



Strathmore
UNIVERSITY

Strathmore University
SU+ @ Strathmore
University Library

[Electronic Theses and Dissertations](#)

2017

An Assessment of fraud risk management and financial sustainability of Non - Governmental Organizations in Kenya

Mary Kariuki
School of Management and Commerce (SMC)
Strathmore University

Follow this and additional works at <https://su-plus.strathmore.edu/handle/11071/5832>

Recommended Citation

Kariuki, M. (2017). *An Assessment of fraud risk management and financial sustainability of Non – Governmental Organizations in Kenya* (Thesis). Strathmore University. Retrieved from

<https://su-plus.strathmore.edu/handle/11071/5832>

This Thesis - Open Access is brought to you for free and open access by DSpace @Strathmore University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of DSpace @Strathmore University. For more information, please contact librarian@strathmore.edu

An Assessment of Fraud Risk Management and Financial Sustainability of Non-Governmental Organizations in Kenya

Mary Kariuki
076540

**Submitted in Partial Fulfilment of the Requirements for Degree of Master of Commerce of
Strathmore University**

**Master of Commerce
Strathmore University
Nairobi, Kenya**

JUNE, 2017

This thesis is available for Library use on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

DECLARATION

I declare that this thesis is my original work and has not been presented to any other university for a ward of a degree. Any work done by other people has been duly acknowledged. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person. It has been examined by a board of Examiners of the Strathmore University

© No part of this dissertation may be reproduced without the permission of the author and Strathmore University.

Mary Kariuki



.....
5th JUNE 2017

APPROVAL

The thesis of Mary Kariuki was reviewed and approved by the following:

Dr. David Wang'ombe

Supervisor

Strathmore University

Dr. David Wang'ombe,

Dean, School of Management and Commerce,

Strathmore University

Professor Ruth Kiraka,

Dean, School of Graduate Studies,

Strathmore University

DEDICATION

This thesis is dedicated to my family for their inspiration, encouragement and prayers towards the successful completion of my master's degree. I give praise and gratitude to God Almighty who has given me the strength and wisdom to undertake this degree.

ACKNOWLEDGMENT

My special and sincere thanks go to my supervisor Dr. David Wang'ombe for his unfailing guidance, support, useful comments and constructive critique which were all instrumental to the successful completion of this thesis. I also appreciate the support and encouragement from my friends and family during the times that I had to balance between the demands of this academic program and an equally demanding work environment. My gratitude also goes to God who renewed my strength at every single stage of this study.

ABSTRACT

Fraud risk management practices influence the financial performance hence sustainability of Non-Governmental Organization. Several fraud risk management techniques are deployed within organizations to curb the vice. They include anti-fraud policies, management style, fraud detection and deterrence mechanisms and internal controls. This study seeks to establish relationship between fraud risk management and financial sustainability of non-governmental organizations in Kenya. The main variables of the study include the techniques of fraud risk used within NGOs in Kenya, extent of adoption of these techniques and relationship between fraud risk and financial sustainability within Kenyan NGOs. The study used an explanatory research design. The study collected both quantitative and qualitative data and analysed it using content analysis, descriptive and correlational analysis methods respectively. The study revealed that fraud is an issue of concern among NGOs in Kenya as most of the NGOs conduct daily or weekly monitoring and apply anti-fraud techniques to a great extent while seeking to curb fraud. The findings indicated that the sector is financially sustainable with the large organisations being more financially stable as compared to small organisations. A multiple regression model was also applied in deriving the relation between the dependent and independent variables. From the findings, the study concluded that all the independent variables; anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style positively correlate with financial sustainability and have a statistically significant relationship with financial sustainability. These variables explain up to 73.1 percent of financial sustainability in Kenyan NGOs. The study recommends that anti-fraud policies should give clear guidance to employees, the organisations should establish policies around whistle blowing, monitoring and financial reporting processes should be considered while setting internal controls and that management should keenly support strategies towards fraud risk management. The outcome of the research will be beneficial in enhancing the understanding of fraud risk management specifically the aspects such as anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style and their relationship to financial sustainability within the NGOs. The findings will also provide the management of NGOs with insight into the various approaches towards fraud risk management techniques and how effectively risk management techniques are in mitigating risks and influence financial performance and also contribute towards the establishment of the fraud triangle, self-control, differential association and fraud scale theories.

TABLE OF CONTENTS

ACKNOWLEDGMENT	iv
ABSTRACT	v
LIST OF FIGURES	x
LIST OF TABLES	xi
LIST OF APPENDICES	xii
LIST OF ACRONYMS AND ABBREVIATIONS	xiii
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background of the Study	1
1.1.1 Fraud Risk Management.....	1
1.1.2 Financial Sustainability	2
1.1.3 Non-Governmental Organisations	3
1.2 Statement of the Problem	5
1.3 Objectives	7
1.3.1 General Objectives	7
1.3.2 Specific Objectives	7
1.4 Research Questions.....	7
1.5 Scope of the Study	7
1.6 Significance of the Study.....	8
CHAPTER TWO.....	9
LITERATURE REVIEW	9
2.1 Introduction	9
2.2 Fraud Risk Management and Sustainability of NGO	9
2.3 Theories Explaining Risk Management Behaviour	9
2.3.1 Self Control Theory	9
2.3.2 The Fraud Triangle Theory.....	10
2.3.4 Differential Association Theory	11
2.3.5 The Fraud Scale Theory.....	11
2.4 The Lifecycle of Fraud Management	12
2.5 Fraud Risk Management Techniques and their Application	13

2.5.1 Anti-Fraud Policies.....	13
2.5.2 Fraud Detection Mechanisms	14
2.5.3 Fraud Deterrence Mechanisms	14
2.5.4 Internal Control.....	15
2.5.5 Management Style	15
2.6 Relationship between Fraud Risk Management and Financial Sustainability.....	16
2.7 Conceptual Framework.....	19
2.8 Summary of Literature Review	19
CHAPTER THREE.....	21
RESEARCH METHODOLOGY	21
3.1 Introduction	21
3.2 Philosophical Assumptions.....	21
3.3 Research Design	21
3.4 Population.....	22
3.5 Sampling.....	22
Source: Researcher (2017).....	23
3.6 Data Collection Methods	23
3.7 Data Analysis.....	23
3.8 Operationalization of Variables.....	25
Source: Researcher (2017).....	25
3.9 Robustness Test of Reliability of the Model	26
3.10 Research Validity and Reliability.....	26
3.11 Ethical Considerations.....	27
RESEARCH FINDINGS AND ANALYSIS	28
4.1 Introduction	28
4.2 Response Rate	28
4.3 Background Information on the Respondents	28
4.3.1 Gender of the Respondents.....	28
4.3.2 Age of the Respondents	29
4.3.3 Level of Education.....	30
4.3.5 Total Period of Work.....	31

4.4 Background Information on the Organizations	32
4.5 Extent of Application of Fraud Risk Management Techniques	34
4.5.1 Aspects of Fraud Risk Management.....	34
4.5.2 Anti-Fraud Policies.....	35
4.5.3 Fraud Deterrence	36
4.5.4 Fraud Detection	38
4.5.5 Employee Awareness	39
4.5.6 Internal Controls.....	39
4.5.7 Management style.....	41
4.5.8 Anti-Fraud Rules and Regulations.....	42
4.6 Financial Sustainability of NGOs.....	42
4.6.1 Fundraising efficiency	42
4.6.2 Indicators of Financial Sustainability	43
4.7 Relationship between Fraud Risk Management and Financial Sustainability.....	44
4.7.1 Impact of Fraud Risk on Financial Sustainability	44
4.7.2 Fraud Risk Management and Financial Sustainability	45
4.8 Inferential Statistics	46
4.8.1 Correlation Analysis	46
4.8.2 Multicollinearity Test	47
4.8.3 Heteroscedasticity Test.....	48
Table 4.18: Heteroscedasticity Test.....	48
4.8.4 Serial Autocorrelation Test.....	48
4.8.5 Regression Analysis	49
4.9 Summary of Chapter.....	50
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.....	52
5.1 Introduction	52
5.2 Research Purpose and Approach	52
5.3 Summary of Findings	52
5.4 Conclusions	55
5.5 Recommendations	56
5.6 Suggestions for Further Studies.....	57

5.7 Implication of the Study	57
5.8 Limitations of the Study	58
5.9 Summary.....	58
REFERENCES	60
APPENDICES	66
APPENDIX 1: questionnaire to employees of NGOs	66

LIST OF FIGURES

Figure 2.1: Conceptual Framework..... 16

Figure 4.1: Gender of Respondents..... 28

Figure 4.2: Age of Respondents..... 28

Figure 4.3: Education Level..... 29

LIST OF TABLES

Table 3.1: Sample Distribution.....	21
Table 4.1: Professional Qualification.....	30
Table 4.2: Total Period of Work	30
Table 4.3: Organisational Information.....	31
Table 4.4: Aspect of Fraud Risk Management.....	33
Table 4.5: Anti-Fraud Policies.....	34
Table 4.6: Fraud Deterrence.....	35
Table 4.7: Fraud Detection.....	36
Table 4.8: Employee Awareness	38
Table 4.9: Internal Controls	39
Table 4.10: Management style	40
Table 4.11: Anti-Fraud Rules and Regulations.....	41
Table 4.12: Fundraising Efficiency Ratio	42
Table 4.13: Organisational Financial Sustainability	43
Table 4.14: Impact of Fraud Risk on Financial Sustainability.....	44
Table 4.15: Fraud Risk Management and Financial Sustainability	45
Table 4.16: Corelation Analysis.....	46
Table 4.17: MultiCollinearity Test.....	47
Table 4.18: Heteroscedasticity Test	48
Table 4.19: Regression Model Summary.....	49
Table 4.20 Regression Coefficients.....	49

LIST OF APPENDICES

Appendix I: Questionnaire to employees of NGOs 58

LIST OF ACRONYMS AND ABBREVIATIONS

BFID	Bank and Financial Institution Division
CBIZ	Century Business Services Inc.
EABL	East Africa Breweries Limited
GDP	Gross Domestic Product
ISA	International Standards on Auditing
ISACA	Information Systems Audit & Control Association
KCB	Kenya Commercial Bank
NGOs	Non-Governmental Organizations
NFP	Not-For-Profit Organization
PWC	Price-Waterhouse Coopers
SPSS	Statistical Package for Social Sciences
VIF	Variance Inflation Factor

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

According to Hamilton and Slatten, (2013), Non-Governmental Organizations (NGOs) reach a substantial number of lives through their activities. They add that these organizations also record a significant growth globally an in spite of their immense contributions in communities, they still remain as targets of fraudsters, giving rise to disrepute. As a result, NGOs experience pressure from stakeholders including governments in which they operate under, regional and international regulators, NGOs rating agencies and donors to remain accountable and sustain performance. This chapter therefore covers the background of the study, statement of the problem, research objective and questions, scope and significance of the study.

Organizations have come to recognize the importance of managing all risks and their interactions, not just the familiar risks or the ones that are easy to quantify (Kummer, Kishore & Peter, 2014). Kanu and Okorafor (2013) assert that risk management practices are usually explained by risk management environment, policies and procedures, risk measurement practices, risk mitigation practices, risk monitoring practices and internal control practices among others. They add that effective risk management starts at the top with clarity around risk strategy and governance. According to the International Standards on Auditing (ISA), fraud refers to an intentional act by one or more individuals among management, those charged with governance, employees or third parties involving the use of deception to obtain an unjust or illegal advantage. Idowu (2009) however defines fraud as a deliberate concealing and/or omitting of truth with the intention of negatively impacting a firm's or an individual financial standing.

1.1.1 Fraud Risk Management

Fraud risk management has become an area of development in organizational performance. According to the 2016 report by Association of Certified Fraud Examiners (ACFE), occupational fraud occurs in three main categories namely; corruption (conflict of interest, bribery, illegal gratuities and economic extortion), asset misappropriation (cash and inventory) and financial statement fraud (net income overstatement or understatement). Several causes of fraud have been identified by various researchers such as Greenidge and Sealy (2010) who link it to the set

detection mechanisms, Khanna and Arora (2009) who associate fraud to overworked staff, low organisational compliance and insufficient training of staff while Kanu and Okorafor (2013) argue that causes of fraud depend on the environment. They classified the causes as; Technological, Legal, Personal, Social and Management. It is important that organizations should try to minimize the chances of fraud occurring. This can be done through developing anti-fraud policies, employee awareness/training, proper internal controls and good governance among others.

Several fraud risk management techniques are used by organizations to curb fraud. These techniques include anti-fraud policies, management style, fraud detection and deterrence mechanisms and internal controls. According to Bierstaker, Brody and Pacini (2006), organizations should establish and maintain a policy on fraud to guide employees. However, Bierstaker, (2009) adds that these policies should consider cultural differences of employees that determines how they react to incidences of fraud. On the other hand, Naicker (2006) asserts that fraud detection entails the identification of fraud as soon as it takes place whereas fraud deterrence refers to measures that seek to stop fraud from occurring according. Grant, Miller and Alali (2008) refer to internal controls as processes designed to provide reasonable assurance that management achieves effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations while Schachler, Juleff and Paton (2007) define management style as the system through which organizations are controlled.

1.1.2 Financial Sustainability

Fraud affects organizations through loss of funds which can lead to low amount of funds available for business, can lead to loss of customer confidence and time wasted through investigations (Neely, 2011). Kroll (2013) noted that 70 % of companies reported suffering from at least one type of fraud. This was up from the previous 61% in the year 2012. Paquita (1993) defines financial sustainability of a non-profit organization as its capacity to obtain revenues in relation to a demand, so as to maintain its productive processes at a constant or increasing rate, produce anticipated results and to obtain a surplus. Paquita also stresses that the financial sustainability can be attained at the level of project or program execution or at the organizational level. Kummer, Kishore and Peter (2014) argue that throughout, several cases of well-established organizations successfully achieving the two objectives but continued experiencing difficulties

financially have been recorded. In the worst cases, these organisations have nearly had to shut their operations. The trio add that organizations have concluded through their experiences that good fundraising and self-income generating procedures are not sufficient without being accompanied by efficient and effective procedures for administration and finances, and budget planning alongside strategic planning; comparing this explanation to a table, it requires all the four legs so as to stand sturdily. Paquita (1993) cites the components making the fundamental pillars for the financial sustainability of an organization as; financial and strategic planning, diversification of revenue sources, sound administration and finance own income generation.

The measure of an organization' policies and operations in monetary terms is referred to as financial performance. It is a general measure of a firm's overall operation health over a given period of time. Several different ways are used to measure the financial performance for NFP organizations. According to CBIZ (2015), the performance may be reflected in the firm's Current Ratio, Viability Ratio, Change in Net Assets, Operating Reliance Ratio, Fundraising Efficiency Ratio, and Operating Margins. In Kenya, fraud has had major impact on organizations giving rise to great losses (Chelangat, 2014). In a study by Githecha (2013), the researcher reveals that banks need to embrace fraud management strategies so as to reduce losses incurred as a result of fraud therefore improving financial performance in his study on the effect of fraud risk management strategies on the financial performance of Kenyan banks. Mahinda (2012) in his study that targeted Kenyan commercial banks while assessing determinants of occupational fraud concluded that traits of employees affect the occupational fraud. A similar study was conducted by Kiragu et al (2013) who concluded that these institutions are to address occupational fraud from both staff and institutional structural perspectives.

1.1.3 Non-Governmental Organisations

According to Mausolff and Spence (2008) and Lecy *et al* (2009), NGO effectiveness which is a measure of NGO performance within the sector has attracted scholarly attention for a while. There is however great disagreement on how to define and measure what makes up NGO performance. Basically, the performance of NGOs represent the result of NGOs activities. Recently, NGOs have moved from this old ways; sustainability which is a prerequisite for NGOs' existence submits a more definitional problem. Several arguments are being raised that, with the roles that NGOs play in facilitating development, NGOs can therefore make profits

which then can be ploughed back into their financial mainstream hence increase and maintain their developmental plans. NGOs are thus seen as development agents bringing their role development into sharp focus. This is a move away from the restrictive model where an NGO was seen only as social welfare provider. This diversification from the normal has resulted from pressure from the unpredictable environment that NGOs operate within. This in turn exposes these NGOs to fraud risks. For the NGOs to perform successfully in the execution of their roles within the society, they need a resilient organizational structures and policy with support from ongoing training that seek to ensure that duties are shared by executives, board members, employees and volunteers (Hamilton & Slatten, 2013).

By 2012, the Kenyan NGO sector accounted for up-to 5% of the country's gross domestic product (GDP) and one of the huge employers (Kenya Bureau of Statistics, 2012). The country's, NGOs are regulated by The National Council of NGOs, also known as the Non-Governmental Organisations Council (NGO Council). It is a self-regulating and a non-partisan body made up of all registered NGOs in the country (NGO Council, 2017). The organisation was established in August 1993 under the Non-governmental Organizations Co-ordination Act of 1990 as a forum of all voluntary agencies. According to the NGO council, currently all registered NGOs in the country are members of the council. The council has a membership of over 8,500 NGOs. Members are required to submit their annual work plan and an annual membership fee. The NGO Council membership includes international, regional and national NGOs operating in Kenya and working with a host of CBOs and groups. These NGOs serve citizens across varied sectors including: agriculture, water, education, environment, health, human rights, gender and development, children's rights, poverty alleviation, peace, population, training, counselling, small scale enterprises, disability and many others. On the other hand, the NGO Council serves as the overall leader in the NGO sector. The NGO coordination act spells a requirement to all NGOs to submit an annual return including the audited accounts for organisations with a budget of over one million; however, according to the NGO coordinating board, approximately 20% of the registered NGOs are compliant (NGO Council, 2017).

According to Kerine (2015), NGOs also suffer from challenges in their projects ranging from sustainability to reliability. Sustainability is now treated as the main thing within the development circles of NGOs; it generally explains the ability of a specific project to remain

viable and in operation even after the termination of external support. Not all projects run by these NGOs are able to achieve this fete of sustainability. Given the rapidity in which NGOs are established, they are obviously too recent, as institutions, to build up capacity to manage themselves properly and professionally facing financial mismanagement (Bujra and Dejumobi, 2002). In the study conducted by, Kunguru et. al, (2002) concluded insufficient data on financial performance makes it hard to carry out a complete efficiency test of the NGO projects in Kenya. This raises the need for adopting current performance management techniques with the lack of proper data and management capacity and capabilities. Kunguru et. al, (2002) also concluded that most NGOs projects in Kenya rely heavily on external funding without which most of the projects would collapse. According to Thomson (2010), enough literature has been used to document the effect of the external funders on performance measurement practices. This implies that the level of independence among the NGOs in relation to the influence of donor procedures differs from one NGO to another depending on the leadership.

1.2 Statement of the Problem

As a worldwide problem, fraud has impacted all industries and firms despite the major improvements in technologies aimed at detecting fraud (Chelangat, 2014). In spite of their immense contributions in communities and individual lives, NGOs still remain as targets of fraudsters, giving rise to disrepute (Hamilton & Slatten, 2013). In general, however, fraud is easier to perpetrate in NFP organizations than in their profit-oriented counterparts (Greenlee et al, 2007). Douglas and Mills (2000) and Owen (2003), for example, cite several factors that make NFP organizations more vulnerable to fraud including: an atmosphere of trust, the difficulty in verifying certain revenue streams (including cash donations), weaker internal controls, lack of business and financial expertise, and reliance on volunteer boards (Greenlee et al., 2007). Kroll (2013) noted that 70% of companies registered a minimum of one category of fraud; this was a 9% increase from the 2012 statistics. A 2016 report on fraud presented by the Association of Certified Fraud Examiners (ACFE), revealed that firms incur losses of up to 5 % annually in relation to their incomes. The report further argues that occupational fraud occurs in three main categories namely; corruption (conflict of interest, bribery, illegal gratuities and economic extortion), asset misappropriation (cash and inventory) and financial statement fraud (net income overstatement or understatement). Kenya has also bore the brand of increase in fraud (Chelangat, 2014). A 2014 report presented by PWC on annual crime in Kenya revealed that

52% of all the organisations in the country including NGOs confirmed having registered a fraud incidence in the last two years.

Fraud risk management practices have a great effect on the financial performance hence sustainability on both profit making and Non-Governmental Organizations. These practices usually target to minimize of financial losses to any organization. Most organizations with better established risk management practices perform better financially (Wanjiku, 2013). However, according to the BFID (2012), most institutions are un-willing to tackle the issue of fraud through implementation of these practices. Occurrence of fraud generally results to lose of monies within organizations. This further result to these organization not having enough funds to execute their mandate; among, Non-Governmental organizations, these may be due to reduction in donor confidence. According to Stulz (1996), some risks present opportunities through which the firm can acquire comparative advantage, and hence enable it to improve on financial performance.

Several studies have been conducted globally and locally in relation to fraud. In a study conducted by Tyge, Kishore and Peter (2014) on the effect of risk management on not for profit organisations in New-Zealand and Australia, the three concluded that organisations without an experience in fraud rely on ineffective prevention measures. They also add that the occurrence of fraud initiates a learning process leading to a better understanding of fraud risk management and establishment of internal controls. Kerine (2015) in her study on factors influencing financial sustainability of NGOs in Nakuru County concluded that staff training ensures continued staff competence. She however fails to connect financial sustainability to fraud management. According to Neely (2011), NFP organizations are under constant pressure from governments, regulators, watchdog groups, charity rating agencies, donors and the community to demonstrate accountability and performance. NGOs therefore mostly rely on internal structures, policies and training to cut down on risk exposures. Okoye & Gbegi (2013) carried out a study on the evaluation of the effect of fraud and related crimes on the Nigerian Economy. The study revealed that, weak internal controls increase the chances of fraud. Owusu-Ansah et al, (2002) and Alleyne et al, (2010) addressed fraud detection and the underlying mechanisms and the effectiveness of fraud detection measures in their researches respectively.

However, these studies were based on profit making organization hence their findings may not be easy to adopt in NGOs. Kerine (2015) confirms that most research studies on NGOs in Kenya target outcomes of NGOs programmes, capacity building, determinants of influence of the NGOs and government involvement. The researcher however does not give the relationship between these aspects and financial sustainability: this being explained by the assumption that NGOs rely on unlimited donor funding. This study therefore pursued to fill this knowledge gap.

1.3 Objectives

The study's objective was broken down to both general and specific objectives.

1.3.1 General Objectives

The study's general objective was to assess the influence of fraud risk management and financial sustainability on Non-Governmental Organisations in Kenya.

1.3.2 Specific Objectives

- i. To determine the extent of application of fraud risk management techniques within the Kenyan Non-Governmental Organizations.
- ii. To assess financial sustainability of Non-Governmental Organizations in Kenya.
- iii. To establish the relationship between fraud risk management and financial sustainability in Non-Governmental Organizations in Kenya.

1.4 Research Questions

- i. To what extent are fraud risk management techniques applied within Non-Governmental Organizations in Kenya?
- ii. How financially sustainable are the Kenyan Non-Governmental Organizations?
- iii. What is the relationship between fraud risk management and financial sustainability in Non-Governmental Organizations in Kenya?

1.5 Scope of the Study

The study focused on Non-governmental organizations registered in Kenya which also submit their annual returns to the NGO council. In assessing the specific objectives, the study examined the fraud risk management techniques and the extent to which they are employed and the relationship between fraud risk management and financial sustainability. The population of the study comprised of employees, at all levels of management from the finance, audit, and risk management and human resources departments.

1.6 Significance of the Study

In general, however, fraud is easier to perpetrate in NGOs than in their profit-oriented counterparts (Greenlee et al., 2007). Douglas and Mills (2000) and Owen (2003), for example, cite several factors that make NGOs more vulnerable to fraud including: an atmosphere of trust, the difficulty in verifying certain revenue streams (including cash donations), weaker internal controls, lack of business and financial expertise, and reliance on volunteer boards. The outcome of the research is most beneficial to NGOs in providing the management and directors with insight into the various approaches towards financial risk management techniques and how effectively risk management techniques are in mitigating risks and influence financial performance. The findings can however be absorbed within other sectors in the country's economy. The research also facilitates future studies on fraud and financial sustainability in NGOs and other sectors of the economy and enhances the theories upon which the current research is anchored; fraud triangle, self-control, differential association and fraud scale theories.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter summarises the reviewed literature. It is divided into sections including fraud risk management and sustainability of NGOs; theories explaining risk management behaviour including self-control, fraud triangle, differential association and fraud scale theories; life cycle of fraud management; fraud risk management techniques and their application that entail anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style; the relationship between fraud risk management and financial sustainability and summary of literature review.

2.2 Fraud Risk Management and Sustainability of NGO

A number of studies have been done in the area of fraud which have dwelt largely on Bank frauds despite the fact that fraud affects organisations in all sectors. Wanjiku (2013) asserts better established risk management practices enhance financial performance. The limited literature in the study of fraud risk management in Kenyan NGOs (Kerine, 2015) is what this study attempted to fill by empirically investigating the effect of Fraud risk management on financial sustainability of NGOs in Kenya. The study was anchored on the following theories; Self Control Theory (Holtfreter et al., 2010) that argues that the degree of self-control determines the likelihood committing crime; The Fraud Triangle Theory (Albrecht et al., 2009) that presents fraud as a composition of three elements that include; perceived pressure and opportunity and the rationalization fraud; Differential Association Theory (Edwin, 1974) which states that people learn to engage in fraudulent activities through relationships with other fraudsters and the Fraud Scale Theory which substitutes rationalisation in the fraud triangle theory with personal integrity.

2.3 Theories Explaining Risk Management Behaviour

This is a collection of interrelated ideas based on theories. It is a reasoned set of ideas which are derived from and supported by data. This study was guided by the following theories:

2.3.1 Self Control Theory

The self-control theory as cited by (Holtfreter et al., 2010) states that people with low degree of self-control have a high likelihood of committing crime. People who have no self-control tend to

be impulsive, have little sensitive physical other than mentally, are not risk averse, are shortsighted and less verbal (McMullen, 1999). Self-Control Theory states that children learn low self-control from their parents as they bring them up. It further argues that absenteeism parenting may give rise to children who are not able to control their gratification, engage in risky behavior, inconsiderate of other people's feelings and cannot manage their impulses (Holtfreter et al., 2010). McMullen, (1999) also adds that people with greater abilities of self-control finally find out the low likelihood of long-term benefit and high chance of apprehension that can be linked to criminal enterprise.

The proposition of the theory in relation the study is that fraud can be controlled if organizations put in place fraud detection and deterrence mechanisms and policies that are geared towards avoiding employees from engaging in risky fraud behavior.

2.3.2 The Fraud Triangle Theory

Albrecht et al., (2009) states that fraud is a composition of three elements that include; perceived pressure, opportunity and the rationalization fraud. These elements make up the fraud triangle. The three aspects making up the fraud triangle are not independent but interact with each other; when the opportunity is viewed to be bigger, or the intensity of the pressure increases, then the lower the rationalization for one to engage in fraud (Albrecht et al., 2010). However, according to Rae & Subramaniam (2008) fraud is viewed as a multi-faced issue hence a combination of several factors. Rae & Subramaniam add that in some instances, however less developed the internal controls are, fraud cases may be at zero while at some points, an organization may set in place very good internal controls but employees of the organization may still find a way round the internal controls hence commit a fraud. Enhanced understanding of how the three aspects; opportunities, pressures and rationalizations facilitate the committing of fraud in an organizations may facilitate the management in identifying with ease the areas prone to fraud hence work towards strengthening these areas (Albrecht et al., 2010).

Individuals engaged in fraud need to develop methods to rationalize their deeds presenting them as acceptable (Albrecht et al., 2009). Lack of integrity and moral reasoning by an individual may be blamed for the urge of the same individual to justify a fraudulent act (Rae & Subramaniam, 2008). Rationalization by people engaged in fraud rises from their feeling that the victims are indebted to them hence they deserve to get more than they are currently (Mutua, 2011). Some

people bear attitudes, traits or ethical beliefs that propel them to willfully engage in fraudulent act (Cohen et al., 2011). Hillison et al., (1999) states that people with well-established moral codes are able to avoid the using rationalizations to justify fraudulent acts; It is however vital for internal auditors to work with an assumption that everybody has the capability of justifying the commission of fraud.

The theory therefore proposes that fraud is undertaken by individuals who are employees of an organization who are able to easily identify an existing opportunity for fraud hence take advantage of it. This therefore implies that fraud can be curbed to a great extent if the triggers, opportunities and employee rationalization can be addressed by organization through anti-fraud policies and internal controls.

2.3.4 Differential Association Theory

This theory was floated by a criminal scholar in the name of Edwin Sutherland in the year 1974. This theory argues that people learn to engage in fraudulent activities through relationships with other fraudsters. Differential Association Theory focuses mainly on how people learn to become criminals, but leaves out the aspect as to why they end up being criminals.

The relevancy of the theory to the current study is anchored on the fact that that if fraud is to be reduced greatly, then the ethics of carrying out business must be changed which links further to fraud deterrence mechanism.

2.3.5 The Fraud Scale Theory

This theory was developed in 1984 by three individuals namely Albrecht, Howe & Romney. According to the three, fraud triangle theory should leave out rationalization and in its place replace with personal integrity. This is specifically applicable in financial reporting of fraud since pressure is more observed in this case. The pressure includes analyst forecasts, management's earnings guidance, sales history and earnings growth. Albrecht, Howe & Romney (1984) define personal integrity as the moral code adopted by an individual.

The theory informs the study in that all established fraud management strategies should take into account an individual's integrity.

2.4 The Lifecycle of Fraud Management

Fraud management lifecycle is defined by Albrecht et al. (2009) as a network lifecycle entailing levels which are summed up entities that include interrelated, interdependent and non-dependent operations, actions and functions. In order for an organization to effectively manage a fraud lifecycle, it should, as the initial step, understand the stages in the fraud lifecycle (Wilhelm, 2004). Wilhelm (2004) argues that the lifecycle of fraud management entails eight levels including fraud deterrence stage that engages in stopping fraud before it is undertaken through ensuring that it is more difficult for fraudsters to engage in illicit behaviour since they tend to mutate and migrate towards anonymity and least resistance. Fraud deterrence can also be achieved through making the consequences clear to the employees and creating fear of consequences or difficulty of being involved, discourage or prevent fraudulent activity from being attempted (Kimani, 2011).

Wright (2007) states that fraud policies must seek to strike a balance in deterrence of value, reducing losses, amount of sales, operational scalability and cost efficiency. On the other hand, the process of creating policies in connection with fraud management entails a continuous process of putting together the states disassembled during the analysis stage, through the knowledge obtained from the carried out analysis, fusing it with the other environmental aspects which can be categorized as internal, external or interactive in order to develop policies that capture the entire aspect, while taking advantage of the knowledge of the parts (Wilhelm, 2004). An organization should have leaders of the fraud management department from those staff involved in policy development. Hassink et al, (2010) adds that the policy developers should consider all factors within the fraud management department including the needs of the entire business enterprise. On the other hand, the fraud investigation stage includes obtaining enough evidence and information to stop fraudulent activity, to obtain recovery of assets or restitution and to provide information and support for the successful prosecution and conviction of the fraudsters (Albrecht, et al., 2009). The investigations in relation to fraud focus on three main aspects that are activity based; internal investigations, external investigations and law enforcement coordination. According to Wilhelm (2004), investigations of employees, contractors, consultants or vendors make up internal investigation process while external investigations include all investigations carried on customers, fraudsters and organized groups.

Law enforcement coordination as further argued by Gottschalk (2010) refers to the provision of information and necessary resources to facilitate the maintenance of a partnership with local law enforcement authorities including the state.

Carrying out continuous and intensive investigations enhances fraud deterrence and ensures the maintenance of an effective relationship with law enforcement. Finally the prosecution stage is focused upon prosecutorial and judicial authorities as well as with law enforcement (Wilhelm, 2004). The intensions of prosecution in the fraud arena is usually geared towards punishing those involved in fraud with an intention of preventing further theft, establish, maintain and enhance an organization's business reputation in deterring fraud so that the fraudsters are aware of it and also recover or retribute what has been lost (Albrecht et al., 2009).

2.5 Fraud Risk Management Techniques and their Application

An effective risk management process calls for a reporting and a review structure that ensures identification and assessment of risk is effectively done and right control techniques are well put in place (Al-Tamimi and Al-Mazrooei, 2007). Several fraud risk management techniques are deployed within organizations to curb the vice. They include anti-fraud policies, management style, fraud detection and deterrence mechanisms and internal controls.

2.5.1 Anti-Fraud Policies

Each organisation should establish and maintain a policy on fraud to guide employees (Bierstaker, Brody, & Pacini, 2006). These policies should consider cultural differences of employees that determine how they react to incidences of fraud (Bierstaker, 2009). Wright (2007) argues that fraud policies should be applied across board within the organization; no senior management should be left out. This demonstrates the organization's commitment in curbing fraud and also indicates the organization's approach and attitude towards the occurrence of fraud. Ledgerwood and White (2006) add that these policies should explain to every employees of what is expected of them, how their duties should be executed and the resultant consequences in the event of contra-performance. The degree and complications involved in current day frauds reveal that a successful anti-fraud policy should be supported by an effective procedure entailing prevention and detection of fraud. Wright (2007) asserts that anti-fraud policies facilitate an organisation' financial sustainability through a preventive mechanism that seeks to curb fraud before it occurs.

2.5.2 Fraud Detection Mechanisms

Naicker (2006) asserts that fraud detection entails the identification of fraud as soon as it takes place. He however adds that both fraud detection and deterrence are important and should be executed together for overall efficiency in fraud management. Naicker (2006) argues that fraud detection should be a continuous process since methodologies of committing fraud keep mutating among the fraudsters once they know that their previous methods have been detected and deterred. Several studies have addressed fraud detection and related mechanisms (e.g. Owusu-Ansah, Moyes, Oyelere, & Hay, 2002), effectiveness and results of fraud detection (Alleyne, Persaud, Alleyne, Greenidge, & Sealy, 2010) and the measures of the fraud (Khondkar & Siegel, 1998). However, most of these findings relate to profit making organizations. The unique characteristics of non-profit making organizations make it impossible to adopt these findings relating to for-profit organizations. For instance, trust is an important requirement for success in a non-profit organization. According to the findings by Tyge-F, Kishore and Peter (2014), most non-profit organizations rarely use fraud detection instruments. This makes them more susceptible to fraud. He however adds that this may be as a result of lack of expertise in identifying the suitable and most effective fraud instruments. Several fraud detection mechanisms have been identified by different researchers including fraud risk assessment (Knap and Knap, 2001); ethical organisational culture (Albrecht, Albrecht, and Albrecht, 2009) and internal and external audits (IIA, 2014).

2.5.3 Fraud Deterrence Mechanisms

Fraud deterrence refers to measures that seek to stop fraud from occurring according to Naicker (2006). Becker's research (Becker, 1974) on the economics of crime offers information on how organizations may deter fraudulent behavior. She asserts that people may be deterred from getting involved in fraudulent activities when organizations put in place higher fines and penalties. She also adds that this increases the probability of detecting fraud. In support of this argument, Garoupa (2001) states that this approach may yield no results if wealthy criminals are subjected to a low fine. Punishment that is little or completely in-existent denies individuals an opportunity to base their decisions on their moral values since they escape with the unethical behaviour while receiving personal gains. Kimani (2011) argues that a good fraud deterrence strategy should involve clear division of duties, staff supervision, monitoring work performance and ensuring that when systems are accessed proper control are in place. Fraud deterrence can be enhanced by an organization through training of its staff on risk management.

2.5.4 Internal Control

Internal controls are processes designed to provide reasonable assurance that management achieves effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations (Grant, Miller, & Alali, 2008). Rae and Subramanian (2008) state that internal controls prevent fraud through monitoring and enhancing an organization's financial reporting processes as well as ensuring compliance with relevant laws and regulations. The controls provide reasonable assurance in ensuring cost effective actions are taken in restricting deviations from the organization's norms to intolerable heights. The effectiveness of the set internal controls should be often assessed to identify if the system is functioning as intended (Fadzil, Haron & Jantan, 2005). Internal controls should stress on, correct identification and measurement of risks, activities that control the various levels of operation, information systems that accurately and timely reports anomalies.

2.5.5 Management Style

According to Nwaduke (2012), management style is a managerial term that refers to the how of management. McGuire (2005) adds that it is a functionality that is linked to personality. McGuire adds that management style can be viewed as the '*glue*' that binds the various functions in an organisation to the operation processes. It is generally not the procedure of how to do it but the framework of how to execute it. Having a different view, Khandwalla (1995) referred to management style as a clear way in which organisations make decision and execute various functions including; setting of goals, developing and implementing of strategy, image building, managing stakeholders among others. Several researchers have classified the various forms of management styles. For instance, Burn and Stalker (1961) categorise the styles as either organic or mechanistic while Likert (1967) regarded participative, paternalistic, exploitative, autocratic and consultative as the forms of existing management styles.

For an organisation to attain its desired business objective, it is important for the management and the followers to establish an efficient, effective and interactive relationship (Jaskyte, 2004). Jaskyte further adds that employee' view on an organisation' leadership can be used to predict their commitment towards their organisations. According to an argument by Mullin (1998), each leadership style has a unique impact on the productivity and commitment of employees. This therefore implies that any strategy including the implementation of the fraud risk management of with an organisation still depends on the management style adopted. In line with this assertion,

Basel Committee (2011) claimed that a well-established leadership framework is a prerequisite for managing operational risk management. Wanjiku (2013) also argues that the better an organization's management structure is, the better placed an organisation is in implementing its strategies, this entails fraud risk management strategies. On the other hand, Kanu and Okorafor (2013) consider management, among other factors, as an aspect that impacts fraud risk management. Generally, leadership is strongly considered as having the potential to influence people (Hersey et al., 2001).

2.6 Relationship between Fraud Risk Management and Financial Sustainability

Fraud risk management practices influence the financial performance hence sustainability of Non-Governmental Organization. According to Wanjiku (2013), most organizations put in place fraud risk management measures but further argue that companies with better established risk practices perform better financially. They generally outperform the other companies through efficiently deploying resources that are not adequate and reducing their exposure to risk hence resulting to a financial save to the organization. Most organizations globally make substantial investments in their human resources, processes and technology to facilitate the control business risk. Generally, these risk investments initiatives focus mainly on financial controls that seek to ensure organizational financial sustainability. CBIZ (2015) list a number of financial ratios that can be used to measure the financial sustainability of NGOs including Current Ratio, Viability Ratio, Viability Ratio, Change in Net Assets, Operating Reliance Ratio, Fundraising Efficiency Ratio and Operating Margins. The organisation adds that these performance measurements can also be used in the evaluation of operations, programmes and services undertaken by NGOs.

Most executives within the NGO raise different arguments in relation to fraud and mostly assuming that since their organizations are engaged in noble causes, their employees and volunteers would not be engaged in fraud (Rothschild & Milofsky, 2006). According to Buckhoff & Parham (2009), these misplaced beliefs may result to the organization not putting in place necessary controls for safeguarding their assets. Douglas and Mills (2000) add that relying on trust, the incomplete verification of revenue streams, weak controls, absence of expertise within the organizations and over-reliance on volunteers enhance the problem of fraud. With the today's competitive business world, the general importance of risk management has become heightened. The practice of risk management usually seeks to minimize financial losses to any organization. A report on fraud issued by the Association of Certified Fraud Examiners (ACFE)

in (2012), indicated that organizations lose up to 5 % of their revenue each year. Organizations that have been affected by fraud end up losing monies that may result to funds not being available to execute the organization's business. This may further erode customer confidence and time that may have to be spent on investigations.

According to Alymkulova & Seipulnik (2005) one of the greatest challenges facing non-profit organizations in Central Asia, particularly Kazakhstan and Kyrgyzstan, is how to sustain and support NGO activities considering the turbulent operating environment in which they operate in. In Kenya, NGOs have also sustainability and reliability challenges in their projects. Sustainability has become a buzzword within the development circles; it describes the ability of a given project to remain viable even after external support is terminated. Kunguru et. al, (2002) asserts that most NGOs projects in Kenya rely heavily on external funding without which most of the projects would collapse. According to the NGO coordination board, revenue of about \$285 million was received in 2005, of this amount, close to 90% came from donors. Many Kenyan companies that channelled their corporate social responsibility funds through NGOs have also started own foundations like; Safaricom, Equity Bank, EABL and KCB. These Foundations have also diverted funds that were once channelled to NGOs (Rawlings, 2010). According to these studies, financial sustainability within NGOs can be measured using parameters such as number of donors in partnership with the organization and the amount of money donated to the organization. According to Jarzabkowski, (2005) any change in the operating environment of an organization calls for the consideration of internal realignment and reshaping of strategy. In line with this, Ann (2015) argues that some NGOs in Kenya have had to engage in income generating activities in order to remain sustainable.

Kerine (2015) carried out a study on factors influencing financial sustainability of NGOs in Nakuru County. She applied both descriptive and inferential statistics in her study and concluded that staff competence affects the organizations' financial sustainability and this can be enhanced through staff training. A 2004 publication by Keller and Owens on preventing and detecting fraud in not-for –profit organizations suggest a comprehensive approach to controlling fraud that includes management support, risk assessment and financial and non-financial controls. In a study carried out by Chiezey & Onu (2013) on the impact of fraud and fraudulent practices on the performance of banks in Nigeria within the period 2001-2011. Evaluative research design

was used to determine the nature, magnitude and economic consequences of fraud on banks in Nigeria. The study found out that poor internal controls leads to increase in fraud and fraudulent activities. Kiragu et al (2013) also conducted a study on the effect of Bank growth on occupational fraud risk in Commercial banks in Kenya. The objective of the study was to find out whether Commercial banks growth has had an effect on occupational fraud in Commercial banks. The results of the study were negative and that there is no significant effect of Bank growth on occupational fraud risk in Commercial banks in Kenya.

Odhiambo (2013) did a study on the effects of financial fraud and liquidity on financial performance of commercial banks in Kenya. The study found out that financial fraud loss and liquidity ratios had a strong and significant influence on financial performance of commercial banks in Kenya. On the other hand, Akindele (2011) in his study of fraud as a negative catalyst in the Nigerian Banking Industry, found out that lack of training, communication gap and leadership skills were the greatest causes of fraud in banks. He advised that adequate internal control mechanism be put in place and that workers satisfaction and comfort be taken care of. Idowu (2009) carried out a study on the assessment of fraud and its management in Nigeria Commercial Banks. The study found out that greed rather than poor salaries is what makes people to commit fraud and that poor salary is not an excuse to commit fraud. Akinfala (2005) carried out a study on job involvement/experience factors and fraudulent behaviour amongst serving and convicted employees. The study revealed that the level of job involvement is a function of three factors; Motivation, Identification and a feeling.

the set internal controls should be often assessed to identify if the system is functioning as intended (Fadzil, Haron & Jantan, 2005). On the other hand, Basel Committee (2011) asserts that a well-established governance framework is a prerequisite for an efficient operational risk management. Overly, fraud risk management practices influence the financial performance hence sustainability of Non-Governmental Organization. In line with this argument, Wanjiku (2013) argues that most organizations put in place fraud risk management measures and adds that companies with better established risk practices perform better financially.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives a comprehensive description of the research methods and procedures that was used in conducting the study. It outlined the Philosophical Assumptions, Research Design, Population, Sampling frame and techniques, Data collection procedures, Data processing and analysis, Test of the validity of the model and Pilot test.

3.2 Philosophical Assumptions

Every study is anchored on some underlying philosophical assumptions on what makes up an authentic study and the research method that is convenient for knowledge development in a given research. The study adopted the interpretive paradigm for the framework of the research. The approach is adopted since it aims at explaining the subjective reasons and meanings behind a social action. Willis (1995) argues that interpretivists stand against foundationalists, who state that there is no one right method to knowledge. Myers (2009) also asserts that the foundation of interpretive researchers is that access to reality is only via social constructions including language, consciousness and shared meanings. Interpretive paradigm is based on observation and interpretation, hence to observe entails collecting information on events, while interpretation involves making meaning of the observed information through drawing inferences or judging the association between the information and some abstract pattern (Aikenhead, 1997).

3.3 Research Design

Thornhill et. (2003) defined a research design as a general plan on how the researcher plans to answer the research question. He further cites that the design should consider the source from which the researcher intends to collect data and the constraints the researcher will have to go through such as money, time, ethical issues and access to data. On the other hand, Mugenda & Mugenda (2003) describe a research design as a structure of investigation conceived to obtain answers to the research questions. They further state that this should include an outline of the research work to enable the representation of results in an understandable form. The research adopted a descriptive design approach. This research design was selected for the study since the study seeks to narrate facts and describe characteristics on the current research topic. According to Kothari & Garg (2014), a descriptive research is connected to particular predictions, fact

narration and characteristics of variables being studied. Mugenda & Mugenda (1999) also assert that a descriptive research describes the existing conditions and attitudes through observation and interpretation techniques.

3.4 Population

Population is the subject such as a person, organization, customer database or amount of quantitative data on which measurement is being taken (Cooper & Schindler, 2003). A population must entail common observable traits and grant each element a probability that is equal of making it into the final sample. The study will target all the 1700 NGOs that are compliant in submitting their annual returns. This is according to the NGO Council of Kenya (2017). The study limited itself to this population since it relied on secondary data on the financial performance of the NGOs. Heads of the finance departments were sampled for response. These groups were selected because they are directly involved in either developing or implementing the daily running financial procedures and controls for their various NGOs and therefore knowledgeable in the subject under research.

3.5 Sampling

In studying the sample, the sample is sufficient if it is representative of the population or has the same characteristics as the population (Zikmund, 2003). Besides, Mugenda & Mugenda (1999) argued that it is not necessary to study the entire population in order to be accurate and reliable in describing a population characteristic. Mugenda and Mugenda (2003) stated that a sample of 10% - 30% of the entire population under study is a good representation of the population. The study therefore settled for a 12% sample representation of the population so as to give allowance for the unreturned and incompletely filled questionnaires hence ensuring the 10% minimum threshold is arrived at. This represented a sample size of 204 units out of the total target population of 1,700 heads of finance from each of the NGO's head offices. The target population was then divided into three strata depending on their financial base: Huge-sized (Turnover >Ksh. 200million annually), Medium-sized (Turnover > Ksh. 50million but < Ksh. 200million) and Small-sized NGOs (Turnover < Ksh. 50 million). Sample from the various strata was obtained using simple stratified random sampling so as to allow for comparisons between sub-groups with homogeneous characteristics. The study then deployed purposive sampling method in selecting the sample elements.

Table 3.1: Sample Distribution

NGO financial base	Population	Proportion	Sample
Huge-sized	240	15%	30
Medium-sized	880	50%	100
Small-sized	580	35%	70
TOTAL	1700		200

Source: Researcher (2017)

3.6 Data Collection Methods

The study employed both secondary and primary data. This facilitated a deeper understanding of how fraud risk management influences financial sustainability in NGOs. Semi-structured questionnaires were used to collect primary data on the research variables (anti-fraud policies, fraud detection mechanisms, fraud deterrence mechanisms, internal controls and management style) from the respondents. Since most of the respondents are expected to be literate, questionnaires were useful instruments in collecting the primary data. Sproul (1998) argues that a self-administered questionnaire is the only way to elicit self-report on people's opinion, attitudes, beliefs and values. The questionnaires itemized each specific research objective. On the other hand, secondary data including fundraising expenses and total contributions were collected from the published financial statements of the NGOs for a period of 4 years (2012-2015). The 4 year period will enable the study improve the accuracy and reliability of the financial data obtained from the organisations.

3.7 Data Analysis

The research collected both quantitative and qualitative data. The data was then be analysed based on each specific objectives. Qualitative data was mostly from the open-ended questions in the questionnaires and document contents. Content analysis was used to analyse this type of data. As per Krisppendorff (2012), content analysis is indigenous to communication research and is potentially one of the most important research techniques in social sciences. The qualitative data beefed up the results obtained from the quantitative data. Quantitative data was mainly obtained from the close-ended questions in the questionnaires. Analysis of this data was carried out using SPSS.

Descriptive analysis methods including mean, mode, range and standard deviation measures were used to analyse the demographic characteristics of the population and the fraud risk management techniques used and the extent of their application within the Kenyan NGOs. To determine the extent of application of fraud risk management techniques within the NGOs, the research measured the frequency and impact of application of fraud risk management techniques and strategies within the NGOs. In order to assess the financial sustainability of NGOs, the study calculated the fundraising efficiency ratio. To determine the relationship between fraud risk management and financial sustainability within Non-Governmental Organizations in Kenya, correlational analysis method was applied. Further, inferential statistics was applied to analyse the data including regression analysis that was used to test the nature of association between categorical variables. The multiple regression model shown below guided the study;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where; Y – Financial Sustainability, β_0 - Constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ - Regression coefficients

X_1 - Anti-fraud policies

X_2 –Fraud deterrence

X_3 - Fraud detection

X_4 - Internal controls

X_5 - Management style

ε - Error term

3.8 Operationalization of Variables

The operational framework as represented in figure 2.2 describes the various variables considered in the study and how the variables will be measured.

Fig 2.2: Operationalization of variables

Category of Variable	Variable	Proxy of Measure	Sources
Dependent Variable	Financial sustainability	Fundraising Efficiency: fundraising Expenses divided by Total Contributions (<0.3-very sustainable; 0.3-0.5 – sustainable; >0.5 – unsustainable)	Charity Navigators (2016)
Independent Variable	Anti-fraud policies	Impact of the set policies (Likert scale: 1 = strongly agree, 5=Strongly disagree).	Kerine (2015) and Tyge, Kishore and Peter (2014).
	Fraud deterrence	Frequency and extent of application of application of fraud deterrence strategies (Likert: 1= Very Often, 5= Not at all).	Kerine (2015), Wanjiru (2013)
	Fraud detection	Type of fraud detection strategy, impact of fraud detection strategy (Likert:1=strongly agree, 5=Strongly disagree).	Kerine (2015) and Wanjiru (2013).
	Internal controls	Impact of set strategies on internal controls (Likert: 1=strongly agree, 5=Strongly disagree).	Kerine (2015) and Wanjiru (2013).
	Management style	Impact of the organisation's strategies on management style (Likert:1=strongly agree, 5=Strongly disagree).	Alleyne et al, (2010)

Source: Researcher (2017)

3.9 Robustness Test of Reliability of the Model

In order to improve on the statistical inferences derived from the findings on the study, the research will conduct a multicollinearity test, heteroscedasticity and serial correlation test on the data.

The study utilized the detection tolerance or Variance Inflation Factor (VIF) to test for multicollinearity among the independent variables. According to Gujarati (2003), multicollinearity exists when two predictor variables are perfectly correlated. Gujarati adds that for a detection tolerance values less than 0.1, this implies the existence of multicollinearity while VIF values exceeding 10 depict multicollinearity. Gujarati (2003) also asserts that in the event that multicollinearity exists, the researcher may choose to exclude one of the variables or ignore it if the adequacy of the model remains unhindered.

A definition by Gujarati (2003) states that serial correlation is a condition where the error terms are correlated to one another or simply when the disturbance term of one variable is affected by the disturbance term that relates to another variable. The existence of serial correlation implies that the OLS estimators determined in presence of autocorrelation usually provide smaller values for standard errors than is appropriate resulting to erroneous results in testing hypothesis. Torres-Reyna (2007) also adds that the value of coefficient of determination is usually erroneously large.

To assess presence of autocorrelation, the study employed the Durbin Watson test.

Heteroscedasticity refers to a state where the variance of the residual-term changes with the variation of the independent variables (Gujarati, 2003). Gujarati argues that even though heteroscedastic data still give unbiased OLS estimators, the results are however inefficient since they do not indicate a minimum variance in the set of all non-biased estimators. This therefore gives rise to a smaller t-statistic value resulting into inaccurate test of hypothesis. The linear regression model works on the assumption that the error-term variance should be constant. To test the level of heteroscedasticity, the study adopted the Lagrange Multiplier (LM) Test.

3.10 Research Validity and Reliability

In order for a data collection instrument to accurately measure what it was intended to measure as per the objectives of the current study, content validity was applied to determine the extent to

which different items in the instruments measured the trait or phenomenon they are meant to. To check validity of the instrument, the researcher prepared the first trial instrument and sought opinion on format, content and other related issues from supervisor and other statistics experts. Their views were incorporated in the revised trial instruments before being administered to the participants. The researcher also trained the research assistants to equip them with adequate data collection skills and avoid ambiguity in questions. According to Joppe (2000), reliability is the extent to which results are consistent over time and an accurate representation of the population under study. Although there are various methods of determining the reliability of research instruments the current study adopted the Item-total correlation method. This is because it is designed to assess characteristics such as attitude. The method divides the items into halves, and scores for each of the halves compared. A correlation between the two halves will then be determined by Cronbach's alpha reliability co-efficient.

3.11 Ethical Considerations

The study was undertaken after obtaining approval from both Strathmore University and the management of the various NGOs forming the sample. The study was also well explained to all the participants and a written informed consent was sought from the respondents before participation in the study. The respondents were also informed of their right to opt out of the study without any fear of retribution. Anonymity and confidentiality was ensured during data collection, storage and analysis. No member of the research team was allowed to discuss the information relating to the study outside the objectives of the study. Names of respondents were also not to appear on any of the data-collection instruments, databases or reports. Rather, questionnaires were assigned unique identification numbers by the research team. The collected data was then be kept under lock-and-key and only made accessible to the members of the research team and other users within the project.

CHAPTER FOUR

RESEARCH FINDINGS AND ANALYSIS

4.1 Introduction

The study sought the assessment of fraud risk management and financial sustainability of non-governmental organizations in Kenya. This section covers the findings, analysis and discussions on the objectives of the study. The chapter presents the findings on the background information for both the respondents and organisations under study, the extent of application of fraud risk management techniques, financial sustainability of NGOs and the relationship between fraud risk management and financial sustainability. Percentages, frequency distributions, mean, standard deviations and Pearson's correlation were used to present and summarize the findings.

4.2 Response Rate

The study issued a total of 200 questionnaires to its targeted respondents through 4 well trained research assistants. Out of the 200 distributed questionnaires, 162 were completely filled and returned. This depicts a response rate of 81% that is highly attributed to a telephone follow-up conducted on the respondents.

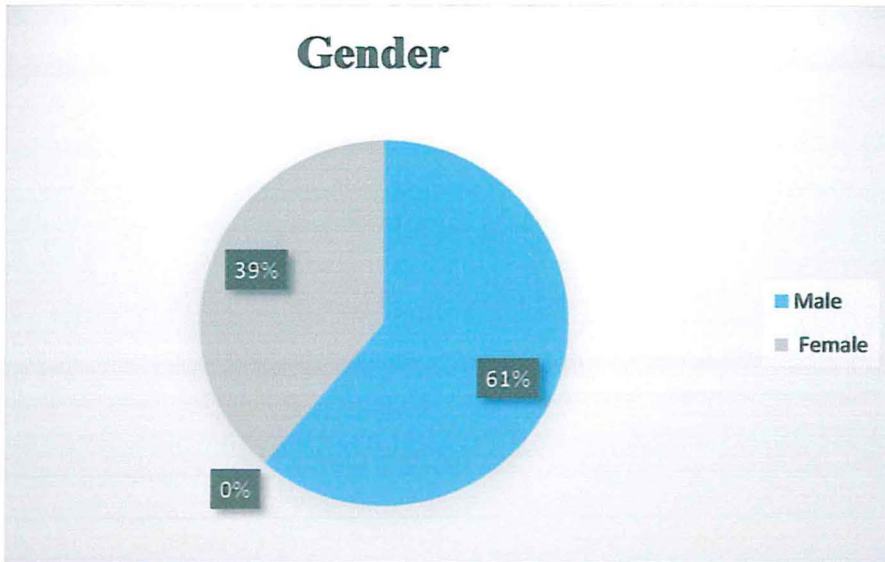
4.3 Background Information on the Respondents

The study sought to collect demographic information from the respondents. The demographic information considered by the researcher included gender of the respondents, age of respondent, level of education, professional qualification, and the period of employment within their organizations.

4.3.1 Gender of the Respondents

Figure 4.1: Gender of the respondents

Figure 4.1 summarizes findings on the gender of the respondents. From the responses, 99 respondents representing 61.1% of the respondents were male while 63 representing 38.9% were female. This implies that more women than men are employed to work within the Kenyan NGO sector hence the sector is gender insensitive.

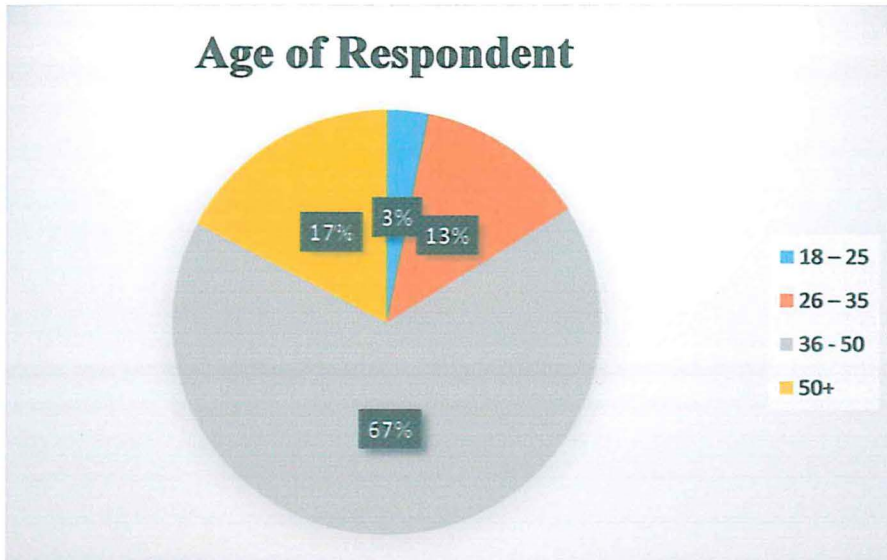


Source: Field data (2017)

4.3.2 Age of the Respondents

Figure 4.2: Age of respondents

Figure 4.2 summarizes the findings on the age of the respondents. The findings indicate that 5 out of the 162 respondents were in the age bracket of 18-25, representing 3.0%; 21 respondents representing 13.0% are in the age of 26-35; 108 respondents representing 66.7% are in the age of 36-50 while 28 of the respondents representing 17.3% are above 50 years in age. This further depicts that most (136, 84%) of the respondents are more than 35 years old hence the NGOs have quite a low number of youthful employees who are mostly described as assertive and adventurous hence attractive to new strategies. This therefore may influence the formulation and adoption of new strategies.

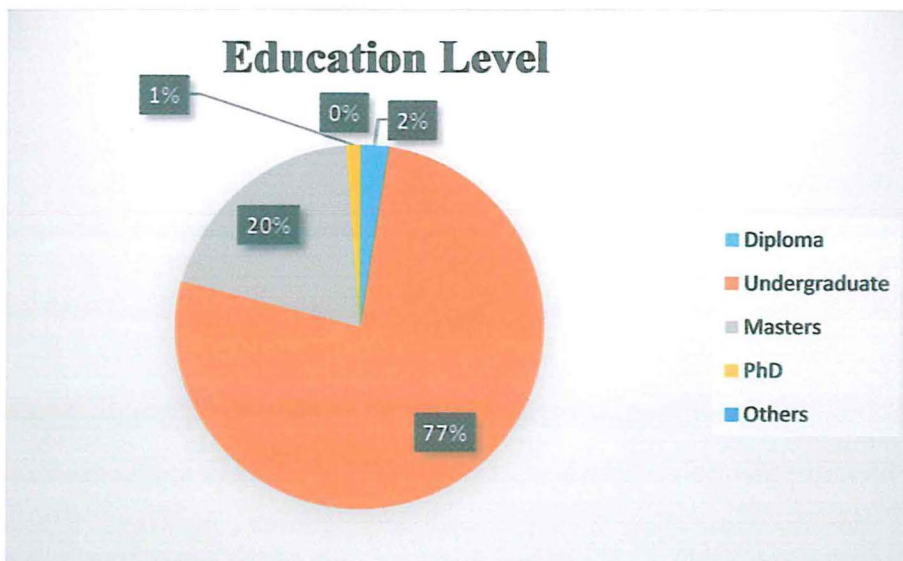


Source: Field data (2017)

4.3.3 Level of Education

Figure 4.3: Education level

Figure 4.3 summarizes the level of education for the respondents. The findings, reveal that Diploma level had been attained by 4 (2.5%) of the respondents, Most (124, 76.5%) of the respondents had an undergraduate degree, while only 34 (20%) had either a Masters degree or a PhD. These findings imply that most of the respondents are qualified academically hence reliable to be used as respondents in the study



Source: Field data (2017)

4.3.4 Professional Qualification

From the findings summarized in table 4.1, most (141, 87.0%) of the respondents indicated that they had a professional qualification. Out of the respondents with a professional qualification only 17 (12.1%) confirmed having an ACCA qualification while more than three-quarters (124, 87.9%) had a CPA professional qualification. Most of the organisations therefore consider professional qualification in employing their workers. This finding also enhances the reliability of the responses collected for analysis.

Table 4.1: Professional Qualification

		Frequency	Percent
Professional Course	Yes	141	87.0
	No	21	13.0
	Total	162	100.0
If yes, specify	ACCA	17	12.1
	CPA	124	87.9
	Total	141	100.0

Source: Field data (2017)

4.3.5 Total Period of Work

From table 4.2, less than one-third (37, 22.8%) of the employees had worked in their respective organizations for between 1 and 5 years. Nearly half (78, 48.2%) had worked in their respective organizations for between 6 and 10 years. Similarly, one-quarter (41, 25.3%) had worked for a total of between 11 and 20 years in their current organizations while only 6, representing 3.7% of the respondents had worked for over 20 years in their current organizations. This depicts a low staff turnover within the NGOs hence most of the respondents understand how their organizations function since they have served in them for more than 5 years hence the data collected from the responses is also deemed reliable.

Table 4.2: Total Period of Work

Variable		Frequency	Percent
Years	0 – 5years	37	22.8
	6 – 10years	78	48.2
	11 – 20years	41	25.3
	Above 20years	6	3.7
	Total	162	100.0

Source: Field data (2017)

4.4 Background Information on the Organizations

The study collected information from the respondents in relation to their various organizations. The information captured included organisational activities, area of coverage, existence of branches, period the organization has been in operation, number of employees, adequacy of finance department staff and the organisational gross revenue. The results were summarized in table 4.3 below.

From table 4.3, it is evident that majority of the organizations operate within Kenya as indicated by frequency of 73 (45.1%) while only 11 (6.8%) had a worldwide presence. The results obtained therefore well depict the Kenyan NGO sector. 7 (4.3%) of the respondents indicated that their organizations had been in operation for between 6 – 10 years, 81 (50.0%) had operated in the country for between 11 – 20 years, 74 (45.7%) above 20 years while none had less than 5 years operation experience within the country. These findings enhance the reliability of the data obtained from the sampled NGOs since most (95.7%) had been in operation for more than 10 years. Majority of the organizations had branches within the country as shown by 113 (69.3%) therefore implying that most of the NGOs had a higher likelihood of experiencing fraud as a result of wider operations. More than one-half (107, 66.1%) of the respondents revealed that their organizations had not more than 200 employees. Similarly, 18 (11.1%) of the respondents indicated that their organizations had very adequate staff within the finance departments while only 17 (10.5%) indicated that their organizations had very inadequate staff at the finance department. These findings reveal that most of the fraud may go undetected due to overwhelmed staff who may be mandated to curb fraud as a result of their inadequacy. Lastly, 36.4% (59) of the NGOs had an average annual income of less than Ksh. 50 million while nearly two-thirds (63.6%, 103) had an average income of more than Ksh. 50 million annually, therefore financial

sustainability is an issue of interest to most of the organisations due to the huge financial investments made by them.

Table 4.3: Organizational Information

		Frequency	Percent
Area of Coverage	World	11	6.8
	Africa	29	17.9
	Kenya	73	45.1
	Others	49	30.2
	Total	162	100.0
Branches	Yes	113	69.8
	No	49	30.2
	Total	162	100.0
Years of Operations	1 -5 years	0	0.0
	6 – 10 years	7	4.3
	11 – 20 years	81	50.0
	Above 20 years	74	45.7
	Total	162	100.0
Total Number of Employees	0 – 50 employees	44	27.2
	51 – 200 employees	63	38.9
	201 – 500 employees	37	22.8
	Above 500 employees	18	11.1
	Total	162	100.0
Staff in Finance Department	Very Adequate	18	11.1
	Adequate	49	30.2
	Not Sure	9	5.6
	Not Adequate	69	42.6
	Very Inadequate	17	10.5
	Total	162	100.0
Average Income per Year	Less than KShs. 50M	59	36.4
	KShs. 50M – 200M	76	46.9
	Above KShs. 200M	27	16.7
	Total	162	100.0

Source: Field data (2017)

4.5 Extent of Application of Fraud Risk Management Techniques

Information on the various aspects of fraud risk management was collected by the study. This included the frequency of fraud, organizational view fraud prevention, frequency of fraud monitoring, anti-fraud techniques and measures, fraud deterrence and detection strategies, employee awareness of fraud management within the organisations, internal controls and management style. The findings were summarised in 4.4 to 4.11 below.

4.5.1 Aspects of Fraud Risk Management

Table 4.4 reveals that only 3.7% (6) of the respondents indicated that their organizations had not recorded any fraud case while up to 16.9% (29) had record more than 10 fraud incidences annually. This further reveals that fraud is a problem within NGOs in the country. Despite most of the organizations having recorded fraud incidences, nearly one-third (47, 29.0%) of the NGOs view fraud prevention as either as a not important or slightly important issue. However, more than two-thirds (115, 71.0%) of the respondents revealed that their organizations view fraud prevention as either an important or very important issue. Most (51, 31.5%) of the respondents indicated that their organizations daily or weekly monitor fraud whereas only 19 (11.7%) of the organizations carry out an annual monitoring. Similarly, most (123, 75.9%) of the organizations apply anti-fraud techniques either to a great or very great extent whereas only 4 representing a 2.5% of the organizations do not at all utilize any anti-fraud techniques. This indicates that most of the NGOs in the country are engaged in deterring the occurrence of fraud.

Table 4.4: Aspects of Fraud Risk Management

		Frequency	Percent
Fraud Cases	None	6	3.7
	1 – 5	58	35.8
	6 - 10	69	42.6
	11 – 15	19	11.7
	Above 15	10	6.2
	Total	162	100.0
View of Fraud Prevention	Not Important	8	4.9
	Slightly Important	39	24.1
	Not Sure	0	0.0
	Important	77	47.5
	Very Important	38	23.5
	Total	162	100.0
Frequency of Fraud Risk Monitoring	Monthly	48	29.6
	Quarterly	22	13.6
	Semi-Annually	22	13.6
	Annually	19	11.7
	Others	51	31.5
	Total	162	100.0
Application of Anti-Fraud Techniques	Not at all	4	2.5
	Medium Extent	35	21.6
	Not Sure	0	0.0
	Great Extent	83	51.2
	Very Great Extent	40	24.7
	Total	162	100.0

Source: Field data (2017)

4.5.2 Anti-Fraud Policies

The researcher asked respondents to express their opinion on their level of satisfaction on the various aspects relating to anti-fraud policies within their organizations. Their responses were as presented in table 4.5.

In table 4.5, the mean of 2.41 reveals that the respondents are satisfied with the fact that their organizations have well-established anti-fraud policies to guide employees at all levels of management. The standard deviation of 0.606 further reveals that the responses were moderately diverse indicating most of the respondents were satisfied. As to whether the anti-fraud policies clearly define employee' responsibility and resulting consequences in the event of occurrence fraud, the mean of 2.55 depicts that most of the respondents were satisfied. Similarly, the standard deviation of 0.505 depicts moderate divergence in the level of satisfaction. The mean of 3.27 reveals that the respondents are indifferent as to whether or not fraud detection and prevention is effectively supported by the organization' anti-fraud policies. The standard deviation of 0.729 however depicts a moderate divergence in the level of satisfaction among the respondents. The findings also indicated that the respondents were dissatisfied with the anti-fraud policies having taken into consideration the cultural differences and diversity in responding to fraud among the employees as depicted by the mean of 3.72 and standard deviation of 0.598.

Table 4.5: Anti-Fraud Policies

Services	N	Min	Max	Mean	Std. Dev.
The organization has well-established anti-fraud policies to guide its employees at all levels of management.	162	1	5	2.41	.606
The anti-fraud policies clearly defines employee' responsibility and resulting consequences in the event of occurrence fraud.	162	1	5	2.55	.505
Fraud detection and prevention is effectively supported by the organization' anti-fraud policies	162	2	5	3.27	.729
The anti-fraud policies consider the cultural differences and diversity in responding to fraud among the employees.	162	1	4	3.72	.598
Valid N (listwise)	162				

Source: Field data (2017)

4.5.3 Fraud Deterrence

Table 4.6 summarizes the responses on how often organization use the listed fraud deterrence strategies in a five point scale that ranged from 'Very Often' (1) to 'Not At All' (5). A standard

deviation of >1.0 implies a significant difference in the responses collected from the respondents pertaining fraud deterrence strategies. The findings in table 4.9 depict that the organizations very often or often deploy clear division of duty, staff supervision, monitoring work performance, ensuring safe controls when accessing systems, fraud risk register and fraud awareness training in deterring fraud as depicted by the mean of 2.44, 1.51, 1.11, 1.29, 2.21 and 2.00 and standard deviations of 0.742, 0.812, 0.683, 0.695, 0.655 and 0.431 respectively. Besides, the mean of 3.14 and 0.873 reveal that the respondents were indifference as to whether their organizations have strict legal consequences that assist in deterring fraud. The results also depict that the NGOs do not often use whistle blower strategy that includes incentives, hotline and protection or set high fines and penalties while targeting to deter fraud as indicated by the mean and standard deviations of 3.67 (0.838) and 3.78 (0.547) respectively.

Table 4.6: Fraud Deterrence

Aspects	N	Min	Max	Mean	Std. Dev
Clear division of duty	162	1	5	2.44	.742
Staff supervision	162	1	3	1.51	.812
Monitoring work performance	162	3	5	1.11	.683
Whistle blower strategy; incentives, hotline, protection	162	2	5	3.67	.838
Ensuring safe controls when accessing systems	162	3	5	1.29	.695
Strict legal consequences	162	2	4	3.14	.873
High fines and penalties	162	2	4	3.78	.547
Fraud risk register	162	1	4	2.21	.655
Fraud awareness training	162	2	4	2.00	.431
Valid N (listwise)	162				

Source: Field Data (2017)

4.5.4 Fraud Detection

The respondents were requested to indicate their opinion on how their organizations deploy the use of fraud detection as an aspect of fraud risk management. They were requested to express their opinions using the scale; [1=Strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=Strongly Disagree]. The responses were as presented in table 4.7

From the findings, the mean of 3.91 and standard deviation of 0.683 reveal that the respondents disagree that their organizations have successfully implemented a great number of fraud detection instruments. The mean of 2.04 and a standard deviation of 0.582 reveal that selection of the suitable and effective fraud detection instruments is enhanced by availability of expertise within the organizations. Similarly, the respondents agreed that the organization's audits (internal and external) significantly contribute towards fraud detection (1.92, 0.703), success in detecting fraud depends greatly on the support from the top management (1.44, 0.444) and that ethical organisational culture influences the success in detecting fraud within the organization (2.07, 0.517). However, the results also indicated that the respondents disagreed that their organization' fraud detection processes mostly rely on technology.

Table 4.7: Fraud Detection

Fraud Detection Aspects	N	Min	Max	Mean	Std. Dev
The organization has successfully implemented a great number of fraud detection instruments.	162	2	5	3.91	.683
Selection of the suitable and effective fraud detection instruments is enhanced by availability of expertise within the organization.	162	2	5	2.04	.582
The organization's audits (internal and external) significantly contribute towards fraud detection.	162	1	5	1.92	.703
The organization' fraud detection processes mostly rely on technology.	162	1	5	3.85	.631
Success in detecting fraud depends greatly on the support from the top management	162	1	5	1.22	.444
Ethical organisational culture influences the success in detecting fraud within the organization.	162	2	5	2.07	.517
Valid N (listwise)	162				

Source: Field Data (2017)

4.5.5 Employee Awareness

The researcher was interested in the organizations' use of employee awareness in relation to fraud risk management. The responses were as presented in table 4.8.

Table 4.8 indicates a mean of 2.59 and standard deviation of 0.583 which depicts that the organisation carries-out employee training on fraud risk management. The mean of 4.01 with standard deviation of 0.677 reveal that the organizations have no clearly outlined anti-fraud internal controls. The mean of 3.25 and standard deviation of .403 indicate that the respondents were generally not sure if the occurrence of fraud increases the awareness of fraud risk in NGOs whereas the mean of 3.85 and standard deviation of 0.430 reveal the respondents disagree that the occurrence of fraud increases understanding on the different risk reduction factors. Also, the respondents agreed that employee awareness on fraud risk reduces the organizations exposure to risk (1.39, .333).

Table 4.8: Employee Awareness

Employee Awareness Aspects	N	Min	Max	Mean	Std. Dev
The organisation carries-out employee training on fraud risk management.	162	1	5	2.59	.583
The organisation has clearly outlined anti-fraud internal controls.	162	1	5	4.01	.677
Occurrence of fraud increases the awareness of fraud risk in NGOs.	162	1	5	3.25	.403
Occurrence of fraud increases understanding on the different risk reduction factors.	162	1	5	3.85	.430
Employee awareness on fraud risk reduces the organizations exposure to risk	162	1	5	1.39	.333
Valid N (listwise)	162				

Source: Field Data (2017)

4.5.6 Internal Controls

The respondents were also requested to express their opinions on various aspects of internal controls as a feature of fraud risk management. The findings were as shown in table 4.9.

As observed in table 4.9, the mean of 3.55 and standard deviation of 0.783 indicated that the respondents are indifferent as to whether the organization's internal controls can be easily

overridden. Similarly, the mean of 3.35 and a standard deviation of 0.471 depict that are not sure if part of the current internal controls in their organizations are as a result of learning processes from previous fraud occurrences. On the other hand, the mean of 2.22 and standard deviation of 0.877; mean of 2.05 and standard deviation 0.503 of and mean of 1.44 and standard deviation of 0.637 indicate that fraud risk prevention is associated with an increase in the number of implemented internal controls; continuous internal and external audits assist in grounding the set internal controls and laws and regulations on fraud risk management mainly influence the establishment of the organization's internal controls. However, the respondents indicated that the set internal controls do not enhance monitoring and financial reporting processes in the organisation and that the organization's internal controls do not facilitate the identification and measurement of risk. These are depicted by the mean of 4.01 and standard deviation of 0.757 and the mean of 3.87 and standard deviation of 0.803 respectively.

Table 4.9: Internal Controls

Internal Control Aspects	N	Min	Max	Mean	Std. Dev
The organization's internal controls cannot be easily overridden.	162	1	4	3.55	.783
Fraud risk prevention is associated with an increase in the number of implemented internal controls.	162	1	4	2.22	.877
Continuous internal and external audits assist in grounding the set internal controls.	162	1	3	2.05	.503
Part of the current organization's internal controls are as a result of learning processes from previous fraud occurrences.	162	1	4	3.35	.471
Laws and regulations on fraud risk management mainly influence the establishment of the organization's internal controls	162	1	3	1.44	.637
The set internal controls enhance monitoring and financial reporting processes in the organisation	162	1	5	4.01	.757
The organization's internal controls facilitate the identification and measurement of risk	162	1	5	3.87	.803
Valid N (listwise)	162				

Source: Field Data (2017)

4.5.7 Management style

The results on management style as an aspect of fraud risk management were summarized and presented in table 4.10.

Table 4.10 reveals that top management support is vital on reducing fraud risk exposure (1.39, 0.639), the organizations' ethical behaviour is determined by the management' attitude (2.49, 0.813) and reliance on trust by the organization increases the chances of fraud (1.38, 0.490). The findings further reveal that the respondents were not sure if the management's use of incentives for professionalism and non-fraud behaviour by employees reduce fraud (3.23, 0.787) and whether the organizations' governance framework creates a platform for an efficient fraud risk management (3.07, 0.619). The respondents however disagree that their organizations deploy the use of expertise to curb fraud (3.99, 0.734).

Table 4.10: Management style

Management style Aspects	N	Min	Max	Mean	Std. Dev
Top management support is vital on reducing fraud risk exposure.	162	1	4	1.39	.631
The organization's ethical behaviour is determined by the management' attitude.	162	2	4	2.49	.813
Management's use of incentives for professionalism and non-fraud behaviour by employees reduce fraud.	162	2	5	3.23	.787
Reliance on trust by the organization increases the chances of fraud	162	1	3	1.38	.490
The organization deploys the use of expertise to curb fraud	162	2	5	3.99	0.734
The organization's governance framework creates a platform for an efficient fraud risk management	162	1	5	3.07	0.619
Valid N (listwise)	162				

Source: Field Data (2017)

4.5.8 Anti-Fraud Rules and Regulations

The respondents were requested to indicate their opinion on how anti-fraud rules and regulations influence fraud risk management. They were requested to express their opinions using the scale; [1=Most Likely, 2=Likely, 3=Not sure, 4=Unlikely, 5=Most Unlikely]. The responses were as presented in table 4.11. A standard deviation of >1.0 implies a significant difference on the responses obtained from the respondents pertaining the impact of the variable.

The findings depict that implementation of antifraud rules and regulations is likely to result to a reduction of fraud (1.21, 0.483), lack of a clearly spelt out code of conduct may likely increase incidences of fraud in NGOs (2.07, 0.777) and long and tedious methods of prosecuting fraudsters may likely encourage involvement in fraudulent activities (2.66, 0.69). The respondents however stated that use of fraud risk register is unlikely to reduce fraud by increasing awareness of the various exposures (4.01, 0.523).

Table 4.11: Anti-Fraud Rules and Regulations

Anti-Fraud Rules and Regulations Aspects	N	Min	Max	Mean	Std. Dev
Implementation of antifraud rules and regulations result to a reduction of fraud.	162	1	4	1.21	.483
Lack of a clearly spelt out code of conduct may increase incidences of fraud in NGOs.	162	1	4	2.07	.777
Use of fraud risk register may reduce fraud by increasing awareness of the various exposures.	162	1	5	4.01	.523
Long and tedious methods of prosecuting fraudsters may encourage involvement in fraudulent activities.	162	1	4	2.66	.609
Valid N (listwise)	162				

Source: Field Data (2017)

4.6 Financial Sustainability of NGOs

The study sought to determine the financial sustainability of the sampled NGOs in Kenya. The results were summarized in tables 4.12 and 4.13 below.

4.6.1 Fundraising efficiency

Table 4.12 summarises the findings on the fundraising efficiency ratio of the NGOs based on the organisational size. The ratio was calculated as fundraising Expenses divided by Total Contributions.

The findings in Table 4.12 reveal that the NGO sector in the country registered an average fundraising efficiency ratio of 0.33 in 2012, 0.38 in 2013, 0.41 in 2014 and 0.33 in 2015. This indicates that averagely, the sector is financially sustainable as revealed by the mean of 0.36 that according to the Charity Navigators (2016) lies within the discrimination zone of financially sustainable (0.3 – 0.5). However, the results further indicated that large organisations were the most financially sustainable organisations as depicted by the least fundraising efficiency ratio of 0.29 while the small organizations were least in financial sustainability as indicated by the fundraising efficiency ratio of 0.41. The ratios also indicate that large organizations are efficient in managing costs that are related to fundraising activities compared to the small organization.

Table 4.12: Fundraising efficiency Ratio

Size	2012	2013	2014	2015	Mean
Large	0.23	0.31	0.34	0.27	0.29
Medium	0.34	0.42	0.44	0.36	0.39
Small	0.42	0.41	0.46	0.35	0.41
Average	0.33	0.38	0.41	0.33	0.36

Source: Field Data (2017)

4.6.2 Indicators of Financial Sustainability

The results on indicators financial sustainability were summarized and presented in table 4.13. The responses were to be given in the scale of [1=Strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=Strongly Disagree].

From the findings, the respondents reveal that the organizations do not have enough resources to allocate towards the activities they undertake as indicated by the mean of 3.79 and standard deviation of 0.811, most of the projects are usually not completed within the scheduled time and within the allocated budget (4.21, 0.774) and that the organizations do not have enough resources set aside in case of any contingency. They findings however reveal further that the overall debt level for the organizations are well within manageable levels as depicted by the mean of 2.36 and standard deviation of 0.649.

Table 4.13: Organizational Financial Sustainability

Anti-Fraud Rules and Regulations Aspects	N	Min	Max	Mean	Std. Dev
The organisation has enough resources to allocate towards the activities it undertakes.	162	1	5	3.79	.811
Most of the projects are usually completed within the scheduled time and within the allocated budget.	162	1	5	4.21	.774
The organisation has enough set aside resources in case of any contingency.	162	1	5	3.99	.713
The overall debt level for the organisation is well within manageable levels.	162	1	5	2.36	.649
Valid N (listwise)	162				

Source: Field Data (2017)

4.7 Relationship between Fraud Risk Management and Financial Sustainability

The researcher collected and analysed data on the extent Impact of Fraud Risk on Financial Sustainability and the existing relationship between fraud risk management and financial sustainability. The findings were discussed in sections 4.7.1 and 4.7.2.

4.7.1 Impact of Fraud Risk on Financial Sustainability

Table 4.14 summarizes the results on the impact of fraud risk management on financial sustainability efficiency of organisational fundraising.

From the findings, most (143, 88.3%) of the respondents acknowledged that fraud risk impacts financial sustainability of the organizations. Out of the 143 respondents, 47 (32.9%) stated that the impact was medium whereas only 16 (11.1%) indicated that the impact was very great. On the other hand, up to one-third of the respondents indicated that their organizations were either inefficient or very inefficient in carrying out fundraising while only 14 (8.6%) of the respondent affirmed that their organizations were very efficient in conducting fundraising.

Table 4.14: Impact of Fraud Risk on Financial Sustainability

		Frequency	Percent
Fraud Affects Financial Sustainability	Yes	143	88.3
	No	19	11.7
	Total	162	100.0
If Yes, Extent of Impact	No Impact	0	0.0
	Medium Impact	47	32.9
	Not Sure	21	14.7
	Great Impact	59	41.3
	Very Great Impact	16	11.1
	Total	143	100.0
Fundraising Efficiency	Very Efficient	14	8.6
	Efficient	61	37.7
	Not Sure	32	19.8
	Inefficient	40	24.7
	Very Inefficient	15	9.2
	Total	162	100.0

Source: Field Data (2017)

4.7.2 Fraud Risk Management and Financial Sustainability

The respondents were also requested to express their opinions on various aspects of describing the relationship between fraud risk management and financial sustainability. The findings were as shown in table 4.15.

The findings reveal that the respondents are not sure whether the organization's fraud risk management practices have improved its financial sustainability (3.19, 0.824) and if availability of funds for the organization's activities have been supported by the existence of good fraud risk management techniques (3.36, 0.735). The mean of 4.00 and standard deviation of 0.763 and the mean of 4.04 and standard deviation of 0.668 depict the respondents disagree with the facts that the organizations have sufficiently employed resources towards fraud risk management that have result to a financial save and that well established fraud risk management techniques have seen the organizations save a lot on fraud investigation respectively. The findings also indicated

that the organizations' fraud risk management techniques mostly focus on financial controls (2.17, 0.693) and that fraud risk management techniques have influenced the organizations' financial stability as a result of improved confidence from funders (1.97, 0.744)

Table 4.15: Fraud Risk Management and Financial Sustainability

Anti-Fraud Rules and Regulations Aspects	N	Min	Max	Mean	Std. Dev
The organization's fraud risk management practices have improved its financial sustainability.	162	1	5	3.19	.824
The organization has sufficiently employed resources towards fraud risk management that have result to a financial save.	162	1	5	4.00	.763
The organization's fraud risk management techniques mostly focus on financial controls.	162	1	5	2.17	.693
Availability of funds for the organization's activities have been supported by the existence of good fraud risk management techniques.	162	1	5	3.36	.735
Well established fraud risk management techniques have seen the organization save a lot on fraud investigation	162	1	5	4.04	.668
Fraud risk management techniques have influenced the organization's financial stability as a result of improved confidence from funders	162	1	4	1.97	.744
Valid N (listwise)	162				

Source: Field Data (2017)

4.8 Inferential Statistics

The study sought to determine the relationship between the dependent (financial sustainability) and independent variables (anti-fraud policies, fraud detection mechanisms, fraud deterrence mechanisms, internal controls and management style). Correlation and multiple regression analyses were conducted between the variables.

4.8.1 Correlation Analysis

The findings on the degree of association between the variables, both dependent and independent, were summarized as indicated in table 4.16.

The findings reveal a positive relationship between the independent variables with the strongest relationship being between fraud deterrence mechanism and fraud detection mechanism ($r =$

0.516). All the independent variables had positive association with the independent variable. This reveals that an improvement in any of the independent variable results to an improvement in financial sustainability of the NGOs. The correlation between fraud deterrence and financial sustainability was strongest amongst the correlation between the dependent and independent variables. The value was $r = 0.798$, depicting that fraud deterrence was the most important variable in NGOs while seeking to carry fraud risk management so as to achieve financial sustainability. The findings also revealed a strong positive influence of internal controls ($r = 0.721$), fraud detection mechanism ($r = 0.651$) and anti-fraud policies ($r = 0.619$) on financial sustainability of NGOs. This implies that a lot needs to be done with reference to anti-fraud mechanism, internal fraud controls and fraud detection mechanisms by NGOs in handling their financial matters. Management style had the weakest relationship among the associations between the independent variables and financial sustainability ($r = 0.469$). The association was however positive depicting that NGOs stand to improve their financial sustainability with an enhanced management style strategy. The findings are in line with the conclusions by Wanjiku (2013).

Table 4.16: Correlation Analysis

	Anti-Fraud Policies	Fraud Detection Mechanism	Fraud Deterrence Mechanism	Internal Controls	Management style	Financial Sustainability
Anti-Fraud Policies	1					
Fraud Detection Mechanism	0.407	1				
Fraud Deterrence Mechanism	0.428	0.516	1			
Internal Controls	0.378	0.486	0.447	1		
Management style	0.211	0.364	0.222	0.301	1	
Financial Sustainability	0.619	0.651	0.798	0.721	0.469	1

Source: Field Data (2017)

4.8.2 Multicollinearity Test

The study conducted a multicollinearity test on the independent variables. Multicollinearity exists when two predictor variables are perfectly correlated. For a detection tolerance values less

than 0.1, this implies the existence of multicollinearity while VIF values exceeding 10 depict multicollinearity (Gujarati, 2003). The results were summarized in table 4.17.

From the results in table 4.17, the values for tolerance were greater than 0.1 while the VIF values were less than 10. The study therefore concludes that there was no multicollinearity in the regression model applied.

Table 4.17: Multicollinearity Test

	Tolerance	VIF
Anti-Fraud Policies	0.768	1.567
Fraud Detection Mechanism	0.871	2.341
Fraud Deterrence Mechanism	0.623	1.897
Internal Controls	0.778	1.889
Management style	0.511	2.008

Source: Field Data (2017)

4.8.3 Heteroscedasticity Test

To test the level of heteroscedasticity, the study adopted the Lagrange Multiplier (LM) Test where the R^2 from the regression model is multiplied by several observations, N. The linear regression model works on the assumption that the error-term variance should be constant. Therefore, if the test statistic: X^2 , is greater than the corresponding value from the statistical table, we accept the null hypothesis; there is no heteroscedasticity. The results were as indicated in table 4.18.

From the findings in table 4.18, the results depict that $R^2N < X^2$ ($21.64 < 39.76$). The study therefore accepts the null hypothesis and concludes that there is no heteroscedasticity.

Table 4.18: Heteroscedasticity Test

R^2N	Test Statistic: $X^2(m)$
21.64	39.76

m: number of independent variables

4.8.4 Serial Autocorrelation Test

To assess presence of autocorrelation, the study employed the Durbin Watson test. A definition by Gujarati (2003) states that serial correlation is a condition where the error terms are correlated to one another. A Durbin Watson value of 1.5 to 2.5 depicts no autocorrelation. From the results

summarized in table 4.22, the Durbin Watson value of 2.004 implies that the data does not have a serial autocorrelation problem.

4.8.5 Regression Analysis

To determine the overall effect of anti-fraud policies, fraud detection, fraud deterrence, internal control and management style on financial sustainability, a multiple regression analysis was conducted. The results were as presented in tables 4.19 and 4.20.

Findings in table 4.19 depict that the coefficient-of-determination that describes the percentage variation in the dependent variable (financial sustainability) that is explained by the changes in the independent variables R^2 equals 0.731, that is, anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style explain up to 73.1 percent of financial sustainability leaving only 26.9 percent unexplained. The significance value of 0.001 (< 0.05) reveals that the combined effect of anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style on financial sustainability is statistically significant.

Table 4.19: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.	Durbin Watson
1	.885a	.731	.702	.641	0.001	2.004

a. Predictors: Constant, anti-fraud policies, fraud detection, fraud deterrence, internal controls, management style.

Source: Field data (2017)

Table 4.20 presents the coefficients of the independent variables; anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style. From the table the regression model for the study is generated as:

$$Y = 1.163 + 0.098X_1 + 0.114X_2 + 0.186X_3 + 0.173X_4 + 0.054X_5 + \varepsilon$$

From the findings in table 4.20, the constant value of 1.163 depicts that if all the independent variables (anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style) were rated as zero, financial sustainability would be 1.163. The results further

depict that with the other variables held constant, a unit increase or decrease in anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style results to 0.098, 0.114, 0.186, 0.173 and 0.054 units increase or decrease in financial sustainability of the NGOs respectively

Table 4.20: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.163	.473		1.442	.001
	Anti-fraud policies	.098	.046	.042	.485	.023
	Fraud detection	.114	.039	.076	1.509	.001
	Fraud deterrence	.186	.045	.113	2.675	.000
	Internal controls	.173	.056	.018	2.121	.000
	management style	.054	.067	1.256	.632	.726

Dependent Variable: Financial Sustainability

4.9 Summary of Chapter

The chapter presented the analysed data on the three main objectives of the study; the extent of application of fraud risk management techniques, financial sustainability of NGOs and the relationship between fraud risk management and financial sustainability. The results were presented in pie charts and frequency tables. The study established that large NGOs are more financially stable as compared to small sized NGOs through being efficient in managing fundraising costs. This was determined through measuring the respective organisations' fundraising efficiency. The research measured five independent objectives; anti-fraud policies, fraud detection, fraud deterrence, internal controls, management style and established that all these variables positively correlate to the dependent variable; financial sustainability. Simple regression analysis method was used to test the nature of relationship between the independent and dependent variables. To test the reliability of the regression model, the study employed three tests; Multicollinearity, Heteroscedasticity and Serial Autocorrelation Tests. It was revealed that there was no multicollinearity in the regression model applied, no heteroscedasticity and the data did not have serial autocorrelation problems.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings of the study, conclusions arrived at by the researcher, recommendations of the study and also captures discussions on suggestions for further studies according to the researcher.

5.2 Research Purpose and Approach

The study purpose was to assess fraud risk management and financial sustainability of non-governmental organizations in Kenya. The independent variables measured include anti-fraud policies, fraud detection, fraud deterrence, internal controls, and management style while the dependent variable was financial sustainability. The study adopted an interpretive paradigm for the framework and a descriptive research design. The target population for the study consisted of 1,700 NGOs, which according to the NGO Council of Kenya (2017) are registered and compliant NGOs in relation to submission of annual returns. The study collected 162 responses from the sampled 200 respondents. Both correlational and regression analysis methods were used to establish the nature of relationship between the dependent and explanatory variables.

5.3 Summary of Findings

The Study revealed that more men work within the Kenyan NGOs as compared to women hence the Kenyan NGO sector is gender insensitive in employee recruitment. Most of the NGO employees are also aged above 36 years hence the NGOs have quite a low number of youthful employees who are mostly described as assertive, creative and adventurous hence attractive to new ideas and strategies. This therefore may influence the formulation and adoption of new strategies. Most of the employees have at least an undergraduate level of education while a great portion of the respondents had a professional qualification of which CPA qualification was more compared to ACCA qualification. These findings imply that most of the respondents are qualified academically hence reliable to be used as respondents in the study. The findings also imply that most of the organisations therefore consider professional qualification in employing their workers.

The NGOs recorded a low staff turnover as most of the respondents had served in their respective organisations for more than 5 years. This therefore depicts a low staff turnover within

the NGOs hence most of the respondents understand how their organizations function since they have served in them for more than 5 years. The data collected from the responses is also deemed reliable. Majority of the organizations also indicated that they operate within Kenya while only a few had a worldwide presence. These results obtained therefore well depict the Kenyan NGO sector. Most of these organisations had operated in the country for more than 10 years and only less than one-third of them operated without branches. These findings enhance the reliability of the data obtained from the sampled NGOs since most of the sampled NGOs had been in operation for a good time period and have a higher likelihood of experiencing fraud as a result of wider operations they undertake, indicated by more than one operating branch. The reliability of the collected data in relation to organisational size was also improved by a great number of the NGOs that revealed that their employee base lie between 51 and 200 employees and a number of NGOs that indicated of having an average annual income of less than 50 million annually. A number of the respondents indicated that their organisations had adequate staff within the finance departments. These findings indicate that most of the fraud may go undetected due to overwhelmed staff, who are mostly mandated to curb fraud, as a result of their inadequacy.

It was evident from the findings that fraud is an issue of concern within NGOs in Kenya with up to 16.9% of the organizations recording more than 10 incidences annually and more than two-thirds of the organizations viewing fraud prevention as an important matter of concern. In support of fraud being an issue of concern within NGOs, it was further revealed that most of the organizations conduct daily or weekly monitoring of fraud. In accordance to an argument by Bierstaker, Brody and Pacini (2006) stating that each organisation should establish and maintain an anti-fraud policy to guide employees it was clear that most of the organizations in the country are engaged in preventing the occurrence of fraud through applying anti-fraud techniques at least to a great extent. The results also indicated that the organizations have well-established anti-fraud policies to guide employees at all levels of management and that the anti-fraud policies clearly define employee' responsibility and resulting consequences in the event of occurrence of fraud, an argument reiterated by Ledgerwood and White (2006). However, the findings revealed that the NGOs were not sure if fraud detection and prevention are effectively supported by the organization' anti-fraud policies. Contrary to the argument by Bierstaker (2009), the findings

also indicated that most of the antifraud policies do not take into consideration the cultural differences and diversity in responding to fraud among the employees.

The findings depicted that the organizations deploy the use of clear division of duties, staff supervision, monitoring work performance, ensuring safe controls when accessing systems, fraud risk register and fraud awareness training in deterring fraud. The finding is in line with the argument by Kimani (2011) who states that that a good fraud deterrence strategy should involve clear division of duties, staff supervision, monitoring work performance and ensuring that when systems are accessed proper control are in place. Further results however reveal that the NGOs do not often use whistle blower strategy that include incentives, hotline and protection or setting of high fines and penalties while targeting to deter fraud.

The results also revealed that the organizations have not successfully implemented a great number of fraud detection instruments and that effective fraud detection is enhanced by availability of expertise within the organizations, internal and external organization's audits, support from the top management and ethical organisational culture. However, the results also indicated that the organization's fraud detection processes do not rely on use of technology. The findings depict that the organisations carry-out employee training on fraud risk management and that employee awareness on fraud risk reduces the organizations exposure to risk. A similar conclusion is arrived at in a study by Kerine (2015). The findings also indicated that the occurrence of fraud does not increase understanding on the different risk reduction factors. It was however not clear among the NGOs if the occurrence of fraud increases the awareness of fraud risk. The results revealed that fraud risk prevention is associated with an increase in the number of implemented internal controls; continuous internal and external audits assist in grounding the set internal controls and that laws and regulations on fraud risk management mainly influence the establishment of the organization's internal controls. However, the results further indicated that the set internal controls do not enhance monitoring and financial reporting processes in the organisation and that the organization's internal controls do not facilitate the identification and measurement of risk. The results are however contrary to the findings by Rae and Subramanian (2008). The findings also depict that it was not sure whether the NGOs developed their internal controls out of a learning process or if the internal controls can be overridden.

The study revealed that that top management support is vital on reducing fraud risk exposure including management's attitude towards organization's ethical behaviour and that reliance on trust by the NGOs increases the chances of fraud. It was also evident that the organizations do not deploy the use of expertise to curb fraud. A similar finding was arrived at in the study by Kimani (2011). In relation to implementation of antifraud rules and regulations within NGOs, the study established that this likely reduce fraud while a lack of a clearly spelt out code of conduct and long and tedious methods of prosecuting fraudsters, May likely increase incidences of fraud in NGOs. The results however indicated that use of fraud risk register does not necessarily reduce fraud through enhancing awareness of the various exposures.

The findings also indicate that averagely, the country' NGOs sector is financially sustainable, a conclusion that was arrived at by Wanjiru (2013). However, the results further indicated that large organisations were the most financially sustainable organisations while the small organisations were least in financial sustainability. The results as depicted by the fundraising efficiency ratio also indicate that large organisations are efficient in managing costs that are related to fundraising activities compared to the small organisation. Generally, the findings of the study depict that there is a strong link between fraud risk management and financial sustainability. Each of the tested objective; anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style positively correlates with financial sustainability with each aspect having a statistically insignificant relationship with financial sustainability. Wanjiku (2013) also established this in her study.

5.4 Conclusions

- i. From the findings, the study concluded that fraud deterrence mechanism and internal controls greatly influence the financial sustainability of the organisations. Fraud deterrence can be enhanced through use of the use of clear division of duties, staff supervision, monitoring work performance, ensuring safe controls when accessing systems, fraud risk register and fraud awareness training while the number of internal controls implemented, continuous carrying out of organisational audits and laws and regulations on fraud risk enhance fraud risk management.
- ii. The study also concluded that fraud detection mechanism strongly affects the financial sustainability of NGOs. Effective fraud detection is enhanced by availability of expertise

within the organizations, internal and external organization's audits, support from the top management and ethical organisational culture. Use of technology can however be used to effectively deploy the use of various fraud detection strategies.

- iii. The researcher concluded that anti-fraud policies can be used by NGOs in curbing risks. However well-established anti-fraud policies that guide employees at all levels of management and that clearly define employee' responsibility and resulting consequences in the event of occurrence of fraud enhance fraud risk management within an organisation. The study also concluded that most of the organization's anti-fraud policies do not take into consideration the cultural differences and diversity among their employees.
- iv. The study finally concluded that management style has an average positive influence on the financial sustainability of the NGOs in the country. The management' support is also vital in reducing organisational fraud risk exposure as it also determines the overall trajectory of the ethical behaviour of the organisation. Generally, the independent variables; anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style explain up to 73.1 percent of financial sustainability within the non-governmental organisations in Kenya.

5.5 Recommendations

- i. The study recommends that NGOs in Kenya should deliberately be involved in developing and implementing fraud risk management strategies including use of anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style as this will enhance the financial suitability of the same organisations.
- ii. The study also recommends that NGOs in the country should always seek to have well-established anti-fraud policies that give guidance to employees at all levels of management, put in place anti-fraud policies that take into consideration the cultural differences and diversities among employees as well as clearly define employee' responsibility and resulting consequences in the event of occurrence of fraud.
- iii. The research recommends that the NGOs in Kenya can further improve their fraud deterrence strategies through establishing policies around whistle blowing that include issuing of incentives to the whistle blowers, developing hotline to ease communications

on reporting fraud and whistle blower identity protection and/or setting of high fines and penalties.

- iv. The study further recommends that when organisations set internal controls in seeking to curb fraud, monitoring and financial reporting processes within the organisations should be considered so that the controls should enhance but not hamper the processes. The set internal controls should also facilitate the identification and measurement of risk.
- v. The researcher also recommends that the management should keenly support strategies towards fraud risk management so as to reduce organisational risk exposure. The NGOs should also avoid reliance on trust so as to reduce chances of fraud. In curbing fraud, the researcher recommends that the organisations should deploy experts. In relation to implementation of antifraud rules and regulations within NGOs, the study recommends that the rules and regulations should be clearly spelt out and the processes of prosecuting fraudsters should not be long and tedious as this encourages the fraud activities.

5.6 Suggestions for Further Studies

- i. The study sought to establish the effect of fraud risk management on financial sustainability with a keen look at the Non-Governmental Organisations in Kenya. Similar studies can be carried out on other fraud risk variables such as internal and external audits, size of the organisation, period of existence of the organisation, organisational culture and fraud risk assessments and their influence on financial sustainability.
- ii. Other studies can also be done on other sectors or industries other than the Non-Governmental Sector such as the public or private sectors while considering the variables measured in this study.

5.7 Implication of the Study

- i. Several factors have been cited that make NGOs more vulnerable to fraud. These factors include overreliance on trust, the difficulty in verifying certain revenue streams (including cash donations), weaker internal controls, lack of business and financial expertise, and reliance on volunteer boards, among others. The outcome of the research provides the management and directors of NGOs with insight into the various approaches and strategies towards fraud risk management techniques and how effectively risk management techniques are in mitigating risks and influence financial performance.

- ii. The research also facilitates future studies on fraud and financial sustainability in NGOs through providing a reference platform.
- iii. The study enhances the theories upon which it has been anchored. These theories are fraud triangle, self-control, differential association and fraud scale theories.

5.8 Limitations of the Study

In seeking to achieve its major objective of analysing the effect of fraud risk management on financial sustainability, the study had the following limitations;

- i. Fraud risk management is a matter that is of interest in all sectors within the country's economy. The research was however limited to only Non-Governmental Organisations that are mostly based in Nairobi.
- ii. A number of aspects have been listed as being influencers of fraud risk management within NGOs. The study however limited itself to five factors namely anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style.
- iii. The researcher also restricted his collection of secondary data on financial performance of the NGOs to four years (2012 – 2015) and only applied fundraising efficiency as the ratio to determine their financial sustainability.

5.9 Summary

The section captured the summary of findings, conclusions, recommendations for further studies implication of the study and limitations of the Study. The findings revealed a mixture of relationship between the dependent and independent variables. The study recommends effective application of anti-fraud policies, fraud detection, fraud deterrence, internal controls and management style since this will facilitate the curbing of fraud within the organisations and that further studies can also be conducted to measure the effects of other variables on fraud risk management. The study seeks to be of importance to policy and decision makers within the NGO sector and also researchers.

REFERENCES

- Alleyne, P., Persaud, N., Alleyne, P., Greenidge, D. and Sealy, P. (2010), "Perceived effectiveness of fraud detection audit procedures in a stock and warehousing cycle", *Managerial Auditing Journal*, 25(6); 553 - 568.
- Ann, N. M., (2015). Strategic responses to the turbulent operating environment and performance of Kenya Red Cross Society. *University of Nairobi*
- Association of Certified Fraud Examiner (ACFE). (2016). Report to the Nation on occupational Fraud Retrieved July 30th, 2014 from <https://acfe.com/documents/2012RttN.pdf>
- Albrecht, C., Albrecht, W. S., & Dunn, G. (2001). Can auditors detect fraud? A review of the research evidence. *Journal of Forensic Accounting*, 2(1), 1-12.
- Albrecht, W. S., Howe, K. R., & Romney, M. B. (1984). Deterring Fraud: The Internal Auditor's Perspective. *Institute of Internal Auditors Research Foundation*.
- Akinyomi, O. J. (2012). Examination of fraud in the Nigerian banking sector and its prevention. *Asian Journal of Management Research*, 3(1), 182-194.
- Basel Committee. (2011). *Principles for the Sound Management of Operational Risk*. Basel, Switzerland: Bank for International Settlements Communications.
- Becker, G. S. (1974), "Crime and punishment: An economic approach", *Essays in the Economics of Crime and Punishment*, 1-54, UMI.
- Bierstaker, J. L. (2009). Differences in attitudes about fraud and corruption across cultures: Theory, examples and recommendations. *An International Journal*, 16 (3), 241-250.
- Bierstaker, J. L., Brody, R. G. & Pacini, C. (2006). Accountants' perceptions regarding fraud detection and prevention methods. *Managerial Auditing Journal*, 21 (5), 520535.

- Buckhoff, T., and Parham, A. G., (2009). Fraud in the NON profit sector? *Strategic Finance*, 90 (12), 53-56.
- Burns, T. and Stalker, G.M., (1961). *The management of Innovation*. London: Tavistock.
- Charity Navigators (2016). How do we rate charities' financial health? Guide to intelligent giving.
- Chelengat, B., (2014). The effect of fraud on financial performance of deposit taking savings and credit co-operative societies in Kenya. University of Nairobi.
- Chiezey, U., & Onu, A. J. (2013). Impact of Fraud and Fraudulent Practices on the Performance of Banks in Nigeria. *British Journal of Arts & Social Sciences*, 15(1).
- Douglas, S. and Mills, K. (2000). Nonprofit fraud: What are the key indicators? , available at: https://charityvillage.com/Content.aspx?topic=nonprofit_fraud_what_are_the_key_indicators_ (accessed 30/11/2016).
- Fadzil, F. H., Haron, H. & Jantan, M. (2005). Internal auditing practices and internal control system. *Managerial Auditing Journal*, 20 (8), 844-866.
- Garoupa, N. (2001), "Optimal magnitude and probability of fines", *European Economic Review*, 45(9); 1765-1771.
- Grant, G. H., Miller, K. C., & Alali, F. (2008). The effect of IT controls on financial reporting. *Managerial Auditing Journal* , 23 (8), 803-823.
- Greenlee, J., Fischer, M., Gordon, T. and Keating, E. (2007), "An Investigation of Fraud in Nonprofit Organizations: Occurrences and Deterrents", *Nonprofit and Voluntary Sector Quarterly*, Vol. 36 No. 4, pp. 676-694. doi: <http://nvs.sagepub.com/content/by/year>.

- Hamilton, J. B. and Slatten, L. A. D. (2013), "A Nonprofit's Practical Guide to Resolving Ethical Questions", *Journal of Applied Management and Entrepreneurship*, Vol. 18 No. 2, pp. 39-58.
- Hersey P, Blanchard KH, Johnson DE (2001). *Management of Organizational Behavior: Leading Human Resources*. (8th ed.). *New Jersey: Prentice-Hall, Inc.*
- Hoffman, V., Zimbelman, M. (2009). Do strategic reasoning and brainstorming help auditors change their standard audit procedures in response to fraud risk? *The Accounting Review*, 84(3), 811-837.
- Idowu, A. (2009). An Assessment of Fraud and its management in Nigeria Commercial Banks. *European Journal of Social Science*, 10(4).
- Jaskyte K (2004). Transformational leadership, organizational culture, and innovativeness in non-profit organizations. *Nonprofit Manage. Leadership*. 15(2):153-168.
- Jarzabkowski, P. (2005): "How to Make the Most of Your Company's Strategy". *Academy of Management Journal*, 51(4); 621-650.
- Joppe M., (2000) *the research process*, from <http://www.ryerson.ca/~mjoppe/rp.htm>
- Kanu, S. I., & Okorafor, E. O. (2013). The nature, extent and economic impact of fraud on bank deposit in Nigerian. *Interdisciplinary Journal of Contemporary Research in Business*, 4(9), 253-264.
- Keller and Owens (2004). *Preventing and detecting fraud in Not for profit organisations*, LLC.

- Kerine, L. O., (2015). Factors influencing financial sustainability of Non-governmental organisations: a survey of NGOs in Nakuru, Kenya. *International journal of economics, commerce and management*, 3(9).
- Khanna, A., & Arora, B. (2009). A study to investigate the reasons for bank frauds and the implementation of preventive security controls in Indian banking industry. *Int. Journal of Business Science and Applied Management*, 4(3).
- Khandwalla, P. (1995b). 'Effectiveness Management Styles: An Indian Study' *Journal of Euro-Asian management*, 1 (7).
- Khondkar, E. K. and Siegel, P. H. (1998), "A signal detection theory approach to analyzing the efficiency and effectiveness of auditing to detect management fraud", *Managerial Auditing Journal*, 13(6); 367 - 375.
- Kimani, J. (2011). *Fraud Risk Assessment Plan for Barclays Bank of Kenya*. Tampere University of Applied Sciences.
- Kiragu, D. N., Wanjau, K.L., Gekara, M., and Kanali, C. (2013). Effects of Bank growth on occupational Fraud risks in Commercial Banks in Kenya. *International Journal of Social Sciences and Entrepreneurship*, 1 (3), 469-480.
- Knapp, C. A. and Knapp, M. C. (2001), "The effects of experience and explicit fraud risk assessment in detecting fraud with analytical procedures", *Accounting, Organizations and Society*, 26(1); 25-37.
- Krippendorff, K. (2012). *Content analysis: An introduction to its methodology*. Accessed on 16.2.2014 at: <http://eau.sagepub.com/content/20/1/187>.
- Law, P. (2011). Management style and no fraud occurrence in organizations: Hongkong evidence. *Managerial Auditing Journal*, 26 (6), 501-518.
- Ledgerwood, J. & White, V. (2006). *Transforming Microfinance institutions, providing services to the poor*. Washington DC, USA: The world bank.

- Likert, R. (1967) *The Human Organization*. New York: McGraw – Hill Inc.
- McGuire, R. (2005) ‘Which Management Style to Use’ London: *The Pharmaceutical Journal* 275 (9)
- Mugenda, O.M., & Mugenda, A.G. (1999). *Research methods: Quantitative and qualitative Approaches*. Nairobi: ACTS Press.
- Mugenda, O., & Mugenda, A. (2003). *Research Methods*. Nairobi: Acts Press.
- Neely, D. G. (2011), "The Impact of Regulation on the U.S. Nonprofit Sector: Initial Evidence from the Nonprofit Integrity Act of 2004" [Article], *AccountingHorizons*, 25(1); 107-125 doi:10.2308/acch.2011.25.1.107
- Newton, M. N., (2013). Effect of fraud risk management on organization performance: a case of deposit-taking microfinance institutions in Kenya. *International Journal of Social Sciences and Entrepreneurship*, 1 (7), 490-507.
- NGO Council. Accessed on 30th November, 2016. Source: <http://www.ngobureau.or.ke>.
- Odhiambo (2013). Effects of Financial Fraud and Liquidity on the performance of Commercial Banks in Kenya. *Unpublished MBA Project, University of Nairobi*.
- Okoye E.I. and Gbegi D.O (2013): An evaluation of fraud and related crimes on the Nigerian Economy. *An Arabian Journal of Business Management Review*, 2.
- Owen, J. R. (2003). Nonprofits Without Audit Committees Risk Financial Disaster, available at: <http://www.accountingweb.com/topic/firmnews/nonprofits> without audit committees risk financial-disaster (accessed 12/02/2014).
- Owusu-Ansah, S., Moyes, G. D., Oyelere, P. B. and Hay, D. (2002), "An empirical analysis of the likelihood of detecting fraud in New Zealand", *Managerial Auditing Journal*, 17(4); 192 - 204.

Paquita Bath (1993), *Resources for Success Series A Manual for Conservation Organizations in Latin America and Caribbean*.

PriceWaterhouseCoopers (PWC) (2014). Annual Crime Report Retrieved from <https://www.pwc.com/.../economic-crime-survey> on July 31,2014.

Rae, K. & Subramaniam, N. (2008). Quality of internal control procedures:Antecedents and moderating effect on organizational justice and employee fraud. *Managerial Auditing Journal* , 23 (2), 104-124.

Rothschild, J.and Milofsky, C. (2006), The centrality of values, passions, and ethics in the nonprofit sector. *Nonprofit Management & Leadership*, 17(2): 137-143.

Schachler, M. H., Juleff, L. & Paton, C. (2007). Management style in the financial services sector. *Management style* , 7 (5), 623-634.

Stulz, R.M. (2003). Risk Management and Derivatives. South-Western: Mason, Ohio.

Thompson A., Strickland A., Gamble J. (2005),*Crafting and executing strategy: The quest for competitive Advantage: Concepts and cases*, McGraw hill.

Tyge, F. K., Kishore, S., Peter, B., (2014). The effect of fraud on risk management in not-for-profit organizations. *Corporate Ownership and Control*, 12, (1).

Wanjiru, A. N., (2013). Effect of financial risk management on financial performance of oil companies in Kenya. *A management research project submitted in partial fulfillment of the award of masters of business administration (finance option) University of Nairobi*.

Wright, R. (2007). Developing effective tools to manage the risk of damage caused by economically motivated crime fraud. *Journal of Financial Crime* , 14 (1), 17-27.

APPENDICES

APPENDIX 1: questionnaire to employees of NGOs

Questionnaires Code:

Interview date:

Instructions

This questionnaire is designed to collect information on relationship between fraud risk management and financial sustainability of NGOs in Kenya. The information obtained will only be used for academic purposes and shall be treated in utmost confidence. You are requested to complete this questionnaire as honestly and objectively as possible.

Please tick appropriately and also kindly provide answers in the blank spaces provided.

SECTION A: RESPONDENT'S BACKGROUND INFORMATION

This section seeks to find the general information about the respondents in relation to the objective of the study.

1. Kindly indicate gender.

Male Female

2. Age group (years).

18-25 26-35 36-50 Above 50

3. Level of Education

Diploma Undergraduate Masters PhD Other (Specify)

.....

4. Have you undertaken any professional course?

Yes No

If yes, please specify

5. How long have you worked in this organization?

0-5yrs 6-10yrs 11-20yrs Above 20yrs

SECTION B: ORGANISATIONAL BACKGROUND INFORMATION

This portion covers questions on general information of your organisation that relates to the study objective.

6. What activities does your organisation engage in?

.....

-
-
7. What region does your organization's activities cover?
 World Africa Kenya Other(Specify).....
8. Does your organisation have branches or subsidiaries?
 Yes No
9. How many years has the organization been in operation?
 1-5yrs 6-10yrs 11-20yrs Above 20yrs
10. How many employees does the organization have within Kenya?
 0-50 51-200 201-500 Above 500
11. How adequate is the number of staff in the finance department?
 Very Adequate Adequate Not sure Not adequate Very Inadequate
12. What is the average annual gross revenue for the organization?(Kshs)
 Less than 50 Million
 Between 50 Million and 200 Million
 Above 200 Million

SECTION C: FRAUD RISK MANAGEMENT

This section seeks information on the various aspects of fraud risk management. The study defines fraud risk management as Intentional involvement in deception so as to gain a financial advantage.

13. How many fraud cases has your organization suffered in the past few years?
 None 1-5 6-10 11-15 Above 15
14. How does your organization view fraud prevention?
 Not important Slightly important Not sure Important Very important
15. How frequent does the organization monitor fraud risk indicators to pre-empt fraudulent activities?
 Monthly Quartely Semi-Annually Annually Other (Specify)

16. To what extent has the organisation applied the anti-fraud techniques?

Not at all[] Medium extent[] Not sure[] Great extent[] Very great extent []

17. Below statements relate to anti-fraud policies as an aspect of fraud risk management technique. Please indicate your opinion on the following scale [1=Strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=Strongly Disagree]. (According to the study, anti-fraud policies refer to organisational policies that guide employees in the event of fraud occurrence).

Aspect	1	2	3	4	5
a) The organisation has well-established anti-fraud policies to guide its employees at all levels of management.					
b) The anti-fraud policies clearly defines employee' responsibility and resulting consequences in the event of occurrence fraud.					
c) Fraud detection and prevention is effectively supported by the organisation' anti-fraud policies.					
c) The anti-fraud policies consider the cultural differences and diversity in responding to fraud among the employees.					

18. The following aspects relate to fraud deterrence strategy. Please indicate your opinion on how often your organisation employs their use in fighting fraud. Indicate your opinion in the following dimensions [1=Very Often, 2=Often, 3=Not sure, 4=Not Often, 5=Not at all]. (According to the study, fraud deterrence implies measures that seek to stop fraud from occurring).

Aspect	1	2	3	4	5
a) Clear division of duty					
b) Staff supervision					
c) Monitoring work performance					

d) Whistle blower strategy; incentives, hotline, protection					
c) Ensuring safe controls when accessing systems					
d) Strict legal consequences					
e) High fines and penalties					
f) Fraud risk register					
g) Fraud awareness training					
h) Other (Specify)					

19. The following statements relate to fraud detection as an aspect of fraud risk management technique. Please indicate your opinion on the following scale [1=Strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=Strongly Disagree]. (The study defines fraud detection as the identification of fraud as soon as it takes place).

Aspect	1	2	3	4	5
a) The organisation has successfully implemented a great number of fraud detection instruments.					
b) Selection of the suitable and effective fraud detection instruments is enhanced by availability of expertise within the organisation.					
b) The organisation's audits (internal and external) significantly contribute towards fraud detection.					
c) The organisation' fraud detection processes mostly rely on technology.					
d) Success in detecting fraud depends greatly on the support from the top management.					

f) Ethical organisational culture influences the success in detecting fraud within the organisation.					
--	--	--	--	--	--

20. The following questions relate to employee awareness on fraud risk management. Please indicate your opinion on the following dimensions [1=Strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=Strongly Disagree].

Aspect	1	2	3	4	5
a) The organisation carries-out employee training on fraud risk management.					
b) The organisation has clearly outlined anti-fraud internal controls.					
b) Occurrence of fraud increases the awareness of fraud risk in NGOs.					
c) Occurrence of fraud increases understanding on the different risk reduction factors.					
d) Employee awareness on fraud risk reduces the organizations exposure to risk					

21. The following questions relate to internal controls against fraud. Please indicate your opinion on the following dimensions [1=Strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=Strongly Disagree]. (The study defines internal controls as internal checks that prevent fraud through monitoring and enhancing internal organisational processes).

Aspect	1	2	3	4	5
a) The organization's internal controls cannot be easily overridden.					

b) Fraud risk prevention is associated with an increase in the number of implemented internal controls.					
c) Continuous internal and external audits assist in grounding the set internal controls.					
d) Part of the current organisation's internal controls are as a result of learning processes from previous fraud occurrences.					
e) Laws and regulations on fraud risk management mainly influence the establishment of the organisation's internal controls.					
f) The set internal controls enhance monitoring and financial reporting processes in the organisation.					
g) The organisation's internal controls facilitate the identification and measurement of risk.					

22. The following questions relate to management style in relation to fraud risk. Please indicate your opinion on the following dimensions [1=Strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=Strongly Disagree]. (According to this study, management style implies system through which organizations are controlled).

Aspect	1	2	3	4	5
a) Top management support is vital on reducing fraud risk exposure.					
b) The organization's ethical behaviour is determined by the management' attitude.					
c) Management's use of incentives for professionalism and non-fraud behaviour by employees reduce fraud.					
d) Reliance on trust by the organization increases the chances of					

fraud					
e) The organization deploys the use of expertise to curb fraud					
f) The organisation's governance framework creates a platform for an efficient fraud risk management					

23. The following questions relate to anti-fraud rules and regulations on fraud risk management. Please indicate your opinion on the following dimensions [1=Most Likely, 2=Likely, 3=Not sure, 4=Unlikely, 5=Most Unlikely]. (The study defines anti-fraud rules as rules set to curb the occurrence of fraud).

Aspect	1	2	3	4	5
a) Implementation of antifraud rules and regulations result to a reduction of fraud.					
b) Lack of a clearly spelt out code of conduct may increase incidences of fraud in NGOs.					
c) Use of fraud risk register may reduce fraud by increasing awareness of the various exposures.					
d) Long and tedious methods of prosecuting fraudsters may encourage involvement in fraudulent activities.					

SECTION D: FRAUD RISK MANAGEMENT & FINANCIAL SUSTAINABILITY

This section seeks to obtain information that targets to establish the relationship between fraud risk management and financial sustainability.

24. In your opinion, has the occurrence of fraud affected the financial sustainability of your organisation?

Yes [] No []

If yes, how great has been the impact?

No impact[] Medium impact[] Not sure[] Great impact[] Very great impact []

25. How do you rate the efficiency of fundraising in your organisation?

Very Efficient [] Efficient [] Not sure[] Not Efficient [] Very Inefficient []

26. The following statements relate to financial sustainability within your organisation.

Please indicate your opinion on the following dimensions [1=Strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=Strongly Disagree].

Statement	1	2	3	4	5
a) The organisation has enough resources to allocate towards the activities it undertakes					
b) Most of the projects are usually completed within the scheduled time and within the allocated budget					
c) The organisation has enough set aside resources in case of any contingency.					
d) The overall debt level for the organisation is well within manageable levels.					

27. The following statements refer to the relationship between fraud risk management and financial sustainability. Please indicate your opinion on the following dimensions [1=Strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=Strongly Disagree].

Statement	1	2	3	4	5
a) The organization's fraud risk management practices have improved its financial sustainability.					
b) The organization has sufficiently employed resources towards fraud risk management that have result to a financial save.					

c) The organization's fraud risk management techniques mostly focus on financial controls.					
d) Availability of funds for the organization's activities have been supported by the existence of good fraud risk management techniques.					
e) Well established fraud risk management techniques have seen the organization save a lot on fraud investigation.					
f) Fraud risk management techniques have influenced the organization's financial stability as a result of improved confidence from funders.					

END

THANK YOU