

**EFFECT OF FORENSIC ACCOUNTING PRACTICES ON FRAUD MITIGATION
AMONG COMMERCIAL BANKS IN KENYA**

BY

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MASTER OF SCIENCE IN COMMERCE (FINANCE AND ACCOUNTING)

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OCTOBER 2021

DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for the award of the degree of Master of Commerce (Finance and Accounting).

I also declare that this dissertation contains no written material or published by other people except where due reference is made and author duly acknowledged.

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ABSTRACT

Banks are one of the critical enablers of development of a country since they facilitate economic progress through formation of new capital and/or provision of saving and lending services. Despite the critical role they play in the economy, financial institutions have been victims of fraud where banks have lost funds running into billions of shillings. Such fraud leads to the loss of colossal sums of money from banks and other financial institutions. The general objective of this study was to analyze the effect of forensic accounting practices on fraud mitigation among commercial banks in Kenya. The specific objectives of the study were to: determine the effect of fraud investigation on fraud mitigation; analyze the effect of litigation support on fraud mitigation; and establish the effect of dispute resolution on fraud mitigation among commercial banks in Kenya. The study adopted the Fraud Triangle Theory, Enterprise Theory of Crime and Routine Activity Theory. This study applied a descriptive survey research design to establish the impact of forensic accounting practices on fraud mitigation. The target population for this study were 41 commercial banks that are currently active as at 31st December, 2019. The study applied census technique since it is possible to access all the commercial banks in Kenya. Structured questionnaires were applied in data collection since the study seeks to solicit for quantitative data. Data Analysis was done using SPSS version 24. Data was analyzed using descriptive statistics, correlation analysis and multiple regression analysis. Analysis of data indicated that there exist a positive and significant association between litigation support and fraud mitigation in commercial banks ($p < .05$). In addition, the established that there exist a significant and positive relationship between fraud investigation and fraud mitigation in commercial banks ($p < .05$) in addition to existence of a significant and positive relationship between dispute resolution and fraud mitigation in commercial banks ($p < .05$). The study recommends the need for proactive measures that identify red flags, such as analysis of unusual activities and the need for capacity building through regular training and the need for commercial banks should go beyond investigating fraud to include process expedition in terms of fact presentation in litigation processes and adoption of alternative dispute resolution mechanisms outside courts since this enhances recovery of the lost funds.

Key Words: Litigation Support, Fraud Investigation, Dispute Resolution, Forensic Accounting, Fraud Mitigation, commercial banks.

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ACRONYMS AND ABBREVIATIONS

ANOVA	Analysis of Variance
GDP	Gross Domestic Product
ILO	International Labor Organization
OECD	Organization for Economic Co-operation and Development
RBV	Resource-based View
SPSS	Statistical Packages for Social Science

DEFINITION OF TERMS

- Litigation Support:** Refers to the process by which accountants familiar with the commercial disputes provide consultation and advice to lawyers or assist attorneys to prosecute or defend a case in a court of law (Emmanuel et al., 2018).
- F** Entails use of forensic techniques and tools to examine if
r fraud has been perpetrated and collect factual evidence to
a support the finding (Fadilah, et al., 2019).
- D** Refers to the process by which parties are encouraged to
i resolve their disputes without necessarily going through a
s trail (Kashindi, 2019).
- F** Refers to procedures and policies that are applied
r systematically with a greater goal of noticing and avoiding
a fraud in an organization (Okoye & Gbegi, 2013).
- F** Refers to the application of financial skills and investigative
o mentality to unsettled issues, conducted within the context
r of the rules of evidence (Salman et al., 2018).

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Globalization has increased market liberalization to an extent that business firms are transacting business at unprecedented scale. This is to suggest that increasing volumes of cross-border trade has precipitated companies to formulate accounting procedures with a view to ensure that their processes are efficient and profitable (Amankwah-Amoah, Deborah, & Nuertey, 2018). In addition to this, information technology has changed the manner in which companies operate since modern technologies have made it possible for fraud to take place at the global level (Button & Cross, 2017). Thus, globalization and revolution of information technology has increased the demand for forensic accounting to detect and prevent fraud (Awolowo, 2019).

Several scholars have provided definitions on the concept of fraud mitigation, both at the global, regional and local context. Blount and Ernest (2003) define detection and prevention of fraud as a cluster of procedures and policies that are applied systematically with a greater goal of noticing and avoiding fraud in an organization. Going by the statistics world-wide on the amount and/or extent of fraud, several organizations across the globe continue to leverage an array of methods aimed at thwarting instances of fraud. In addition, organizations across the world have lost huge amount of money running into billions, which in turn has necessitated the need for companies to implement fraud mitigation strategies. According to the Fraud Examiners manual (2017), organizations implement fraud detection and prevention techniques with a greater goal of extenuating fraud that might happen in their jurisdictions. One of the fundamental starting points against fraud mitigation involves symptoms identification, red flags and indicators that signal possible fraud occurrence. Some of the fraud detection

techniques include procedures of audit that are proactive, oversight management that is effective, and reporting channels.

The understanding of organizational and/or enterprise is advanced by earlier theories and models that predicted the motivation for fraud and ways in which companies can detect and prevent fraud. The main theories originate in the field of criminology and try to link the motivation for individuals and firms to engage in fraud. For instance, enterprise theory of crime hinges on the criminal behavior of the organization, which is predicted by economic/market and environmental factors (Campbell & Lord, 2018). On the other hand, the fraud triangle theory provides important explanation on how pressure, opportunity, and rationalization to commit a crime can be applied within the financial sector fraud (Huang et al., 2017). Routine activity theory borders on why individuals commit fraud due to convenience and opportunity (Leukfeldt & Yar, 2016). These theories emphasize the convenience and motivational factors that encourage fraud and how to leverage these factors in developing mitigation mechanism.

Ostensibly, commercial banks across the world are leveraging forensic accounting to analyze their day-to-day operations with a view detecting and circumventing any form of fraud (Bhasin, 2016). This appears to suggest that financial institutions are taking full advantage of forensic activities, such as background checks, proactive audit procedures, effective management oversight, reporting channels, and Anti-Fraud policy among other precautionary activities to thwart possible fraud activities (Bhasin, 2016; Oyebisi et al., 2018). Furthermore, organizations use internal control, password protection, and corporate code of conduct mechanism to detect and prevent fraud (Salman et al., 2018).

The concept of forensic accounting has received a number of definitions, where scholars such as Arokiasamy and Cristal (2019) define forensic accounting as the use of investigative approach in addition to financial skills to financial matters within the parameters

of evidence and investigative rules. Other scholars (see, for instance, Bologna & Lindquistn, 2017) assert that forensic accounting refers to astute understanding, knowledge, financial expertise and working of the legal system. The current literature (see, Oyebisi et al., 2018) has underscored the centrality of forensic accounting practices as one of the most probable mechanisms of checking against and/or decreasing instances of financial fraud. Though forensic accounting has gained resounding attention among auditors and academia in terms of militating fraud, still, instances of fraud continue to persist.

There is plethora of literature at the global level on the interplay between forensic accounting and fraud mitigation. Aduwo (2016) underscore the need for organizations to put in place proactive measures forensic accounting measures on financial data, accounting information system software, auditing and communication competence as a mechanism of circumventing loss of resources. This seem to suggest that forensic accountants should possess apt accounting skills so that they are able to utilize professional judgments, auditing and law procedures to fight corporate liquidation. Mojsoska and Dujovski (2015) states that South-Eastern European countries are leveraging forensic auditing and forensic accounting practices to circumvent fraud crimes such as forgery of cheques, false invoices, and false payments. Fadilah et al. (2019) observes that the ability for Polish organizations to apply forensic accounting practices borders on the legal knowledge, criminological and victim logical skills, auditing skills, investigative knowledge and skills among other forensic accounting skills that are central to fraud mitigation.

There is a growing wave of scholarship in Africa on the essentials of forensic accounting in the banking sector. For instance, there is considerable amount of empirical literature on how financial institutions in Nigeria are using forensic accounting to circumvent fraud activities. For instance, Enofel et al. (2013) was of the view that though forensic

accounting was a new practice, it had enabled Nigerian firms to fight incidences of fraud in various sectors of the economy with particular emphasis on the banking sector. Given that fraud has morphed into a global concern, the application of forensic accounting activities will go a long way in enabling banking institutions to fight loss of funds through fraudulent activities. Tommie (2010) underlined the criticality of investigation and analytical skills, where this is sine qua non for solving financial matters. Similarly, Hoopwood et al. (2018) states that forensic accounting approaches offers critical auditing, financial and accounting skills that are key to fraud investigations. Blount and Ernest (2003) define fraud mitigation as a set of broad procedures and policies that are defined to reduce the instances of fraud occurrence in addition to detection of fraud when it takes place.

The increasing cases of fraud seem to suggest that lopsided forensic accounting practices have predisposed banks to financial crimes. Furthermore, there is evidence that employees of these banks have been on record orchestrating fraud activities to the extent that this has affected the reputation and integrity of banks (Maharaj, 2020). Financial malfeasance in Kenya's commercial has been a topic of public debate and among financial professionals since banks have been used by unscrupulous people to commit economic crimes (Mwangi, 2018; Mutonyi, 2019). According to research by Deloitte, "67 per cent of Kenyan banks lack an IT system that can detect fraud as it occurs, meaning that there is always a lag between the time the fraud occurs and when the crime is detected.

Drawing statistics from 2012 as cited in Banking Fraud Investigations Department (BFID), losses to fraud in Kenya's financial institutions rose to Ksh1.6 billion (\$18.8 million) for the first nine months of 2013, nearly triple the Ksh655.6 million (\$7.71 million) reported stolen in the first nine months of 2012, exposing the weak deterrence and investigation systems in the sector" (BFID, 2012). Rustiarini et al. (2019) stated that "scandals, frauds, and failures

have contributed to the loss of confidence by the financial statement users in the ability of public accounting to contribute viable solutions to the financial problems, and have fueled the growth in demand for forensic accountants.” Onwonga, Achoki, and Omboi (2017) state that “commercial banks have been involved in fraud since it is always possible for high level management to access data and change the information, paper-based system or a computerized system alike.”

1.1.1 Forensic Accounting Practices

Forensic accounting is the science that deals with the application of finance, accounting, and auditing knowledge to analyze and investigate matters in civil and criminal law to obtain the truth (Zia, 2010). Forensic accounting practices entails analysis and assessment of evidence and thereafter interpret and communicate the findings in courts or other legal administrative forums (Durkin & Ueltzen, 2009). The current body of literature is replete with information on forensic accounting practices that organizations, such as financial institutions have applied to detect and prevent fraud. For instance, Emmanuel et al. (2018) states that “forensic accounting techniques include; fraud prevention, detection and deterrence skills, forensic audit, forensic investigation, and forensic interviewing skills, litigation, mediation and arbitration skills, and computer-assisted reviews and document reviews.” The current study adopts the major forensic accounting practices that have been applied in detection and prevention of fraud which include fraud investigation, litigation support and dispute resolution (Oyebisi et al., 2018). The use of the three forensic accounting techniques is justified on the basis that majority of studies done globally and regionally have applied various factor reduction mechanisms, which have indicated that litigation support, dispute resolution and fraud investigation to be the most prevalent forensic accounting practices. Even though this has been the case globally and regionally, there is no study that has been conducted in the banking sector that has adopted the afore-mentioned forensic accounting practices, which this study seeks to achieve.

Fraud investigation entails use of forensic techniques and tools to examine if fraud has been perpetrated and collect factual evidence to support the finding (Silverstone et al., 2004). Digital Investigation Manager (DIM) is a document management tool used in digital Investigations. The tool was developed to support and preserve digital evidence during computer forensic and incident response operations (Accountant Search, 2011). DIM allows the investigation process to be arranged and organized on a “case by case” according to the host. It further allows forensic accountants to summarize all material information collected during investigations.

Encase Tool is a holistic forensic toolkit used by forensic accountants to analyze digital media such as Hard drives, networks, Database servers, flash discs among others during investigations. The tool has successfully been used in various court systems around the globe and it is globally known as a world leader in digital forensic, cyber security and e-discovery (Oliver & Shanoi, 2006). Data mining can be defined as the practice of searching huge volumes of data to establish patterns (Wells & Joseph, 2006). This is a technique used by forensic accounting practitioners that provides models of database for the purpose of identifying trends in the data.

For any organization, data plays invaluable importance and can give significant insight and information when analyzed and interpreted by an expert. For an organization, data can be for customers, suppliers, Bank accounts, reports from Surveys and other transactions. Investigators apply four steps in Data mining namely; Classify data, Cluster data, Regression and Association rule learning (Ekeigwe, 2010). Other techniques used by forensic accountants to analyze financial data include Ratio and trend analysis. Ratio analysis examines data patterns to identify possible fraudulent transactions and further reveal anomalies in large volumes of

data. Ratio analysis also detects specific transactions which are not familiar compared to the previous trends established.

Trend analysis is useful to investigators when analyzing movement of inventories vis-a-vis sales revenue (Bales & Fox, 2011). Outlier detection is a technique used by forensic accountants to establish the difference between normal and abnormal transactions where patterns are developed based on information gathered. Litigation support refers to the “process by which accountants familiar with the commercial disputes provide consultation and advice to lawyers or assist attorneys to prosecute or defend a case in a court of law” (Mukoro, 2013). In some instances, the support may relate to providing of relevant information and documentation and in some cases in involves evaluating the magnitude of losses upon conclusion of a court case. Litigation support requires a variety of skills but predominantly it ends by forensic accountants giving an opinion in a legal system as an expert witness on whether fraud has occurred. Omoniyi (2004) stated that the purpose of an expert witness is to help the court to draw a conclusion on a matter on which the court on its self may not have the required knowledge to decide.

Document examination is a common service given under litigation support where forensic accountants mostly analyze handwriting and signatures to determine cases of forgeries and alterations on documents (Özkul & Pamukçu, 2012). Once conclusions have been drawn the forensic expert would then give his expert opinion on how fraud was perpetrated through document forgery or alteration of material facts. Forensic accountants offer litigation support by among others; help in obtaining major documents to be used as evidence which is necessary when preparing to approve or disapprove a claim. Evaluation of relevant documents in the initial review of the case to determine possible areas of loss. To brief the attorney on monetary

and accounting aspects of the case during pre-trial arrangements. Advising the attorney during trials, specifically during cross examination of the opposing expert witness.

Dispute resolution refers to the process by which parties are encouraged to resolve their disputes without necessarily going through a trial (Fraud Examiners Manual, 2017). Dispute resolution has merits over the conventional litigation approach since it helps to protect business reputation between parties and provides a flexible and less costly solution to settle matters. In fraud cases, dispute resolution normally involves mediation or arbitration. Mediation refers to the process of using an independent third party who encourages the parties to arrive at a mutually agreed settlement on the matter of dispute (Moore, 2014).

1.1.2 Fraud Mitigation

There is plethora of statistics at the global, regional, and Kenyan context on the extent of fraud in the banking sector. Most of the statistics at the global level have been provided by audit firms, such as Pricewaterhouse coopers (PWC) and KPMG since these firms provide consultancy services at the global level, thus able to compute aggregate levels of banking fraud. KPMG (2019) as cited in Zahari et al. (2020) indicates that “increasing fraud typologies globally from 2015 to 2018 include identity theft and account takeover, cyber-attack, card not present fraud and authorized push payments scams.” In addition, the global banking fraud survey of 2019 as detailed in the KPMG report reveals that less than 25 percent of fraud losses are recovered, signifying that fraud prevention is key. PWC report of 2020 which focused on the Global Economic Crime and Fraud Survey as cited in Raji (2020) revealed that economic crimes yield losses of US\$42 billion. That’s cash taken straight off companies’ bottom line. Besides, the report indicated that fraud losses amounted to US\$50 million-plus. In the financial sector, customer Fraud (27%) Cybercrime (15%) Accounting/ Financial Statement Fraud (14%) were reported.

According to PwC's Global Economic Crime and Fraud Survey (2018), "77% of companies in South Africa that were surveyed reported being victims of fraud in 2018, earning the country the top spot on the global fraud map. Kenya was second at 72 percent. Uganda, Gambia and Tanzania also made the top ten. The global average was 49 percent. The size of the problem is such that fraud today is one of the biggest single causes of failure and distress in the African banking system." In Africa, banks have implemented technologies towards fraud prevention, where cyber-attacks have been cited as the most significant challenge in fraud risks (Mukminin, 2018). Procedures related to proactive audits represent the readiness of the organizational management to investigate and lay bare all probable fraudulent activities (Andon & Free, 2012). Pro-activeness means that an organization does not wait for fraud to take place before thwarting them, rather, systems are put in place to detect all actions related to fraud and thus enable the organization to prevent fraud before happening. Proactive audit procedures include; Analytical review of red flags, Fraud assessment questionnaire and Surprise audits, Wealth declaration by staff and lifestyle Audit, Close monitoring of dormant and suspense accounts.

Evidence shows that most of the theft occurring in organizations is directed towards improving the standard of living of the employees (Levi, 2013). Some of the proceeds of fraud is used by employees to pay for exotic holidays, purchase of expensive clothes and vehicles coupled with purchase of luxurious holiday homes. Thus, managers of any organization should check for the above-mentioned signs as a means of detecting fraud at the organizational level. It is instructive to note that proactive measures are important in deterring fraud since the fraudsters are discouraged from doing the vice since watching suspicious behaviour can create deterrence (Strawhacker, 2016). In addition to creation of deterrence culture, there is need to put in place apt reporting channels, such as hotlines that can act as a system aimed at discouraging fraud. To this end, it is instructive to note that creation of employee awareness

coupled with encouraging them to report any fraud/suspicious activities is central to detection and prevention of fraud.

Preventive programs under consideration includes; Background checks, Anti-fraud policy and Tone at the top. The most effective way to prevent employee fraud is to avoid hiring employees who have committed fraud in the past by conducting background checks. Prior to hiring, management should conduct a background check to gather detailed information about the employee being considered for hire and how his/ her past record of accomplishment has been with employers and law enforcement agents (Strawhacker, 2016). To have an effective fraud prevention programme, Biegelman and Bartow (2012) suggests that organizations should establish a well-documented Anti-fraud policy that explicitly outlines the person with the responsibility of handling fraud related matters in the organization. Operationalization of a proper anti-fraud policy transfers a strong message to workers that fraud will not be tolerated within the organization and further creates a platform where management can explicitly communicate its values, culture and philosophy to implement a successful ethics program. Zimbleman and Albrecht (2012) states that “fraud prevention involves creating and maintaining an honesty and ethical culture and developing measures to mitigate the risk and eradicate the opportunities to commit fraud.”

1.1.3 Forensic Accounting and Fraud Mitigation

Scholars have delved into the interplay between forensic accounting and detection and prevention of fraud. For instance, Gray (2008) suggested that businesses take advantage of forensic accounting techniques as a means to preventing fraud in their organizations, where the author looked at forensic accounting as an amalgamation of investigative and audit techniques. This seem to suggest that the relevance of forensic accounting has gained attention since it is central to detection of fraud. Elsewhere, Fiiia (2013) delved into how forensic accounting impacts detection and prevention of fraud in organizations and found that fraud prevalence

within the public sector decreases when forensic accounting is applied. On the other hand, Koh et al. (2009) studied public perception, where it was found that people perceived forensic accounting to deter financial fraud. Besides the reduction of financial fraud, forensic accounting is leveraged by organizations to provide earlier signs/red flags on fraudulent activities.

Kasum (2009) studied the importance of forensic accountants towards financial fraud among developing economies. He concluded that forensic accounting's services are necessary to combat fraudulent or corrupt dealings more so in public sector. In a study conducted by on Nigerian Banks by Onuorah (2011) on the impact of forensic accounting services on fraud detection found that the approach enables financial institutions to avert fraud. Based on this contextual and conceptual evidence, this paper is designed to establish the effect of forensic accounting practices on fraud mitigation for commercial banks in Kenya since more than 40% of Kenya's financial institutions continue to leverage forensic accounting practices as cited in Kessler (2007). This study is interested to establish how the failure of statutory audit to prevent, detect, and reduce misappropriation of commercial banks' financial and non-financial assets has precipitated fraud. Moreover, this study will be different from the existing studies since it will fill the contextual gap of Kenyan and international empirical studies that have not conducted research on the impact of forensic accounting practices on fraud detection and prevention among commercial banks in Kenya.

1.1.4 Commercial Banks in Kenya

According to the Central Bank of Kenya (2016), "there are 44 licensed commercial banks and 1 Mortgage Finance Company. Of these 44 institutions, 24 are locally owned, 14 have foreign interests by incorporation or by ownership and the remaining 6 have government participation in their activities. Commercial banks in Kenya are licensed and guided by prudential guidelines formulated by the CBK. Kenyan commercial banks display cartel like characteristics with 10

banks owing 75% of the total assets in the industry (Market Intelligence, 2018). As profit driven institutions, commercial banks are predisposed to adapt various fraud mitigation strategies/practices in order to attract and retain more clients.”

The Banking Sector in Kenya “comprises of the Commercial Banks and Non-Bank Financial Institutions (NBFIs). The various institutions in this sector are registered under the Banking Act, Chapter 488 of the Laws of Kenya. The Central Bank of Kenya, which is established under CBK Act Chapter 491 of the Laws of Kenya, is the main regulatory body in this sector. The CBK is the principal banking institution to exercise monetary control, supervision of financial institutions and assistance to commerce, trade and industry. It supervises, monitors, guides and advises the bank financial institutions so that the government's monetary policy objectives are fulfilled in the interest of the nation.”

1.2 Statement of the Problem

Banks are one of the critical enablers of development of a country since they facilitate economic progress through formation of new capital and/or provision of saving and lending services (Niepmann & Schmidt-Eisenlohr, 2017). Statistics provided by Central Bank of Kenya (CBK) show that commercial banks in Kenya in the 2017/2018 – 2019/2020 financial years, banks accounted for close to 11.0% taxes collected by Kenya Revenue Authority (CBK, 2019). However, across the world, financial institutions have been victims of fraud, where banks have lost funds running into billions of shillings (Nichols, 2019; MacKenna, 2017).

Scholars have delved into the essentials of forensic accounting, but the results have been inconclusive given that empirical and conceptual studies have produced varied results. There is evidence to indicate that forensic accounting tools provide indispensable mechanisms that organizations leverage as a basis of detecting and preventing fraud (Andon & Free, 2012; Kolapo & Olaniyan, 2018). However, there is lack of consensus among researchers on what constitutes forensic accounting. This lack of clear demarcation on the components of forensic

has led to different definitions to the extent that there is lack of conceptual definition. It is against this backdrop that this paper seeks to delineate on the impact of forensic accounting practices.

Contextually, most of commercial banks in Kenya have been victims of fraud, where banks have lost funds running into billions of shillings (Kiragu & Riro, 2019). This suggests that lack of forensic accounting practices has predisposed banks to financial crimes. Furthermore, there is evidence that accountants of these banks have been on record orchestrating fraud activities to the extent that this has affected the reputation and integrity of banks (Kashindi, 2019). Financial malfeasance in Kenya's commercial has been a topic of public debate and among financial professionals since banks have been used by unscrupulous people to commit economic crimes (Andon & Free, 2012). In addition, scandals, frauds, and failures have contributed to the loss of confidence by the financial statements' users in the ability of public accounting to contribute viable solutions to the financial problems, and have fueled the growth in demand for forensic accountants. However, commercial banks have been involved in fraud. This is because it is always possible for high level management to access data and change the information, paper-based system or a computerized system alike. It all relates back to human nature and high-level management.

Evidence suggests that most of the leading banks in Kenya have been victims of fraud, where these financial institutions have lost colossal amounts of money. KCB (2014) while releasing its sustainability report, said that it had dismissed some 94 employees in the past year over fraud and professional negligence. It said 22 per cent of its 431 former staff were sacked because of fraud" (The East Africa, 2014). In addition, there are Kenyan banks that have collapsed as a result of fraud. For instance, a multi-year fraud costed Imperial Bank \$380 million in bad loans and customer deposits, while Chase Bank was placed under receivership

(Kashindi, 2019). Routine forensic accounting practices are posed to have the potential to unearth unethical conduct in commercial banks given that fraud activities in these financial institutions span over a long period, such as 13-years for the case of Imperial Bank.

Several scholars have focused on concept forensic accounting and its impact on organizational performance (Gbegi & Habila, 2017; Mohamed et al., 2019), fraud investigation on performance (Kolapo & Olaniyan, 2018), litigation support and fraud prevention (Basse & Ahonkhai, 2017). Other studies considered fraud prevention initiatives (Abdullahi & Mansor, 2018), while Gbegi and Habila (2017) focused on the effect of forensic accounting evidence on litigation services. The conceptual gap that this study will fill from the aforesaid studies is the impact of forensic accounting practices on fraud detection and prevention in commercial banks.

Empirical studies in Kenya that have considered forensic accounting have dwelled on fraud mitigation strategies (OGW, Kiragu, & Riro, 2019). Other studies have concentrated mainly on the companies listed in the Nairobi Securities Exchange (Wahinya & Ondigo, 2017). Those companies are members of different industry sector, denoting a very different focus that can deter generalization. International empirical literature focused on manufacturing industry (Okoye & Ndah, 2019), Malaysian manufacturers (Jabar Soosay, & Sant, 2011), chemicals, machinery, and motor vehicle industries in the US (Schilke, 2014) and large and medium sized Greek firms (Protogerou, Caloghirou, & Lioukas, 2011). This study was designed to fill the contextual gap of Kenyan and international empirical studies that have not conducted research on the impact of forensic accounting practices on fraud detection and prevention in commercial banks in Kenya.

1.3 Objective of the Study

1.3.1 General objective

The general objective of this study was to analyze the effect of forensic accounting practices on fraud mitigation among commercial banks in Kenya.

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

- i. To determine the effect of litigation support on fraud mitigation among commercial banks in Kenya.
- ii. To analyze the effect of fraud investigation on fraud mitigation among commercial banks in Kenya.
- iii. To establish the effect of dispute resolution on fraud mitigation among commercial banks in Kenya.

1.4 Research Hypothesis

The following research hypotheses were tested:

***Ho1:** Litigation support has no statistically significant effect on fraud mitigation among commercial banks in Kenya.*

***Ho2:** Fraud investigation has no statistically significant effect on fraud mitigation among commercial banks in Kenya.*

***Ho3:** Dispute resolution has no statistically significant effect on fraud mitigation among commercial banks in Kenya.*

1.5 Significance of the Study

1.5.1 Management of Commercial Banks

Results of this study will be relevant and applicable to the management of commercial banks, where managers will develop critical insights on what needs to be done to enhance fraud mitigation. By understanding the dynamics of fraud mitigation, commercial banks will develop

important understanding on what it entails financial fraud and what can be done to prevent its occurrence. Financial audit organizations, such as ICPAK, ACFE, and IIA will use findings of this study to further deepen techniques used in fraud mitigation among financial institutions. By commercial banks and financial institutions gaining insights on strategic information pertaining to financial fraud, there will be development of more strategies to contain and/or ameliorate financial fraud.

1.5.2 Researchers

This study is justified on the basis that much of the existing body of literature has not focused on the impact of forensic accounting practices on fraud detection and prevention among commercial banks in Kenya. Moreover, there is no known study that has concentrated on forensic accounting practices using the variables of dispute resolution and litigation support and how these practices of forensic accounting impact on fraud detection and prevention with focus on the banking sector. This is to suggest that there is no known empirical study that has established the impact of forensic accounting in Kenya's banking sector since the available body of literature tends to be conceptual and contextual in nature and lacks empirical evidence. Over and above, this research provides indispensable snapshots and entry points on the study of the effect of forensic accounting practices on fraud detection and prevention.

1.5.3 Government

Kenya loses significant number of resources to corruption and other pilferage platforms, denoting that the results of this study will have far reaching policy implications for fraud mitigation in Kenya. Through determination of the relative variance of the forensic accounting practices on fraud mitigation, the government can legislate priority policies on the best ways to deter fraud.

1.6 Scope of the Study

The research aims to analyze the impact of forensic accounting practices on fraud detection and prevention among commercial banks in Kenya. Data will be collected from 41 commercial banks in Kenya. The research study is to be carried out in the city of Nairobi since all commercial banks' headquarters are domiciled in Capital Nairobi. The research sample targets the top and middle level management. The study seeks to examine the key forensic accounting practices that financial institutions leverage to detect and prevent fraud. The study will be limited to a period of 7 years that is year 2013-2019 since this period experienced expansion of the banking sector thanks to implementation of critical banking legislations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter details the relevant literature according to the objective of the study. In addition, the chapter will develop theoretical and empirical reviews that will be used in the study. The chapter will also present a summary of the literature.

2.2 Theoretical Review

2.2.1 Fraud Triangle Theory

This theory by Cressey (1971) alludes three factors: Pressure, Opportunity, and rationalization, must exist for a white-collar crime to take place. In 1950, Donald Cressey, who was a known criminologist, conducted a study on fraud where he argued that in everything that people do, there must be a reason behind it. His quest to answer the question “Why people commit fraud?” was the basis why his research focused mainly on what makes people to violate trust bestowed on them. Pressure refers to “factors that influence or induce bad behavior to people. All perpetrators of fraud face some degree of pressure to commit unethical behavior (Mansor & Abdullahi, 2015). Lister (2007) cited pressure as the key element in perpetrating fraud. The three kinds of pressure he identified are Employment stress, external pressure and personal pressure.”

Opportunity is another key factor that must exist for fraud to occur. “Opportunities occur when organization’s internal controls or system of governance is ineffective hence allowing individuals to perpetrate fraud. Under opportunity, Hartley and Kelly (2010) argued that individuals will capitalize on the loopholes or control weaknesses before them by committing fraud. Cressey (1953) found that when the risk of being caught is lower, then there are high chances that fraud will take place.” Various factors can lead to existence of opportunities to perpetrate fraud within organizations and such may include non-adherence to

policies, employee negligence and absence of disciplinary actions (Sauser, 2007). Wilson (2004) defined “opportunity” as being able to circumvent fraud related controls. Rationalization happens when the perpetrator of fraud formulates a morally acceptable reason as a justification for engaging in unethical behavior. When an individual cannot justify his immoral actions, he or she is less likely to perpetrate fraud. Examples of rationalizations include, “I was only borrowing the money with intention to repay”. Rationalization is difficult to detect because it is not easy to read a fraudsters mind. Fraudsters usually bear a mindset which permits them to rationalize their fraudulent behavior (Hooper & Pornelli 2010). This theory therefore presupposes that fraud can reduce significantly if the three factors of Pressure, Opportunity and Rationalization within organizations are well handled and managers should be aware of such factors. This theory is applicable to the practice and/or component of fraud investigation since it provides an explanation on how any effective fraud prevention and detection program by organizations should ensure that no opportunities exist for employees to commit fraud, no factors exist that may induce bad behavior to people and no mindset exists that would permit rationalization of fraudulent behavior.

2.2.2 The Enterprise Theory of Crime

The enterprise theory of crime was expounded by Smith (1980), where the theory attempts to describe the stake of organizations in criminal acts as “reflective of specific environmental factors-market or economic forces, influencing the motivations of criminals, how they interact, their perceptions or risk versus benefit, and the efficiency and efficacy of their modus operandi.” According to this theory as argued by Lyman and porter (2007), “organized crime exists because legitimate markets leave many customers and potential customers unsatisfied.”

High demand for a particular service, low levels of risk detection and high profits, lead to a conducive environment for entrepreneurial criminal groups to enter the market and profit by supplying those goods and services (Lyman & porter, 2007). The enterprise theory of crime

is relevant to this study as it describes how organizational crimes discourage competition to ensure criminal monopolies are maintained to sustain profits. The critique of the enterprise theory of crime occurs because it tends to be deterministic, implying that once someone is labelled a fraud, a deviant career is inevitable. Furthermore, the theory talks about the negative effects of labelling gives the offender a kind of victim status and fails to explain why people commit primary deviance in the first place before they are labelled criminals.

The enterprise theory of crime is appropriate for this study as it can be used to explain well how individuals conduct fraud within the banking industry. The theory further explains that economic enterprises involve both legitimate and criminal activities. In fact, Smith (1980) argues that market dynamics operating past the point of legitimacy tend to establish the primary context of the illicit entrepreneur. Simply put, a high-level demand for a particular form of products combined with relatively low-level risk of detection and considerable high profit margins provides the ideal condition for illicit business groups to enter the market.

2.2.3 Routine Activity Theory

The theory was developed by Cohen and Felson (1979). The theory argues that “crimes are an outcome of convenience and therefore individuals would commit white collar crimes at work since they have easy access to commit them.” Routine activity theory alludes that “individuals become vulnerable to commit criminal activities due to their situation and by virtue that they can perpetrate the crimes because they have access.” Hillision and Pacini (2004) alluded in their model that one of the factors that allow misstatement of financial statements due to fraud is “the degree to which conditions allow management fraud to be committed. Organizations can therefore contend crime by ensuring that they close all the loopholes that create convenience for employees to commit fraud. Such may include employing measure like Job Rotation, Segregation of duties, surprise checks among others. According to this theory, crime is influenced by three significant factors namely; The presence of targets victims such as

individuals and organizations, Lack of suitable guardians such as Security, Auditors and Risk personnel and availability of Capable offenders such as disgruntled or financially distressed workers.”

The routine activity theory was further developed by various scholars who underlined the role of organizational familiarity. For instance, Hillision and Pacini (2004) indicated in their framework that “One of the factors that allow misstatement of financial statements due to fraud is the degree to which conditions allow management fraud to be committed.” Thus, organizations should put in place frameworks that increases deterrence of crime happening by sealing all loopholes, such incognito checks, duty segregation, and job rotation. According to this theory, crime is influenced by three significant factors namely; The presence of targets victims such as individuals and organizations, Lack of suitable guardians such as Security, Auditors and Risk personnel and availability of Capable offenders such as disgruntled or financially distressed workers.

The growing cases of fraud within organizations have attracted interest in fraud detection and prevention and a lot of people agree that such frauds would have been circumvented if organizations had put in place effective internal controls. Nyakarimi and Karwirwa (2015) alluded that fraud within organizations could be thwarted using strong internal controls because it allows the organization to eliminate the environment that create easy access to commit fraud. Fraud prevention entails establishing a culture of uprightness and high standards of ethics coupled with elimination of possible opportunities to commit fraud (Zimbleman and Albrecht 2012). Adoption of forensic accounting practices communicates management’s intention not only to detect any possible fraud but also to prosecute and recover stolen assets. Therefore, Forensic accountants can play a critical role to stand in as the capable

guardian who will not only prevent fraud but rather detect it in the event it occurs and assist in the prosecution of fraud perpetrators.

The routine activity theory was further developed by various scholars who underlined the role of organizational familiarity. For instance, Hillision and Pacini (2004) indicated in their framework that “One of the factors that allow misstatement of financial statements due to fraud is the degree to which conditions allow management fraud to be committed.” Thus, organizations should put in place frameworks that increases deterrence of crime happening by sealing all loopholes, such incognito checks, duty segregation, and job rotation.

The routine activity theory is relevant to the study since it describes how crime is influenced by three significant factors namely; the presence of targets victims such as individuals and organizations, Lack of suitable guardians such as Security, Auditors and Risk personnel and availability of Capable offenders such as disgruntled or financially distressed workers. In addition, the theory is applicable to the current research because it offers a framework that explains why cases of fraud within organizations have been growing and how they can be circumvented if organizations had put in place effective internal controls.

2.3 Empirical Review

2.3.1 F

Kenya and Oyier (2013) examined the “impact of forensic accounting services on fraud detection and prevention among commercial banks in Kenya, the most prevalent type of fraud and to establish the major areas of application of forensic accounting services. The data collection instrument preferred for the study was a questionnaire. Findings from the study saw that fraud detection and prevention increased when forensic accounting services was employed. The study used descriptive research survey design and uses a sample of 47 respondents in 16 commercial banks in Kenya. The data was analyzed using Statistical package for social

sciences (SPSS). The study findings indicated that the application of forensic accounting services by banks led to increased fraud prevention in the commercial banks and the highest application was on enhancing quality of financial reporting.” The most prevalent type of fraud in the banking sector was fraudulent expense claims. The study focused on the prevention mechanisms and did not provide details on which forensic accounting practices were used in fraud detection and prevention.

Ng et al. (2017) conducted a study on “behavioral intention to use forensic accounting services among small and medium enterprises in Malaysia and stated that unlike auditing, forensic accounting applies more analytical skills and in-depth analysis on company’s overall performance. It is specially designed to detect business fraud. Since SMEs industry is growing rapidly and has large opportunity to expand in future, fraud detection method must be improved. Cross-sectional study by using adopted survey questionnaires distributed to SMEs in Selangor, Wilayah Persekutuan, Johor, Perak and Pulau Pinang is carried out. Pearson Correlation Analysis and MLR analysis are applied to analyse data collected and proposed hypotheses. The result of the research could contribute to future studies that are related to forensic accounting and fraud prevention among SMEs. Past studies related to this topic are mainly focused on large companies.” The study applied behavioral intention to use forensic accounting services for SMEs, while the current study applies forensic accounting practices, mainly fraud investigation, litigation support, and dispute resolution and how they can be leveraged by commercial banks to detect and prevent fraud.

Enofe, Omagbon, and Ehigiator (2015) examined the impact of forensic audit on corporate fraud in Nigeria. “The study concluded based on the statistical analysis that the frequent utilization of forensic audit services will significantly help in the detection, prevention as well as reduction of incidences of fraud in and businesses. Consequently, forensic audit was

adjudged to be an efficient and effective tool against corporate fraud. It therefore recommended that forensic audit be made statutory for businesses and organizations.” The study concentrated on corporate in its entirety without disaggregating the sector of focus. Thus, the current study will focus on forensic accounting practices on fraud detection and prevention among commercial banks in Kenya.

Kabue and Aduda (2017) focused on the “impact of forensic accounting services as a tool to deter fraudulent practices in the public service in Kenya, where the authors stated that barely half-way through 2018 Kenya has registered series for fresh mega corruption scandal, raising concern about Kenya’s capacity to safeguard public funds. Topping the list is the Sh9 billion procurement scandal at the National Youth Service (NYS) that has seen 50 suspects charged in court including former chief executive government officials charged in a court of law. The predictions theoretical indicated that, the application of Forensic Accounting Services helps to prevent fraud occurrence in the commercial banks. The mindset of a fraud specialist will lead them to search for pertinent information pertaining to frauds. The study concentrated on the public sector, while the current study delves into forensic accounting practices on fraud detection and prevention among commercial banks in Kenya.”

2.3.2 Litigation Support and Fraud Mitigation

Basseyy and Ahonkhai (2017) conducted a study on the “effect of forensic accounting and litigation support on fraud detection of banks in Nigeria., where data were sourced for through primary sources and this was achieved with the help organized questionnaires of two segments administered to the employees of Zenith Bank Nigeria Plc. and Union Bank Nigeria Plc. in Calabar, Cross River State. The study revealed that forensic accounting and litigation supports do not have significant effect on fraud detection in Nigerian companies. It was recommended that Management and Shareholders should be educated on the usefulness of the services of

forensic accountants in litigation matters and that Nigeria legal system should be strengthened, so that it can lend credibility or confidence in their legal system.”

Okoye (2009) delved into the “role of forensic accounting in fraud investigation and litigation support and stated that forensic accounting is the specialty practice area of accounting that describes engagements that result from actual or anticipated dispute or litigation. It provides an accounting analysis that is sustainable to the court which will form the basis for discussion, debate and ultimately dispute resolution. While certainly ideal for court testimony, in broad terms, 'forensic', is about fact finding and interpretation. The increase in number of fraud and fraudulent activities in Nigeria and around the world has emphasized the need for forensic accounting.” Engagements of forensic accountants on criminal matters typically arise as the aftermath of fraud. Fraud examination in forensic accounting is different from that of traditional accounting because the forensic accountant has the intuitive ability to analyze fraud.

Oyedokun (2013) assessed the role of “forensic accountants in litigation support services, the evolution of forensic accounting was explained while the need for forensic accounting in an organization vis a vis the possible litigation services was assessed. Content analysis method was used in getting some information and eliciting responses from professionals in related filed. The limitation of the study was in the area of the population of study as it was based on a professional line of endeavor. It was revealed that the professional accountancy training alone is not sufficient to tackle the control deficiency and risk of fraudulent activities in an organization and to be a good expert witness. It was recommended that there is a need for advance training in the area of forensic accounting for any professional performing internal audit/control functions and for sound litigation support.”

Gbegi and Habila (2017) examined effect of forensic accounting evidence on litigation service in the Nigerian Judicial system. The findings revealed that “forensic accounting

evidence (documentary evidence, demonstrative evidence, physical evidence and oral evidence) has significance influence on litigation services in the Nigerian judicial system. The study recommended that Forensic accounting evidence should be constantly employ by the Nigeria court of law in other to positively enhance litigation services in Nigeria, and Forensic accounting oral evidence should be administered in the court of law and should be given by expert witness that has the training and communication skills such as forensic accountants.”

2.3.3 Dispute Resolution and Fraud Mitigation

Yahaya et al. (2018) delved into the effect of forensic accounting knowledge on fraud prevention among listed companies in Nigeria. Furthermore, “the finding suggests that forensic accounting knowledge and complexity are significantly related with fraud prevention. It is therefore recommended that auditing staff of these companies should have more forensic accounting knowledge to serve as a tool to deter and prevent fraudulent activities in companies and Nigeria at large.”

Eze (2019) investigated the “effects of forensic accounting practice of dispute resolution and fraud prevention in the Nigerian public sector with Imo state as a case study. The research design used was the descriptive survey. The study adopted structured questionnaire for data collection after validity and reliability test with z-test for the hypothesis testing. The result revealed a significant relationship between forensic accounting and fraud detection and prevention in the public sector. It was recommended among other things, that forensic accounting should be strengthened in the public sector and that the top-level management should be committed to the program while the anti-graft agencies like the EFCC and ICPC should be repositioned to adopt forensic accounting techniques.”

Okoye and Gbegi (2013) examined “forensic accounting as a tool for fraud detection and prevention in the public sector organizations with particular reference to Kogi State. Both

primary and secondary sources of data were appropriately used. 370 questionnaires were administered to staff of five (5) selected ministries in Kogi State of Nigeria, along with interviews conducted with those ministries out of which 350 were filled and returned. Tables and simple percentages were used to analyze the data. The statistical tool used to test hypotheses was Analysis of Variance (ANOVA). Among the findings was that the use of Forensic Accounting does significantly reduce the occurrence of fraud cases in the public sector, and that there is a significant difference between Professional Forensic Accountants and Traditional External Auditors and therefore the use of Forensic Accountants can help better in detecting and preventing fraud cases in the public sector organizations. The research recommended that Forensic Accountants be replaced with the external auditors in Kogi State, proper training and retraining on Forensic accounting should be provided to staff of Kogi State and proper adherence to accounting and auditing standards should be followed.”

Eze (2019) investigated the “effects of forensic accounting practice of dispute resolution and fraud prevention in the Nigerian public sector with Imo state as a case study. The research design used was the descriptive survey. The study adopted structured questionnaire for data collection after validity and reliability test with z-test for the hypothesis testing. The result revealed a significant relationship between forensic accounting and fraud detection and prevention in the public sector. It was recommended among other things, that forensic accounting should be strengthened in the public sector and that the top-level management should be committed to the program while the anti-graft agencies like the EFCC and ICPC should be repositioned to adopt forensic accounting techniques.”

Gichuki (2009) examined “factors that influence the utilization of forensic accounting services in detecting frauds within banking institutions in Kenya. The study’s objective was to investigate which factors determine use of forensic accounting services by banks within Kenya.

Descriptive study design was adopted with a population of forty-two licensed commercial banks from which a sample of twenty-one banks was selected. The study revealed that forensic accounting services are rarely used by commercial Banks in Kenya in fraud detection due to little awareness of forensic accounting services, high cost, and lack of easy access to such services.

Opiyo (2017) studied on “the role of forensic accounting in fraud mitigation within Kenyan parastatals. The study sampled 53 respondents which comprised of Top, Middle and lower-level managers. In his study he concluded that all parastatals in Kenya have employed proactive measures in fraud audit and strong internal controls which have greatly helped in mitigation of fraud. The study also concluded that parastatals in Kenya have employed measures such as compliance policies and segregation of duties to help in mitigating fraud within their operations.” Wanjohi (2011) identified “adoption of Forensic audit as a key measure to the reduction of audit expectation gap. Omondi (2013) studied to examine how forensic accounting services contributes to detecting and preventing fraud within Kenyan Banks.” The study discovered that there was augmented fraud detection when Forensic accounting services are implemented.

2.4 Summary of Literature Reviewed

The increasing cases of fraud seem to suggest that lopsided forensic accounting practices have predisposed firms to financial crimes. Furthermore, there is evidence that accountants orchestrate fraud activities to the extent that this has affected the reputation and integrity of companies (Maharaj, 2020). Financial malfeasance in Kenya’s organizations has been a topic of public debate and among financial professionals since business firms have been used by unscrupulous people to commit economic crimes (Mwangi, 2018; Mutonyi, 2019). According to research by Deloitte, 67 per cent of Kenyan banks lack an IT system that can detect fraud as

it occurs, meaning that there is always a lag between the time the fraud occurs and when the crime is detected.

Furthermore, scandals, frauds, and failures have contributed to the loss of confidence by the financial statements' users in the ability of public accounting to contribute viable solutions to the financial problems, and have fueled the growth in demand for forensic accountants (Rustiarini et al., 2019). Onwonga, Achoki, and Omboi (2017) state that commercial banks have been involved in fraud since it is always possible for high level management to access data and change the information, paper-based system or a computerized system alike. Towards this end, it can be argued fraud involves a conglomeration of various entities, such as banks among other organizations that deal with large sums of money to orchestrate fraud. This appears to suggest that organizations in Kenya still present opportunities for fraud to take place.

2.5 Critique of the Reviewed Literature

There is plethora of literature at the global level on the interplay between forensic accounting and fraud mitigation. Aduwo (2016) underscore the need for organizations to put in place proactive measures forensic accounting measures on financial data, accounting information system software, auditing and communication skills to be able to address the global menace of corporate failure. This seem to suggest that forensic accountants should possess apt accounting skills so that they are able to utilize professional judgments, auditing and law procedures to fight corporate liquidation.

Mojsoska and Dujovski (2015) states that South-Eastern European countries are leveraging forensic auditing and forensic accounting practices to circumvent fraud crimes, such as forgery of cheques, false invoices, and false payments. Fadilah et al. (2019) observes that the ability for Polish organizations to apply forensic accounting practices borders on the legal knowledge, criminological and victimological skills, auditing skills, investigative knowledge

and skills among other forensic accounting skills that are central to fraud detection and prevention. Unfortunately, even after business firms have adopted forensic accounting, cases of financial and non-financial fraud in their organizations continue to persist, where accountants of some of these organizations work conspire with fraudsters to defraud organizations.

2.6 Research Gap

Empirical studies that have considered forensic accounting have dwelled on fraud mitigation strategies (OGW, Kiragu, & Riro, 2019). Other studies have concentrated mainly on the companies listed in the Nairobi Securities Exchange (Wahinya & Ondigo, 2017). Those companies are members of different industry sectors, denoting a very different focus that can deter generalization.

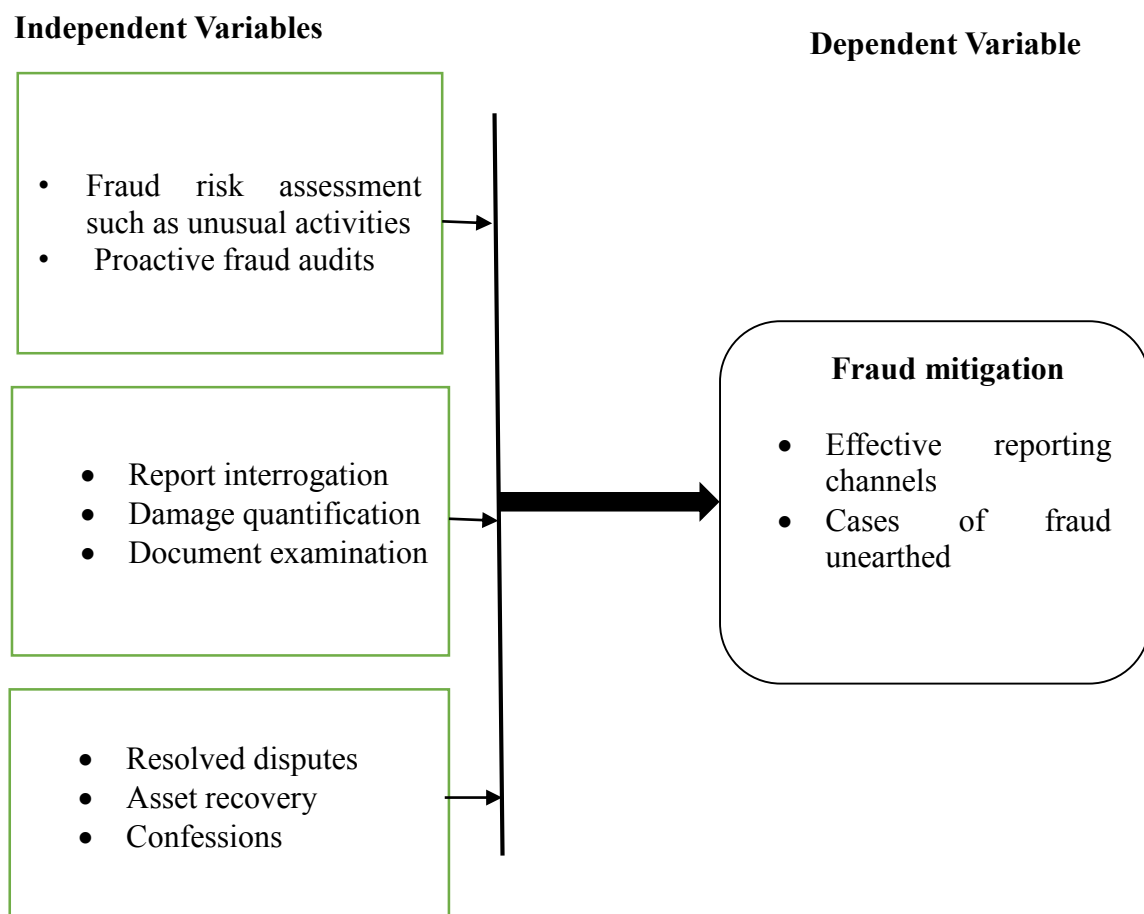
International empirical literature focused on manufacturing industry (Okoye & Ndah, 2019), Malaysian manufacturers (Jabar Soosay, & Sant, 2011), chemicals, machinery, and motor vehicle industries in the US (Schilke, 2014) and large and medium sized Greek firms (Protogerou, Caloghirou, & Lioukas, 2011). This study fills the contextual gap of Kenyan and international empirical studies that have not conducted research on the effect of forensic accounting practices on fraud mitigation commercial banks in Kenya. Moreover, this study will be different from the existing studies since it will fill the contextual gap of Kenyan and international empirical studies that have not conducted research on the effect of forensic accounting practices among commercial banks in Kenya.

2.7 Conceptual Framework

A conceptual framework is defined as a network of linked concepts. Therefore, a conceptual framework is an analytical tool with several variations and contexts. It is used to make conceptual distinctions and organize ideas. Conceptual framework analysis offers a procedure of theorization for building conceptual frameworks based on grounded theory method.

Accordingly, the conceptual framework would make it possible for the study to link various variables of the study as such, be able to understand the correlation and influence of the dependent variables on the independent variable. In light of this, the study would seek to manipulate the independent variables while analyzing its effect on the dependent variable.

FIGURE 1
Conceptual Framework



Source: Researcher (2021).

2.8 Operationalization of the Variables

The study operationalizes the result of the effect of forensic accounting procedures on fraud mitigation in commercial banks in Kenya. The independent variables are: Fraud investigation, Litigation support, and Dispute resolution. The dependent variable is the fraud mitigation. The

following operation table provides the intuition on how the numerous variables will be restrained, examined and assumptions are drawn after.

TABLE 1
Operationalization of the Study Variables

Objective	Variable	Indicators	Measurement scale
To determine the impact of fraud investigation on fraud detection and prevention	Independent Fraud investigation	<ul style="list-style-type: none"> • Fraud risk assessment such as unusual activities • Proactive fraud 	Ordinal
To analyze the impact of litigation support on fraud detection and prevention	Independent Litigation support	<ul style="list-style-type: none"> • Report interrogation • Damage quantification • Document examination 	Ordinal
To establish the impact of dispute resolution on fraud detection and prevention	Independent Dispute resolution	<ul style="list-style-type: none"> • Resolved disputes • Asset recovery • Confessions 	Ordinal
	mitigation	<ul style="list-style-type: none"> • Effective reporting channels 	Ordinal

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter comprises the study area, research design, data collection techniques, sampling techniques and data analysis techniques to be employed in the study. It describes what and how the data to be used in this study will be collected.

3.2 Research Design

According to Kothari (2004), research design is the link that exists between the research question's empirical data through to the inferences made. This study applied a descriptive survey research design to establish the impact of forensic accounting practices on performance. The data were evaluated and examined to establish patterns of interrelationship between variables. Other researchers (Awino, 2007; Machuki & Aosa 2011; Murgor, 2014; Ongeti, 2014) applied similar research design which enabled them to describe similar incidences of phenomenon.

3.3 Target Population

Population parameters are essential in the description of the population size and other characteristics/parameters that are relevant to any study. According to Cooper and Schindler (2006) population refers to the group that the researchers are interested to study, which loosely translates into the unit of study that contains individual participants that measurements will be undertaken from. The target population for this study were 41 commercial banks that are currently active as at 31st December, 2019 (CBK, 2020). The study focused on personnel who were in charge of fraud mitigation in commercial banks given that each bank has a fraud investigation unit, thus data were solicited from fraud investigation units at the headquarters of each commercial bank.

3.4 Sample and Sampling Procedure

Sampling design provides a design that will define the rules and procedures for the population to be selected for subsequent data collection. According to Etikan, Musa, and Alkassim (2016) sampling design provides the inclusion criteria by which a small population is derived from the population from which data is collected. Kalton (2020) underlines the need for sampling since it is one of the ways that enhances statistical inference and offers knowledge on the characteristics of the population. On the other hand, the sampling plan details the appropriate sample size, procedures of sampling, sampling frame, and unit of sampling.

The study applied census technique since it was possible to access all the 41 commercial banks in Kenya. Application of census technique is justified when the sample size is highly variable, accessible and comparatively small (Saunders et al., 2003). The study used census technique in collecting data from all the commercial banks. Specific respondents were sampled using purposive sampling technique. That is, those in charge of fraud investigation unit in the respective banks.

3.5 Research Instrument

Structured questionnaires were applied in data collection since the study sought to solicit quantitative data. The questionnaires were used to obtain crucial data on how the various indicators of compensation practices manifest. The structure of the questionnaire was in form of a Likert scale of 1 to 5, consisting of four sections. Section A contained the organizational demographics together with those of the respondents, section B, C, and D capture the first, second, and third objectives of the study. Section E detailed structured questions on the outcome variable of the study.

The basis for selection of questionnaires was based on confidentiality of the respondents since filling of the questionnaires did not require respondents to indicate their names unless specified so. Besides anonymity of the respondents, questionnaires save on time

and they are easy to administer through drop and pick method. The respondents were the drawn from the top management teams in fraud investigation and mitigation units since this cluster of respondents was deemed to possess adequate organizational information on fraud occurrence.

3.6 Validity and Reliability of the instrument

A pre-test study was carried out with a view to establish validity and reliability of the questionnaire. Pre-test study encompassed administering the questionnaire to 10 respondents. In the opinion of Cooper and Schindler (2007), the pilot test needs to account for at least 10% of the sample; this means that the pilot test in this case met the recommended percentage. The purpose of pre-test testing was to determine the correctness and suitability of tools of data collection. The outcomes of the pre-test study were not be part of the last data analysis. Pre-testing was done randomly in 10 commercial banks in Kenya.

3.6.1 Reliability tests

Reliability is conducted to measure the stability of instruments over time and to ensure that the collected data can be dependable and is consistent. Pilot study assisted in measuring the accuracy of instruments. The pilot study helped to establish the reliability and constancy of the instruments. Reliability analysis was conducted using the Alpha coefficient for questionnaires (Cronbach's alpha, 1951).

Researchers have applied the Cronbach's alpha to establish the dependability of the data collection instrument, that is, the internal consistency of the instrumentation, such as questionnaires. The coefficients applied to calculate internal consistency range from 0 to 1, where they are applied to offer a description of the factors from scaled and dichotomous questions. Notably, the higher the alpha coefficients, the more reliable an instrument of data collection is (Sekaran, 2013). Scholars have provided various thresholds that are considered reliable. Nunnally (1978) stated that coefficients of 0.7 and above are considered acceptable.

3.6.2 Validity Tests

Validity refers to the extent to which the results acquired from data analysis are an actual depiction of the phenomena being examined (Mendenhall et al., 2017). It is related to how well the variables of the study are represented by data collected. The study applied both constructs and content validity to establish the credibility of the instrument. Content validity extracts a conclusion from test scores to a large area of items identical to those on the test.

The validity of a research's content is interrelated to the representation by the population of the sample. To ensure that the content is valid, the questionnaire will be handed out to specialists in the leadership and governance area to provide their opinions and suggestions that could contribute to improving it. Construct validity was enhanced by the analysis of empirical and theoretical literature to help one understand the relevant concepts through the construction of items based on previous studies.

3.7 Data collection procedure

Before the commencement of data collection, the researcher obtained all the necessary documents and an introduction letter from the University. Upon getting clearance, the researcher in person distributed the questionnaires to the Fraud examination and investigation units staff working at the headquarters of the commercial banks. Use of questionnaires eased and expedited the process of data collection since all the selected respondents were reached in time. During the distribution of the instruments, the purpose of the research was explained.

3.8 Data Processing and analysis

The study adopted descriptive and inferential statistics for data analysis. Descriptive statistics encompassed the calculation of percentages, mean, frequencies on the independent variables to summarize and classifying the data collected into meaningful form for easy interpretation. In inferential statistics, multivariate regression analysis and correlation analysis were carried out to establish the association between independent and dependent variables. The researcher

used multiple regression analysis to determine whether a group of variables together predicts a given dependent variable and in this way attempt to increase the accuracy of the estimate. Data were presented using tables for easier readability and visualization. Data Analysis was done using SPSS version 24. The study applied the following regression model:

$$Y = a + B_1X_1 + B_2X_2 + B_3X_3 + e$$

Where:

Y = Dependent variable fraud mitigation as measured by the composite Index

X_1 = Litigation Support

X_2 = Fraud investigation,

X_3 = Dispute Resolution

B_1, B_2, B_3 , = Regression coefficients, a = is a Constant, e =Error term.

The above model was used by Ogundana and Okere (2018) when they examined forensic accounting and fraud prevention and detection in Nigerian banking industry.

3.9 Diagnostic Tests

In statistics, particularly in linear regression, multicollinearity is also undertaken to establish whether the predictor variables are linearly correlated. This procedure uses several approaches, where Pearson correlation can be applied to see whether the predictor variables have a correlation coefficient of +1 or -1, which will violate the assumption of linear regression. This study applied variance inflation factor (VIFs). A cut-off of 0.8 has been suggested as the demarcation for severe multicollinearity as cited in Vatcheva, Lee, McCormick, and Rahbar (2016). It is instructive to note that negating the aspect of linearity among predictor variables leads to large and/or infinite standard errors which affect the preciseness of data to undertake estimations or hypothesis testing. In undertaking multicollinearity diagnostic, the problem of linearity among predictor variable always exists, but severity as indicated by correlation of >0.8 will affect the results. Oguntunji and Makram (2019) underscores the need to compare the

result of the diagnostic with a VIF of 10 and correlation of 0.8 to establish that the rule of multicollinearity is not violated.

In normality test, researchers sought to establish whether data sets were normally distributed in a bell curve. This signifies that data sets ought to coalesce around the mean and should not have stubborn outliers, which refers to the data sets that are far off the line of best fit (Mishra et al., 2019). Thus, through scatter plots and line of best fit, researchers could easily know whether the collected data sets meet the linear regression criteria. The study applied two methods to establish whether data is normally distributed, which is central to conducting linear regression, where the graphical approach painted a picture on the way data is distributed. Secondly, sometimes it is not feasible to establish normal distribution by simply looking at scatter plots. Thus, normality can be established by testing null hypothesis which states that data is normally distributed, where $p < 0.05$ rejects null hypothesis that data is normally distributed.

Durbin Watson's autocorrelation was applied to establish whether data is serially correlated. In other words, autocorrelation test is conducted to establish whether the predictor variables have any correlation among them, where if they have, then the assumption of linear regression will be judged as violated. Violation of autocorrelation assumption leads to idiosyncratic error term, thus blurring measuring of estimates (Gencay & Signori, 2015). The Durbin - Watson test was used to test for autocorrelation in this study to establish autocorrelation among the predictor variables.

The assumption of heteroscedasticity is based on the Classical Linear Regression Model, which assumes constant variance on the error term, suggesting that absence of constant error variance indicates heteroscedasticity (Cattaneo, Jansson, & Newey, 2018). Presence of heteroscedasticity in regression model leads to invalid standard errors even though the

parameter estimates will be unbiased. Breusch Pagan test was used to test whether there was constant error variance in the data. The null hypothesis for constant error variance (assumption of equal variance) was tested, where $p > .05$ failed to reject null hypothesis and concluded that data were homoscedastic. There was no heteroskedasticity in the model, suggesting that all the coefficients were equivalent to zero.

CHAPTER FOUR

DATA PRESENTATION AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter presents analysis and interpretation of data on the effect of forensic accounting practices on fraud mitigation among commercial banks in Kenya. The chapter is divided into the background of the study, the presentation of descriptive findings and finally presentation of results on inferential statistics. The presentation of findings laid focus on descriptive statistics and inferential statistics. The study sought to achieve research objectives on the effects of litigation support on fraud mitigation, the effect of fraud investigation on fraud mitigation, and the effect of alternative dispute resolution (ADR) on fraud mitigation among commercial banks in Kenya.

Respondents were presented with statements describing the various questions on the specific objectives. The study applied a structured questionnaire, which contained close-ended statements. The Statistical Package for Social Sciences (SPSS version 24.0) was used to run descriptive, which includes frequency, percentages, mean, and standard deviation. On the other hand, inferential statistics, such as multiple linear regression and correlation analysis were applied to test association between predictor variables and the response variable. The interpretation of the results focuses on organizational demographics, descriptive analysis of data under each objective of the study, diagnostic tests and regression analysis.

4.2 Response Rate

There are 43 active commercial banks in Kenya according to the statistics provided by Central Bank of Kenya (CBK, 2019). The sample size of this study was 43 respondents representing the 43 commercial Banks in Kenya. Using census technique, data were collected from 41 commercial banks in Kenya making a response rate of 95.3% as presented in table 2. Morris (2008) supports this argument that for a social study, responses bearing over 60% response rate

are sufficient for making adequate research conclusions. The 95.3% response rate achieved was adequate and would provide sufficient information for analysis and drawing of conclusions and generalizations of the study.

TABLE 2
Response Rate

Category	Frequency	Percentage
Response		.
Non-Response		
Total		100.0

4.3 Reliability analysis

Cronbach’s alpha was used to evaluate internal consistency, this helped to established internal consistency of certain items in a scale to measure construct validity. Gliem and Gliem (2012) recommend that Alpha value should be 0.7; the findings in the table below in table 4.2 indicate that the five scales were reliable because their reliability values exceeded a threshold of 0.7. This depicts that the study instrumentation was reliable.

TABLE 3
Reliability Analysis

Determinant	No of items	Cronbanch’s
	7	.74
	5	.76
	7	.83
	5	.95

4.4 Organizational Demographics

The organizational demographics used for the study focused on the years of operation in Kenya, ownership structure, scope of operation, position/title, and number of years worked for the organization and the level of education. The organizational age in years represented the tenure in which bank had operated. The organization age was determined by the number of years in

operation. Table 4 below contains computation of the demographic attributes of the respondents as self-reported in the questionnaires.

TABLE 4

	F	P
College level	8	19.5
Bachelor's level	21	51.2
Master's level	12	29.3
years		
years		
Years		
Other		
Dispute resolution	35	85.4
Litigation support	40	97.6
Fraud investigation	38	92.7
Up to 10 years	14	33.3
11-20 years	2	5.6
21-30 years	11	27.8
31-40 years	5	1
Above 40 years	9	22.2
Foreign owned	14	3
Banks with Government participation	6	13.6
Banks locally owned	24	54.5
National	30	73.2
Regional	7	17.1
International	4	9.8

4

The survey sought to establish the educational attributes of the respondents, where more than half (51.2%) of the respondents indicated that they were degree holders, whereas 29.3% and 19.5% of the respondents had graduate qualification and college or diploma qualification. The finding in this section shows that respondents had requisite education qualification and thus

able to understand the dynamics and mitigation of fraud in their organizations. In addition, the education qualification of the respondents affirms their ability to answer survey questions in a confidential way, which is critical to reduced bias and Hawthorne Effect when respondents' confidentiality is compromised as a result of awareness of being observed.

4

The survey was designed to establish the work experience of the respondents in the same financial institutions since this is a key predictor of their capacity to understand internal controls and procedures on financial fraud among other forms of fraud in commercial banks.

Work Experience Collected data revealed that more than half (61.0%) of the respondents had worked in the same financial institution for a period exceeding 10 years, while 24.4% of the respondents had worked for a period of 6-10 Years, whereas 12.2% and 2.4% of the respondents had worked for a period of 3-5 years and less than 2 years respectively. The result in this section indicates that respondents possessed the minimum experience to respond to the items of the survey questionnaire.

4

The survey sought to establish the type of forensic accounting practice applied by the financial institutions to mitigate against an array of fraud activities. The question posed to the respondents was a multiple response question, where the goal was to establish the most prevalent practice in their organizations. Analysis of the collected data indicated that majority (97.6%) of the commercial banks applied the practice of litigation support, followed by fraud investigation (92.7%) and dispute resolution (85.4%). This finding affirms that commercial banks in Kenya applied various practices of forensic accounting practices.

4

It is evident from table 4.3 above that majority (33.3%) of the commercial banks have been operating in Kenya for the last 10 years followed by 27.8%, which have operated for 21-30

years. On the other hand, 22.2% of the banks have operated for more than 40 years, while 11.1% and 5.6% have operated for 31-40 years and 11-20 years respectively. This finding suggests that most commercial banks in Kenya have experience on the operating environment and thus able to provide information on forensic accounting strategies.

4

It is evident from table 4.4 above that majority (54.4%) of the commercial banks in Kenya are locally owned, while 13.6% of the banks are partially and/or wholly owned by the Kenyan government, whereas 31.8% are foreign owned. This finding suggests that most of the commercial banks operating in Kenya have a good understanding of the legislations and expectations of the industry in terms of on forensic accounting practices because they are locally owned.

4

The survey was designed to establish the geographical scope of operation of the commercial banks as a means to establish whether they had comparative knowledge on forensic accounting practices. Analysis of the collected data revealed that majority (73.2%) of the commercial banks as reported by the respondents operated nationally, whereas 17.1% and 9.8% operated regionally and internationally respectively. This information appears to suggest that commercial banks considered in the study were competent in understanding the local context in terms of forensic accounting practices and how they apply to the context of Kenya.

4.5 Descriptive Statistics

This section presents analysis of data under the descriptive statistics, where trends and patterns of data will be visualized using tables. Descriptive statistics applied in this section include measures of central tendencies: percentage and mean, while the standard deviation shall be applied as a measure of dispersion. The goal of the study is to examine the effect of forensic accounting practices on fraud mitigation in commercial banks. The objectives of the study were

to determine: the effects of litigation support on fraud mitigation, the effect of fraud investigation on fraud mitigation, and the effect of alternative dispute resolution (ADR) on fraud mitigation among commercial banks in Kenya. The 5-point Likert scale was ‘Not at all (1)’ to ‘very great extent (5)’. The scores of not at all have been taken to represent a variable, which had a mean score of less than 2.5 on the 5-point Likert scale. The scores of ‘moderate extent’ have been taken to represent a mean score of 2.5 to 3.4 on the continuous 5-point Likert scale, whereas the score for great extent and very great extent have represent a mean score of 3.5 to 5.0 on the 5-point Likert scale. A standard deviation of great than 0.9 indicate significant differences the mean and the individual statement scores.

4.5.1 Litigation Support

The study sought to determine the effect of litigation support by commercial banks in Kenya on fraud mitigation. To establish this influence, respondents were presented with statements on a 5-point Likert scale, where 1 is “Not at all”, 2 is “To a little extent”, 3 is “To a moderate extent”, 4 is “To a great extent”, 5 is “To a very great extent”). Analysis of the collected data was analyzed in the table 5.

TABLE 5
Effect of Litigation Support

	Not at all	Little Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	Std dev.
We offer assistance of an Accounting Nature in matters involving existing or pending court cases.	0.0%	9.8%	12.2%	39.0%	39.0%	4	.9
We offer quantification of economic or financial damages in court	4.9%	2.4%	9.8%	17.1%	65.9%	4	1
We offer expert evidence in court	0.0%	12.2%	24.4%	19.5%	43.9%		1.09
We undertake document examination to determine forgeries and alterations	2.4%	19.5%	24.4%	12.2%	41.5%	3.7	1
We present facts for trial in fraud cases	2.4%	43.9%	22.0%	17.1%	14.6%		1.15
We interrogate other expert reports presented in courts	4.9%	19.5%	14.6%	26.8%	34.1%	3	1
The advices on the validity of claims for cases presented in court and settlement negotiations	14.6%	39.0%	14.6%	17.1%	14.6%	2	1.31
We offer timely documentation to support litigation processes	2.4%	4.9%	29.3%	26.8%	36.6%		1.04
We strive to meet the litigation supports needed in courts	2.4%	29.3%	19.5%	19.5%	29.3%	3.4	1
We have been successful in our litigation support	4.9%	4.9%	7.3%	12.2%	70.7%	4	1

Table 5 illustrates the effect of litigation support of fraud mitigation among commercial banks in Kenya. Analysis of collected data revealed that commercial banks offered assistance of an accounting nature in matters involving existing or pending court cases as supported by majority (39.0%) of the respondents who agreed to a great extent and very great extent (mean=4.1; SD=.96). Furthermore, the study established that commercial banks quantified economic or financial damages in court as indicated with the highest response of 65.9% who agreed to a very great extent (mean=4.4; SD=1.09). Analysis of data revealed that commercial banks offered expert evidence in court as evidence by majority response of 43.9% who agreed to a great extent with a mean of 4.0 and standard deviation of 1.09. The study established that commercial banks in Kenya undertake document examination to determine forgeries and alterations as supported by a majority response of 41.5% who agreed to a very great extent (mean=3.7; SD=1.27). The study established that commercial banks do not presented evidence for trial in fraud cases as evidence by a mean of 3.0 and standard deviation of 1.15082, where majority (43.9%) of the respondents indicated little extent.

Further to the above, the study sought to determine whether commercial banks interrogated reports presented in court in an expert manner, where majority (34.1%) of the respondents agreed to a very great extent (mean=3.7; SD=1.28). Analysis of data revealed that majority of the commercial banks advice on the validity of claims for cases presented in court and settlement negotiations to a little extent (mean=2.9; SD=1.31). This evidence reveals that most of the commercial banks in Kenya do not advice their customers or courts as a mechanism of validating cases presented in court for settlement purposes. On the other hand, the study established that commercial banks offer timely documentation to support litigation processes as evidenced by a majority (36.6%) response (mean=3.9; SD=1.04). The study found that commercial banks in Kenya strive to meet the needs of the litigation processes in the court of law as supported by majority (29.3% and 19.5%) of the respondents. Interestingly, another

majority (29.3%) set of respondents stated that the support for litigation process as needed in the courts of law was very little. However, the mean of 3.4390 and standard deviation of 1.27 affirms that commercial banks offer moderate support in the litigation process. Finally, the study established that commercial banks have been successful in the process of litigation support as supported by more than two thirds (70.7%) of the respondents (mean=4.4; SD=1.14).

4.5.2 Fraud Investigation

The study sought to determine the effect of fraud investigation on fraud mitigation in commercial banks. To establish this influence, respondents were presented with statements on a 5-point Likert scale, where 1 is “Not at all”, 2 is “To a little extent”, 3 is “To a moderate extent”, 4 is “To a great extent”, 5 is “To a very great extent”). Analysis of the collected data was analyzed in table 6.

TABLE 6
Effect of Fraud Investigation

	Not at all	Little Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	Std dev.
We investigate any red flags identified during routine audits	7.3%	17.1%	0.0%	17.1%	58.5%	4.0	1.4
The bank uses trend analysis and ration review of financial statements and probe suspected financial transactions	0.0%	41.5%	0.0%	12.2%	46.3%	3.6341	1.4
We perform digital forensics on electronic devices	0.0%	0.0%	4.9%	2.4%	92.7%	4.1	0.4
The bank undertakes fraud risk assessment and conducting employee anti-fraud education.	4.9%	0.0%	9.8%	22.0%	63.4%	4.1	1.02
We investigate alleged fraud or illegal activities	4.9%	14.6%	4.9%	14.6%	61.0%	4.1	1.4
We conduct proactive fraud audits on high-risk areas.	0.0%	19.5%	14.6%	12.2%	53.7%	4.0	1.22
We undertake data analysis on transactions to identify any abnormal trends.	22.0%	31.7%	7.3%	4.9%	34.1%		1.6
We have quality fraud investigation checks	2.4%	46.3%	14.6%	9.8%	26.8%	3.1	1.4
Our fraud investigation capability has been on the increase	0.0%	22.0%	12.2%	19.5%	46.3%	3.9	1.22
We are efficient in detecting unusual transactions	24.4%	26.8%	7.3%	2.4%	39.0%	3.0	1.70
We undertake routine fraud investigation capacity building for our staff	4.9%	53.7%	4.9%	4.9%	31.7%	3.0	1.4

Table 6 interrogates various statements on the effect of fraud mitigation on fraud mitigation. Analysis of the collected data reveals that commercial banks investigate any red flags identified during routine audits as supported by the highest response of 58.5% and a mean of 4.0 and standard deviation of 1.41. Furthermore, the study established that commercial banks in Kenya use trend analysis and ration review of financial statements and probe suspected financial transactions as supported by majority (46.3%) who agreed to a very great extent (mean=3.6; SD=1.43). However, 41.5% of the respondents indicated little extent, signifying that a significant number of banks do not use trend analysis. From the responses given, almost all (92.7%) banks undertake digital forensics on electronic devices (mean= 4.9; SD=.46). The study established that commercial banks undertake fraud risk assessment and conducting employee anti-fraud education as supported by close to two-thirds (63.4%) of the respondents and mean of 4.4 and standard deviation of 1.02. In addition, the study established that commercial banks in Kenya investigate alleged fraud or illegal activities as evidenced by 61.0% of the respondents who agreed to a great extent (mean=4.1220; SD=1.31).

The study sought to establish the whether commercial banks in Kenya conduct proactive fraud audits on high-risk areas, where more than half (53.7%) of the respondents agreed to a very great extent (mean=4.0; SD=1.22). On the other hand, the study revealed varied application of data analysis on transactions to identify any abnormal trends as evidenced by a mean of 2.98 and standard deviation of 1.64. Notably, analyzed data appeared to suggest that commercial banks do not have quality fraud investigation checks as supported by a majority response of 46.3%, where a mean of 3.12 and standard deviation of 1.32 suggests that the quality fraud investigation checks is moderate. The study established that fraud investigation capability has been on the increase among commercial banks as evidenced by majority (46.3%) of the respondents and a mean of 3.9 and standard deviation of 1.22. The study established that commercial banks in Kenya are efficient in detecting unusual

transactions to a moderate extent as demonstrated by a mean of 3.0 and standard deviation of 1.70; however, majority (39.0%) of the commercial banks are efficient. The study established that commercial banks undertake routine fraud investigation capacity building for their staff to a moderate extent as demonstrated by a mean of 3.0 and standard deviation of 1.44.

4.5.3 Dispute Resolution

The study sought to analyze the effect of litigation support on fraud mitigation among commercial banks in Kenya. To establish this influence, respondents were presented with statements on a 5-point Likert scale, where 1 is “Not at all”, 2 is “To a little extent”, 3 is “To a moderate extent”, 4 is “To a great extent”, 5 is “To a very great extent”). Analysis of the collected data was analyzed in table 7.

TABLE 7
Effect of Dispute Resolution

	Not at all	Little Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	Std dev.
We resolve disputes outside the courtroom and traditional litigation	7.3%	22.0%	24.4%	24.4%	22.0%	3.3	1.25
We use ADR to maintain our reputation	14.6%	41.5%	19.5%	2.4%	22.0%	2	1.37
We encourage self-confession by fraudsters who may disclose other facts that may be useful to strengthen controls and curb subsequent frauds.	14.6%	14.6%	7.3%	4.9%	58.5%	3	1.60
Our capacity to resolve disputes involving fraud is effective	2.4%	22.0%	12.2%	7.3%	56.1%	3.9	1.34
We recognize that resolution of disputes outside the courts is effective	4.9%	39.0%	7.3%	9.8%	39.0%	3	1.46

	Not at all	Little Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	Std dev.
The bank is committed to enabling our clients meet their end of the dispute is on the rise	2.4%	34.1%	17.1%	9.8%	36.6%	3.4	1.36
We strive to educate our clients on dispute resolution	14.6%	22.0%	17.1%	12.2%	34.1%	3	1.50
Dispute resolution creates high chances to recover stolen assets	24.4%	24.4%	14.6%	14.6%	22.0%	2	1
Our capacity to settle cases out of courts has increased in the recent past	2.4%	34.1%	17.1%	14.6%	31.7%	3	1.32

Table 7 illustrates the effect of dispute resolution on fraud mitigation among Kenya's commercial banks. It was evident from the analyzed data that commercial banks resolve disputes outside the courtroom and traditional litigation as indicated by a mean of 3.32 and standard deviation of 1.25, where majority (24.4%) of the respondents moderately agree and agreed to a great extent. The study sought to establish whether commercial banks applied ADR as a mechanism of maintaining their reputation, where majority (41.5%) stated that they use ADR to a little extent. A mean of 2.7561 and standard deviation of 1.37 affirms that use of ADR for reputation purposes was a little extent. The study established that commercial banks in Kenya encourage self-confession by fraudsters who may disclose other facts that may be useful to strengthen controls and curb subsequent frauds as supported by majority (58.5%) of the respondents who agreed to a very great extent (mean=3.8; SD=1.60). The study established that the capacity of commercial banks to resolve disputes involving fraud was effective as evidenced by a mean of 3.93 and standard deviation of 1.34, where majority (56.1%) of the respondents agreed to a very great extent. The study established that commercial banks in

Kenya recognize that resolution of disputes outside the courts is effective to a moderate extent as evidenced by a mean of 3.39 and standard deviation of 1.46.

Notably, majority (36.6%) of the respondents indicated to a very great extent that commercial banks are committed to enabling their clients meet their end of the dispute is on the rise with a mean of 3.44 and standard deviation of 1.36. This illustrates a moderate commitment to enabling their clients meet their end of the dispute is on the rise. The study established that commercial banks strive to educate their clients on dispute resolution to a moderate extent as supported by a mean of 3.29 and a standard deviation of 1.50. Majority (24.4%) of the respondents stated that dispute resolution creates little chances to recover stolen assets, where this is supported by a mean of 2.85 and standard deviation of 1.51. The study established that the capacity to settle cases out of courts has increased in the recent past in a moderate manner as evidenced by a mean of 3.4 and standard deviation of 1.32; however, majority (34.1%) stated little extent.

4.5.4 Fraud Mitigation

The study sought to establish the extent to which fraud mitigation has achieved or not achieved among commercial banks. To establish this influence, respondents were presented with statements on a 5-point Likert scale, where 1 is “Not at all”, 2 is “To a little extent”, 3 is “To a moderate extent”, 4 is “To a great extent”, 5 is “To a very great extent”). Analysis of the collected data was analyzed in table 8.

TABLE 8
Fraud Mitigation

	Not at all	Little Extent	Moderat e Extent	Great Extent	Very Great Extent		
Banks can adopt litigation support services as a way of prosecuting fraud committed in the banks by either employees or individuals from outside	17.1%	26.8%	24.4%	14.6%	17.1%	2	1
						.	.
							3
Commercial banks can leverage proactive fraud audits, such as lifestyle audits of their workforce to unearth fraud in the organization	17.1%	29.3%	12.2%	14.6%	26.8%	3.0	1
							.
Banks may adopt ADR approaches to discover given aspects of fraud which could otherwise remain unknown.	9.8%	19.5%	19.5%	17.1%	34.1%	3	1
						.	.
						3.3	1.41
Use of proactive measures to detect unusual activities will enable banks to detect and militate fraud in a timely manner.	7.3%	36.6%	7.3%	19.5%	29.3%		
						3	1.30
Fraud assessment tools will go a long way in enabling banks to mitigate fraud occurrence	9.8%	19.5%	14.6%	34.1%	22.0%	.	
Lifestyle audits and background checks will enable banks to detect various forms of fraud from their employees	4.9%	14.6%	17.1%	14.6%	48.8%	3	1
						.	.
							3
Digital investigation approaches will enable banks to detect fraudulent activities	4.9%	22.0%	17.1%	14.6%	41.5%	3	1.35
						.	
Background checks for new and existing employees prevents fraud	12.2%	9.8%	19.5%	34.1%	24.4%	3	1
						.	.
							3
Employee training on anti-fraud policy prevents fraud	29.3%	4.9%	4.9%	26.8%	34.1%	3.3	1
							.
Proactive fraud Audit prevents fraud	7.3%	24.4%	4.9%	17.1%	46.3%	3.7	1.45

Effective reporting channels prevents fraud	12.2%	29.3%	4.9%	14.6%	39.0%	3	1
Effective management oversight prevents fraud	9.8%	7.3%	4.9%	22.0%	56.1%	4	1
Tone at the top prevents fraud	0.0%	9.8%	0.0%	22.0%	68.3%	4	1

Table 8 illustrates findings on the outcome variable, where various items on the questionnaire were tested on a 5-point Likert scale. Analysis of collected data indicated that commercial banks in Kenya can moderately adopt litigation support services as a way of prosecuting fraud committed in the banks by either employees or individuals from outside as supported by a mean of 2.9 and standard deviation of 1.35. The study found that commercial banks can leverage proactive fraud audits, such as lifestyle audits of their workforce to unearth fraud in the organization to a moderate extent as indicated by a mean of 3.0 and standard deviation of 1.49919. Furthermore, the study established that commercial banks may adopt ADR approaches to discover given aspects of fraud which could otherwise remain unknown as supported by majority (34.1%) of the respondents who agreed to a very great extent (mean=3.5; SD=1.40). The study established that use of proactive measures to detect unusual activities will enable banks to detect and militate fraud in a timely manner to a moderate extent as evidenced by a mean of 3.3 and standard deviation of 1.41. Majority (34.1%) of the respondents agreed to a great extent that fraud assessment tools will go a long way in enabling banks to mitigate fraud occurrence, where a mean of 3.4 and standard deviation of 1.30 indicates a moderate effect.

Furthermore, the study established that lifestyle audits and background checks will enable banks to detect various forms of fraud from their employees to great extent as supported by a mean of 3.9 and standard deviation of 1.31, where majority (48.8%) agreed to a very great extent. The findings of the analyzed data revealed that digital investigation approaches will enable banks to detect fraudulent activities as supported by majority (41.5%) of the respondents who agreed to a very great extent (mean=3.7; SD=1.35). Majority (34.1%) of the respondents

agreed to a great extent that background checks for new and existing employees prevents fraud, where a mean of 3.5 and standard deviation of 1.31 affirms the centrality of background checks. The findings of the study reveal the need for employee training on anti-fraud policy to prevent fraud as supported by 34.1% of the respondents (mean=3.3; SD=1.68). The criticality of proactive fraud audit to prevent fraud was underscored by respondents (3.7; SD=1.45), while effective reporting channels as a mechanism of preventing fraud was mooted by majority (39.0%) of the respondents (mean=3.4; SD=1.55). Furthermore, the study established that effective management oversight and tone at the top to prevent fraud were other suggestions underlined by respondents as evidenced by majority responses of 56.1% (mean=4.1; SD=1.35) and 68.3% (mean=4.5; SD=.93) respectively.

4.6 Diagnostic tests

4.6.1 Tests for Normality

Parametric tests, such as linear regression, require normality to be checked because the validity of this statistical method depends on it (Bilon, 2021). Shapiro-Wilk test was used to check for normality of the data. If the p-value of the Shapiro-Wilk Test is greater than 0.05, the data is normal. If it is below 0.05, the data significantly deviate from a normal distribution. Table 3.6 presents the findings under this subsection.

TABLE 9
Test of Normality

Variable	Statistic	Sig.
	.962	.587
	.926	.130
	.946	.316
	.965	.837

Based on the above table on Shapiro-Wilk Test of normality, data on litigation support, fraud investigation, dispute resolution, and fraud mitigation were normally distributed. All

these variables exhibited p-value greater than 0.05, suggesting that the data did not deviate significantly from a normal distribution and thus, a sharp pointer to the normality of the data.

4.6.2 Multicollinearity Tests

Multicollinearity test establishes if the independent variables are correlated (Friday & Emenonye, 2012). Multicollinearity affect regression model and its lack, thereof, is a key assumption for regression. Multicollinearity increases standard errors of the regression coefficient decreasing the reliability of the results. The study used formal detection-tolerance or the variance inflation factor (VIF) for multicollinearity to establish if there was a correlation between the independent variables. For the tolerance part, value less than 0.1 infer multicollinearity whereas values of variance inflation factor were more than 10 are often regarded as indicating multicollinearity.

TABLE 10

Independent Variables	Tolerance	VIF
	.708	1.412
	.660	1.515
	.853	1.172

Based on the above table on multicollinearity, the tolerance values were more than 0.1 and those of variance inflation factor were less than 10. This indicates lack of multicollinearity between the variables and thus, the independent variables of the study were not correlated.

4.6.3 Heteroscedasticity Tests

Heteroscedasticity refers to the state of systematic changes in the spread of residuals or the error term of the model (Tovohery, Totohasina, & Rajaonasy, 2020). Residual variance in a regression model means that the scattering of the model is more dependent on one specific predictor variable. In this regard, the model fails to generate actual results. In the study, Breusch-Pagan Test was used to establish presence of Heteroscedasticity in the dataset.

Table 11: Heteroscedasticity test

Variables: fitted values of in Fraud Mitigation

chi2(1) = 1.75 Prob > chi2 = 0.1862

Ho: Constant variance

Based on table 11, the probability value of chi-squared was found to be greater than the alpha level of significance, that is; $0.1862 > 0.05$, we fail to reject the null hypothesis of homoscedasticity. We thus concluded that the model was homoscedastic. Hence, there was absence of Heteroscedasticity in the model.

4.6.4 Autocorrelation

Violation of autocorrelation assumption leads to idiosyncratic error term, thus blurring measuring of estimates (Gencay & Signori, 2015). The Durbin - Watson test was used to test for autocorrelation in this study to establish autocorrelation among the predictor variables.

TABLE 12**Durbin-Watson test for Autocorrelation**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.951 ^a	.905	.897	.33123	1.639

Durbin-Watson test was conducted to establish autocorrelation among the predictor variables, where the Durbin-Watson statistic was 1.639, meaning that data was not auto correlated (serial correlation).

4.7 Correlation Analysis

The study applied Pearson correlation to establish the association between and among the predictor and response variables. In addition, the correlation analysis indicated the strength and the direction of the effect of forensic accounting practices and fraud mitigation among commercial banks in Kenya. Table 13 details the results of the correlation analysis.

TABLE 13
Pearson Correlation Analysis

	Pearson Correlation	1		
L	Sig. (2-tailed)			
i	N	41		
	Pearson Correlation	.587**	1	
F	Sig. (2-tailed)	.000		
r	N	41	41	
	Pearson Correlation	.556**	.789**	1
D	Sig. (2-tailed)	.000	.000	
i	N	41	41	41
	Pearson Correlation	.809**	.858**	.819**
F	Sig. (2-tailed)	.000	.000	.000
r	N	41	41	41

From the result in table 13, it is evident that there was a positive and significant correlation between litigation support and fraud mitigation, $r = (41), .809, p < .05$. This signifies positive association between litigation support and fraud mitigation. This result suggests that as litigation support increases so does fraud mitigation. It is, therefore, possible to conclude that usage of litigation support influence fraud mitigation. Furthermore, there was a positive and significant correlation between fraud investigation and fraud mitigation, $r = (41), .858, p < .05$. Moreover, there was a significant and positive correlation between Dispute resolution and fraud mitigation $r = (41), .819, p < .05$. Results in this section reveal that all the predictor variables are significantly correlated with the dependent variable and the association is strong based on the correlation coefficients.

4.8 Regression Analysis

The researcher conducted a multiple regression analysis to determine the relative influence of each of the predictor variables (dispute resolution, litigation support, and fraud investigation) in relation to fraud mitigation of Commercial Banks in Kenya. The researcher used the statistical package SPSS to enter and compute the measurements of the multiple regressions for the study. Findings are presented in table 14.

TABLE 14

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.951 ^a	.905	.897	.33123

A. Predictors: (Constant), Dispute Resolution, Litigation Support, Fraud Investigation

B. Dependent Variable: Fraud Mitigation

Under the model summary, coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (fraud mitigation among commercial banks) that is explained by all the 3 predictor variables (dispute resolution, litigation support, and fraud investigation). The three independent variables that were studied, explain 90.5% of variance in fraud mitigation in commercial banks as represented by the R². This therefore means that other factors not studied in this research contribute 9.5% of variance in the outcome variable.

TABLE 15

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.674	3	12.891	117.497	.000 ^b
	Residual	4.059	37	.110		
	Total	42.733	40			

Under the analysis of variance (ANOVA) in table 15, the F critical at 5% level of significance was 2.859 for degree of freedom of 3 and 37. Since F calculated was greater than the F critical (value = 117.497), this show that the overall model was significant in predicting the relationship between forensic accounting practices and fraud mitigation in commercial banks. The P value was 0.000 which was less than 0.05, thus showing a correlation between the predictor's variables (dispute resolution, litigation support, and fraud investigation) and outcome variable (fraud mitigation in commercial banks). If the significance value of F was

larger than 0.05 then the independent variables would not explain the variation in the dependent variable.

TABLE 16
Multiple Linear Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1.169	.283		-4.125	.000
L	.622	.093	.427	6.701	.000
F	.405	.089	.393	4.555	.000
D	.264	.081	.272	3.240	.003

A. Predictors: (Constant), Dispute Resolution, Litigation Support, Fraud Investigation

B. Dependent Variable: Fraud Mitigation

From the regression findings, the substitution of the multiple linear equation become:

$$Y = -1.169 + 0.622X_1 + 0.405X_2 + 0.264X_3$$

Where Y is the outcome variable (Fraud mitigation in commercial banks), X1 is litigation support, X2 is fraud investigation, and X3 is dispute resolution. According to the equation, taking all factors; (dispute resolution, litigation support, and fraud investigation) constant at zero, fraud mitigation in commercial banks will decrease by 1.169. The data findings also showed that a unit increase in litigation support variable would lead to a 0.622 (62.2%) increase in fraud mitigation in Commercial Banks. A unit increase in fraud investigation would lead to a 0.405 (40.5%) increase in fraud mitigation, while a unit increase in dispute resolution would lead to a 0.264 (26.4%) increase in fraud mitigation in commercial banks. This means that the order of significance on effects of forensic accounting practices was litigation support, fraud investigation and dispute resolution respectively.

The first null hypothesis (H01) of the study was stated as follows:

H₀: Litigation support has no significant effect on fraud mitigation among commercial banks in Kenya.

This null hypothesis was tested using multiple linear regression analysis where the basis for rejecting the specified premise was the probability value was less than 0.05 ($p < .05$), hence rejection of the null hypothesis and concluding that litigation support has a significant effect on fraud mitigation among commercial banks. This finding is relatable to the existing body of literature on the interplay between litigation support and fraud prevention, where some studies agree or disagree on the effect of litigation support on fraud prevention. For instance, Bassey and Ahonkhai (2017) disagrees with the result of this study, while Gbegi and Habila (2017)'s findings agree with the results of the current study.

The second null hypothesis (H02) of the study was stated as follows:

H₀: Fraud investigation has no significant effect on fraud mitigation among commercial banks in Kenya.

This null hypothesis was tested using multiple linear regression analysis where the basis for rejecting the specified premise was the probability value was less than 0.05 ($p < .05$), hence the rejection of the null hypothesis and concluding that fraud investigation has a significant effect on fraud mitigation among commercial banks. This finding is relatable to the existing body of literature on the interplay between fraud investigation and fraud prevention, where some studies agree or disagree on the effect of fraud investigation on fraud prevention. For example, Enofe, Omagbon, and Ehigiator (2015) and Kabue and Aduda (2017) agrees with the findings of this study.

The third null hypothesis (H03) of the study was stated as follows:

H₀: Dispute resolution has no significant effect on fraud mitigation among commercial banks in Kenya.

This null hypothesis was tested using multiple linear regression analysis where the basis for rejecting the specified premise was the probability value was less than 0.05 ($p < .05$), hence

the rejection of the null hypothesis and concluding that dispute resolution has a significant effect on fraud mitigation among commercial banks. This finding is relatable to the existing body of literature on the interplay between dispute resolution and fraud prevention, where some studies agree or disagree on the effect of fraud investigation on fraud prevention. For example, the findings of this study agree with Eze (2019) and Opiyo (2017).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study examined the effect of forensic accounting practices on fraud mitigation among commercial banks in Kenya. This section details summary of the findings in light of the variables adopted. In addition, the section captures discussion of findings and conclusions that are derived coupled with policy recommendations and suggestion for further research.

5.2 Summary of Findings

5.2.1 Effect of Litigation Support

Analysis of collected data illustrates that majority of the respondents agreed that their commercial banks provide assistance of an accounting nature in matters involving existing or pending court cases. Similarly, the study found commercial banks offer quantification of economic or financial damages for matters in court as evidence by majority of the respondents who indicated great extent. Moreover, it was revealed that commercial banks offer expert evidence and testimony in court. The study established that commercial banks undertake document examination to determine forgeries and alterations. It was clear from the analysis of the collected data commercial banks advise clients on effective ways of presenting facts for trial in fraud cases. The study's regression results showed a coefficient of 0.622 for litigation support with a p value of 0.000, which signifies that litigation support has a positive and significant effect on fraud mitigation in commercial banks.

5.2.2 Effect of Fraud Investigation

The study established that commercial banks investigate any red flags identified during routine audits in addition to moderate use of trend analysis and ration review of financial statements and probe suspected financial transactions. Notably, the study established that commercial banks perform digital forensics on electronic devices in addition to undertaking fraud risk

assessment and conducting employee anti-fraud education. Moreover, it was revealed that commercial banks investigate alleged fraud or illegal activities coupled with conducting proactive fraud audits on high-risk areas. The study's regression results showed a coefficient of 0.405 for fraud investigations with a p value of 0.000, which signifies that fraud investigations as a practice of forensic accounting has a positive and significant effect on fraud mitigation in commercial banks.

5.2.3 Effect of Dispute Resolution

The study established that commercial banks moderately resolve disputes outside the courtroom and traditional litigation in addition to the use of ADR to maintain their reputation. Furthermore, the study revealed that commercial banks encourage self-confession by fraudsters who may disclose other facts that may be useful to strengthen controls and curb subsequent frauds, where the capacity of commercial banks to resolve disputes involving fraud was effective. The results of analyzed data revealed that commercial banks are committed to enabling their clients meet their end of the dispute in addition to educating their clients on dispute resolution. The study's regression results showed a coefficient of 0.264 for dispute resolution with a p value of 0.000, which signifies that dispute resolution as a practice of forensic accounting has a positive and significant effect on fraud mitigation in commercial banks.

5.3 Study Conclusion

From the study findings under the first objective of the study, the study concludes that there exist a positive and significant association between litigation support and fraud mitigation in commercial banks ($p < .05$). From the study findings under the second objective of the study, the study concludes that there exist a significant and positive relationship between fraud investigation and fraud mitigation in commercial banks ($p < .05$). Based on the study findings under the third objective of the study, the study concludes that there exist a significant and

positive relationship between dispute resolution and fraud mitigation in commercial banks ($p < .05$).

5.5 Recommendations

5.5.1 Policy Recommendations

The following is a list of policy recommendations that the study established upon critical evaluation of the study findings:

The study found that litigation support is critical in ameliorating existing challenges to fraud detection and prevention. This study recommends the need for proactive measures that identify red flags, such as analysis of unusual activities and the need for capacity building through regular training.

The study found that fraud investigation is central to detecting and preventing corporate fraud. Towards this end, the study recommends that commercial banks should go beyond investigating fraud to include process expedition in terms of fact presentation in litigation processes.

The study found that dispute resolution is key to circumventing fraud mitigation challenges. As a result, this study underscores the need to adopt alternative dispute resolution mechanisms outside courts since this encourages recovery of the lost funds.

5.5.2 Recommendations for Further Studies

The study focused on three variables that affect forensic accounting practices on fraud mitigation, that is, litigation support, fraud investigation and dispute resolution. Based on the variables used, the study recommends for further research involving other variables not captured in the current study to ascertain their influence on mitigation of fraud. Furthermore, the study was conducted among commercial banks, signifying the need to undertake a study in other organizations that mitigate fraud to ascertain the trends and patterns of the findings.

5.6 Limitations of the Study

The researcher also faced documentation challenges in terms of putting together the available information since there was paucity of information concerning the relationship between forensic accounting practices and mitigation of fraud in commercial banks. The study also faced the challenge of unresponsive of research participants, as some respondents were not willing to give information or provided inconsistent information because of confidentiality concerns. The researcher therefore had to engage the top executives of the banks as an approach to understanding the protocol of collecting information, which was valuable in informing the basis of this research. Use of structured questionnaires deterred collection of a wide range of data, while the research design did not support use of panel and/or longitudinal data to establish co-integration of the variables overtime.

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APPENDICES

Appendix I: Questionnaire

SECTION A: GENERAL INFORMATION

COMPANY INFORMATION

1. What is your highest level of formal education?

College level

Bachelor's level

Master's level

2. How many years have you served?

Less than 2 years

3 to 5 years

6-10 years

Over 11 years

3. What are the forensic accounting services used by your bank? (select all that apply)

Dispute resolution

L

F

4. How many years has your bank operated in Kenya? (Tick one as appropriate)

~~U~~ p to 10 years

~~H~~ -20 years

~~2~~ 1-30 years

3

1 A

5. What is the ownership structure of the firm? (Tick one as appropriate)

~~4~~ Local

~~0~~ Local and Foreign

e ~~S~~ Foreign only

6. Scope of operation (Tick one as appropriate)

~~4~~ ~~p~~ National

~~0~~ ~~P~~ Regional

r ~~0~~ International

y t

e i

a o

r n

SECTION B: LITIGATION SUPPORT

To what extent do you agree with the following statements as ways that litigation support services mitigate fraud?

Use 1- Not at all, 2-Little Extent, 3- Moderate Extent, 4- Great Extent, 5- Very Great Extent

Activity	1	2	3	4	5
7. We offer assistance of an Accounting Nature in matters involving existing or pending court cases.					
8. We offer quantification of economic or financial damages in court.					
9. We offer expert evidence in court					
10. We undertake document examination to determine forgeries and alterations					
11. We present facts for trial in fraud cases					
12. We interrogate other expert reports presented in courts					
13. The advices on the validity of claims for cases presented in court and settlement negotiations					
14. We offer timely documentation to support litigation processes					
15. We strive to meet the litigation supports needed in courts					
16. We have been successful in our litigation support					

SECTION C: FRAUD INVESTIGATION

To what extent do you agree with the following statements regarding how Fraud Investigation mitigates fraud (Use 1- Not at all, 2-Little Extent, 3- Moderate Extent, 4- Great Extent, 5- Very Great Extent)

Activity	1	2	3	4	5
17. We investigate any red flags identified during routine audits					
18. The bank uses trend analysis and ration review of financial statements and probe suspected financial transactions					
19. We perform digital forensics on electronic devices					
20. The bank undertakes fraud risk assessment and conducting employee anti-fraud education.					
21. We investigate alleged fraud or illegal activities					
22. We conduct proactive fraud audits on high-risk areas.					
23. We undertake data analysis on transactions to identify any abnormal trends.					

Activity	1	2	3	4	5
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- 24. We have quality fraud investigation checks
- 25. Our fraud investigation capability has been on the increase
- 26. We are efficient in detecting unusual transactions
- 27. We undertake routine fraud investigation capacity building for our staff

SECTION D: DISPUTE RESOLUTION

To what extent do you agree with the following statements on Dispute resolution (DR) and how it mitigate against fraud? (Use 1- Not at all, 2-Little Extent, 3- Moderate Extent, 4- Great Extent, 5- Very Great Extent)

Activity	1	2	3	4	5
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- 28. We resolve disputes outside the courtroom and traditional litigation
- 29. We use ADR to maintain our reputation
- 30. We encourage self-confession by fraudsters who may disclose other facts that may be useful to strengthen controls and curb subsequent frauds.
- 31. Our capacity to resolve disputes involving fraud is effective
- 32. We recognize that resolution of disputes outside the courts is effective
- 33. The bank is committed to enabling our clients meet their end of the dispute is on the rise
- 34. We strive to educate our clients on dispute resolution
- 35. Dispute resolution creates high chances to recover stolen assets
- 36. Our capacity to settle cases out of courts has increased in the recent past

SECTION E: FRAUD MITIGATION

To what extent do you agree with the following statements regarding forensic accounting practices as services useful for fraud mitigation among commercial banks (Use: 1- Not at all, 2- Little Extent, 3- Moderate Extent, 4- Great Extent, 5- Very Great Extent).

Activity	1	2	3	4	5
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- 37. Banks can adopt litigation support services as a way of prosecuting fraud committed in the banks by either employees or individuals from outside

38. Commercial banks can leverage proactive fraud audits, such as lifestyle audits of their workforce to unearth fraud in the organization
39. Banks may adopt ADR approaches to discover given aspects of fraud which could otherwise remain unknown.
40. Use of proactive measures to detect unusual activities will enable banks to detect and militate fraud in a timely manner.
41. Fraud assessment tools will go a long way in enabling banks to mitigate fraud occurrence
42. Lifestyle audits and background checks will enable banks to detect various forms of fraud from their employees
43. Digital investigation approaches will enable banks to detect fraudulent activities
44. Background checks for new and existing employees prevents fraud
45. Employee training on anti-fraud policy prevents fraud
46. Proactive fraud Audit prevents fraud
47. Effective reporting channels prevents fraud
48. Effective management oversight prevents fraud
49. Tone at the top prevents fraud

End

Thank you

Appendix II: Commercial banks in Kenya

1. Bank of Africa
3. Bank of Baroda
5. Bank of India
7. Barclays Bank
9. Brighton Kalekye Bank
11. CFC Stanbic Bank
13. Chase Bank (Kenya
15. Citibank
17. Commercial Bank of Africa
19. Consolidated Bank of Kenya
21. Cooperative Bank of Kenya
23. Credit Bank
25. Development Bank of Kenya
27. Diamond Trust Bank
29. Dubai Bank Kenya
31. Ecobank
33. Equatorial commercial bank
35. Equity Bank
36. Family Bank
37. Fidelity Commercial Bank Limited
38. Fina Bank
39. First Community Bank
40. Giro Commercial Bank
41. Guardian Bank
42. Gulf African Bank
43. Habib Bank
2. Habib Bank AG Zurich
4. I&M Bank
6. Imperial Bank
8. Jamii Bora Bank
10. Kenya Commercial Bank
12. K-Rep Bank
14. Middle East Bank of Kenya
16. National Bank of Kenya
18. NIC Bank
20. Oriental Commercial Bank
22. Paramount Universal Bank
24. Prime Bank (Kenya)
26. Standard Chartered Bank
28. Trans National Bank of Kenya
30. United Bank For Africa
32. Victoria Commercial Bank
34. ABC Bank (Kenya)