INFLUENCE OF INTERNAL AUDIT CONTROLS ON FRAUD DETECTION AMONG COMMERCIAL BANKS: THE CASE OF SELECTED BANKS IN KENYA

\mathbf{BY}

BEATRICE KUBASU

A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI

DECLARATION

This research project report is my original work and has not been presented for the award of any
degree in any other university.
Sign Date
Beatrice Kubasu
L50/60510/2010
This research project report has been submitted for examination with my approval as the
University Supervisor.
Sign Date
Prof. David Macharia EBS
School of Continuing and Distance Education
University of Nairobi

DEDICATION

This work is dedicated to my daughter Kimberly, my mother Everlyn and my brother Dennis Wabwire.

ACKNOWLEDGEMENT

This study could not have been successful without the assistance of my supervisor Prof David Macharia who tirelessly gave direction and encouragement hence enabling me to finish my work in time. I would also like to acknowledge Dr. Naomi Mwangi for her contribution in the completion of this work. My sincere gratitude goes to the University of Nairobi and The Department of Extra Mural Studies for the opportunity that they gave to me to carry out my study and final project research. Not to fail to mention my fellow students at the School of Continuing and Distance Education for their support both morally and physically. Finally I would like to acknowledge my colleagues at Barclays Bank of Kenya in the DNA team (Fred Juma, Ednah Chawiyah, Carol Bii and Anne Mburu) for their encouragement and motivation.

To you all, this has been made possible because you gave selflessly.

TABLE OF CONTENT

	Page
DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
LIST OF TABLES	viii
LIST OF FIGURES	ix
ABBREVIATIONS AND ACRONYMS	X
ABSTRACT	xi
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.2 Statement of the Problem	7
1.3 Purpose of the Study	8
1.4 Objectives of the Study	8
1.5 Research Questions	8
1.6 Significance of the Study	9
1.7 Delimitations of the Study	9
1.8 Limitations of the Study	10
1.9 Assumptions of the Study	10
1.10 Definition of Significant Terms	10
1.11 Organization of the study	11
CHAPTER TWO: LITERATURE REVIEW	12
2.1 Introduction	12
2.2 Fraud detection among commercial banks in Kenya	12
2.3 Proactive Fraud Audit and Fraud Detection among commercial banks	13
2.4 Compliance with Policies and Fraud Detection among commercial banks	15
2.5 Risk Management and Fraud Detection among commercial banks	16
2.6 Controls Over Efficiency of Operations and Fraud Detection among commercial	ial banks 19
2.7 Management Reporting and Fraud Detection among commercial banks	21
2.8 Theoretical Review	22
2.9 Conceptual framework	25

2.10 Summary and Research Gap	26
CHAPTER THREE27RESEARCH METHODOLOGY	27
3.1 Introduction	27
3.2 Research Design	27
3.3 Target Population	27
3.4 Sample Design	28
3.5 Research Instrument	28
3.5.1 Data Collection Procedure	29
3.5.2 Validity of the Instrument	29
3.5.3 Reliability of the Instrument	29
3.6 Methods of Data Analysis	30
3.7 Ethical Issues	30
3.8 Operationalization of Variables	30
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, INTERPRETA	TION AND
DISCUSSION	33
4.1 Introduction	33
4.2 Questionnaire Return Rate	33
4.3 Demographic Characteristics of the respondents	33
4.4 Proactive Fraud Audit	35
4.5 Compliance with Policies	37
4.6 Risk Management	39
4.7 Controls over Efficiency of Operation	41
4.8 Management Reporting	43
4.9 Inferential Analysis	45
4.9.1 Multiple Regression Analysis	45
CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND	
RECOMMENDATIONS	47
5.1 Introduction	47
5.2 Summary of findings	47
5.2.1 Proactive fraud audit	47
5.2.2 Compliance with policies	47

5.2.3 Risk Management	47
5.2.4 Controls over efficiency of operation	48
5.2.5 Management Reporting	48
5.3 Conclusion of the Study	48
5.4 Recommendations	49
5.5 Suggestions for Further study	49
REFERENCES	50
APPENDICES	50
Appendix 1: Introduction Letter	56
Appendix II: Questionnaire on the Influence of Internal Audit Contr	rols on fraud detection among
Commercial banks: The case of selected banks in Kenya	57
Appendix III: LIST OF COMMERCIAL BANKS IN KENYA	61

LIST OF TABLES

Page
Table 3.1: Sample Size
Table.3.2: Operationalization of variables
Table 4.1: Response Rate
Table 4.2: Gender of the respondents
Table 4.3: Age distribution of Respondent
Table 4.4: Highest level of Education of the respondents
Table 4.5: Influence of Proactive Fraud Audit on Fraud detection in commercial banks 35
Table 4.6: Influence of factors of proactive fraud audit on fraud detection in commercial
banks
Table 4.7: Influence of compliance with policies on fraud detection in commercial banks. 37
Table 4.8: Influence of the factors of compliance with policies on fraud detection in
commercial banks
Table 4.9: Influence of risk management on fraud detection in commercial banks
Table 4.10: Influence of the factors of risk management on fraud detection in commercial
banks
Table 4.11: Influence of controls over efficiency of operations on fraud detection in
commercial banks41
Table 4.12: Influence of the factors of controls over efficiency of operations on fraud
detection in commercial banks. 42
Table 4.13: Influence of management reporting on fraud detection in commercial bank 43
Table 4.14: Influence of the factors of management reporting on fraud detection in
commercial bank
Table 4.15: Coefficients of the multiple regression analysis

LIST OF FIGURES

	Page
Figure 1: Conceptual Framework	25

ABBREVIATIONS AND ACRONYMS

ACFE: Association of Certified Fraud Examiners'

BFID: Banking Fraud Investigations Department

CAE: Certified Association Executive

CBK: Central Bank of Kenya

CIC: Credit Information Sharing

DNA: Development Needs Assessment

IIA: Institute of Internal Auditors

IPPF: International Professional Practices Framework

KBA: Kenya Bankers Association

KPMG: Is a global network of professional firms providing audit, advisory and tax

services (Klynveld, Peat, Marwick and Goerdeler)

PCAOB: Public Company Accounting Oversight Board

SAS: Statement on Auditing Standards

SEC: Securities and Exchange Commission (SEC)

SOX: Sarbanes-Oxley Act

SPSS: Statistical Package for Social Sciences.

US: United States

ABSTRACT

In recent years the importance of good corporate governance has received significant public and regulatory attention. A crucial part of an entity's corporate governance is its internal audit function. At the same time, there has been significant public concern about the level of fraud within financial institutions. Detecting fraud is a challenging task as perpetrators actively engage in deception in an attempt to conceal their behavior, auditors may have limited experience in fraud detection, and fraudulent activities are inherently unpredictable and difficult to detect. While financial statement fraud has been the main focus of public interest and research, the other type of fraud that has received less research attention is misappropriation of assets, which is typically perpetrated by employees. In recent past there has been rise in fraudulent cases reported in the banking companies in Kenya leading to placing a number of them such as Charterhouse bank under statutory management by Kenya Bankers Association. Because of the extensive implicit and explicit costs of fraud, identifying ways to increase the probability of fraud detection is of great interest to all stakeholders. This study desires to establish the influence of internal audit controls on fraud detection among commercial banks. The researcher hopes the study will be of significance to all the existing firms in the banking industry in Kenya as it will give an insight to other aspiring companies on what elements are important for their success. Government agencies such as KBA and policy makers could use the results to formulate positive national policies. The study could also be invaluable to the Central Bank of Kenya as it could furnish it with information that they may use when coming up with guidelines and regulation governing the commercial banks to ensure fraud reduction. The study provides information to potential and current scholars on the relationship between internal audit controls and fraud detection among companies in Kenya. This, the researcher hopes will expand their knowledge on internal audit in the banking industry and also identify areas of further study. The study could be a source of reference material for future researchers on other related topics; it could also help other academicians who undertake the same topic in their studies. This research problem was studied through the use of a descriptive survey design. The target population of this study was the management staff working in commercial banks at the Headquarters in Nairobi. Stratified proportionate random sampling technique was used to select the sample. The study grouped the population into three strata i.e. senior managers, middle level managers and low level managers. From each stratum the study used purposive sampling to select 120 respondents by taking 20% from each stratum. The study collected both primary and secondary data. Primary data was collected using a questionnaire while secondary data was obtained from annual reports of the companies. Data collected was purely quantitative and it was analyzed by descriptive analysis including the mean, standard deviation, frequencies and percentages. In addition, the researcher conducted a multiple regression analysis so as to determine the effects of each of the five variables on fraud detection. Tables and figures were used to summarize responses for further analysis and to facilitate comparison. From the findings the study concludes that the five objectives under study namely; proactive fraud audit; compliance with policies; risk management; controls over efficiency of operation and management reporting have a positive influence on fraud detection with proportions as indicated by the regression equation; Y=21.58- $0.05X_1 - 0.08X_2 - 0.06X_3 - 0.06X_4 - 0.04X_5$. This interpreted to mean that a unit increase in any of the independent variables causes a unit increase in fraud detection. The study recommends that the internal audit function in financial institutions should be acknowledged and strengthened as it has a great influence on fraud detection.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Fraud is expensive at both the societal and organizational level. One analysis concluded that the collective economic cost of fraud exceeds \$650 billion each year (ACFE, 2006). The costs at the organizational level are more immediate and include the loss of reputation, a decline in market capitalization and even the dissolution of the firm. Because of the extensive implicit and explicit costs of fraud, identifying ways to increase the probability of fraud detection is of great interest to all stakeholders, but because the organization holds the ultimate responsibility for any fraudulent behavior, it has the greatest motivation to detect fraud before it can adversely impact the financial statements. One way organizations can enhance the probability of detecting fraud in its nascent stage is by identifying, hiring and utilizing internal auditors that are best suited for the task of fraud detection.

The internal audit function is an important function that has been shown to add value and reduce detected errors by external auditors. Its objectives are to improve the effectiveness of risk management, control, and governance and it is considered an important governance tool to protect corporations from internal criminal behavior (Nestor 2004). Further, the professional literature suggests that internal audit is a vital tool in fraud detection when assets are misappropriated by employees or outsiders (Belloli, 2006).

Fraud is believed to be amongst the most serious corporate problems, and challenges in today's business environment, indeed Palshikar (2002) suggests that fraud or scam is a dominant white collar crime in today's business environment, many businesses and government organizations, particularly in financial and related services, suffer from fraud of various kinds. In the banking industry, many frauds are perpetrated through falsified payment instruments. Common fraud types include; Cheque fraud, computer fraud, Card fraud and Mail order fraud that's commonly referred to as internet fraud.

The phenomenon is empirically supported by a number of studies; for example, Cain (2009) and the KPMG Australia fraud survey (KPMG, 2002) each indicate that over 50 per cent of all

interviewees surveyed believed that fraud is a major business problem. Similarly, reviews of fraud cases by Rezaee (2004) revealed that financial statement fraud has cost market participants more than \$500 billion during recent years, with serious litigation consequences for associated auditors.

The risks of fraud within and upon corporations cannot be understated. They include the immediate risks to the company affected, which can fail completely. There is also the reputation risk to the company that has suffered major fraud. This is one reason that companies and particularly financial houses are so reluctant to report fraud to law enforcement, where they fear that the likelihood of their names hitting the headlines associated with major losses will result in competitors' obtaining an advantage and customers walking away. Systemic risk, that affects an entire financial market or system, and not just specific participants, cannot be underestimated. After the secondary banking crisis in the 1980s, where so many minor financial houses failed, largely as a result of fraud, confidence in the banking sector was shaken severely.

A possible strategy for auditors in light of this problem is to assess the likelihood of fraud. The ability of an auditor to accurately assess the risk of fraud is crucial to the initial assessment of risk of material misstatement during the planning stage of the audit. The risk assessment will affect the design of audit tests. Incorrect assessment of risk may result in either inefficient or ineffective audit.

The value of internal control is apparent in both preventing and detecting fraud as prevention is better than cure. A weak internal control creates opportunities for fraud and about half of all frauds occur in the financial area (Valentine et al, 2002). Internal control system has four broad objectives; those are to safeguard assets of the firm; to ensure the accuracy and reliability of accounting records and information; to promote efficiency in the firm's operation; and to measure compliance with management's prescribed policies and procedures. The effectiveness of internal control depends largely on management integrity.

Failure to prevent and detect fraud has serious consequences for organizations in Africa most of which have experienced a myriad of fraud cases over the years. Although rare in occurrence, financial statement fraud can result in devastating losses to investors, creditors and auditors.

Detecting fraud is a difficult task for auditors, in part because most have never experienced fraud in their careers (Montgomery et al., 2002).

In Nigeria the banking sector recorded N28.4bn cases of fraud and forgeries in the year 2010, as reported by Nigerian Deposit Insurance Corporation. The amount contained in the 2011 annual report and statements of accounts of the NDIC, represents an increase of 33.4 per cent over the N21.29bn recorded in 2010. The increase of 53.5 per cent in the number of attempted or successful fraud and forgeries cases as reported in 2011 over the preceding year could be attributed to rising fraud cases through Internet banking and suppression of customer deposits.

An analysis of the types of fraud and forgeries committed last year revealed that Automated Teller Machine frauds and fraudulent transfers/withdrawals accounted for the largest number of perpetrations. Despite the increase; the losses resulting there from declined by 62.3 per cent from N6.43bn in 2010 to N2.42bn in 2011. The reduction was as a result of better and improved security and internal control measures put in place by the banks for transactions involving large sums of money. The highest number of staff involved in cases of fraud and forgeries was from the clerks and cashier status as had been the case in the preceding years with the lowest being the typists, technician and stenographers.

The phenomena is no different in South Africa, despite the proactive strategies put in place by the country's stakeholders to tackle bank card fraud, the banking industry suffered a loss of R403.1m in 2010/2011 – a massive increase of 53% on the previous financial year. In 2009 / 2010, the banking industry incurred losses amounting to R263.3m. In 2010/2011 this figure rose by 53% to a massive R403.1m. According to reports from South African Banking Risk Information Centre (SABRIC), the increase in card fraud can be attributed to an increase in Counterfeit card fraud (63% increase) and Card Not Present (CNP) fraud over the past year.

A concerted effort has been made over the past year to vigorously educate banking customers on the importance of safeguarding ones bank cards and PINs. In combination with the continued roll-out of EMV Chip and Pin cards these efforts appear to be paying off. The banks now require customers to either come into their local branch to collect their bank cards, or in some cases the banks have specialised couriers who deliver the cards to the individual. Separation of cards and pins when posted has also contributed to a drop in NRI fraud.

Central banks in eastern Africa have specific guidelines on risk management requiring banks to have policies, processes and procedures to control or mitigate material operational risks. These policies and procedures should be documented and communicated. Judiciary systems in eastern Africa currently do not provide a significant deterrent to fraud. Systems are slow and the fines are small compared to the value of fraudulent activities. Law enforcement authorities are poorly equipped to deal with white collar crimes like bank and insurance fraud. Banks and insurance companies avoid publicity around fraud, as it can damage company reputations. A large number of frustrated fraud activities may effectively demonstrate detection but their secrecy does not help to prevent the activity in the first place this is according to a PWC report, Spotlight on Financial services, 2011 Risk survey.

There are two faces to the banking in Kenya. One throws caution to the wind and embraces the latest technologies and receives international acclaim for its progressive attempts to reach millions of unbanked Kenyans. The other is the dark underbelly of banking, where fraud and corruption are rife and seemingly acceptable, daily activities, for bank employees (PWC 2011).

Both internal and external auditors emphasize the importance of fraud assessment and detection partly in response to calls by professional bodies, regulatory agencies, and governments. This study also contributes to the literature in this area as it uses a unique and rich data set to evaluate fraud detection, which is the self-reported fraud from the 2004 KPMG Fraud Survey. This data expands our understanding of the importance of the internal audit function and the role it plays in detecting fraud. The results show a significant positive relation between an organization having an internal audit function and the number and value of self-reported (Carey et al., 2006).

Crime in Kenyan banks has evolved from simple crimes of petty theft and forgeries to hi-tech computer based cyber crimes. Frauds in Kenyan banks only prove that financial liberalization aggravates the inherent tendency of shallow markets to foster excessive speculation and worsens the systematic consequence of such speculative activity. Revelations of fraud, evidence of insider trading and consequent collapse of investor interest have led to an almost unstoppable downturn in Kenyan banks. Bank frauds concern all citizens. It has become a big business today for fraudsters.

The Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK), governs the Banking industry in Kenya.

The banking sector was liberalised in 1995 and exchange controls lifted. The CBK, which falls under the Minister for Finance's docket, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. The CBK publishes information on Kenya's commercial banks and non-banking financial institutions, interest rates and other publications and guidelines. The banks have come together under the Kenya Bankers Association (KBA), which serves as a lobby for the banks' interests and addresses issues affecting its members (Kenya Bankers Association, 2008).

For the quarter ended March 31st, 2013, the banking sector comprised 43 commercial banks, 1 mortgage finance company, 8 deposit taking microfinance institutions, 7 representative offices of foreign banks, 108 foreign exchange bureaus and 2 credit reference bureaus. The commercial banks and non-banking financial institutions offer corporate and retail banking services but a small number, mainly comprising the larger banks, offer other services including investment banking, insurance services and custodial services among others (CBK, 2013).

The revised Prudential and Risk Management Guidelines issued in November 2012 came into effect in January 2013. Seven new Prudential Guidelines were issued covering various operating aspects of banks. These include Outsourcing, Representative Offices of Foreign Institutions, Voluntary Liquidation, Consolidated Supervision, Stress Testing, Prompt Corrective Action and Consumer Protection. In addition, the existing nine Risk Management Guidelines were reviewed while two new guidelines on Country and Transfer Risk and Information and Communication Technology Risk Management were introduced. Banking Sector 2013 Outlook The banking sector is expected to sustain its growth momentum on the backdrop of a stable macro-economic environment, and domestic and regional expansion by banks (CBK 2013). These guidelines together with the Credit Reference s' CIS mechanisms which was launched by the CBK in July 2010 shows the seriousness with which the country is keen on fighting fraud in Kenya.

The Banking Fraud Investigations Department (BFID) reported that the soaring levels of bank related crime on their books is as a direct result of lack of banks to correct the problem. In addition to this there is an absence of law which specifically addresses card fraud related crimes in Kenya, resulting in perpetrators operating freely and being handed light sentences if caught. BFID is also concerned over cases where banks do not act timeously on warrants issued to them

allowing the fraud activities to continue in the interim. In terms of ATM fraud there are still many ATM lobbies which do not have CCTV cameras installed as per CBK regulations and this too hampers investigations.

BFID also identified that forensic auditing was compromised within the banks as the sections often fall under either internal audit or security departments, which threatens their independence and integrity. In May 2011 in a response to spiralling fraud cases the CBK demanded an audit of automated payment processing systems operated by commercial banks after their investigations showed the rising cases of fraud were in fact being initiated by bank employees at the point of entry of information into their internal payment systems. The incidence average is 57 per cent in Africa. In 2009, Kenya ranked second after South Africa with 57 per cent reported incidence of economic crime. The results are generated from 4,000 responses from senior executives in the 78 countries with PwC terming this as the most comprehensive survey on economic crime. Though the survey estimates the loss at Sh10million to an organization through economic crimes, the direct cost of the crimes is difficult to gauge. In Kenya, theft or asset misappropriation is cited as the most common type of economic crime, followed by accounting fraud, corruption and money laundering this was reported by PWC Economic Crime Survey 2011.

Perpetrators of fraud tend to target the established financial institutions because of their likely event to have large accounts which are not used actively. The NSE listed the top 5 commercial banks after the 2012 financial reporting to be namely; Equity bank, Standard Chartered Bank (SCBK), Barclays Bank (BBK), Kenya Commercial Bank (KCB) and Co-operative Bank (Co-op). These banks are going to be the focus of this study.

1.2 Statement of the Problem

In recent years the importance of good corporate governance has received significant public and regulatory attention. A crucial part of an entity's corporate governance is its internal audit function. At the same time, there has been significant public concern about the level of fraud within financial institutions. That an auditor has the responsibility for the prevention, detection and reporting of fraud, other illegal acts and errors is one of the most controversial issues in auditing, and has been one of the most frequently debated areas amongst auditors, politicians, media, regulators and the public (Gay et al., 1997).

Fraud is one of the most significant risks affecting chief executives and senior management at financial services companies in eastern Africa. Insurers have tended to focus on fraudulent claims, but the increasing frequency and sophistication of fraudulent activities occurring at banks should serve as a warning for the industry as a whole. Respondents to the eastern Africa financial services risk survey indicated that fraud was a top risk (PWC, 2011).

Kenya has the highest incidences of fraud in the world, according to a global ranking of 78 countries surveyed by PricewaterhouseCoopers. Overall, 66 per cent of organizations in Kenya say they were victims of economic crime over the last 12 months, nearly double the global average of 34 per cent. While the CBK 2010 survey showed that 95% of respondents now have an independent risk management function one is forced to question their effectiveness when it is reported that banks lost approximately 761 million KES to fraud in the six-month period January to June 2010 and a staggering 1.7 billion KES in the three months August to October 2010 (PWC, 2011). Deloitte reported that bank fraud tripled to an estimated KES 3 billion in 2010, approximately four percent of the total sector profitability over the same period. If this trend is left to continue unabated then organizations in Kenya will suffer a great deal which could lead to loss of reputation, a decline in market capitalization and even the dissolution of the firm. This could lead to Kenya's economy stagnating in its growth. Because of the extensive implicit and explicit costs of fraud, identifying ways to increase the probability of fraud detection is of great interest to all stakeholders. This study desires to establish the influence of internal audit controls on fraud detection among commercial banks: the case of selected banks in Kenya.

1.3 Purpose of the Study

The purpose of this study is to establish the influence of internal audit controls on fraud detection among commercial banks: The case of selected banks in Kenya.

1.4 Objectives of the Study

This study sought to achieve the following objectives:

- i. To determine the influence of proactive fraud audit on fraud detection among commercial banks in Kenya
- ii. To assess the influence of compliance with policies on fraud detection among commercial banks in Kenya
- iii. To investigate the influence of risk management on fraud detection among commercial banks in Kenya
- iv. To determine the influence of controls over efficiency of operations on fraud detection among commercial banks in Kenya
- v. To establish how management reporting influence fraud detection among commercial banks in Kenya

1.5 Research Questions

This study sought answers to the following research questions:

- i. What is the influence of proactive fraud audit on fraud detection among commercial banks in Kenya?
- ii. How does compliance with policies influence fraud detection among commercial banks in Kenya?
- iii. How does risk management influence fraud detection among commercial banks in Kenya?
- iv. How do controls over efficiency of operations influence fraud detection among commercial banks in Kenya?

v. How does management reporting influence fraud detection among commercial banks in Kenya?

1.6 Significance of the Study

Internal audit adds value through improving the control and monitoring environment within organizations to detect fraud. The researcher hopes the study will be of significance to all the existing firms in the banking industry in Kenya as it will give an insight to other aspiring companies on what elements are important for their success.

Government agencies such as KBA and policy makers could use the results to formulate positive national policies on a framework that is relevant and sensitive to the market forces influencing the banking industry in Kenya and the East African region. The study could also be invaluable to the Central Bank of Kenya as it could furnish it with information that they may use when coming up with guidelines and regulation governing the commercial banks to ensure fraud reduction. The study provides information to potential and current scholars on the relationship between internal audit controls and fraud detection among companies in Kenya. This, the researcher hopes will expand their knowledge on internal audit in the banking industry and also identify areas of further study. The study could be a source of reference material for future researchers on other related topics; it could also help other academicians who undertake the same topic in their studies.

1.7 Delimitations of the Study

The study investigates the influence of internal audit controls on fraud detection among commercial banks; the case of selected banks in Kenya. The study focused on five top commercial banks in Kenya as listed by the NSE after the 2012 half year financial reporting to be namely; Equity bank, Standard Chartered Bank (SCBK), Barclays Bank (BBK), Kenya Commercial Bank (KCB) and Co-operative Bank (Co-op). Perpetrators of fraud tend to target the established financial institutions because of their likely event to have large accounts which are not used actively. The management staff of all the selected five commercial banks headquarters in Kenya located in Nairobi will be targeted These banks are going to be the focus of this study.

1.8 Limitations of the Study

The researcher encountered various limitations that were likely to hinder access to information that the study was looking for. The main limitation of study was its inability to include more banks in the study. The study could have covered more banks across the country so as to provide a more broad based analysis however resource constraints placed this limitation.

The respondents approached were reluctant in giving information fearing that the information sought would be used to intimidate them or print a negative image about their banks. The researcher handled the problem by carrying an introduction letter from the University and assured them that the information they gave would be treated confidentially and it would be used purely for academic purposes.

The researcher also faced time constrains, the large sample size selected by the researcher made it difficult for her to personally talk to every respondent, hence the researcher employed the services of a research assistant who assisted in data collection.

1.9 Assumptions of the Study

The researcher makes the assumption that the banks in focus have an internal audit function. The researcher also assumes that cited respondents are conversant with the fraud issues and that they will be willing to discuss issues freely and honestly.

1.10 Definition of Significant Terms

Fraud Detection among commercial banks- Fraud detection is the identification of actual or potential scheme whose motive/intent is to swindle a person/s of a certain amount of money or goods within an organization. It relies upon the implementation of appropriate systems and processes to spot the early warning signs of real or perceived threats.

Proactive fraud audits— This entails doing the due diligence and constant checks on the institutions operations for any fraudulent cases.

Compliance with policies –Compliance is not merely about obeying laws and regulations, but also about acting in accordance with society's higher ethical and moral standards.

Risk management - The identification, analysis, assessment, control, and avoidance, minimization, or elimination of unacceptable risks.

Controls over efficiency of operations – This is a process affected by an organization board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of effectiveness and efficiency of operation, reliability of financial reporting and compliance with the applicable laws and regulations

Management reporting - broad-based process of providing statements of financial position (balance sheets), results of operations (income statements, statements of shareholders' equity, and statements of comprehensive income), changes in cash flows (statements of cash flows), and accompanying disclosure notes (footnotes) to outside decision makers who have no internal source of information. It also include real time and after-the-fact information resulting from data analyses of transaction processing and process control functions contained within the system.

1.11 Organization of the study

The study was organized into five chapters, each of which contains specific information. Chapter One contains the introduction to the study. It gives background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the Study, delimitations of the study, limitations of the Study and the definition of significant terms. Chapter Two reviews the literature based on the objectives of the study. It further looks at the conceptual framework and finally the summary. Chapter Three covers the research methodology of the study. The chapter describes the research design, target population, sampling procedure, tools and techniques of data collection, pre-testing, data analysis, ethical considerations and finally the operational definition of variables. Chapter Four covers data analysis, presentation, interpretation and discussion. Finally, Chapter Five presents a summary of the main findings of the study, discusses these against what appears in literature and also offers a conclusion and recommendation for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides theoretical and empirical information from literature on topics related to the research problem. It examines what various scholars and authors have studied/ written about internal audit controls and fraud detection from global, African and local perspectives. It also presents a conceptual framework on which the study is based

2.2 Fraud detection among commercial banks in Kenya

In our society where the business culture has been overridden in recent times with fraudulent practices perpetrated by management and employees, the lack of clear understanding of the duties of an auditor in relation to fraud detection has often led to unjustifiable criticisms of this role. Auditors are known to be competent, honest and independent professionals who express unbiased opinion on the truth and fairness of the financial statement as presented by management to members of the company (Ashton, 1999). The accounting profession has over the years built a reputation, which encourages others to rely upon the opinions auditors express.

The Association of Certified Fraud Examiners' (ACFE) 2008 survey results reported that U.S. organizations lost an estimated 7% of their annual revenues to fraud (ACFE 2008). This percentage increased from the estimated 5% for 2006 and 6% for 2004 (ACFE 2006). With layoffs and cuts in travel budgets for internal auditors, there is concern that as economic stresses increase due to the poor economy there will be more instances of fraud and corruption (Sullivan 2009).

As organizations work to reduce the incidence of fraud, their anti-fraud programs continue to rely heavily on the internal audit activity. Over time as internal auditors review systems in the organization, they develop an overall knowledge of the organization's processes, risks, control systems and personnel (IIA 2009c). These factors contribute to their effectiveness at detecting fraud.

The Institute of Internal Auditors (IIA) provides mandatory guidance for internal auditors in its International Professional Practices Framework (IPPF) through the International Standards for the Practice of Internal Auditing (Standards) (IIA 2009a). Several Standards outline the role of the internal auditor in detecting, preventing, and monitoring fraud risks and addressing those risks in audits and investigations (IIA 2009c). IIA Standard 1200, Proficiency and Due Professional Care, requires that internal auditors have sufficient knowledge to evaluate the risk of fraud in their organizations, but they are not expected to have expertise in fraud detection. IIA Standard 2060, Reporting to Senior Management and the Board, requires that internal auditors report to the Board any fraud risks found during their investigations under IIA Standard 2120, Risk Management. Finally, IIA Standard 2210, Engagement Objectives, states that when internal auditors are developing engagement objectives, the probability of fraud must be considered (IIA 2009a).

Extensive studies have been conducted in many countries into the perception of financial report users of auditors' responsibilities in fraud prevention and detection For example, Monroe and Woodliff (1994) in Australia; Epstein & Geiger (1994) in the US; Humphrey *et al* (1993) in the UK; and Low (1980) in Singapore; Leung and Chau, (2001) in Hong Kong; Dixon *et al* (2006) in Egypt; Fadzly and Ahmad (2004) in Malaysia. These studies found that many financial report users believe that the detection of irregularities is a primary audit objective and that the auditors have a responsibility for detecting all irregularities. This is a misconception and shows the existence of an audit expectation gap between auditors and financial report users with respect to the actual duties of auditors (Humphrey *et al*, 1993).

2.3 Proactive Fraud Audit and Fraud Detection among commercial banks

Auditors make a contribution to the detection of possible fraud even though "reliance on the auditors to detect fraud is misplaced". The first stage of an audit is designed to establish if the accounting records are accurate and provide a reliable basis for the preparation of accounts. This objective can be achieved by checking all the routine transactions which took place during the financial year and this process might uncover fraud, except where fictitious evidence have been carefully created (Norman et al., 2010).

However, the cost of such an approach is prohibitive. Fortunately, it is possible to reduce the volume of test without greatly reducing the validity of opinion by using sampling technique. Using such an approach is almost as likely to detect fraud, which would be found by a far comprehensive examination. But even this approach is also being expensive. As a result, the auditors adopt a different method, which relies extensively upon the organization's system of internal control and internal checks (Gadziala, 2005). The essence of the approach is to analyze and evaluate the system and then to carry out tests to establish that the controls are operating intended and constitutes a reliable basis for the preparation of the annual accounts and to determine the required substantive testing.

The examination of the system is usually done with the following fundamental consideration: the possibility of defalcation/fraud, either permanent or temporary, the possibility of undiscovered errors occurring and the possibility of accounts being deliberately distorted. If the internal control is very weak, it may not be possible to express an opinion at all on the accounts presented (Nila and Viriyanti, 2008). If on the other hand the internal control is strong, there could be a minimization of the amount substantive testing used in arriving at an opinion. At the final stage of an audit, the search for examination substantive evidence may contribute to a large extent in detection fraud. The auditor in performing his duty aims at being thorough a systematic, but there is no doubt that some carefully planned and highly ingenious schemes can defeat the most thorough and systematic of audits.

Research suggests internal auditors believe that business intelligence tools are effective. For example, Bierstaker et al (2006) found that internal auditors and accountants tended to rate these techniques as effective in combating fraud, but the study's subjects also noted that these techniques were not used very frequently, except in the largest organizations. Cook & Clements (2009) shared their concern about the lack of use of the best tools that are available and their hope that internal auditors would develop the skills necessary to continue the fight against fraud by using the best tools available. In The IIA's Global Technology Audit Guide, *Fraud Prevention and Detection in an Automated World*, the use of technology as an audit tool allows the internal auditor to go from using IT as a detective control to a continuous monitoring technique. Data analysis technology allows auditors to examine data for indications of fraud (IIA 2009b).

2.4 Compliance with Policies and Fraud Detection among commercial banks

An essential part of internal auditing is substantiating compliance with company and regulatory policies, procedures, and laws. It is essential to review whether employees are conducting their tasks as desired by management. Assurance must be obtained that controls are functioning and responsible parties have been assigned. There should be written compliance directives in such sources as manuals, bulletins, and letters (Nila and Viriyanti, 2008).

In compliance testing, the internal auditor examines evidence to substantiate that the firm's internal control structure elements are performing as intended. A key aspect of internal auditing deals with compliance as to accounting procedures. The accounting system must be operating as designed if reliable and consistent accounting data are to be provided. The appropriate forms have to be used in the prescribed manner (Pratolo, 2007). Examples of areas subject to compliance testing are standards for data processing, controller's procedures, procurement, data retention requirements of the company and governmental agencies, security policies, personnel administration, planning, budgeting, payroll, and expense accounts.

Operational auditing looks at the effectiveness, efficiency, and economy of operational performance in the business. It examines the reasonableness of recorded financial information. The performance of managers and staff are scrutinized. For example, there should be an examination of operational performance related to payroll, receiving, purchasing, and cost control. Generally, operations should be conducted in such a way that results in profitability. A determination must be made as to whether corporate policies are being adhered to as well as whether such policies are reasonable in the current environment or if changes are necessary. Areas of inefficiency and uneconomical practice are identified (Arens, Elder, & Beasley, 2010).

Conscientiousness is the personality dimension primarily responsible for organizing and directing individual behavior, and conscientious individuals may be characterized as responsible, ethical, diligent, persevering and thorough (Becker ,1998; Digman and Takemoto-Chock, 1981). Wells (2003) conducted a series of interviews with successful fraud examiners and found that these individuals exhibited a cluster of common traits including perseverance, diligence and integrity – each of which is an attribute of the conscientiousness dimension.

Within the context of the five factor model, only conscientiousness has been found to reliably predict job performance across all occupational groups (Robertson et al., 2000). Indeed, some studies have demonstrated that conscientiousness correlates with task performance just as strongly as cognitive ability. Previous research has demonstrated a linkage between conscientiousness and task performance, and the linkage has been shown to be stable across time.

Conscientiousness can affect job performance in a number of ways. Conscientious employees are generally more reliable, more motivated, and hard working; they are also likely to devote more energy to the task at hand and spend less time daydreaming (Viswesvaran, 2006). This results in greater assimilation of task related knowledge, leading to greater productivity. Conscientious individuals would be expected to pay more attention to detail and profit more from vicarious learning, thus gaining enhanced job knowledge and being more productive. These assertions were confirmed by Colquitt et al. (2000) who showed that conscientiousness was highly correlated with motivation to learn and by Borman et al. (1991) who demonstrated a positive association with job knowledge. Consequently, the personality trait of conscientiousness provides the basis for hypothesis development regarding the prediction of individual performance within the realm of fraud detection. Conscientious auditors are theorized to engage in a more diligent, perseverant, organized and systematic approach to evidence evaluation than their less conscientious counterparts.

2.5 Risk Management and Fraud Detection among commercial banks

The internal audit function plays a unique role in corporate governance by monitoring organizational risks and ensuring that organizational processes are efficient and effectively controlled. This unique role has been noted in both research and practice. For example, studies have found that the presence of an internal audit function has a deterrent effect on financial reporting irregularities and employee theft. Gordon and Smith (1992) found that a control function, such as that performed by internal audit, can lead to better firm performance. Furthermore, Prawitt et al., (2006) found that the internal audit function moderates the level of earnings management in companies.

The internal audit activity evaluates risk exposures relating to the organization's governance, operations and information systems, in relation to; effectiveness and efficiency of operations, reliability and integrity of financial and operational information, safeguarding of assets and compliance with laws, regulations, and contracts. Based on the results of the risk assessment, the internal auditors evaluate the adequacy and effectiveness of how risks are identified and managed in the above areas. They also assess other aspects such as ethics and values within the organization, performance management, communication of risk and control information within the organization in order to facilitate a good governance process (IIA Research Foundation, 2004).

An auditor should assess the risk that errors and fraud may cause the financial statements to contain material misstatements. (S)he should then design the audit so as to provide reasonable assurance that material errors and fraud are detected. An entity's risk assessment for financial reporting purposes is its identification, analysis, and management of risks pertaining to financial statement preparation. Accordingly, risk assessment may consider the possibility of executed transactions that remain unrecorded. Assessing fraud risk is a natural role for internal auditors, and one that is in keeping with The IIA's fraud-related Practice Standards (IIA 2009c). With their understanding of the business and its processes, their knowledge of the organization's performance and related pressures, and their ability to assess internal controls (Zikmund, 2008), internal auditors' skills and abilities to determine the top fraud risks in terms of likelihood and impact are vital to the company's anti-fraud program.

Based on the fraud risk assessment, an anti-fraud program ensures that there are adequate controls in place to prevent and detect fraud. Although the goal of prevention is to stop fraud from occurring, it is not cost-effective to prevent all fraud so it is important to have controls that allow for the prompt and effective detection of any material frauds. In some cases, "an organization may choose to design its controls to detect rather than prevent fraud risks" (IIA 2009c, 18). Compared to preventive controls, controls and procedures to detect fraud tend to be less obvious in the organization (IIA 2009c, 21). Apart from red-flag studies, research in this area tends to be less pervasive.

Recent corporate frauds (e.g., Enron, Tyco and WorldCom) and increased regulation have emphasized the importance of risk assessment. SOX Section 404, for example, requires

management to perform a fraud risk assessment, and PCAOB Auditing Standard No. 5 emphasizes the importance of internal controls and risk assessment (Ugrin and Odom, 2010). These regulatory initiatives have resulted in an augmented focus on internal control systems and fraud detection. Rose and Rose (2003, 312) found that the "assessed level of fraud risk systematically affects the evaluation of evidence by auditors." Clearly, accurate fraud risk assessments are critical to organizations (Norman et al, 2010).

According to SAS No. 99, three conditions are generally present when fraud occurs: (1) management or other employees have an incentive, or are under pressure to commit fraud; (2) situations exist (e.g., the absence of controls, ineffective controls or the ability of management to override controls) that provide an opportunity for fraud to be perpetrated; (3) the offending party is able to rationalize committing a fraudulent act. The greater the incentive or pressure, the more likely an individual will adopt an attitude that allows them to rationalize committing fraud. Furthermore, the tone of managerial attitudes can influence the probability of organizational fraud. The current experiment contains scenarios which include a variety of risk factors associated with incentives, opportunities and attitudes (Arens, Elder & Beasley, 2010).

The organizational psychology literature can provide insights into fraud detection by classifying fraudulent acts, such as theft of assets and misuse of information, as counterproductive work behavior. Sackett and DeVore (2006) note that personal and situational factors such as organizational policies and practices, organizational culture and internal control systems all serve as determinants of counterproductive work behaviors. These factors are evident in the work of Bell and Carcello (2000) who identified a number of antecedents associated with fraudulent financial reporting including such items as rapid growth, weak or ineffective internal controls, managerial preoccupation with meeting earnings projections, and aggressive managerial attitudes coupled with weak control environments.

It has been estimated that auditors only detect 5% of fraud (Zeune, 1997); therefore any tool that might assist in the detection process would be important. The identification of red flags is one such a tool. Pincus (1989, 154) characterized red flags as risk factors that serve as "warning signals for fraud based on economic factors and business structure factors." In order to effectively detect fraud, an auditor must be sensitive to the identifiable risk factors and assess the likelihood of fraud to be higher when those factors exist than when they do not (Hoffman and

Zimbelman, 2009). Awareness of significant warning signs such as the presence of identifiable risk factors can help auditors assess fraud risk and may serve as an effective early warning system. When evaluating organizational risk, red flags represent situational indicators that point to the need for the auditor to be more attentive than normal, and their presence should increase an auditor's sensitivity to the possibility that fraud may exist.

2.6 Controls Over Efficiency of Operations and Fraud Detection among commercial banks

Control activities are the policies and procedures management has implemented in order to ensure that directives are carried out. One task of internal auditing is to ensure that controls are in place that will detect fraud and also to report fraud, which is supported by the professional literature that shows whistle blowing and investigations by the in sourced internal auditor is an effective fraud detection device (Morgan 2005).

Internal control consists of the organization planning that includes all methods used to safeguard the company assets, to insure the reliability of information, to support the efficiency and effectiveness of operations, and to insure the compliance with rules and regulations (Arens, Elder, & Beasley, 2010). The regulation of Indonesia Government No. 60 (2008) in paragraph 1 of section 1 defines the government internal control system as follows: an integrated process on activities and actions that enforced continuously by managers and all employees to give adequate assurance in achieving the organization goals by efficient and effective manner, by the reliability of financial report, by safeguarding government assets, and by compliance with rules and regulations. (p. 2)

Mensah, Aboagye, Addo, and Buatsi (2003) found empirical evidence in Ghana that effective internal control improved good governance practices and decreased the corruptions. Pratolo (2007) found that the effective internal control had positive link with good corporate governance at State Owned Enterprises in Indonesia. Similar with this finding, Nila and Viriyanti (2008) also found that internal control had a positive relationship with good corporate governance at State Owned Enterprises in West Java, Indonesia.

Control activities may be classified into the following categories: Performance reviews, including comparisons of actual performance with budgets, forecasts, and prior-period results. It also comprises information processing. Controls relating to information processing are generally

designed to verify accuracy, completeness, and authorization of transactions. Specifically, controls may be classified as general controls or application controls (Dixon *et al*, 2006). The former might include controls over data center operations, systems software acquisition and maintenance, and access security; the latter apply to the processing of individual applications and are designed to ensure that transactions that are recorded are valid, authorized, and complete.

Control activities also include physical controls, which involve adequate safeguards over the access to assets and records, include authorization for access to computer programs and files and periodic counting and comparison with amounts shown on control records. It also include segregation of duties, which is designed to reduce the opportunities to allow any person to be in a position both to perpetrate and to conceal errors or irregularities (fraud) in the normal course of his or her duties, involves assigning different people the responsibilities of authorizing transactions, recording transactions, and maintaining custody of assets. Reviewing and evaluating the reasonableness, adequacy, and application of accounting, financial, and other operating information and controls. Effective controls should be implemented at reasonable cost (Gadziala, 2005).

The internal auditors are expected to provide recommendations for improvement in those areas where opportunities or deficiencies are identified. While management is responsible for internal controls, the internal audit activity provides assurance to management and the audit committee that internal controls are effective and working as intended. The internal audit activity is led by the CAE. The CAE delineates the scope of activities, authority, and independence for internal auditing in a written charter that is approved by the audit committee. An effective internal audit activity is a valuable resource for management and the board or its equivalent, and the audit committee due to its understanding of the organization and its culture, operations and risk profile. The objectivity, skills, and knowledge of competent internal auditors can significantly add value to an organization's internal control, risk management, and governance processes. Similarly an effective internal audit activity can provide assurance to other stakeholders such as regulators, employees, providers of finance, and shareholders (IIA Research Foundation, 2004).

SEC officials have repeatedly emphasized the importance of the internal audit function to the overall control structure of an organization. For example, former SEC Chief Accountant Herdman (2002) stated that an effective internal audit function is "crucial to the success of a

company in stemming fraud and abuse, and in the preparation of accurate financial statements." The SEC Director of the Office of Compliance Inspections and Examinations Richards (2002) noted that internal auditors have a critical role in fraud prevention and compliance promotion. More recently, the Associate Director of the Office of Compliance Inspections and Examinations for the SEC has stated that she considers internal audit a critical component of a company's internal control structure (Gadziala, 2005).

2.7 Management Reporting and Fraud Detection among commercial banks

Internal auditors play an important role in fraud detection with most frauds identified by the internal audit function (KPMG, 2003, Norman et al., 2010). Due to the importance of effective fraud detection, any measures that can enhance the efficacy of auditors should be of value. While experience and ability are undeniably important in the detection process, certain individual characteristics may be predictive of the capacity to detect fraud (Ashton, 1999). Understanding how auditors are perceived, and how these perceptions lead to beliefs regarding their detection abilities, is an important first step in relating personality traits to the efficacy of auditors.

Auditing is an independent appraisal process often governed by statute for examining, investigating and verifying the financial statements of any organization or entity by a qualified person appointed to do the job who seeks to established an opinion concerning the truth, accuracy, validity, reliability and fairness of the statements and the records on which the statements are based and concerned with any statutory or other requirements. To make auditing possible, the internal control measures should be adequate and perfect. The accounting system must be sound and the organizational structure must not be overlapping.

To provide credibility to reports and accounts therefore, auditors must examine records available through to detect errors, disclose fraud, detect any form of irregularity or misleading report, evaluate the effectiveness or otherwise of the internal control system in place. Auditing enables the management and investors to have correct and efficient information for decisions making sufficient skill and experience (ACFE, 2008).

The internal auditing profession is guided by the International Standards for the professional practice of Internal Auditing. According to the International Standards for the professional practice of Internal Auditing (2008), the purpose, authority, and responsibility of the internal

audit activity must be formally defined in an internal audit charter, consistent with the definition of internal auditing, the code of ethics, and the standards. The CAE must periodically review the internal audit charter and present it to senior management and the board for approval.

The study of Roe (2004) focused on internal audit independence and corporate governance. The study analyzed the internal audit function as a first line protection against insufficient corporate governance and financial reporting. With suitable support from the Board of Directors' Audit Committee, the internal audit staff is in the best position to collect intelligence on unsuitable accounting practices, insufficient internal controls and unsuccessful corporate governance. The result of the study showed that the internal audit scope should be extensive to address strategic business issues as well as increasing some fulfillment audits. There is a strong support for internal audit to play a major role in monitoring in conformity in positive manner. As a result, the Chicago area internal audits groups previously have taken vital steps to move past the dialogues stages and have become vigorously engaged in conformity monitoring (Barriff, 2003).

Proceedings of the 3rd Asia-Pacific Business Research Conference 25 - 26 February 2013, Kuala Lumpur, Malaysia, presented by Rozmita Dewi Yuniarti showed that the internal audit function effectiveness can protect companies from fraudulent financial reporting when internal auditors are competent and objective in the following two areas: (1) detecting fraudulent financial reporting; and (2) reporting detected fraudulent financial reporting to top executives if they are not involved in fraud or, otherwise, the board of directors and its representative audit committee for further investigation of the possibility of fraudulent financial reporting. Thus, the internal audit function effectiveness plays a crucial role in detecting fraudulent financial reporting.

2.8 Theoretical Review

This study presents two theories relevant to the study namely the Agency Theory and the Institutional Theory. Meckling and Jensen (1976) in their paper on the theory of the firm defined the agency relationship as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent.

The first scholars to propose, explicitly, that a theory of agency be created, and to actually begin its creation, were Stephen Ross and Barry Mitnick, independently and roughly concurrently. Ross introduced the study of agency in terms of problems of compensation contracting; agency was seen, in essence, as an incentives problem. Mitnick introduced the now common insight that institutions form around agency, and evolve to deal with agency, in response to the essential imperfection of agency relationships. That is behavior never occurs as it is preferred by the principal because it does not pay to make it perfect. But society creates institutions that attend to these imperfections, managing or buffering them, adapting to them, or becoming chronically distorted by them. Thus, to fully understand agency, we need both streams to see the incentives as well as the institutional structures (Mitnick, 2006).

Fama (1980) proposed that separation of security ownership and control can be explained as an efficient form of economic organization within the "set of contracts" perspective. He set aside the typical presumption that a corporation has owners in any meaningful sense and the concept of the entrepreneur for the purposes of the large modern corporation. Instead, the two functions attributed to the entrepreneur, management and risk bearing, were treated as naturally separate factors within the set of contracts called a firm. He proposed that the firm is disciplined by competition from other firms, which forces the evolution of devices for efficiently monitoring the performance of the entire team and of its individual members. In addition, individual participants in the firm, and in particular its managers, face both the discipline and opportunities provided by the markets for their services, both within and outside of the firm.

Agency theory evolution also owes much to the corporate governance literature, which analyzes the problem of the separation of ownership and control and the role of indirect policing forces in aligning shareholders and management's interests. The contemporary literature identifies three essential indirect policing forces: the labor market discipline, the product market discipline, and the market for corporate control (Padilla, 2003). Fama (1980) in Padilla (2003) argues that one mechanism to mitigate management's opportunistic behavior is the managerial labor market. He argues that manager's career and reputation concerns will alleviate negative incentives. Moreover, Fama argues that career concerns also stimulate competition between the managers inside but also outside the firm, which, in turn, induces a monitoring process between managers to emerge. According to Fama and Jensen (1983) in Fama and Jensen (1998), agency problem is

controlled by decision systems that separate the management (initiation and implementation) and control (ratification and monitoring) of important decisions at all levels of the organization. Devices for separating decision management and decision control include; decision hierarchies in which the decision initiatives of lower level agents are passed on to higher level agents, first for ratification and then for monitoring, boards of directors that ratify and monitor the organization's most important decisions and hire, fire, and compensate top-level decision managers, and incentive structures that encourage mutual monitoring among decision agents.

According to institutional theory by Fogarty *et al.*(1997), an organisation is designed and functions to meet social expectations in so far as its operations are visible to the public. Therefore organisational internal operations, which are often complex and difficult to identify, may take second place to the issue of external legitimacy. It is suggested that the external image of the organisation may be loosely coupled with its operating processes and the kind of technology it adopts.

Fogarty *et al.* (1997) developed this, asserting that the contribution of institutional theory is in the insight that the actual accomplishments of an organisation and what its structure suggests should accomplish are often different. The organisation operates with internal processes that are not normally visible to those external to it, while other structures maintained for outsiders do not significantly add to output. Fogarty (1996) observes that scrutiny by outsiders can be avoided if the right structures are adopted by organizations. Loose technological coupling enables organizations to show success in external problems whilst allowing flexibility in operational processes. Thus the institutions should be ready to meet the high cost of adopting various technologies in the internal audit department and ensure that the staff are trained in order for the department to operate efficiently.

2.9 Conceptual framework

Fig. 1 presents the conceptual framework on which the study is based.

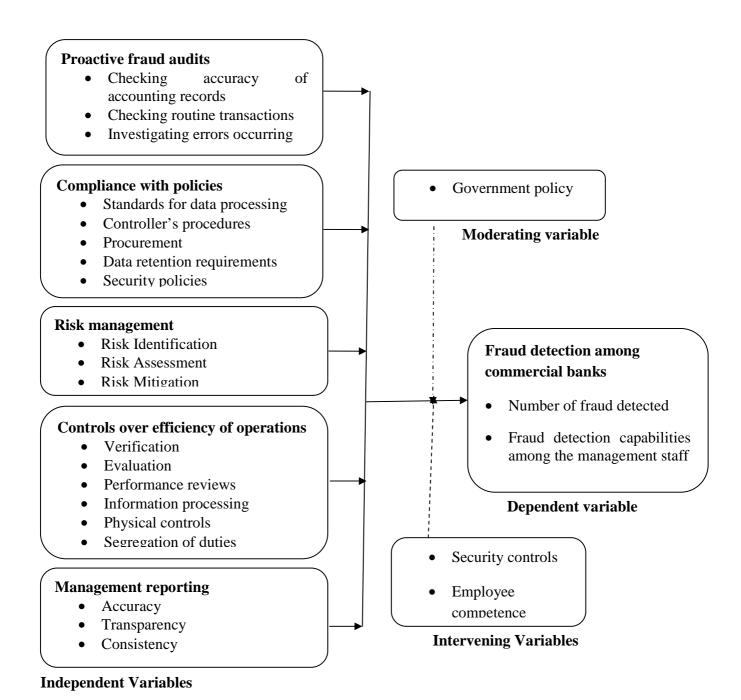


Figure 1: Conceptual Framework

2.10 Summary and Research Gap

Proactive fraud audits and fraud investigations entails checking all the routine transactions which took place during the financial year and this process might uncover fraud, except where fictitious evidence have been carefully created. The examination of the system is usually done with the following fundamental consideration: the possibility of defalcation/fraud, either permanent or temporary, the possibility of undiscovered errors occurring and the possibility of accounts being deliberately distorted. Further, an essential part of internal auditing is substantiating compliance with company and regulatory policies, procedures, and laws. The internal audit function plays a unique role in corporate governance by monitoring organizational risks and ensuring that organizational processes are efficient and effectively controlled. Another task of internal auditing is to ensure that controls are in place that will detect and report fraud.

From the Literature review, several researchers seem to concur that there is a relationship between internal audit and fraud detection in an organization. These conclusions were confirmed after empirical evidence was obtained from the research. However there seems to be very few studies done on influence of internal audit control on fraud detection in commercial banks.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used to carry out the study. It focused on the research design, methods of data collection, the population, data collection instruments and procedures, the data analysis and finally the operationalization of variables table.

3.2 Research Design

Research design refers to the overall plan used to carry out a research. According to Cooper and Schindler (2007), a descriptive survey design is concerned with finding out the what, where and how of a phenomenon. According to Chandran (2004), a descriptive survey design is concerned with gathering facts or to obtain pertinent and precise information concerning the current status of phenomenon and whatever possible to draw possible conclusions from the facts discovered. This research problem will be studied through the use of a descriptive survey design to obtain pertinent and precise information concerning the influence of internal audit controls on fraud detection among commercial banks in Kenya. It is concerned with the generalized statistics that result when data are abstracted from a number of individual cases (Zikmund, 2009).

3.3 Target Population

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well defined set of people, services, elements, events, group of things or households that are being investigated. Mugenda and Mugenda, (2003), explain that the target population should have some observable characteristics, to which the researcher intends to generalize the results of the study. The target population of this study was the management staff working at the five identified commercial banks Headquarters in Nairobi. The study focused on the 597 headquarters management staff from the CBK database, made up of 44 top managers, 185 middle level and 368 lower level management staff, all of whom are directly dealing with the day to day management of the banks.

3.4 Sample Design

The sampling frame describes the list of all population units from which the sample was selected (Cooper and Schindler, 2007). Ngechu (2004) underscores the importance of selecting a representative sample through making a sampling frame. From the population frame the required number of subjects, respondents, elements or firms were selected in order to make a sample.

Stratified proportionate random sampling technique was used to select the sample. According to Babbie (2004) stratified proportionate random sampling technique produce estimates of overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogeneous population. Stratification aims to reduce standard error by providing some control over variance. Statistically, in order for generalization to take place, a sample of at least 30 elements (respondents) must exist (Cooper and Schindler, 2007). Kothari (2001) also argues that if well chosen, samples of about 10% of a population can often give good reliability. For this study we shall use a sample size of 20% of the population. From each stratum the study used purposive sampling to select 120 respondents by taking 20% from each stratum. The sampling is shown in Table 3.1

Table 3.1: Sample Size

	Total population	Percentage	Sample size
Senior managers	44	20%	9
Middle level managers	185	20%	37
Low level managers	368	20%	74
Total	597	20%	120

3.5 Research Instrument

This section looks at the type and method of data collection including the tools and their administration. The study collected both primary and secondary data. Primary data was collected using a questionnaire while secondary data was obtained from annual reports of the companies. According to Kothari (2010), a self administered questionnaire is the only way to elicit self report on people's opinion, attitudes, beliefs and values. Ngechu (2004) also argues that the use of questionnaires is a cost effective method to acquiring information especially from a large or sparsely located group of respondents. It also allows for anonymity. The questionnaire designed

in this study comprised of two sections. The first part included the demographic and operational characteristics designed to determine fundamental issues including the demographic characteristics of the respondent while the second part dealt with the study variables.

3.5.1 Data Collection Procedure

This study collected quantitative data using a self-administered questionnaire. The researcher dropped the questionnaires at the respondents' place of work and allowed time for filing. The completed questionnaires were then collected from the respondents at the agreed time. Structured questions allows for uniformity of responses to questions. The questionnaire is a fast way of obtaining data as compared to other instruments (Mugenda & Mugenda, 1999) as it gives the researcher comprehensive data on a wide range of factors. Questionnaires also allow greater uniformity in the way questions are asked, ensuring greater compatibility in the responses. The structured questions were used in an effort to conserve time and money as well as to facilitate in easier analysis as they are in immediate usable form.

3.5.2 Validity of the Instrument

According to Creswell (2003), validity is the degree by which the sample of test items represents the content the test is designed to measure. Mugenda and Mugenda (2003) contend that the usual procedure in assessing the content validity of a measure is to use a professional or expert in a particular field. In this study to ensure validity of the questionnaire, the questionnaire (draft form) was presented to a panel of three supervisors at the proposal level in the University for their independent review on its factorial, criterion and content. Based on their comments and suggestions, necessary adjustments were done on the draft questionnaire. Further professional advice was sought from two experts in the subject matter and especially the research supervisor.

3.5.3 Reliability of the Instrument

According to Babbie (2004), reliability refers to the consistency of measurement and is frequently assessed using the test–retest reliability method. Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. The researcher selected a pilot group of 20 individuals from the target population of the management staff working in commercial banks to test the reliability of the research instrument. In order to test the reliability of the instruments, internal consistency

techniques will be applied using Cronbach's Alpha. The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. Coefficient of 0.6-0.7 is a commonly accepted rule of thumb that indicates acceptable reliability and 0.8 or higher indicated good reliability (Mugenda, 2008). Based on the consistent feedback received from the responses the researcher concluded that the instrument was reliable in giving the required information. The pilot data was not included in the actual study.

3.6 Methods of Data Analysis

Before processing the responses, the completed questionnaires were edited for completeness and consistency. The data was then coded into SPSS version 21.0 to enable the responses to be grouped into various categories. Quantitative data collected was analyzed by descriptive analysis including the mean, standard deviation, frequencies and percentages. Tables were used to summarize responses for further analysis and facilitate comparison. In addition, the researcher conducted a multiple regression analysis so as to determine the effects of each of the five variables on fraud detection. Regression was used to estimate the coefficients of the linear equation, involving one or more independent variables, which best predicted the value of the dependent variable

3.7 Ethical Issues

The researcher ensured that guarantees to the participants concerning confidentiality are given and strictly observed by carrying a letter from the University indicating that the study was purely for academic purposes. The strict standard of anonymity was employed which means that the participant remained anonymous throughout the study even to the researchers themselves. The researcher strived to maintain truthfulness in reporting data results by ensuring that there is no fabrication, falsehood, or any misrepresentation of data.

3.8 Operationalization of Variables

The operationalization of variables is shown in Table 3.2.

Table3.2: Operationalization of variables

Objective	Variable	Indicators	Measurement	Measurem ent scale	Tools of analysis	Type of data analysis
To determine the influence of proactive fraud audits on fraud detection among commercial banks in Kenya	Independent: Proactive fraud audits	Checking accuracy of accounting records Checking routine transactions Investigating errors occurring	Level of accuracy of the records Routine transaction reliability Number and type of errors	Nominal Ordinal Ordinal	Mean Percentage	Descriptive Regression
To assess the influence of compliance with policies on fraud detection among commercial banks in Kenya	Degree of compliance with policies	Standards for data processing Controller's procedures Data retention requirements Security policies	Adherence to data processing guidelines Compliance with controller procedure Amount of data stored Data security systems	Ordinal Interval Ordinal Ordinal	Mean Percentage	Descriptive Regression
To investigate the influence of risk management on fraud detection among commercial banks in Kenya	Risk management	Risk Identification Risk Assessment Risk Mitigation	Number of risks identified Risk assessment procedure Risk control measures	Ordinal Ordinal	Mean Percentage	Descriptive Regression

To determine the influence of controls over efficiency	Controls over efficiency of	Verification	Records and transaction verification	Interval	Mean	Descriptive
of operations on fraud	operations	Evaluation				
detection among commercial banks in		Performance reviews	Review of institutional performance	Ratio	Percentage	Regression
Kenya		Information processing	Level of physical controls	Interval		
		Physical controls	Duties and responsibilities	Ordinal		
		Segregation of duties	allocation	Ordinal		
To establish how financial	Financial and	Accuracy	Report correctness	Ordinal	Mean	Descriptive
and management reporting influence fraud detection	management reporting	Transparency	Truthfulness of the report	Ordinal	Percentage	Regression
among commercial banks in Kenya		Consistency	Reliability of report	Ordinal		
	Dependent:	Number of Fraud	Number of each type of		Mean	Descriptive
	Fraud detection	detected	fraud identified	Ordinal	Percentage	Regression
	among the top five commercial banks in Kenya	Fraud detection capabilities among the management staff	Capacity of the staff to detect fraud	Interval		

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter discusses data analysis and presentation of the research findings, the chapter gives a detailed explanation of the process, techniques and procedures applied to analyze and present data acquired through the use of questionnaires. This chapter begins with the analysis of the response rate where the actual number of respondents who participated in the study was determined. The data obtained under each research variable was analyzed independently through the use of quantitative analysis to enhance high data validity.

4.2 Questionnaire Return Rate

This sector describes the questionnaire return rate.

Table 4.1: Response Rate

The study targeted a sample size of 120 respondents. 120 questionnaires were printed and distributed.

Response	Percentage
Respondent	89
Not Respondent	11
Total	100

From Table 4.1, an entire 89% response rate was realized being far above the 70% that Mugenda and Mugenda (2003) say is excellent response.

4.3 Demographic Characteristics of the respondents

This sector describes the demographic characteristics of the respondents in terms of gender, age and highest level of education attained. The responses are given in Tables 4.2 to 4.4

4.3.1 Gender of the Respondents

The participants were asked to state their gender. Their responses appear in Table 4.2.

Table 4.2: Gender of the respondents

Response	Percentage
Female	71
Male	29
Total	100

Table 4.2shows that majority of those who were willing and able to respond were female which was at 71% of the total respondent rate reflecting their large number in the managerial ranks.

4.3.2 Age Distribution of the Respondents

The participants were asked to state their age bracket. The responses appear in Table 4.3.

Table 4.3: Age distribution of Respondent

Age of Respondent	Percentage (%)
< 24 years	0
25-30	20
31-34	18
35-40	22
41-44	24
45-50	15
>50 years	1
TOTAL	100

From the findings in Table 4.3, 60% of the respondents are aged 40 years and below. This shows that the respondents are mostly young and energetic people who are willing to learn and experiment new and emerging ideas.

Table 4.4: Level of Education of the respondents

The participants were asked to state the highest level of education attained. The responses appear in Table 4.4.

Level of Education	Percentage
Primary certificate	0
Secondary certificate	15
Diploma	20
Bachelors degree	55
Postgraduate degree	10
TOTAL	100

Table 4.4 shows that the bank has a very highly educated staff with 85% of respondents holding at least a diploma. This finding indicates that majority of the employees in this sector were well educated and could easily manage and control fraud.

4.4 Proactive Fraud Audit

The study sought to determine the influence of proactive fraud audit on fraud detection among the commercial banks under study. The participants were asked to state to what extent proactive fraud audit influenced fraud detection in commercial banks. Their responses are captured on Tables 4.5 and 4.6.

Table 4.5: Influence of Proactive Fraud Audit on Fraud detection in commercial banks.

Response	Frequency	Percentage (%)
Very great extent	32	30
Great extent	54	50
Moderate extent	16	15
Little extent	5	5
Not at all	0	0
Total	107	100

Table 4.5 shows that 80% of the respondent agreed to the fact that proactive fraud audit has a great influence on fraud detection in the financial industry and only 5% says that it has little influence.

Table 4.6: Influence of factors of proactive fraud audit on fraud detection in commercial banks.

The respondents were also asked to indicate which factors of proactive fraud audit had the greatest influence on fraud detection in commercial banks. Using a scale of 1 to 5 where, 1-Very great extent, 2- Great extent, 3-moderate extent, 4-little extent, 5-Not at all. Their responses are recorded in Table 4.6.

Factor	Very great extent	Great	Moderate extent	Little Extent	Not at all	Mean	Std deviation
Accounting records accuracy	50	30	22	5	0	1.83	0.91
Routine transaction checking	35	50	12	10	0	1.95	0.88
Error occurring investigation	48	45	13	1	0	1.67	0.71

Findings from Table 4.6 show that routine transaction checking was noted as the very great influential method of identifying fraud in the commercial banks by a mean of 1.95. The accounting records accuracy willingness had an influence on fraud detection indicated by a mean score of 1.83. Investigating errors that might be occurring were noted as worth checking constantly which had a mean of 1.67. All proactive fraud checks and attributes were relevant but checking of routine transactions was noted as the most effective and reflective to the actual realities on the ground. The standard deviation of the responses was at 0.91, 0.88 and 0.71 which shows respondents shared the same views on the questions asked.

That the study findings show that proactive fraud audit has an influence on fraud detection among commercial is in agreement with the arguments of Nila and Viriyanti who in their discussion on proactive fraud audit said that the examination of the system is usually done with the fundamental consideration that there is the possibility of defalcation/fraud, either permanent or temporary, the possibility of undiscovered errors occurring and the possibility of accounts being deliberately distorted. If the internal control is very weak, it may not be possible to express an opinion at all on the accounts presented (Nila and Viriyanti, 2008). If on the other hand the internal control is strong, there could be a minimization of the amount substantive testing used in arriving at an opinion.

The findings from the study identifying routine transaction checking as the factor having the greatest influence on fraud detection are in agreement with the statement of Norman et al who indicated that the first stage of an audit is designed to establish if the accounting records are accurate and provide a reliable basis for the preparation of accounts. This objective can be achieved by checking all the routine transactions which took place during the financial year and this process might uncover fraud, except where fictitious evidence have been carefully created (Norman et al., 2010).

4.5 Compliance with Policies

The study also sought to determine the influence of compliance on with policies on fraud detection among the commercial banks under study. The participants were asked to state how compliance with policies influenced fraud detection in commercial banks. Their responses are recorded in Table 4.7 and 4.8.

Table 4.7: Influence of compliance with policies on fraud detection in commercial banks.

Response	Frequency	Percentage (%)
Very great extent	58	54
Great extent	48	45
Moderate extent	1	1
Little extent	0	0
Not at all	0	0
Total	107	100

The findings in Table 4.7 indicate that 99% of the respondents felt that compliance with policies greatly influenced fraud detection among commercial banks.

Table 4.8: Influence of the factors of compliance with policies on fraud detection in commercial banks.

The respondents were also asked to indicate which factors of compliance with policies had the greatest influence on fraud detection in commercial banks. Using a scale of 1 to 5 where, 1-Very great extent, 2- Great extent, 3-moderate extent, 4-little extent, 5-Not at all. Their responses are recorded in Table 4.8.

Factor	Very Great extent	Great extent	Moderate extent	Little extent	Not at all	Mean	Std Deviation
Standards for data processing	57	22	13	15	0	1.85	1.09
Controllers' procedures	52	30	18	6	0	1.79	0.92
Procurement	60	36	5	5	0	1.57	0.79
Data retention requirement	52	36	10	11	0	1.81	0.95
Security Policies	42	42	22	1	0	1.82	0.77
Personnel Administration	48	48	10	1	0	1.64	0.65

Table 4.8 shows that adhering to standards set for data processing had the greatest influence on fraud detection indicated by a mean of 1.85. The other factors of compliance with policies are all very important in deterring fraud as indicated by an average mean score of between 1.57 to 1.82.

The study findings show that compliance with policies had a very great influence on fraud detection. The response from the field is in agreement with what scholars in the area have commented on the topic. As Nila and Viriyanti indicated that an essential part of internal auditing is substantiating compliance with company and regulatory policies, procedures, and laws. Further they say that it is essential to review whether employees are conducting their tasks as desired by management. Assurance must be obtained that controls are functioning and responsible parties have been assigned. There should be written compliance directives in such sources as manuals, bulletins, and letters (Nila and Viriyanti, 2008).

Respondents noted that policies set aside allow or discourage fraud in the institution. These findings support the assertions of scholars in the field who were of the opinion that in compliance testing, the internal auditor examines evidence to substantiate that the firm's internal control structure elements are performing as intended. A key aspect of internal auditing deals with compliance as to accounting procedures. The accounting system must be operating as designed if reliable and consistent accounting data are to be provided. The appropriate forms have to be used in the prescribed manner (Pratolo, 2007).

4.6 Risk Management

Risk management involves risk identification, risk assessment, risk mitigation and risk monitoring. All four aspect of risk management holds the same magnitude where all factors influencing fraud detection must be analyzed and understood by the risk managers. Participants were asked to state to how risk management influenced fraud detection. Their responses are given in Table 4.9 and 4.10.

Table 4.9: Influence of risk management on fraud detection in commercial banks.

Response	Frequency	Percentage (%)
Very great extent	60	56
Great extent	45	42
Moderate extent	2	2
Little extent	0	0
Not at all	0	0
Total	107	100

Table 4.9 shows that 98% of the respondents who are in management position noted the importance of risk management both to the bank business or investments on fraud detection.

Table 4.10: Influence of the factors of risk management on fraud detection in commercial banks.

The respondents were also asked to indicate which factors of risk management had the greatest influence on fraud detection in commercial banks. Their responses are shown in Table 4.10.

Factor	Frequency	Percentage
Risk identification	32	30
Risk assessment	59	55
Risk mitigation	11	10
risk monitoring	5	5
TOTAL	107	100

Table 4.10 shows that 30% of the respondents felt that risk identification had the greater influence on fraud detection whereas 55% felt risk assessment had greater influence on fraud detection, 10% felt risk mitigation had a greater influence on fraud detection and 5% felt that risk monitoring had a greater influence on fraud detection.

That risk management greatly influences fraud detection is a view that is supported by researchers in the field who stated that the internal audit function plays a unique role in corporate

governance by monitoring organizational risks and ensuring that organizational processes are efficient and effectively controlled. This unique role has been noted in both research and practice. For example, studies have found that the presence of an internal audit function has a deterrent effect on financial reporting irregularities and employee theft. Gordon and Smith (1992) found that a control function, such as that performed by internal audit, can lead to better firm performance. Furthermore, Prawitt et al., (2006) found that the internal audit function moderates the level of earnings management in companies.

The study findings showed that risk assessment was noted as the most appropriate strategy to use while controlling fraud and other related elements mainly because it assesses areas of possibility hence helping create precautions. This finding concurs with Zikmunds' assertions that, risk assessment may consider the possibility of executed transactions that remain unrecorded hence aiding in elimination of the actual fraud (Zikmund, 2008). Internal auditors' skills and abilities to determine the top fraud risks in terms of likelihood and impact are vital to the company's antifraud program

4.7 Controls over Efficiency of Operation

The study sought to investigate the influence of controls over efficiency of operation on fraud detection. The participants in the study were asked to state how controls over efficiency of operations influenced fraud detection. Their responses are recorded in Tables 4.11 and 4.12.

Table 4.11: Influence of controls over efficiency of operations on fraud detection in commercial banks.

Response	Frequency	Percentage
Very great extent	45	42
Great extent	30	28
Moderate extent	26	24
Little extent	6	6
Not at all	0	0
Total	107	100

Table 4.11 shows that a whole 94% of the respondents stated that controls over efficiency of operations had a major influence on fraud detection.

Table 4.12: Influence of the factors of controls over efficiency of operations on fraud detection in commercial banks.

The respondents were also asked to indicate which factors of controls over efficiency of operations had the greatest influence on fraud detection in commercial banks. Using a scale of 1 to 5 where, 1-Very great extent, 2- Great extent, 3-moderate extent, 4-little extent, 5-Not at all. Their responses are recorded in Table 4.12.

Factor	Very Great extent	Great	Moderate extent	Little extent	Not at all	Mean	Std Deviation
Verification	58	30	12	10	0	1.79	0.98
Evaluation	50	22	20	0	0	1.69	0.77
Performance reviews	53	30	18	6	0	1.79	0.92
Information processing	48	35	21	3	0	1.79	0.84
Physical controls	65	27	15	0	0	1.59	0.71
Segregation of duties	50	30	15	12	0	1.87	1.01

From the findings in Table 4.12 segregation of duties had the greatest influence on fraud detection with a mean score of 1.87, verification of operations influenced fraud detection as shown in table 4.12 by a mean of 1.79 evaluation was shown by a mean of 1.69, performance reviews by a mean of 1.79 information processing by a mean of 1.79 and physical controls by a mean of 1.59. The variability of the responses indicated by a standard deviation of 0.98, 0.77, 0.92, 0.84, 0.71 and 1.01 prove that the respondents almost shared the same opinions.

These study findings that indicate that control over efficiency of operations has a great influence on fraud detection is in agreement with the thoughts of Morgan who says that control activities are the policies and procedures management has implemented in order to ensure that directives are carried out. One task of internal auditing is to ensure that controls are in place that will detect fraud and also report fraud, which is supported by the professional literature that shows whistle blowing and investigations by the in sourced internal auditor is an effective fraud detection device (Morgan 2005).

Findings from table 4.12 which shows that segregation of duties has the greatest influence on fraud detection are in agreement with the statement of Gadziala who said that physical controls positively influence fraud detection. Control activities may be classified into the following categories: Performance reviews, including comparisons of actual performance with budgets, forecasts, and prior-period results. It also comprises information processing. Controls relating to information processing are generally designed to verify accuracy, completeness, and authorization of transactions. Specifically, controls may be classified as general controls or application controls (Dixon *et al*, 2006). The former might include controls over data center operations, systems software acquisition and maintenance, and access security; the latter apply to the processing of individual applications and are designed to ensure that transactions that are recorded are valid, authorized, and complete.

4.8 Management Reporting

The study sought to determine the influence of management reporting on fraud detection. The participants in the study were asked to state to how management reporting influenced fraud detection. Their responses are shown in Tables 4.13 and 4.14.

Table 4.13: Influence of management reporting on fraud detection in commercial bank.

Response	Frequency	Percentage (%)
Very great extent	30	28
Great extent	25	23
Moderate extent	49	46
Little extent	3	3
Not at all	0	0
Total	107	100

Table 4.13 indicate that 97% of the respondents stated that management reporting had moderate to very great influence on fraud detection whereas only 3% of the respondents felt that management reporting had little to no effect on fraud detection.

Table 4.14: Influence of the factors of management reporting on fraud detection in commercial bank.

The respondents were also asked to indicate which factors of management reporting had the greatest influence on fraud detection in commercial banks. Using a scale of 1 to 5 where, 1-Very great extent, 2- Great extent, 3-moderate extent, 4-little extent, 5-Not at all. Their responses are recorded in Table 4.14.

Factor	Very Great extent	Great	Moderate extent	Little extent	Not at all	Mean	Std Deviation
Accuracy	59	25	20	3	0	1.70	0.87
Transparency	60	25	18	4	0	1.67	0.87
Consistency	55	28	15	9	0	1.78	0.96

The findings in table 4.14 show that the respondents felt that consistency of the management reporting had a very great influence on fraud detection with a mean of 1.78. Transparency in management reporting had a mean of 1.67 and accuracy in management reporting had a mean of 1.70.

The respondents felt that these factors when closed monitored and practiced had a positive influence on fraud detection. Proceedings of the 3rd Asia-Pacific Business Research Conference 25 - 26 February 2013, Kuala Lumpur, Malaysia, presented by Rozmita Dewi Yuniarti showed that the internal audit function effectiveness can protect companies from fraudulent financial reporting when internal auditors are competent and objective in the following two areas: (1) detecting fraudulent financial reporting; and (2) reporting detected fraudulent financial reporting to top executives if they are not involved in fraud or, otherwise, the board of directors and its representative audit committee for further investigation of the possibility of fraudulent financial

reporting. Thus, the internal audit function effectiveness plays a crucial role in detecting fraudulent financial reporting.

4.9 Inferential Analysis

To establish the relationship between the independent variables and the dependent variable the study conducted inferential analysis which involved a multiple regression analysis.

4.9.1 Multiple Regression Analysis

The researcher conducted a multiple regression analysis so as to identify the influence of internal audit controls on fraud detection among commercial banks in Kenya. Multiple regression is a statistical technique that allows the study to predict a score of one variable on the basis of their scores on several other variables. The main purpose of multiple regressions is to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable. The researcher applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study.

Table 4.15: Coefficients of the multiple regression analysis

Model	Unstandard	dized	t	Sig
	Coefficient			
	В	Std Error	_	
(Constant)	21.58	0.72		
Proactive fraud audit	-0.05	0.78	-2.45	0.62
Compliance with policies	-0.08	0.53	-3.90	0.28
Risk Management	-0.06	0.66	-3.07	0.44
Controls over efficiency of operations	-0.06	0.82	-2.30	0.68
Management reporting	-0.04	0.79	-2.41	0.64

Source: Author

The regression equation was: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$

Becomes

 $Y=21.58-0.05X_1-0.08X_2-0.06X_3-0.06X_4-0.04X_5$

Where: Y = Fraud detection among commercial banks (Dependent variable)

 $\beta_0 = Constant$

 β_1 , β_2 , β_3 , β_4 , β_5 = coefficients of determination

 X_1 = Proactive fraud audits and fraud investigations

 X_2 = Degree of compliance with policies

 $X_3 = Risk management$

 X_4 = Controls over efficiency of operations

 X_5 = Financial and management reporting

 $\varepsilon = Error Term$

From the regression equation established, taking all other factors (Proactive fraud audit, compliance with policies, risk management, controls over efficiency of operation and management reporting) constant as zero, fraud detection among commercial banks would be at 21.58. This interpreted to mean that the incidences/number of fraudulent activities would be very high. Further, if all the other variables are kept constant, a unit increase in Proactive fraud audit will lead to a 0.05 increase in fraud detection in commercial banks. A unit increase in Compliance with policies will lead to a 0.08 increases in fraud detection among commercial banks in Kenya. This applies to all the other independent variables as a unit increase in the independent variable will lead to a unit increase in fraud detection hence a decrease in the number of reported fraudulent cases.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the summary of the findings, the conclusion of the study, it also makes the necessary policy recommendations and finally suggests areas of further research.

5.2 Summary of findings

This section outlines the summary of the study findings.

5.2.1 Proactive fraud audit

Findings from the study shows that the respondent agreed to the fact that proactive fraud audit has a great influence on fraud detection in the financial industry. Additionally routine transaction checking was noted as the very great influential method of identifying fraud in the commercial banks, closely followed by ensuring accounting records accuracy and finally investigation of errors that might be occurring were noted as worth checking constantly.

5.2.2 Compliance with policies

The findings also indicate that the respondents felt that compliance with policies greatly influenced fraud detection among commercial banks. On the factors under compliance with policies the respondents felt that adhering to standards set for data processing had the greatest influence on fraud detection. The other factors of compliance with policies were also noted as being very important in deterring fraud.

5.2.3 Risk Management

The respondents who are in management position noted that risk management had a great influence on fraud detection. The respondents felt that risk identification had a great influence on fraud detection whereas risk assessment had greater influence on fraud detection, risk mitigation had a slightly lower influence on fraud detection and that risk monitoring had the least influence on fraud detection.

5.2.4 Controls over efficiency of operation

The study shows that the respondents were of the view that controls over efficiency of operations had a major influence on fraud detection. From the findings segregation of duties had the greatest influence on fraud detection and the other factors of controls over efficiency of operation equally influenced fraud detection with varying magnitudes.

5.2.5 Management Reporting

The study indicate that the respondents stated that management reporting had moderate to very great influence on fraud detection whereas only few of the respondents felt that management reporting had little to no effect on fraud detection. The findings show that the respondents felt that consistency of the management reporting had a very great influence on fraud detection. Transparency in management reporting had the least influence on fraud detection and accuracy in management reporting had great influence on fraud detection.

5.3 Conclusion of the Study

The study sought to establish the influence of internal audit controls on fraud detection among commercial banks Kenya. The research problem was studied through the use of a descriptive survey design. The target population of the study was the management staff working in commercial banks at the Headquarters in Nairobi. The study collected both primary and secondary data on the current state of affairs. The research was both quantitative and qualitative in nature. The researcher also used a multivariate regression analysis to determine the relationship between the independent variables and the dependent variable. The study concludes that compliance with policies had the greatest influence on fraud detection in commercial banks in Kenya followed by risk management and controls over efficiency of operations, which have an equal influence. Proactive fraud audit has a great influence on fraud detection while management reporting had the least influence. It is for these reasons that the study recommends that banks should recognize the importance of the audit function and support its implementation including setting up policies and guidelines as this would greatly deter fraud. The study also recommends risk management activities to be done, control over efficiency of operation and proactive fraud to be undertaken to ensure fraud detection

5.4 Recommendations

The following are the recommendations from the study;

- 1. The study recommends that financial institutions should adhere to set policies and guidelines as this has shown to greatly deter fraud.
- 2. The study also recommends risk management activities to be undertaken seriously, leading commercial banks should be willing and able to train their workers and other stakeholders on areas which might be prone to the risk of fraud. This will increase chances of detection hence protecting the institution interest at all time.
- 3. To control fraud among the financial institutions, it is prudent to invest in technology. Current crime involves better technological advancement which counters the already existing technology among the main commercial banks in Kenya. To protect them from continued fraud crisis, modern technology will pay a great deal.
- 4. Holding all factors constant, auditing and crime follow up strategies should be availed in line with the current operation system hence streamlining coordination and risk control system where one organ detect and report without having many requirements. This will improve risk management strategies hence discouraging fraud attempts.
- 5. Banks should also endeavor to fully comply with guidelines, rules and regulations on good corporate governance in order to take control of the situation.
- 6. The study also recommends that banks should thoroughly screen prospective employees by obtaining status report from previous employers and relevant agencies adding that employees should be made to understand the risks involved in defrauding banks.

5.5 Suggestions for Further study

These are the suggestions for further study;

- 1. The influence of internal audit controls among other financial institutions i.e. insurance companies and small and medium size enterprises.
- 2. The influence of internal audit process controls in county governments.
- 3. The challenges to effective performance of internal audit departments in other areas of the Kenyan public sector.
- 4. The role of the internal auditor in risk management in county governments.

REFERENCES

- Adeduro, A.A. (1998). *An investigation into frauds in banks*. An unpublished thesis of University of Lagos.
- Adeniji, A. (2004). Auditing and Investigation. Lagos, Value Analysis Publishers
- Aderibigbe, P. and Dada, S. O. (2007). Microauditing Principles. *Lagos ICAN Students Journal*, Vol 11 No 1, Jan/March.
- Arens, A. A., Elder, R. J., & Beasley, M. S. (2010). *Auditing and assurance services: An integrated approach* (13th ed.). New Jersey: Prentice Hall Inc..
- Ashton, R.H. (1999). Enriching the "expertise paradigm" of accounting research: Conscientiousness, general cognitive ability and goal orientation. *Advances in Accounting Behavioral Research*, 2, 3-14.
- Association of Certified Fraud Examiners (ACFE). (2006). Report to the nation on occupational fraud and abuse. Austin, TX: ACFE.
- Babbie, E. (2004). *The practise of social research (10th Ed)*. Thomson Belmont CA: Wadsworth Publishing Company.
- Bell, T., and J. Carcello. (2000). A decision aid for assessing the likelihood of fraudulent financial reporting. *Auditing: A Journal of Practice and Theory*, *19*(1), 169-184.
- Belloli, P. (2006). *Fraudulent overtime*. The Internal Auditor 63 (3): 91-95. Auditing and Assurance Standards Board (AUASB). 2006. ASA 240: The Auditor's Responsibility to Consider Fraud in an Audit of a Financial Report. Melbourne: AUASB.
- Bierstaker, J., R.G.Brody & C. Pacini. (2006). Accountants' perceptions regarding fraud detection and prevention methods. *Managerial Auditing Journal* 21(5): 520-536.
- Borman, W., L. White, E. Pulakos, and S. Oppler. (1991). Models of supervisory job performance ratings. *Journal of Applied Psychology*, 76,863-872.
- Brink, V.Z. & Witt, H. (1982). Internal Auditing. New York, John Wiley & Sons.

- Carcello, J., Hermanson, D., & Raghunandan, K. (2005). Changes in internal auditing during the time of the major US accounting scandals. *International Journal of Auditing*, *9*, 117-127.
- Carey, P., N. Subramaniam, and K.C.W. Ching. (2006). Internal audit outsourcing in Australia. *Accounting and Finance* 46 (1): 11-30.
- Chandran, E. (2004). Research Methods. Nairobi: Starbright services limited.
- Colquitt, J., LePine, J., and R. Noe. (2000). Toward an integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology*, 85(5), 678-707.
- Cook, G.J. & L.H. Clements. (2009). Computer-based Proactive Fraud Auditing Tools. *Journal of Forensic & Investigative Accounting* 1(2).
- Dixon, R. & Woodhead, A. (2006). An investigation of the expectation gap in Egypt. *Managerial Auditing Journal*. 21(3):293-302.
- Epstein M, Geiger M (1994). Investor views of auditor assurance: Recent evidence of the "expectation gap□. J. Account., pp. 60-64.
- Fadzly MN, Ahmed Z (2004). Audit expectation gap: The case of Malaysia. Managerial Aud. J., 19(7): 897-915.
- Fama, E. F., & Jensen, M.C.(1983). *Agency Problems and Residual Claims*. Michael C. Jensen, *Foundations of Organizational Strategy*, Harvard University Press, 1998; Journal of Law & Economics, 26. Available at SSRN: http://ssrn.com/abstract=94032 or DOI: 10.2139/ssrn.94032
- Fama, E.F. (1980). Agency Problems and the Theory of the Firm. *The Journal of Political Economy*, 88(2), 288-307. Retrieved from http://astro.temple.edu/~tub06197/Wk5FamaAgencyProblemsandthetheoryofthefirm.pdf
- Gay, G., Schelluch, P. & Reid, I. (1997). Users' Perceptions of the Auditing Responsibilities for the Prevention, Detection and Reporting of Fraud, other illegal acts and error. *Australian Accounting Review*. 7(1):51-61.

- Gramling, A. A., Maletta, M. J., Schneider, A., & Church, B. K. (2004). The role of the internal audit function in corporate governance: A synthesis of the extant internal auditing literature and directions for future research. *Journal of Accounting Literature*, 23, 194-244.
- Hoffman, V., and M. Zimbelman. (2009). Do strategic reasoning and brainstorming help auditors change their standard audit procedures in response to fraud risk? *The Accounting Review*, *4*(3), 811–837.
- Holtfreter, K. (2004). Fraud in US organizations: An examination of control mechanisms. *Journal of Financial Crime* 12 (1): 88-95.
- Humphrey C, Moizer P, Turley S (1993). The audit expectations gap in Britain: An empirical investigation. Account. Bus. Res., 23: 395-411.
- Institute of Internal Auditors. (2008). *Internal Auditor Competency Framework*. Available at: http://www.theiia.org/guidance/additional-resources/competency-framework-for-internal auditors/.
- Jensen, M. C. (2000). A Theory of the Firm: Governance, Residual Claims and Organizational Forms. Harvard University Press, Journal of Financial Economics (JFE),3(4). Retrieved from SSRN: http://ssrn.com/abstract=94043 or DOI: 10.2139/ssrn.94043
- Kaplan, S., Pope, K., and Samuels, J. (2010). The effect of social confrontation on individuals' intentions to internally report fraud. *Behavioral Research in Accounting*, 22(2), 51–67
- Kothari, C. R. (2007). *Research Methodology: Methods and Techniques*. New Delhi: New Age International Publishers.
- KPMG. (2004). Fraud Survey 2004. KPMG.
- Leung, P. & Chau, G. (2001). The problematic relationship between audit reporting and audit expectations; some evidence from Hong Kong. *Advances in International Accounting*. 14:181-206.
- Low AM (1980). The auditor □s detection responsibility: is there an "expectation gap? J. Account., 150: 65-70.

- Marguerite G, Dean T, Katherine H (2010). *Methods in Educational Research: From Theory to Practice*. San Francisco: Jossey-Bass
- Meckling, W. H., & Jensen, M. C. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure.
- Mensah, S., Aboagye, K., Addo, E., & Buatsi, S. (2003). *Corporate governance and corruption in Ghana: Empirical finding and policy*. African Capital Market Forum, Accra, Ghana. Retrieved from http://www.google.com/pdf
- Mitnick, B.M. (2006). *Origin of the Theory of Agency: An Account by One of the Theory's Originators*. Retrieved from SSRN: http://ssrn.com/abstract=1020378
- Monroe, G. & Woodliff, D. (1994). An empirical investigation of the audit expectation gap: Australian evidence. *Australian Accounting Review*. November, 42-53.
- Morgan, B. (2005). Drying out fraud. The Internal Auditor 64 (4): 111-115.
- Nestor, S. (2004). The impact of changing corporate governance norms on economic crime. *Journal of Financial Crime* 11 (4): 347-352.
- New York Stock Exchange (NYSE). (2003). Amendment No.1 to Corporate Governance Rule Filing. New York, NY: NYSE.
- Ngechu. M. (2004), *Understanding the research process and methods*. An introduction to research methods. Acts Press, Nairobi.
- Nieschwietz, R., J. Schultz, Jr., and M. Zimbelman. (2000). Empirical research on external auditors' detection of financial statement fraud. *Journal of Accounting Literature*, 19, 190–245.
- Nila, P., & Viriyanti. (2008). The relatinship between internal control and good corporate governance (survey on state owned enterprises in Bandung, Indonesia) (Widyatama University working paper). Retrived from http://www.di.tamu.edu and http://www.dspace.org

- Norman, C.S., A. Rose, and J. Rose. (2010). Internal audit reporting lines, fraud risk decomposition, and assessments of fraud risk. *Accounting, Organizations and Society*, *35*, 546–557.
- Pincus, K. V. (1989). The efficacy of a red flags questionnaire for assessing the possibility of fraud. *Accounting, Organizations and Society, 4 (1, 2),* 153-164.
- Pratolo, S. (2007).Good corporate governance and the performance of state owned enterprises in Indonesia. *National Symposium of Accounting X.* Makasar, Indonesia.
- Public Oversight Board (POB). (1993). *Issues Confronting the Accounting Profession*. Stamford, CT: POB.
- Robertson, T., Baron ,H., Gibbons, P., MacIver, R., and G. Nyfield. (2000). Conscientiousness and managerial performance. *Journal of Occupational and Organizational Psychology*, 73, 171-180.
- Rose, A. and J. Rose. (2003). The effects of fraud risk assessments and a risk analysis decision aid on auditors' evaluation of evidence and judgment. *Accounting Forum*, 27(3), 312-134
- Sackett, P. and C. DeVore. (2006). Counterproductive behaviors at work. in *Industrial Work & Organizational Psychology volume 1*. Edited by Anderson, N., D. Ones and C.
- Sharma, V. D. (2004). Board of director characteristics, institutional ownership, and fraud: Evidence from Australia. *Auditing: A Journal of Practice & Theory* 23 (2): 105-117.
- Sullivan, K. (2009). As Internal Audit Staffs Shrink, Will Fraud Rise? *CFO.com*: CFO Publishing Corporpation.www.cfo.com/printable/article.cfm/14461787.
- Ugrin, J., and M. Odom. (2010). Exploring Sarbanes–Oxley's effect on attitudes, perceptions of norms, and intentions to commit financial statement fraud from a general deterrence perspective. *Journal of Accounting and Public Policy*, 29(5), 439-458.
- Viswesvaran, C. (2006). Assessment of individual job performance: A review of the past century and a look ahead. In *Industrial Work & Organizational Psychology Volume 1*. Edited by

Wallace, W., & Kreutzfeldt, R. (1991). Distinctive characteristics of entities with an internal audit department and the association of the quality of such departments with errors. *Contemporary Accounting Research*, 7(2), 485-512.

Wells, J.T. (2003). Corruption: Causes and Cures. Journal of Accountancy. 195(3): 49-52.

Zeune, G. (1997). Fraud: It's your job! Michigan CPA, 48(4), 26-31.

Zikmund, P. (2008). 4 steps to a successful fraud risk assessment. *Internal Auditor*. 65(1): 60-64.

APPENDICES

Appendix 1: Introduction Letter
University of Nairobi
School of Extra Mural Studies
Nairobi
Dear Respondent
REF: INTRODUCTION LETTER
My name is Beatrice Kubasu, I am a student at the University of Nairobi, undertaking a Masters
Degree in Project Planning and Management.
Attached is a questionnaire that is a requirement for my completion of the program. Kindly give
the required information which will be used for academic purposes only.
Strict confidentiality will be observed.
Your cooperation is highly appreciated.
Thank you
Beatrice Kubasu

Appendix II: Questionnaire on the Influence of Internal Audit Controls on fraud detection among Commercial banks: The case of selected banks in Kenya

Section A: Background Information

1.	What is your	gender	: Male	[]	Female	[]	
2.	Which age b	racket d	o you belong(T	ick whichever approp	priate)		
	Below 24 Ye	ears	[]	25 - 30 Years	[]		
	31 - 34 years	S	[]	35 - 40 years	[]		
	41 - 44 years	S	[]	45 - 50 years	[]		
	Over- 51 yea	ars					
3.	What is your	highes	t education level	1? (Tick as applicable	e)		
	Primary cert	ificate	[]	Secondary certifica	te []		
	Diploma/cer	tificate	[]	Bachelors' degree	[]		
	Postgraduate	degree	[]				
	Others-speci	fy					
Sect	ion B:						
PRO	OACTIVE FRA	UD AU	J DIT				
Tick	company?		•	e fraud audit influend extent, 2- Great extent		·	
Very	great extent	[]	Great extent	[]			
Mod	erate extent	[]	Little extent	[]			
Not	at all	[]					
а				fraud detection in yout, 2- Great extent, 3-n			nt, 5-

	Very great	Great	Moderate	Little	Not at
	extent	extent	extent	extent	all
Charling a common of a committee and a					
Checking accuracy of accounting records					
Checking routine transactions					
Investigating errors occurring					

COMPLIANCE WITH POLICIES

6. How does compliance with policies influence fraud detection in your company?							
Very great extent	[]	Great extent	[]				
Moderate extent	[]	Little extent	[]				
Not at all	[]						

7. How do the following factors influence fraud detection in your company? Tick the appropriate response, (1-Very great extent, 2- Great extent, 3-moderate extent, 4-little extent, 5- Not at all)

	Very great extent	Great extent	Moderate extent	Little extent	Not at all
Standards for data processing					
Controller's procedures					
Procurement					
Data retention requirements					
Security policies					
Personnel administration					

RISK MANAGEMENT

8. How does risk management influence fraud detection in your company?								
Very great extent	[]	Great exte	nt	[]				
Moderate extent	[] Little extent []							
Not at all	[]							
9. How do the following factors of risk management influence fraud detection in your company? Tick the appropriate response, (1-Very great extent, 2- Great extent, 3-moderate extent, 4-little extent, 5-Not at all).								
			Very gre	at extent	Great	Moderate	Little	Not
					extent	extent	extent	at all
Risk Identification								
Risk Assessment								
Risk Mitigation								
Risk Monitoring								
CONTROLS OVER EFFICIENCY OF OPERATIONS 10. In your view how do controls over efficiency of operations influence fraud detection in your company?								
Very great extent	[]	Great exte	nt	[]				
Moderate extent	[]	Little exte	nt	[]				
Not at all	[]							
11. In your view how detection in your extent, 3-modera	compa	ny? Tick the	appropria	te response,		•		

	Very great extent	Great extent	Moderate extent	Little extent	Not at all
Verification					
Evaluation					
Performance reviews					
Information processing					
Physical controls					
Segregation of duties					

RELIABILITY OF MANAGEMENT REPORTING

12. To your underst detection in your	Ü		liability o	f management	reporting	influence	fraud
Very great extent	[]	Great extent]]			
Moderate extent	[]	Little extent]	1			
Not at all	[]						

13. How do the following factors of management reporting influence fraud detection in your company? Tick the appropriate response, (1-Very great extent, 2- Great extent, 3-moderate extent, 4-little extent, 5-Not at all).

	Very great extent	Great extent	Moderate extent	Little extent	Not at all
Accuracy					
Transparency					
Consistency					

THANK YOU

Appendix III: LIST OF COMMERCIAL BANKS IN KENYA

- ABC Bank (Kenya)
- Bank of Africa
- Bank of Baroda
- Bank of India
- Barclays Bank
- Brighton Kalekye Bank
- CFC Stanbic Bank
- Chase Bank (Kenya)
- Citibank
- Commercial Bank of Africa
- Consolidated Bank of Kenya
- Cooperative Bank of Kenya
- Credit Bank
- Development Bank of Kenya
- Diamond Trust Bank
- Dubai Bank Kenya
- Ecobank
- Equatorial Commercial Bank
- Equity Bank
- Family Bank
- Fidelity Commercial Bank Limited
- Fina Bank
- First Community Bank
- Giro Commercial Bank
- Guardian Bank
- Gulf African Bank
- Habib Bank
- Habib Bank AG Zurich
- I&M Bank
- Imperial Bank Kenya
- Jamii Bora Bank
- Kenya Commercial Bank
- K-Rep Bank
- Middle East Bank Kenya
- National Bank of Kenya
- NIC Bank
- Oriental Commercial Bank
- Paramount Universal Bank
- Prime Bank (Kenya)
- Standard Chartered Kenya
- Trans National Bank Kenya
- United Bank for Africa[2]
- Victoria Commercial Bank

Source: Central Bank of Kenya Annual Report, 2012 (Central Bank of Kenya, 2012)