial statements. This, therefore, makes the duty an accountant plays on fraud deterrence and uncovering although “dependence on the auditors in sensing deceit is misguided” (Kubasu, 2014). To establish faithful and just view of financial status, an audit must first ensure that the financial records are correct and give a valid ground for the formulation of accounts. This effort displays fraud, except in a situation where fabricated affirmation has been awarded (Norman et al., 2010).

The cost associated with this approach is however prohibitive. Most auditors have managed to lessen the magnitude of the test without interfering with the authenticity of opinion through the use of sample techniques. Due to excess costs associated with this approach, auditors have resorted to different mechanism which is cost-friendly and depends abundantly upon the entity’s system of internal control and internal checks (Gadziala, 2005). The main drive p is to scrutinize and measure the system to ensure the efficacy of controls and their accuracy in construction of the annual reports to come up with

appropriate substantive testing. Weak internal control makes it impossible to articulate an opinion on the accounts presented (Nila and Viriyanti, 2008)

### **2.3.2 Robust Internal Control**

Self-monitoring is defined as a procedure that is influenced by the organizational formation, chain of command, stakeholders' information system, prepared to assist the enterprise achieve its goals. (AICPA, 2003). Wahinya (2015) defines internal control as management developed a process to specifically enable the organization to attain its objective. According to Fardon (2013) various techniques are required in order to have a robust interior system crucial in detecting and dealing with fraud, such as skilled staff with full dedication on mitigation, proper supervision of financial statement activities regularly, ensuring personal protection by safeguarding important items to deter theft, and put in place authorization limits to few bookkeeping activities such as loose change and signing of cheques over certain amounts.

Lack of proper internal control creates an opportunity for fraud perpetrators to carry out their fraudulent activities, therefore; the organization has to evaluate risk robustly associated with fraud to effects the internal control structure. Wahinya(2015) concluded that internal controls should be reviewed and rectified frequently as infrequent review may increase the fraud risk, this is the fraudster can identify and exploit the weaknesses in internal control.

### **2.3.3 Management Override of Controls**

The responsibility of administering internal control to ensure its effectiveness and efficiency lies entirely on the board of directors and the audit committee (American Institutes of Public Accountants, 2016). The management is answerable to effective internal controls, appropriate financial reporting, and proper accounting policies in the organization. (Farrell & Franco, 1999). According to a fraud survey undertaken by KPMG (2012), most fraud incidences are associated with the senior stakeholders in the corporation. The survey reveals that the collapse of the corporations is more extensive when the managers and directors are involved.

The audit committee should ensure surveillance devices are in place and operating well to detect and hinder management override of internal control (American Institute of certified accountants, 2016). PCAOB (2009), asserts principles the financial auditors will use in appraising the risk of management disregard of controls and they include: discussing fraud risk, inquiring about the management, audit committee and how they approach risk linked to fraud and lastly evaluating fraud components such as, incentive, opportunity, and rationalization that helps management to justify override of controls. According to Di Napoli (2010), the act of the internal auditors to recruit and promote managers with integrity and high social values creates a conducive environment that diminishes management override controls risk in an organization. Therefore, to enhance effective fraud mitigation, the corporations should ensure management override of controls is in place. According to The AICPA (2005), the audit committee of the organization can

achieve this through exercising professional, brainstorming the workers about the crime risks and promoting vigorous whistleblower program

#### **2.3.4 Risk Management**

Risk is defined as an uncertain future occurrence with a positive or a negative effect on the organization's resources. Risk is considered positive when an organization forgoes an opportunity because of a lack of adequate resources or fear of unknown. Risk management includes identification of potential risks, assessment of risks to identify their criticality, responding to the risks based on their magnitude and monitoring and controlling risks. Financial institution risk management comprises of operational, credit, strategic and market risks (Mwangi, 2013) Risk management services are crucial to the organization in that they encourage proper utilization of the resources to achieve the anticipated goals and objectives and lower fraud rate in the organization. Employment of effective and efficient risk management methods lowers substantially the total operational costs of the organization (Mwangi, 2013). To ensure effective risk management in the organization, the management should be included in organization process, transparent and continual improvement of internal control set up.

As per DIT (2015), internal control is defined as free-spirited and unbiased assurance that is created to better the organizational operations. The purpose is to assist an organization attain its goals by providing an individualistic and unprejudiced guarantee and consultancy activity. According to Prawitt et al., (2006) internal audit mitigates financial statement fraud in companies. Internal audit function has the effect of enhancing organizational performance (Kubasu, 2014). The internal audit assesses risk relating to the organization's

governance through the audit committee, ensures reliability of and safeguards assets and ensures compliance with laws. The scope of internal control is not only limited to evaluating risk management, control environment, and governance, an internal audit is also responsible for examining the value of money (DIT, 2015). Fraud mitigation responsibilities lie with the management and this is achieved through the implementation of an adequate internal control system. Although the goal of prevention is to stop fraud from occurring, it is impossible to prevent the execution of all fraudulent activities, as a result, the organization should put in place controls that allow effective detection of any material fraud (Kubasu, 2014). The recent fraud cases of Enron and WorldCom have emphasized the importance of risk assessment. The organization should, therefore, ensure that incentive to commit and rationalize fraud by the employees is reduced through setting a positive tone at the top in the organization. The current fraud investigations contain scenarios that include a variety of risk factors associated with incentives, opportunities, and attitudes (Arens, Elder & Beasley, 2010).

## **2.4 Empirical Review**

### **2.4.1 Global review**

Ezaegba (2014) researched on responsibilities of forensic accounting and eminence pledge in fiscal commentary among chosen Nigerian private sectors. The research utilized a descriptive design methodology. An organized survey was employed in gathering first hand data from 250 respondents. Study revealed that the major accounting and financial reporting traits such as relevance and faithful representation can be improved significantly by capitalizing in forensic accounting. Findings of the research cannot be incorporated

among Kenyan commercial banks because they are specifically for Nigerian commercial banks which assume different policies and procedures from commercial banks in Kenya.

Mukoro, (2014) researched on how forensic accounting helps find out corruption and in public sector via the application of forensic skills. The study used (SPSS) to establish the effects on the variables under study. Raw data was collected using a well-structured questionnaire administered to specific staff of the Federal Inland Revenue Service, Lagos. The study concluded that it had accounting substantial influence on combating deception and corrupt practices public sector since it holds people answerable to any exploitation of the company's resources. The study above did not capture private sectors it is entirely on the public sectors.

Omar, (2013) examine the effect of application of these practices within this sector, this was got from 50 well-structured surveys distributed to three chosen state interventions in Klang Valley comprising the ministry of education and Shah Alam council of the court. Findings showed study outlines the role of forensic accounting plays in curbing and resolving crimes in the economy of Malaysia. The findings of this study cannot be employed in Kenyan commercial banks since these researches are concentrating on different legal entities, public sectors and private sectors respectively which are located in two different geographical scopes.

Islam (2011) looked at forensic accounting in noticing deception and exploitation in Bangladesh. The sample size in the research consisted of 100 interviewees. A well-structured questionnaire was used to collect primary data. It employed research design

approach. The study settled that forensic accounting was crucial instrument in combating crime and corruption in Bangladesh. It should be noted that the study was conducted in Bangladesh specifically on fraud detection.

Ebimobowei (2011) studied influence of these services in deception detection among commercial banking institutions of Nigeria. Primary statistics was obtained using planned survey administered 24 banks in the capital of Rivers state. It adopted descriptive design, Augmented Dickey-Fuller, ordinary least square and Granger Causality which was used in analysis collected statistics from questionnaire outcomes. Research showed forensic accounting methods negatively affected fraudulent activities in banks. The study did not, however, explore fraud prevention mechanisms but rather fraud detection tools.

#### **2.4.2 Local Empirical Review**

Wahinya (2015) looked at forensic accounting services as a mechanism mitigating crime among the listed firms in NSE. The sample size of the study was comprised of all the 61 firms listed in NSE. Data was collected by administering a brief questionnaire to the respondents. The research revealed that internal controls need to be reviewed and rectified frequently as infrequent review may increase the fraud risk, as the fraudster can identify and exploit the weaknesses in internal control. Although the researches are conducted in the same geographical areas, the findings of this study cannot be used to generalize fraud prevention in Kenyan commercial banks since they are aiming non-identical institutions. I.e. NSE and commercial banks respectively which are governed by different laws.

Kyalo (2013) examined the role of fraud prevention on effective financial reporting in Nakuru County. A descriptive design approach was utilized in this study. The study used a sample of 106 composed of accountants, finance and procurement officers in Nakuru County. Structured questionnaires with Likert scale was used to collect primary data. The study revealed that fraud mitigation enhances effective financial statement reporting in Nakuru County. Therefore, these outcomes cannot be used to conclude crime mitigation in commercial banks because they are specifically for fraud prevention in Nakuru County as a whole.

Ng'ang'a (2013), researched on the effect of forensic accounting methods on fraud prevention in insurance companies in Kenya. The study adopted a descriptive design approach. The study targeted all the 49 Kenyan insurance companies as per the Association of Kenyan Insurer's register of 2013. Raw data was collected using a well-structured questionnaire. The study indicated that forensic accounting practices lower the fraud level in insurance companies. It is worth noting that the study did not capture mechanisms used to mitigate fraud in commercial banks.

Omondi (2013) viewed the role of forensic accounting services in distinguishing and curbing fraud in commercial banks in Kenya. The research design approach was employed in the study. The sample size comprised of 47 respondents 16 commercial banks in Kenya. The study used a structured questionnaire to collect data and analyzed it using inferential statistics. He concluded that the implementation of forensic accounting services lowered the level of crime and corruption practices in the private sectors. The findings of the study indicated a notable difference in response between the cooperative members and the

auditors thus demonstrating the existence of the audit expectation gap in audit engagement in Kenya. The study did not utilize proactive fraud audits, management override control and robust internal control as instruments for determining fraud in commercial banks.

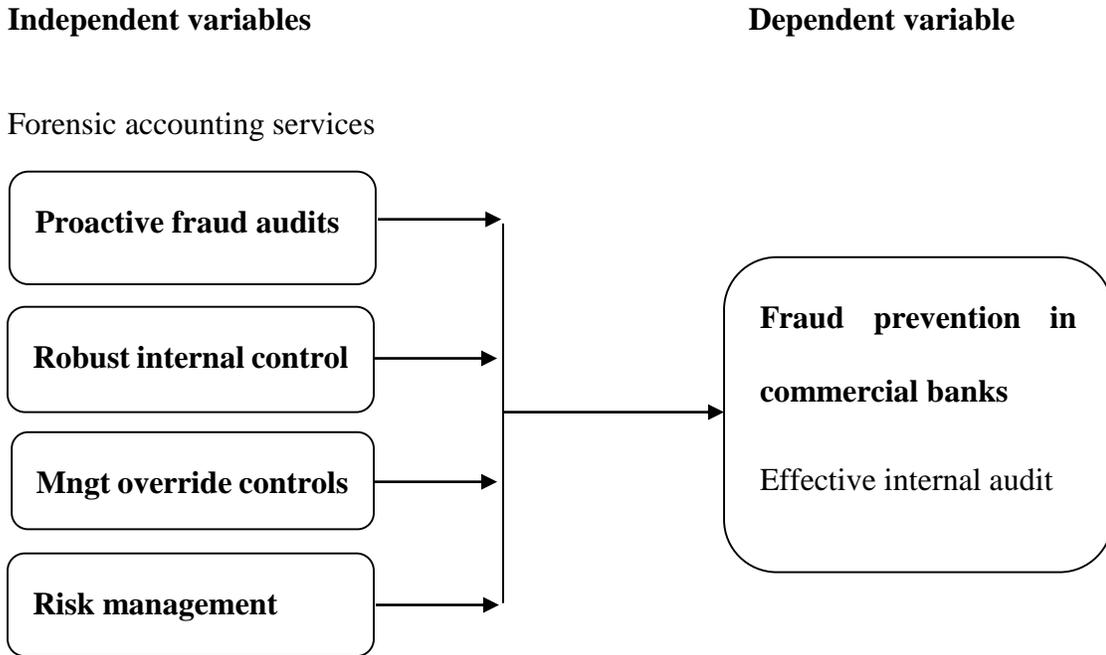
Wanambe (2010) examined strategies applied by commercial banks to combat fraud. The study used a research design approach to analyze the data. First-hand information was obtained using a well-structured questionnaire. Secondary data was collected from Kenya anti-banking fraud unit. The sample size of the study comprised of 44 listed banks. The researcher concluded that the availability of anti-fraud strategies enables banks to take appropriate measures for curbing fraud. It is worth recalling that the study did not employ forensic accounting practices as a strategy for curbing crimes in commercial banks.

## **2.5 Conceptual Framework**

The conceptual framework is the illustration of the relationship between the independent and dependent variables graphically to give the users of the research a wide understanding of the proposed association. Variable is a quantifiable value that takes varying values in a study. The independent variable is a variable that is manipulated by the researcher to determine the effect it has on other variables while the dependent variable is a variable that is influenced by another variable (Anderson, Sweeney & Williams, 2006)

The predictors of the independent variable (forensic accounting practices) of the study include; proactive fraud auditing, robust internal control, management override controls, and risk management. Effective internal audit, performance evaluation and background screening of the employees will be used as representative for fraud prevention (dependent

variable). The above mention variables and predictors are exploring the effect of forensic accounting practices on fraud prevention in commercial banks in Kenya.



**Figure 2.1: Conceptual Framework**

## 2.6 Summary of Literature Review

From the above empirical studies, it can be noted that forensic accounting is an important mechanism that permits the hindrance of fraud because of its ability to cube most of the loopholes for committing and masking fraud, due to this, most of the organizations across the world have been inspired to venture in the forensic accounting field. Theoretical literature explored four theories namely agency theory, white-collar fraud theory, fraud triangle theory, and internal control theory. Agency theory briefs us about the principle-agent problem which is brought about by the conflict of interest due to the principle's inability to oversee the agent's behavior. White-collar theory stipulates that crimes are not

only committed by the junior staff in the organization but also by people of high ranking. Creesy Fraud triangle theory narrowed down fraud further into three sections which include: a perceived pressure, a perceived opportunity, and rationalization of the acts of fraud. Finally, internal control theory which states that the company must work in line with its policies, procedures, rules, and regulations to achieve its objectives, mission, and visions. Most of the empirical studies emphasize on the importance of effective forensic accounting in fraud detection and prevention, financial reporting and effective internal control in different part of the world such as Malaysia, Bangladesh, and Nigeria (Mukoro, Yamusa & Faboyede, 2014; Islam 2011; Omar, 2013) Forensic accounting services are however not widely in use in (Islam et al., 2011). They did not mention the impact of risk management and management override of control on fraud prevention anywhere in their studies. Locally Kyallo (2013) examines the role of forensic accounting methods in Nakuru County he did not, however, narrow down how forensic accounting impact negatively on fraud which makes it challenging for this study to adopt his findings. Wanambie looked at the general strategies applied by commercial banks to combat fraud. Omondi (2013) however reviewed the effect of forensic accounting methods in Kenyan commercial banks and came out with findings that indicate the importance of forensic accounting in fraud detection and prevention.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter captured the kind of research design the study adopted. It also detailed the population and sample of the study, data collection, analysis and variables measurements.

#### **3.2 Research Design**

Research design is a comprehensive arrangement and examination of data to conquer with research body (Astalin, 2013). Wanyama and Olweny (2013) concluded that research design aims at improving the ability of the research in conceptualizing an operational plan in order to be able to embark on the various techniques available and tasks that are required to complete the study while at the same time ensure that the procedures used are sufficient enough to acquire validity, objectives and precise responses to the research questions.

The study adopted the use of a descriptive design approach. This is because this approach observes, concludes and report information within a definite context. According to Mathoko et al. (2007) research design is a framework of decisions and techniques which are lied down by the researcher to state methods to be used in collecting and analyzing data.

#### **3.3 Population and Sample**

According to Ngalyuka (2013), population refers to a class of persons or elements with similar interests. Population also refers to services, people and components that are under investigation (Ngechu, 2004). Commercial banks have been selected because of their high

exposure to occupational fraud (ACFE, 2010). The population of the study comprised of all the 43 Kenyan commercial banks.

### **3.4 Data Collection Procedures**

The research utilized primary which was obtained with the help of a well-structured questionnaires. This is because the study covered parameters that are impossible to observe directly such as; perspectives, feelings, and understanding of the respondents. Oso and Onen (2005) identified a questionnaire as the only instrument that captures and brings out the respondent's feelings and beliefs accurately. According to Kothari (2004), data collection is the process of collecting and measuring data collected from relevant sources to answer the research question and test the hypothesis. The respondents were issued the questionnaire through a self-introduction process with the help of the research assistant because this study used actual information and hence the need for self-Reporting questionnaire (SRQ). The questionnaire was considered most appropriate in this research because of its ability to collect information from various answerers in a very short period.

### **3.5 Data Analysis**

To ensure the comprehensiveness and consistency of the research the data was edited, coded then put into the data processor to be processed with the help of Statistical Package for Social Sciences (SPSS v.17.0). According to Cohen and Manions (1980), editing of responses is intended to identify and eliminate errors made by the interviewers or respondents. Descriptive statistics which involve the use of frequencies, percentage and means were used to analyses information extracted from the respondents.

### **3.6 Data Validity and Reliability**

According to Kabusa (2014) validity determines whether the samples of the items tested portray the capacity that the assessment is intended to measure. An expert is employed to assess the validity of content in a particular field (Mugenda & Mugenda, 2003). The questionnaire used in this study was presented to the staff for their self-sufficient reviews on its capacity to ensure authenticity. With their remarks and recommendations required reconciliation will be entered on the questionnaire.

The study was subjected to pre-trial tests to ensure the verification of the reliability of the questionnaire. According to Opiyo (2017), reliability is the uniformity of the results over time and repeatedly appraised under a similar methodology.

### **3.7 Analytical Model**

The researcher used Karl Pearson's coefficient correlation to indicate the association of the parameters. This enabled the researcher to capture the relationship between forensic accounting and fraud prevention in the commercial banks of Kenya. The study utilized a regression model below:  $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$

Whereby:

Y- Is the dependent variable Fraud Prevention as measured by effective internal audit, performance evaluation, background screening, and a company's culture.

X<sub>1</sub>-Proactive Fraud Audit (PFA) as measured by its effectiveness in fraud detection and prevention

X<sub>2</sub>- Robust internal controls (RIC) as measured by its effectiveness in fraud detection and prevention.

X<sub>3</sub>- Management overrides of controls (MOC) as measured by its effectiveness in fraud detection and Prevention

X<sub>4</sub>-Risk Management (RM) as measured by its effectiveness in fraud detection and prevention

B<sub>0</sub>- Is a constant; it is the Y value when all the determinant values (X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, and X<sub>4</sub>) are zero

β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub> and β<sub>4</sub>- Are constants regression coefficient representing the condition of the independent variables to the dependent variables.

ε- (Extraneous) Error term which explains the variability of other factors not accounted for.

### **3.7.1. Test of Significance**

The study utilized parametric tests such as f-test to analysis variance (ANOVA), the f statistic to examine the statistical significance of the regression equation and the t-test to test the statistical significance of the study coefficient. This study used a 95% confidence level of f- test and t-test t for further analysis

## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### 4.0 Introduction

This chapter comprised of data analysis, findings and interpretation. Results were presented in tables and diagrams. The analyzed data was arranged under themes that reflected the research objectives.

#### 4.1 Response Rate

The queries that were given out were 43. Out of the 43, 33 were given back fully filled while 10 were not returned. This represented an overall successful response rate of 76.74%. According to Mugenda and Mugenda (2003) a response rate of above 50% is adequate for a research.

**Table 4.1: Response Rate**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Returned	33	76.74%
Unreturned	10	23.26%
<b>Total</b>	<b>43</b>	<b>100%</b>

**Source: Survey Data (2019)**

#### 4.2 Reliability Results

Reliability analysis was done to evaluate survey constructs. Reliability analysis was evaluated using Cronbach's alpha. Sekaran and Bougie (2013) argued that coefficient

greater than or equal to 0.7 is acceptable for basic research. Reliability results were presented in Table 4.2 below.

**Table 4.2: Reliability Results**

Variable	Cronbach's		Comment
	Alpha	Number of items	
Proactive Fraud Audit	0.701	4	Reliable
Robust Internal Controls	0.799	4	Reliable
Management overrides of controls	0.747	4	Reliable
Risk Management	0.841	4	Reliable
Fraud Prevention	0.715	12	Reliable

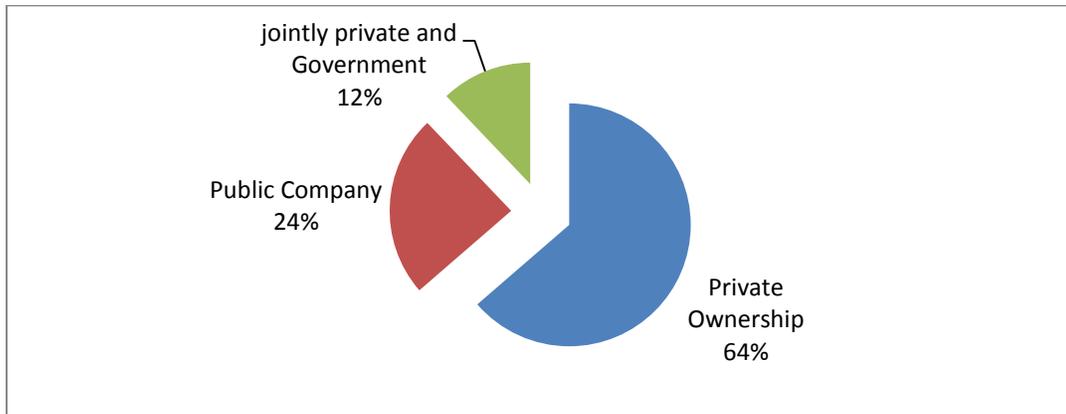
**Source: Survey Data (2019)**

The findings on Table 4.2 indicated that proactive fraud audit, robust internal controls, management overrides of controls, risk management and fraud prevention had reliability of 0.701, 0.799, 0.747, 0.841 and 0.715 respectively. All variables depicted that the value of Cronbach's Alpha were above value of 0.7 thus the study variables were reliable. This represented high level of reliability.

## 4.3 Bio Data Analysis

### 4.3.1 Ownership

The responses indicated that 64% of the banks were privately owned, 24% of the banks were public companies while only 12% were jointly private and government.

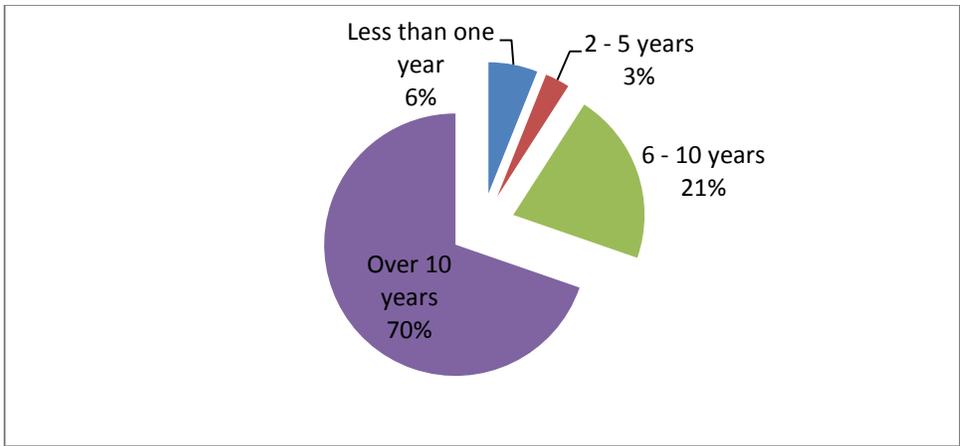


**Figure 4.1: Ownership**

**Source: Survey Data (2019)**

### 4.3.2 Years the Banks have been in Operation

The results displayed that 70% of the banks had been in operation for over 10 years, 21% of the banks had been in operation for 6 – 10 years, 6% of the banks had been into operation for 2 – 5 years while only 3% of the banks had been in operation for 2 – 5 years. This implied that most banks had been in operation for a long time.

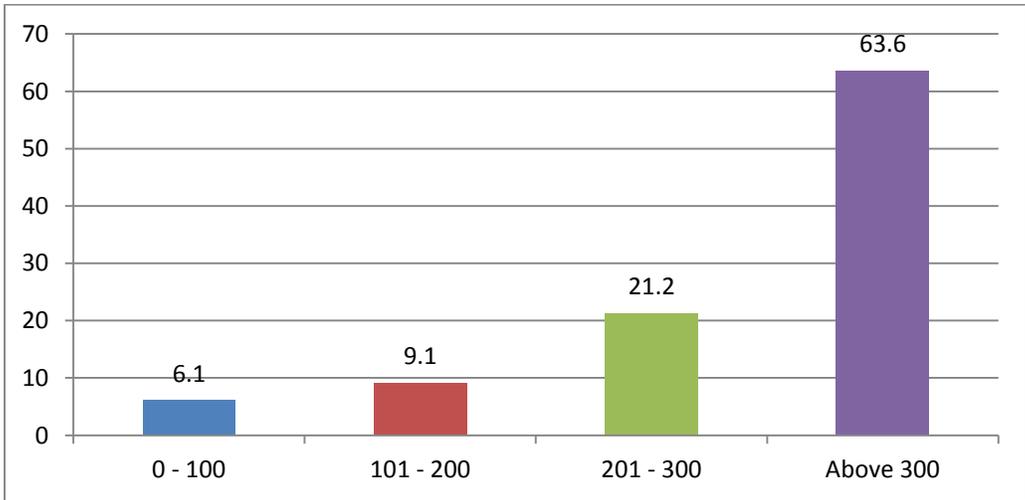


**Figure 4.2: Years the Banks have been in Operation**

**Source: Survey Data (2019)**

**4.3.3 Number of Employees**

The results showed that 63.6% of the banks had more than 300 employees, 21.2% of the banks had 201 – 300 employees, and 9.1% of the employees had 101 – 200 employees while only 6.1% of the banks had less than 100 employees. This implied that most commercial banks were big banks.



**Figure 4.3: Number of Employees**

**Source: Survey Data (2019)**

## 4.4 Descriptive Results

### 4.4.1 Proactive Fraud Audit

The outcomes displayed that 78.8% of the defendants agreed that proactive fraud audit helps in checking accuracy of accounting records. In addition, 57.6% displayed that proactive fraud audit helps in checking routine transaction. In addition, 69.7% of the defendants agreed that proactive fraud audit helps in reviewing accounting policies. The results also showed that 72.7% the defendants agreed that proactive fraud audit helps in investigating errors.

**Table 4.3: Proactive Fraud Audit**

Statement	Strongly Disagree		Neutral	Strongly Agree		Mean	std. dev
	Disagree	Disagree		Agree	Agree		
Checking accuracy of accounting records	6.10%	6.10%	9.10%	36.40%	42.40%	4.03	1.16
Checking routine transaction	24.20%	9.10%	9.10%	39.40%	18.20%	3.18	1.49
Reviewing accounting policies	6.10%	6.10%	18.20%	69.70%	0.00%	3.52	0.87
Investigating errors	3.00%	3.00%	21.20%	54.50%	18.20%	3.82	0.88
<b>Average</b>						<b>3.64</b>	<b>1.10</b>

**Source: Survey Data (2019)**

#### 4.4.2 Robust Internal Controls

The outcomes further displayed that 87.9% agreed that there exist a code of conduct in the organization. Outcomes also revealed that 78.8% stated that their bank had robust audit committee. In addition, 45.5% stated that their bank regularly conduct of fraud risk assessment. Outcomes also revealed that 72.7% stated that their bank had a functioning whistle blower.

**Table 4.4: Robust Internal Controls**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
There exist a code of conduct in the organization	3.00%	3.00%	6.10%	60.60%	27.30%	4.06	0.86
The bank has Robust audit committee	9.10%	0.00%	12.10%	45.50%	33.30%	3.94	1.14
The bank regularly conduct of fraud risk assessment	39.40%	6.10%	15.20%	21.20%	18.20%	2.73	1.61
The bank has a functioning whistle blower	3.00%	6.10%	18.20%	54.50%	18.20%	3.79	0.93
<b>Average</b>						<b>3.63</b>	<b>1.14</b>

**Source: Survey Data (2019)**

#### 4.4.3 Management Overrides of Controls

The outcomes displayed that 60.6% stated that their bank maintains an appropriate level of professional skepticism. Outcomes also stated that 87.9% displayed that their bank strengthen committee understanding of the business. Outcomes also exhibited that 87.9%

stated that their bank brainstorms about fraud risks. Outcomes also exhibited that 51.5% stated that their bank uses the code of conduct to assess financial reporting culture.

**Table 4.5: Management Overrides of Controls**

	<b>Strongly Disagree</b>		<b>Neutral</b>	<b>Strongly Agree</b>		<b>Mean</b>	<b>Std. Dev</b>
The bank maintains an appropriate level of professional skepticism	24.20%	6.10%	9.10%	39.40%	21.20%	3.27	1.51
The bank strengthen committee understanding of the business	0.00%	0.00%	12.10%	45.50%	42.40%	4.30	0.68
The bank brainstorms about fraud risks	0.00%	3.00%	9.10%	48.50%	39.40%	4.24	0.75
The bank uses the code of conduct to assess financial reporting culture	0.00%	30.30%	18.20%	48.50%	3.00%	3.24	0.94
<b>Average</b>						<b>3.76</b>	<b>0.97</b>

**Source: Survey Data (2019)**

#### **4.4.4 Risk Management**

The outcomes displayed that 84.9% stated that their bank carries out risk identification through internal control system. In addition, 84.9% stated that bank conducts risk assessment. Outcomes further displayed that 87.9% indicated that their bank conducts risk mitigation. Outcomes also displayed that 60.7% highlighted that their bank evaluates potential risk.

**Table 4.6: Risk Management**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>	<b>Mean</b>	<b>Std. Dev</b>
The bank carries out risk identification through internal control system	3.00%	0.00%	12.10%	48.50%	36.40%	4.15	0.87
The bank conducts risk assessment	6.10%	9.10%	0.00%	39.40%	45.50%	4.09	1.18
The bank conducts risk mitigation	9.10%	0.00%	3.00%	45.50%	42.40%	4.12	1.14
The bank evaluates potential risk	12.10%	3.00%	24.20%	45.50%	15.20%	3.48	1.18
<b>Average</b>						<b>3.96</b>	<b>1.09</b>

**Source: Survey Data (2019)**

#### **4.5 Correlation Results**

Outcomes revealed that there was a positive and significant correlation amongst fraud audit function and fraud prevention ( $r=0.634$ ,  $p=0.000$ ). Kubasu (2014) stated that the role of an auditor essential in fraud prevention and detection. Outcomes further displayed that there was a positive and significant correlation amongst robust internal controls and fraud prevention ( $r=0.810$ ,  $p=0.000$ ). These findings agreed with that of Wahinya (2015) whose outcomes displayed that internal controls need to be reviewed and rectified frequently as infrequent review may increase the fraud risk, as the fraudster can identify and exploit the

weaknesses in internal control. In addition, there was a positive and significant correlation amongst management overrides controls and fraud prevention ( $r=0.513$ ,  $p=0.000$ ). These findings agreed Wanambe (2010) who concluded that management controls enables banks to take appropriate measures for curbing fraud. There was a positive and significant correlation amongst risk management and fraud prevention ( $r=0.316$ ,  $p=0.000$ ). These findings agreed with that of Mwangi (2013) conducted a study on risk management services are crucial to the organization in that they encourage proper utilization of the resources to achieve the anticipated goals and objectives and lower fraud rate in the organization.

**Table 4.7: Correlation Results**

		prevalence of Frauds	fraud audit function	robust internal controls	Management overrides controls	Risk management
prevalence of Frauds	Pearson Correlation Sig. (2-tailed)	1.000				
fraud audit function	Pearson Correlation Sig. (2-tailed)	.634**	1.000			
robust internal controls	Pearson Correlation Sig. (2-tailed)	.810**	.513**	1.000		
Management overrides controls	Pearson Correlation Sig. (2-tailed)	.513**	.481**	.461**	1.000	
risk management	Pearson Correlation Sig. (2-tailed)	.361*	-0.251	0.171	0.313	1.000
		0.036	0.158	0.342	0.076	

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

**Source: Survey Data (2019)**

#### 4.6 Regression Results

Outcomes displayed that R squared was 0.728. This implied that proactive fraud audit, robust internal controls, management overrides of controls, risk management explained 72.8% of fraud prevention. The model summary results were displayed in Table 4.8.

**Table 4.8: Model Summary**

<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
.853a	0.728	0.689	0.26532

**Source: Survey Data (2019)**

Outcomes displayed that the overall model was significant. Forensic accounting practices had significant effect on fraud prevention in commercial banks in Kenya (F=18.749, p=0.000). The ANOVA results were displayed in Table 4.9.

**Table 4.9: ANOVA**

	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	5.279	4	1.32	18.749	.000 <sup>b</sup>
Residual	1.971	28	0.07		
Total	7.25	32			

**Source: Survey Data (2019)**

Outcomes revealed that there was a positive and significant correlation amongst fraud audit function and fraud prevention (r=0.583, p=0.013). Kubasu (2014) stated that the role of an auditor essential in fraud prevention and detection. Outcomes further displayed that there was a positive and significant correlation amongst robust internal controls and fraud

prevention ( $r=0.581$ ,  $p=0.000$ ). These findings agreed with that of Wahinya (2015) whose outcomes displayed that internal controls need to be reviewed and rectified frequently as infrequent review may increase the fraud risk, as the fraudster can identify and exploit the weaknesses in internal control. In addition, there was a positive and significant influence amongst management overrides controls and fraud prevention ( $r=0.353$ ,  $p=0.037$ ). These findings agreed Wanambe (2010) who concluded that management controls enables banks to take appropriate measures for curbing fraud. There was a positive and significant correlation amongst risk management and fraud prevention ( $r=0.33$ ,  $p=0.045$ ). These findings agreed with that of Mwangi (2013) conducted a study on risk management services are crucial to the organization in that they encourage proper utilization of the resources to achieve the anticipated goals and objectives and lower fraud rate in the organization. The regression of coefficients results were displayed in Table 4.10.

**Table 4.10: Regression Coefficient**

	Unstandardized		Standardized		T	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
(Constant)	0.705	0.518			1.359	0.185
fraud audit function	0.583	0.22	0.322		2.654	0.013
robust internal controls	0.581	0.113	0.637		5.136	0.000
Management overrides						
controls	0.353	0.161	0.346		2.192	0.037
Risk management	0.33	0.158	0.331		2.096	0.045

**Source: Survey Data (2019)**

$$Y = 0.705 + 0.583X_1 + 0.581X_2 + 0.353X_3 + 0.33X_4 + \varepsilon$$

Whereby:

Y- Fraud Prevention

X<sub>1</sub>- Proactive Fraud Audit (PFA)

X<sub>2</sub> - Robust internal controls (RIC)

X<sub>3</sub> - Management overrides of controls (MOC)

X<sub>4</sub>-Risk Management (RM)

#### **4.7 Discussion of Findings**

The outcomes displayed proactive fraud audit helps in checking accuracy of accounting records in banks. In addition proactive fraud audit helps in checking routine transaction. In addition, proactive fraud audit helps in reviewing accounting policies. The results also proactive fraud audit helps in investigating errors. Correlation outcomes showed that there was a positive and significant correlation amongst fraud audit function and fraud prevention. This implied that improvement in fraud audit function would lead to better fraud prevention. Regression results revealed that there was a positive and significant effect amongst fraud audit function and fraud prevention ( $r=0.583$ ,  $p=0.013$ ). This implied that improvement in fraud audit function by one unit would lead to improvement in fraud prevention by 0.583 units. These outcomes were consistent with that of Kubasu (2014) who stated that the role of an auditor essential in fraud prevention and detection.

The outcomes further displayed most banks have a code of conduct. Outcomes also revealed that most banks had robust audit committee. In addition, most banks regularly conduct fraud risk assessment. Outcomes also revealed that most banks had a functioning whistle blower. Correlation outcomes showed that there was a positive and significant impact amongst robust internal control and fraud prevention. This implied that improvement in robust internal control would lead to better fraud prevention. Outcomes further displayed that there was a positive and significant correlation amongst robust internal controls and fraud prevention ( $r=0.581$ ,  $p=0.000$ ). This implied that improvement in robust internal controls by one unit would lead to improvement in fraud prevention by 0.581 units. These findings agreed with that of Wahinya (2015) whose outcomes displayed that internal controls need to be reviewed and rectified frequently as infrequent review may increase the fraud risk, as the fraudster can identify and exploit the weaknesses in internal control.

The outcomes further displayed that most banks maintains an appropriate level of professional skepticism. Outcomes also stated that most banks strengthen committee understanding of the business. Outcomes also exhibited most banks brainstorm about fraud risks. Outcomes also exhibited that most banks uses the code of conduct to assess financial reporting culture. Correlation outcomes showed that there was a positive and significant impact amongst management overrides of controls and fraud prevention. This implied that improvement in management overrides of controls would lead to better fraud prevention. In addition, there was a positive and significant influence amongst management overrides controls and fraud prevention ( $r=0.353$ ,  $p=0.037$ ). This implied that improvement

in management overrides controls by one unit would lead to improvement in fraud prevention by 0.581 units. These findings agreed Wanambe (2010) who concluded that management controls enables banks to take appropriate measures for curbing fraud.

The outcomes also displayed that most banks carries out risk identification through internal control system. In addition, banks conduct risk assessment. Outcomes further displayed that bank conducts risk mitigation. Outcomes also displayed most banks evaluates potential risk. Risk management showed that there was a positive and significant impact amongst risk management and fraud prevention. Correlation outcomes showed that there was a positive and significant impact amongst risk management and fraud prevention. Regression outcomes stated that there was a positive and significant effect amongst risk management and fraud prevention ( $r=0.33$ ,  $p=0.045$ ). This implied that improvement in risk management by one unit would lead to improvement in fraud prevention by 0.581 units. These findings agreed with that of Mwangi (2013) conducted a study on risk management services are crucial to the organization in that they encourage proper utilization of the resources to achieve the anticipated goals and objectives and lower fraud rate in the organization.

## **CHAPTER FIVE**

### **SUMMARY, RECOMMENDATIONS AND CONCLUSIONS**

#### **5.1 Introduction**

This chapter addressed the summary of the findings, the conclusions and the recommendations. This was done in line with the objectives of the study.

#### **5.2 Summary of Findings**

The outcomes displayed proactive fraud audit helps in checking accuracy of accounting records in banks. In addition proactive fraud audit helps in checking routine transaction. In addition, proactive fraud audit helps in reviewing accounting policies. The results also proactive fraud audit helps in investigating errors. Regression outcomes showed that there was a positive and significant impact amongst fraud audit function and fraud prevention

The outcomes further displayed most banks have a code of conduct. Outcomes also revealed that most banks had robust audit committee. In addition, most banks regularly conduct fraud risk assessment. Outcomes also revealed that most banks had a functioning whistle blower. Regression outcomes showed that there was a positive and significant impact amongst robust internal control and fraud prevention

The outcomes further displayed that most banks maintains an appropriate level of professional skepticism. Outcomes also stated that most banks strengthen committee understanding of the business. Outcomes also exhibited most banks brainstorm about fraud risks. Outcomes also exhibited that most banks uses the code of conduct to assess

financial reporting culture. Regression outcomes showed that there was a positive and significant impact amongst management overrides of controls and fraud prevention.

The outcomes also displayed that most banks carries out risk identification through internal control system. In addition, banks conduct risk assessment. Outcomes further displayed that bank conducts risk mitigation. Outcomes also displayed most banks evaluates potential risk. Risk management showed that there was a positive and significant impact amongst management overrides of controls and fraud prevention

### **5.3 Conclusions**

There was a positive and significant impact amongst fraud audit function and fraud prevention. This implied that improvement in fraud audit function would lead to fraud prevention. Proactive fraud audit helps in checking routine transaction and also in investigating errors.

There was a positive and significant impact amongst robust internal control and fraud prevention. This implied that improvement in robust internal control would lead to fraud prevention. In addition, conducting fraud risk assessment regularly helps in preventing fraud.

There was a positive and significant impact amongst management overrides controls and fraud prevention. This implied that improvement in amongst management overrides controls would lead to fraud prevention. In addition, maintaining an appropriate level of professional skepticism in an organization helps in preventing fraud.

There was a positive and significant impact amongst risk management and fraud prevention. This implied that improvement in amongst risk management would lead to fraud prevention. Conducting risk assessment and risk mitigation in an organization helps in minimizing fraud.

#### **5.4 Limitations of the Study**

Firstly, the target participants failed to complete all the questions. Others filled certain options and skip others thus affecting the reliability of the results. The researcher had to make regular follow up both on mail and phone calls.

Some of the respondents feared of their confidentiality while answering the questions. However, the researcher assured them that the information will be used for academic purposes only.

In addition, this study was limited in commercial banks in Kenya. Therefore the study may not be a reflection of all the other banks like Islamic banks. In addition, the study was limited done collecting primary data only which may not be accurate enough.

#### **5.5 Recommendations**

From the research conclusion, there was a positive and significant impact amongst fraud audit function and fraud prevention. Banks should ensure they have experienced and skilled auditors. This is because role of an auditor essential in fraud prevention and detection

From the research conclusion, there was a positive and significant impact amongst robust internal control and fraud prevention. Banks should therefore regularly conduct fraud risk assessment. Internal controls therefore need to be reviewed and rectified frequently as

infrequent review may increase the fraud risk, as the fraudster can identify and exploit the weaknesses in internal control.

From the research conclusion, there was a positive and significant impact amongst management overrides controls and fraud prevention. Banks are should use code of conduct to assess financial reporting culture. This will help in fraud prevention in the bank.

From the research conclusion, there was a positive and significant impact amongst risk management and fraud prevention. To ensure effective risk management in the organization, the management should be an integral part of the organization process, decision making, transparent and continual improvement of the internal control system.

### **5.6 Areas of Further Study**

Further study should focus on the research gaps identified in this study. The current study focused on effect of forensic accounting practices on fraud prevention in commercial banks in Kenya. Therefore, a similar study can be conducted in other east African countries for purposes of comparisons.

In addition, the study focused on commercial banks in Kenya. Further study can focus on effect of forensic accounting practices on fraud prevention in Islamic banks in Kenya.

Since the R squared was not 100% it seems there are other forensic accounting practices that were not addressed by the study. Other studies should therefore focus on other forensic accounting practices that affect fraud prevention in commercial banks in Kenya.

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## APPENDICES

### Appendix I: Questionnaire

This questionnaire is intended to collect information on the effect of forensic accounting practices on fraud prevention in commercial banks in Kenya. Please provide answers to the following questions against the most suitable alternative or by giving narrative responses in the spaces provided. (Responses will be treated with utmost confidentiality).

Questionnaire Number.....

Date.....

#### Section One: General Background Information

1. Ownership (please tick appropriately)

Private company  Public company  jointly private and Government

Others, Specify

2. How many years has the bank been in operation?..... years.

a) Less than 1 year

b) 2 to 5 years

c) 6 to 10 years

d) Over 10 years

Do you have Forensic Accounting department? (please tick appropriately)

Yes  No

3. How many employees do you have? (please tick appropriately)

a)  0-100  101-200

b)  201-300  Above 300

## Section two: Components of Forensic Accounting

### A. Proactive Fraud Audit

4. Does the bank have a proactive fraud audit function?

a) Yes

b) No

5. To what extent do you agree with the following attributes as ways that proactive fraud audit impact on fraud prevention in commercial banks? Rate your agreement with the following statements using the Likert scale below: (Please tick appropriately)

**Key:** 1- Strongly Disagree, 3-Disagree, 3-Neutral 4-Agree, 5-Strongly Agree

No	Description	1	2	3	4	5
1	Checking accuracy of accounting records					
2	Checking routine transaction					
3	Reviewing accounting policies					
4	Investigating errors					

**B .Robust internal control**

6. Does the bank have working robust internal controls?

(a) Yes [ ]

(b) No [ ]

7. To what extent do you agree with the following attributes as ways that robust internal controls impact on fraud prevention in the bank? Rate your agreement with the following statements using the Likert scale below: (Please tick appropriately)

**Key:** 1- Strongly Disagree, 3-Disagree, 3-Neutral 4-Agree, 5-Strongly Agree

No	Description	1	2	3	4	5
1	There exist a code of conduct in the organization					
2	The bank has Robust audit committee					
3	The bank regularly conduct of fraud risk assessment					
4	The bank has a functioning whistle blower					

**C. Management overrides controls**

8. Does the bank have a working management override controls?

(a) Yes [ ]

(b) No [ ]

9. To what extent do you agree with the following attributes as ways that management overrides controls impact on fraud prevention in the commercial bank? Rate your agreement with the following statements using the Likert scale below: (Please tick appropriately)

**Key:** 1- Strongly Disagree, 3-Disagree, 3-Neutral 4-Agree, 5-Strongly Agree

No	Description	1	2	3	4	5
1	The bank maintains an appropriate level of professional skepticism					
2	The bank strengthen committee understanding of the business					
3	The bank brainstorms about fraud risks					
4	The bank uses the code of conduct to assess financial reporting culture					

#### **D. Risk management**

10. Does the bank have a working risk management?

a) Yes [ ]

b) No [ ]

11. To what extent do you agree with the following attributes as ways that risk management impact on fraud prevention in commercial banks? Rate your agreement with the following statements using the Likert scale below: (Please tick appropriately)

**Key:** 1- Strongly Disagree, 3-Disagree, 3-Neutral 4-Agree, 5-Strongly Agree

No	Description	1	2	3	4	5
1	The bank carries out risk identification through internal control system					
2	The bank conducts risk assessment					
3	The bank conducts risk mitigation					
4	The bank evaluates potential risk					

### **Section Three: The prevalence of Frauds in Banks**

The following statements tests on the most prevalent type of fraud in the banking sector.

12. To what extent do you agree with the occurrence of the frauds below? (Please tick appropriately).

**Key:** 1- Strongly Disagree, 3-Disagree, 3-Neutral 4-Agree, 5-Strongly Agree

No	Description	1	2	3	4	5
	Theft of cash, physical assets or confidential information					
	Misuse of accounts					
	Procurement fraud					
	Payroll fraud					
	Financial accounting miss-statements					
	Inappropriate journal vouchers					
	Suspense accounting fraud					
	Fraudulent expense claims					
	False employment credentials					
	Bribery and corruption					
	Corporate identity theft					
	Intellectual property fraud					

Filled by..... Designation.....