DRIVERS OF FRAUD RISK AMONG STATE CORPORATIONS IN MOMBASA COUNTY IN KENYA

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

This thesis is dedicated to my family for their patience and support, may you be motivated to reach your dreams; to my siblings, who have always urged me to move on and to my parents who have supported me throughout my studies.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACFE: Association of Certified Fraud Examiners

CIMA : Chartered Institute of Management Accountants

FFA : Financial Fraud Action

FSF : Financial Statement Fraud

IFCP : Institute of Financial Crime and Prevention

IT : Information Technology

KMA : Kenya Maritimes Authority

KPA : Kenya Ports Authority

KRA : Kenya Revenue Authority

NCFFR: National Commission of Fraudsters Financial Reporting

PwC : Price Waterhouse Coopers

SCAC : State Corporations Authority Committee

PPDA : Public Prosecution Disposal of Public Assets Authority

UK : United Kingdom

USA : United States of America

ABSTRACT

Fraud is a global problem and affects literally all institutions. Statistics indicate that organization loose at least 5% of their annual collections to fraud. The drives of are generally unknown and it is believed that the same could vary from one institution to another. The aim of this study was to evaluate the drivers of fraud risk among state corporations in Mombasa County in Kenya. In respect to this, key driers of fraud of interest included; financial statement fraud, asset misappropriation and corruption. The study used two major theories; the fraud triangle theory and Clark Study theory. This research study used a descriptive research design that aims at determining and reporting the way things are. The sample size of the study was 64 internal auditors and accountants of state corporations in Mombasa County. Since the accessible population is regarded as small no sampling was done and therefore a census survey was used. This means all the internal auditors of state corporations was used. Structured questionnaires were used for data collection. The questionnaire was self-administered. The researcher will use Statistical Package for Social Sciences (SPSS) for both descriptive analyses, that is, mean, percentages, and correlations. For inferential analysis, a both bivariate linear and multiple linear regressions will be carried out. Model R^2, F-Statistics and regression coefficients was generated and interpreted. Inferential statistics will be carried out at 95% degree of confidence. Results will present in Tables and Figures. The study concluded that financial misstatement, asset misappropriation and corruption had a positive and significant effect fraud risk among state corporations in Mombasa County. The study recommends the management of state corporations in Mombasa County to adopt more robust monitoring measures to avoid manipulation of their financial records. There is also need for the management of state corporations to emphasize on proper disclosure of financial statement information. The study also recommends the management of state corporations to ensure that their expenditures are not overstated through the provision of accountability reports. The study further recommends for the adoption of policies to handle financial statements such as Forensic accounting and auditing. The study also recommends the management of state corporations in Mombasa County to put in place punitive measures to curb misappropriation of funds. The study also recommends the management of corporations in the county to audit their personnel databases to get rid of ghost employees. The study further recommends for a strict cash transfer policies to be put in place so as to reduce misappropriation of funds. Finally, the study recommends the management of state corporations in Mombasa County to put in place policies to regulate cases of payoffs and kickbacks. There is also need for the state corporation's management to adopt severe and punitive penalties measures against perpetrators of payoffs and kickbacks.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Financial fraud refers to the intentional act to gain monetary advantage unfairly and unlawfully. It relates to activities that encourage fraudulent financial reporting such as misappropriation of assets (inside or outside the system, such as: embezzlement, payroll fraud and theft), (ACFE, 2014). According to Rubin (2015) financial fraud also include illegal or unethical sales practices and commercial and public bribery. The Kenya Anti-Fraud and Corruption Policy (2006) defines financial fraud as any acts as deception, bribery, forgery, extortion, corruption, theft, conspiracy, embezzlement, misappropriation, false representation, concealment and collusion. It further asserts that for practical purposes, financial fraud may include any use of deception with the intention of obtaining financial advantage.

Organizations across of the global continue to be affected by the effects of financial fraud (Granter, 2014). State corporations being state owned enterprises that are managed and run by the government have always been viewed as a public venture by many as they have a wide global customer base, high profitability margins and customer retention. Nevertheless, just like other businesses they are also faced with numerous challenges including financial fraud that have in the long-run affected their performance, (Soltani, 2013). Issues ranging from acquiring counterfeit goods, identity fraud, embezzlement, internal theft to payoffs others have affected the performance of these organizations.

From a global perspective, according to the Financial Fraud Action UK (2015), fraud losses statistics in state corporations across the county was a still a major threat to the total revenues from the state companies. The state organs have been facing several types of financial including; embezzlement of funds and internal theft. In this case, the UK fraud losses totaled to 479 million pounds. This promoted FFA UK to lead the collective light against fraud in the UK. In the U.S.A according to the Report of the USA National Commission on Fraudster Financial Reporting in the majority of the studied cases, state agencies management, such as chief executive, president and chief financial officer, were the fraudulent perpetrators. In some cases, it was found that there were made intentional false disclosures from the accountant throughout falsified documents and records (NCFFR, 2015). On the other hand in Australia almost half of the state corporations suffered some form of financial fraud. In this case financial fraud had cost the Australian government $5.8 billion in 2015 (Hooper, 2016).

In addition, according to Ernst and Young (2012), different types of financial frauds have caused RS.6,600 core losses to the Indian economy and state corporations were the most common victims in swindling cases. On the other hand, Soni (2013) argues that embezzlement of funds in these organizations had emerged the major cause of concern. Similarly, in another survey in India conducted by Delloitte (2012), shows that state corporations experienced a rise in the number of financial fraud incidences and that the number of financial frauds in state corporations had increased by more than 10%. On the other hand, according to Fraud Survey of KPMG (2008), the total value of fraud reported was $301.1 million with an average value of each organization of $1.5 million in Australia and New Zealand of 420 organizations surveyed representing 20% of the total surveys distributed.

In South Africa, financial fraud costs government trillions of Rands thus damaging the national reputation and government entities are among the most common victims. Government entities are victims of every conceivable kind of swindle, and everyone pays for these frauds in direct and indirect ways. This prompted a policy to be formulated to regulate these cases. This policy framework works to control fraudulent activities in the county (Nkune, 2013). On the hand, in Ghana Kwame (2014) asserts that financial fraud is till common in state corporations in Ghana. Although it occurs least in only 10% of all the fraud cases, it is easily the most expensive in terms of value lost. Kwame notes that financial fraud centers on the manipulation of financial statements in order to create financial opportunities for several individuals. Fraudulent activities in this case include; manipulation of stock price and increased year-end bonuses.

In East Africa, According to KPMG (2012), Burundi, Uganda, Kenya and Tanzania make up 74% of all the financial fraud cases in the East African region with Kenya standing out with 23% of the reported cases, Burundi at 21%, Uganda at 18% and Tanzania at 12%. Most fraud in East Africa target governments and financial sectors with misappropriation of funds, bribery and corruption extremely high in the organizations in these countries.

In Kenya, although there are effective policies, systems of checks and balances and physical security, fraud most financial fraud cases in state corporations are in form of misappropriation or embezzlement of funds, bribery and corruption and financial statement frauds (Wanyama, 2009).

In is therefore no surprise that the economic survey of 2010 by PwC found that financial fraud incidents and cases in state corporations had increased with higher margins in the year 2010 than in any other preceding year. To this end, approximately, 90% of the respondents to the study indicated that most state entities had recorded serious cases of fraud. These cases of financial fraud have been increasing affecting the performance of state corporations thus leading to low profitability, (PwC, 2010).

State corporations in Mombasa County specifically have been on the radar for cases of financial fraud considering that the county acts as the gateway to East Africa. Issues ranging from bribery, tax aversion, financial statement fraud, misappropriation of funds and forgery are still dominant is these organizations (EACC, 2016). That is why this study will focus on the effects of financial fraud on performance of state corporations in the county.

1.1.1 Fraud Risk

According to Hopwood (2012), fraud involves an array of irregularities and illegal acts characterized by intentional deception. The Anti-Fraud and Corruption Policy (2006) gives the forms of fraud to include; computer fraud (where Information Technology (IT) equipment has been used to manipulate programs or data dishonestly), corruption (offering, giving, soliciting or acceptance of an inducement or reward which may influence a person to act against the interests of the organization and theft (any misappropriation, stealing, malicious damage and actual or attempted break-in.

Fraud risks involves undisclosed associations with related parties, fraudulent disbursements, theft by cybercrime, bribery, manipulation in terms of expenses and liabilities, improper reporting and disclosures or theft of assets and services. Most of these frauds are financial in nature although fraud risks centers on asset misappropriation, financial and non-financial reporting, regulatory compliance and engaging in unlawful activities.

Financial fraud refers to those practices that encourage fraudulent financial reporting such as misappropriation of assets (inside or outside the system, such as: embezzlement, payroll fraud and theft). On the other hand, Hoffman (2012) argues that financial fraud also include the manipulation of financial statements. In this case in relates to the falsification, alteration, or manipulation of material financial records, supporting documents, or business transactions to benefit individuals within or outside an organization. In addition, Alexander (2015) argues that financial fraud involves the use of destructive accounting practices through dishonest earnings to achieve some financial affluence.

1.1.2 State Corporations in Kenya

State corporations are state owned enterprises that are managed and run by the government. It is a body that is defined by a statute, established by an act of parliament or a bank or any other financial institution or company whose shares or a majority of shares are owned by the government or by another state corporation (State Corporations Act, Cap.446, 2007).

The State Corporations Acts (1987) revised in 2013 gives 10 criteria through which an institution can be considered to be a state corporation. The common variable in all the 10 is control by the government of Kenya. A state corporation is therefore an entity which the government has significant influence over it. By law, state corporations are guided by government regulations and appointed bodies such as the State Corporations Advisory committee (SCAC), the Efficiency Monitoring Unit and Public Procurement Oversight Authority (PPOA). The terms and conditions guidelines of state corporations released through the State Corporations Advisory committee in stresses that state corporations have no option but to embrace modern business management practices (Government Press, 2004). The guidelines go further to point out that each and every corporation is expected to have corporate strategy with clear goals, a set of values, objectives and mission.

Njiru (2011) says that the Kenya government forms state corporations to meet both commercial and social goals and that they exist for various reasons including correcting market failure, exploiting social and political objectives, providing education, health, redistributing income or developing marginal areas. The Government of Kenya has since June 2005, required all Boards of state corporations to sign performance contracts with the Government and the Chief Executive Officers to sign performance contracts with their respective Boards and the same being cascaded down to individual staff members. This has been a solid attempt to improve state corporations by ensuring improved and sustained performance and service delivery. State corporations of Kenya are divided into 8 broad categories based on their mandate and functions. The categories are financial corporations, commercial corporations, regulatory corporations, public universities, service corporations, regional development authorities, tertiary education and training corporations and finally training and research corporations.

Examples of state corporations in Kenya include; Kenya Airports Authority, Kenya Ports Authority, Kenya Revenue Authority, Kenya Ferry Services, Kenya Maritime Authority, Kenya Airports Authority among others. Kenya state corporations are not new to financial fraudulent cases and since one of the factors that has affected the performance of these organizations is the existence of fraudulent activities. According to Business Daily (2012), there exits fraudulent activities in the Kenyan state corporations and financial fraud are one of them. The Business Daily has attributed these cases to unwillingness to tackle the fraud problem, poor response time to arrest warrants issued to state corporations by the relevant authorities, weak surveillance and the lack of independence in the forensic auditing function. That is why this study will seek evaluate the drivers of fraud risk among state corporations in Mombasa County in Kenya

1.2 Statement of the Problem

State corporations in Kenya have been experiencing financial fraudulent activities that have been affecting their performance. This has seen some of these companies register poor productivity thus face a threat of closure with the management of these companies featuring as the poorest and their internal controls extremely vulnerable to prevent financial fraud. Some organizations in Kenya have collapsed due to financial fraud. Kenya lost 1.4 billion shillings as a result of fraudulent activities in state corporations. This is attributed to the failure of statutory auditing to prevent and reduce financial fraud.

According to the 2010 economic crime survey carried out by PwC, cases of fraud have risen sharply compared to preceding years affecting all sectors of the Kenyan economy. Globally, an average organization is estimated to lose 5% of its revenue each year due to significant frauds which also include financial statement fraud. If this rate of loss is applied to 2011 Gross World Product, this causes an anticipated fraud loss of $3.5 trillion. The impact is that financial statement fraud cases have resulted in financial losses, a loss of shareholder value and bankruptcies (Center for Audit Quality, 2010). Internal risk management systems are losing ground to highly-networked, sophisticated fraudsters.

Poor performance of most state corporations in Kenya is caused by misappropriation of funds by management or sub-ordinate employees in the organizations. In May 2016, the government put on notice several state corporations among which included sugar companies in western Kenya such as Mumias Sugar Company for massive misappropriation of funds. It is worth stating that corruption and misappropriation of funds in the organizations has often been blamed for such woes. An example is in the sugar industry where majority of the sugar companies had to change their top administrations since misappropriation of funds had contributed to their dismal performance and occupational strikes. For instance in April 2017, the government had to change the management of Chemelil Sugar Company (one of Kenya top sugar company) due to poor productivity coupled with misappropriation of funds. It is because of such cases that this study seeks to investigate the drivers of fraud risk among state corporations in Kenya.

There are also knowledge gaps in the previous studies that have focused on fraud risks. Previous studies for instance, Mustafa and Youssef (2010) investigated the relationship between the financial expertise of the audit committee and the incidence of asset misappropriation in publicly held companies, Majid *et al* (2010) focused on the opinions of local authority employees on the issue of asset misappropriation in Malaysia, Akindele (2011) looked at the effect of fraud as a negative catalyst in the Nigerian Banking Industry, Gikiri (2012) sought to determine the influence of fraud risk management practices in commercial banks and their effect on fraud risk exposure while Odhiambo (2013) looked at the effects of financial fraud and liquidity on financial performance of commercial banks in Kenya. These studies focused on fraud risks in commercial banks in Kenya thereby presenting a contextual gap, this study will fill this gap by looking at the drivers of fraud risk in state corporations in Mombasa County.

Additionally, Maxwell *et al* (2012) assessed the effect of corruption in humanitarian assistance through in humanitarian agencies only focused on only one driver of fraud risk; this gap was filled by focusing on financial misstatement, asset misappropriation and corruption. The studies also reveal differences in the contexts ranging from developed countries such as USA to developing countries such as Nigeria. This contextual knowledge gap can be filled by focusing on the drivers of fraud risk among state corporations in Kenya.

1.3 Objectives of the Study

1.3.1 General Objective of the Study

The general objective of the study was to evaluate the drivers of fraud risk among state corporations in Mombasa County in Kenya

1.3.2 Specific Objectives of the Study

i. To assess the effects of financial statement on fraud risk among state corporations in Mombasa County
ii. To evaluate the effects of asset misappropriation on fraud risk among state corporations in Mombasa County
iii. To explore the influence of corruption on fraud risk among state corporations in Mombasa County

1.4 Research Questions

i. What is the effects of financial statement on fraud risk among state corporations in Mombasa County?
ii. To what extent does asset misappropriation affect fraud risk among state corporations in Mombasa County?
iii. What is the influence of corruption on fraud risk among state corporations in Mombasa County?

1.5 Significance of the Study

The findings of the study can be of significance to the state corporations in Kenya since they are capable of adopting the most appropriate financial fraud mitigation strategies to combat the losses brought by fraudulent activities in the organizations.

The results of the study can also be of help to Finance managers in organizations in coming up with the measures for handling possible effects of financial fraud by ensuring that financial statements and reports are not manipulated. In addition, they can be of benefit by adopting the most appropriate forensic auditing techniques for the purposes of acquiring the services of qualified forensic experts in combating financial fraud in their organizations.

The findings of the study can benefit potential and current investors. The study sought to inform the investors about the importance of combating the effects of financial fraud. This can enable them make informed decision on whether to dispose their shares or to buy more so as to benefit in future from the state corporations. This is because investors pursue investment in companies that have reduced fraudulent activities due to proper policies like incorporation of forensic auditing services.

The findings of this study can be important to scholars especially in the field of financial fraud by providing with the necessary knowledge. As a result they may be in a position to adopt the most appropriate approach of meeting their targets.

1.6 Scope of the Study

This research focused on the drivers of fraud risk among state corporations in Mombasa County so as to determine the reason for high fraud cases in the County. The study specifically focused on the effects of financial statements, asset misappropriation and corruption on fraud risks among state corporations. These present the broad categories of occupational frauds in theoretical literature. There are many state corporations and they are spread throughout Kenya. This study focused on those state corporations operating in Mombasa County. This is because they are involved in most of the making decisions that affect the operations of the corporations such as curbing fraud risks. The target population for the study included 32 audit and 32 accounting officers in state corporations within Mombasa County.

1.7 Limitations of the Study

The researcher had limited access to vital information due to confidentiality and loyalty of the respondents to the management of their respective targeted institutions. Some respondents were not willing to reveal the main effects of financial fraud due to the sensitively around the topic of fraud. However to mitigate this, researcher categorically elaborated the main purpose of conducting the research by obtaining permission from the relevant authorities to carry out the study. Due to the expensive nature of research the researcher incurred costs to facilitate travelling from one place to another, stationary expenses, typing and printing expenses and binding expenses. To overcome this limitation, the researcher sought for financial support from potential sponsors. Due to the demanding nature of research, collecting, interpreting and analyzing data was a time consuming affair. To handle this challenge the researcher sought for a time off from the employer to allow for data collection, cleaning, coding, analysis, interpretation and eventually presentation.

Fraud information is regarded as confidential in many institutions. This study used a Likert scale to measure the perception and belief regarding the fraud situation in each of the state corporation. This was because there are no direct measures otherwise to measure the concept at hand.

1.8 Assumptions of the study

The study expected all the participants to be helpful and provide consistent responses to the questions of the study. The study also expected all the participants to provide honest information to the study.

1.9 Definition of Terms

Financial Fraud refers to falsification, alteration, or manipulation of material financial records, supporting documents, or business transactions and material intentional misstatements, omissions, or misrepresentations of events, transactions, accounts or other significant information from which financial statements are prepared, (Razaeel, 2014).

Asset misappropriation refers to the theft or misuse of funds placed in one's trust or belonging to one's employer, (Institute of Financial Crime and Prevention, 2011)

Bribery refer to situations in which employees accept cash or benefits in exchange for access to the company's business often creating a scenario where the company that the employee works for pays more for the goods or products than necessary, (Zahra, 2007)

Financial fraud refers to the intentional act to gain monetary advantage unfairly and unlawfully. It relates to activities that encourage fraudulent financial reporting such as misappropriation of assets (inside or outside the system, such as: embezzlement, payroll fraud and theft), (ACFE, 2014).

Fraud Risks refers to the undisclosed associations with related parties, fraudulent disbursements, and theft by cybercrime, bribery, manipulation in terms of expenses and liabilities, improper reporting and disclosures or theft of assets and services.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter contained the review of theoretical background of the study, the conceptual framework, literature and empirical review. The chapter further presents the research gap for the existing literature.

2.2 Theoretical Review

The section provides the theories upon which the study anchors on. Based on the theoretical connection, it was easier to compare the findings of the study with the existing theories to establish whether the findings are for or against the theories. The study is anchored on the fraud triangle theory, the Clark study theory, fraud management life cycle theory and the theory of reasoned action.

2.2.1 The Fraud Triangle Theory

The proponent of fraud triangle theory was Donald Cressey in 1950. Being a criminologist, Cressey did a study of fraud by asserting that people do things with some reasons. He interviewed 250 criminals in 5 months putting into consideration that; the individual being interviewed must be a person of trust in good faith and must have violated the trust. In this case his findings were that there are three major factors that are present for a person to violate this trust (Crassey 1953). In this case the three factors were causes by; non-shareable financial problem, opportunity to commit the trust violation, and rationalization by the trust violator. As far as non-shareable financial problem, is concerned, Cressey posited that persons become trust violators when they conceive of themselves as having incurred financial obligations which are considered as non-socially sanction-able and which, consequently, must be satisfied by a private or secret means.

Moreover, Cressey argues that perpetrator of fraud must formulate some type of morally acceptable rationalization before engaging in unethical behavior. Rationalization refers to the justification that the unethical behavior is something other than criminal activity. If an individual cannot justify unethical actions, it is unlikely that he or she will engage in fraud. It is important to note that rationalization is difficult to observe, as it is impossible to read the perpetrator’s mind (Cressey 1953 in Wells, 2005). Individuals who commit fraud possess a mind-set that allows them to justify or excuse their fraudulent actions (Hooper and Pornelli, 2010). Rationalization is a justification of fraudulent behavior because of an employee's lack of personal integrity, or other moral reasoning (Rae and Subramanian, 2008). Some individuals are more prone than others to commit fraud. That the propensity to commit fraud depends on people ethical values as well as on their personal circumstances such as job insecurity due to downsizing, redundancy, a work environment that inspires resentment such as being, passed over for promotion. Therefore this theory can be used to understand personal and corporate pressures which motivate proxies for fraud commitment.

2.2.2 The Clark Study Theory

The Clark study theory is one of most relevant theories as a far as financial fraud is concerned. This theory was propagated by Richard C. Hollinger and assumed that employees steal primarily as a result of workplace conditions and concluded that the true costs of employee theft are vastly understated (Hollinger, 1976). In this theory Hollinger works with five major hypotheses; external economic pressures motivate employees to commit theft, contemporary employees (particularly young ones) are not as honest and hardworking as those in past generations, every employee could be tempted to steal from his employer (assumes people are greedy and dishonest by nature), job satisfaction is the primary cause of theft and that there are shared and informal structure of organizations that becomes the standard of conduct, (Bebchuck, 2011).

First, Hollinger argues that there is a statistical relationship between employees' concern over their financial situation and the level of theft. To this end, the higher theft individuals are more likely to be concerned about their finances, particularly those who ranked finances as the first or second most important (personal) issue. He also states that there is a direct correlation between (younger) age and (higher) level of theft. Thus the younger an individual is the more likely he is to commit financial fraud. In his research he also indicated that financial thefts were higher for those with greater access to the things of value in the company. He also asserts that employees who are dissatisfied with their jobs are more likely to engage in counterproductive or illegal behavior in order to right the perceived inequity that committing fraud (Hollinger, 1976).

Furthermore Hollinger argues that financial fraud cases are rampant because formal organizational controls do not provide a strong deterrent effect on employee theft. To this end, he argues that there are two categories of employees' deviant behavior (acts by employees against property misuse and theft of company and acts of employee deviance that affect productivity). To control these cases of employee fraud, he recommends that there is need to increase the perception of detection provides a significant deterrent to employee theft Hollinger, 1976).

2.3 Empirical Literature

This section presents the empirical literature for each of the three study objectives (s).

2.3.1 Financial Statement and Fraud Risk

Odhiambo (2013) did a study on the effects of financial fraud and liquidity on financial performance of commercial banks in Kenya. The objective of the study was to evaluate the effects of financial fraud and liquidity on the financial performance of commercial banks in Kenya. The study adopted a descriptive research design. Regression analysis model was used to analysis the data. 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.

Makori (2016) sought to assess the influence of internal control systems on fraud risk management among banks in Kisii town. The study focused on 15 banks in Kisii town. The sample size comprised of 130 respondents. The results of the study showed that internal control systems influence fraud risk management; positively and significantly.

Gikiri (2012) did a study to determine the influence of fraud risk management practices in commercial banks and their effect on fraud risk exposure. The main objective was to find the combined effect of fraud risk management practice, fraud prevention and fraud detection on fraud risk incidence in commercial banks in Kenya. The results of the study showed that

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.

Abiola and Oyewole (2013) evaluated the effects of financial statements on fraud detection in selected Nigerian commercial banks and showed a statistically significant positive relationship between risk assessment and fraud detection. Similarly, Akinyomi (2010) in a study on the effect of financial statements on Nigerian banks found that there was a strong positive relationship between risk assessment and fraud management while studying fraud in Nigerian banks.

2.3.2 Asset Misappropriation and Fraud Risk

Majid *et al* (2010) conducted a study in Malaysia to explore the opinions of local authority employees on the issue of asset misappropriation. Their findings revealed that the most likely assets to be misused in a local authority are vehicles and internet connection. They also found factors that might lead to asset misappropriation include inadequate or lack of internal control, lack of employee's fraud education, lack of independent cheques, override of existing controls, and lack of management reviews, attitude, and lack of awareness of the dishonest acts. Besides, the majority of respondents in their study believed the likelihood of asset misappropriation in the future is increasing. However, their research was based on the perception of employees in local authorities, did not show the types of asset misappropriation or how to detect any, and did not mention the role of external auditors in detecting this fraud scheme. Another limitation in their study is that it was conducted on just one local authority which makes it difficult for their results to be generalized.

Only one study by Gullkvist and Jokipii (2012) examined whether internal auditors, external auditors, and economic crime investigators perceive the importance of red flags as significantly different across asset misappropriation and fraudulent financial reporting, as well as across within-subject categories. 471 web-based surveys were collected from internal auditors, external auditors, and economic crime investigators. Findings revealed that significant differences in perceptions exist among the participant groups. Internal auditors report a higher perceived importance of red flags related to detecting asset misappropriation than those related to fraudulent financial reporting, whereas the economic crime investigators perceived red flags for fraudulent financial reporting as more important than that of asset misappropriation. External auditors reported equal perceived importance of red flags across the two fraud types as well as across within-subject categories. They provided a list of red flags for asset misappropriation and fraudulent financial reporting. However, they did not suggest weights to red flags in their list and did not mention how external auditors might respond to these red flags. Another weakness is the low response rate which affects the generalization of the study results.

Mustafa and Youssef (2010) investigated the relationship between the financial expertise of the audit committee and the incidence of asset misappropriation in publicly held companies using a sample of 28 publicly held companies in the USA who were experiencing asset misappropriation from 1987 to 1998, as well as 28 control companies matched according to size, industry, and time period. Results revealed that the higher the percentage of financial expert members and the higher the percentage of independent members in the audit committee, the lower the likelihood of asset misappropriation. However, both studies did not examine how asset misappropriation can be detected or the role of external audit in detecting asset misappropriation as a corporate governance mechanism.

2.3.3 Corruption and Fraud Risk

Maxwell et al (2012) sought to assess the effect of corruption in humanitarian assistance through humanitarian agencies. The study employed descriptive survey research design. The unit of analysis was humanitarian agencies. Results of the study revealed that accurate targeting of those who need assistance poses significant corruption risk.

Graycar *et al* (2012) also looked at past corruption cases to identify opportunity and control structure in order to devise preventive mechanism. The study used multiple cases analysis. The study concluded that deficiency in control structure positively and significantly influences the existing opportunities for corruption thereby developing systematic methods. Thanos and Petrou (2014) in concurrence, attest that corruption acts as a “helping hand” to commerce. Evidence from bank records show that bribing mechanisms had helped facilitate transactions and enable private agents to pursue economic activities they could not pursue otherwise

2.4 Conceptual Framework

A conceptual framework is that logically, developed, described and elaborated network of interrelationships among variables which are deemed to be integrated as part of the dynamics to be investigated. According to Seraken (2003), it states the researcher’s ideological stand from his or her agreement or disagreement with the issues at hand. A conceptual framework has to have both independent and dependent variables. In this case the independent variables were; financial statement fraud, corruption and asset misappropriation. On the other hand, performance of state corporations is the dependent variable.

Independent variables **Dependent variable**

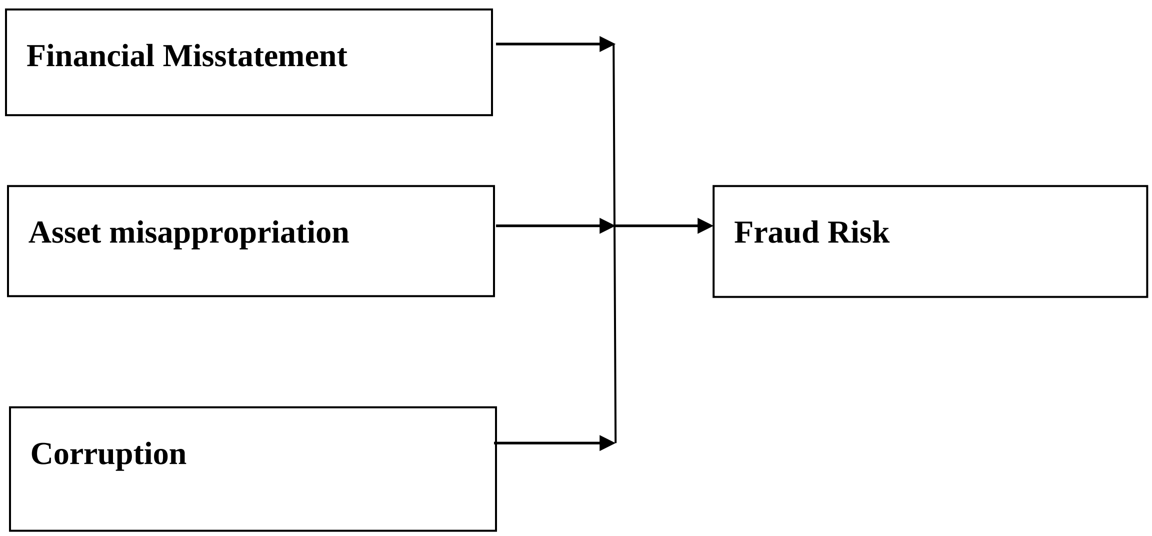

Figure 2.1 Conceptual framework

2.4.1 Financial Misstatement

Financial statement fraud refers to the intentional, deliberate, misstatement or omission of material facts, or accounting data which is misleading and, when considered with all the information made available (Cressey, 2012). Financial statement fraud is usually committed with the aim that a financial statement audit ensures that a company's financial reports are free from material misstatement and fraud. According to Razaeel (2014), financial fraud involves; falsification, alteration, or manipulation of material financial records, supporting documents, or business transactions and material intentional misstatements, omissions, or misrepresentations of events, transactions, accounts or other significant information from which financial statements are prepared.

A study conducted by the National Commission on Reporting Financial Fraudsters in America (2007), financial statement fraud in organizations occurs as a result of certain environmental forces and opportunities. Professor Donald R. Cressey studied the factors that lead to committing financial statement fraud and concluded that when fraud occurs there are three factors that are responsible; intent (premeditation), opportunity and pressure (Cressey, 2007). The USA National Commission on Fraudster Financial Reporting notes that financial statements fraud are normally made through intentional false disclosures from the accountant throughout falsified documents and records Furthermore, studies have shown that while the authors of fraudulent financial reporting have used different means, the effect of their actions is almost always consist of overestimating or smoothing earnings in order to exaggerate the company or its assets. In addition, fraudulent financial statements do not always begin with an openly recognizable act of distortion of the financial statements. In many cases, fraudulent financial statements are the peak point of a number of acts intended to address operational difficulties (National Commission on Reporting Financial Fraudsters, 2007). In case fraudulent financial statements often leads to poor accountability, huge financial losses and a false image of an organization (Rubin, 2015).

According to Cotton (2012), financial statement fraud cost organizations more than $500 billion in America in 2010. The collapses of the giant companies in USA as a dominant economy in the world as a result of financial statement fraud has affected almost all financial markets all over the world. Financial statement fraud (FSF) has received considerable attention from the public, press, investors, the financial community, and regulators because of high profile reported fraud at large companies such as Lucent, Xerox, Rite Aid, Cendant, Sunbeam, Waste Management, Enron Corporation, Global Crossing, WorldCom, Adelphia, and Tyco. Cotton (2012) further calls for the needs to adopt financial fraud mitigation strategies to avert these fraudulent activities.

2.4.2 Asset Misappropriation

Asset misappropriation refers to the theft or misuse of funds placed in one's trust or belonging to one's employer. According to the Institute of Financial Crime and Prevention (IFCP, 2011) there are four conditions in a work place that provide the opportunities for misappropriation. These include; poor internal controls, too much control limited to specific employees, lack of supervision by management and failure to pre-screen employees adequately. According to Akinyomi (2012), theft and misappropriation represent another form of fraud which involves the illegal collection of financial items such as cash and travelers cheque.

According to Kerber (2015), misappropriation by employees can take the form of a person using organizations credit cards to buy personal items to complex check forging schemes that culminates to massive losses. The association of Certified Fraud Examiners assert that signs of misappropriation by an employee of an organization include; abrupt shift in work schedules, declining to take vacations, sudden changes in lifestyles such as buying a larger home and driving expensive vehicles and problems associated with drug abuse, alcoholism and gambling.

It is worth stating that misappropriation of fund in an organization can lead to poor performance of organizations. Okumbi (2014) asserts that the poor performance of most state corporations in Kenya is caused by misappropriation of funds by management or sub-ordinate employees in the organizations. In May 2016, the government put on notice several state corporations among which included sugar companies in western Kenya for massive misappropriation of funds. Other state corporations included Kenya Ports Authority (KPA), Kenya Revenue Authority (KRA) and Kenya Maritimes Authority (KMA). This is why the researcher intends to investigate the effects of financial fraud in these state organizations in Mombasa County.

2.4.3 Corruption

Payoffs and kickbacks refer to situations in which employees accept cash or benefits in exchange for access to the company's business often creating a scenario where the company that the employee works for pays more for the goods or products than necessary. To this end, the extra money finds its way into the pockets of the employees who helped facilitate the access (Zahra, 2007). On the other hand, Hoffman (2002) argues that the reality is that payoffs are just fraudulent behaviors that cultivate corruption and bribery.

Payoffs have often affected the performance of organizations. According to Kaufmann (2006), in organizations with weak policies and legal systems, payoffs are considered a strong and painful constraint to their economic functioning, growth, and development.

2.5 Operational Framework

An operational framework illustrates the implementation arrangement for the study. It presents a review of the arrangement of tasks to conduct the research objective. It is used to provide a preview of the major ideas of the study. This study intends to evaluate the effect of financial statements, asset misappropriation and corruption on fraud risks among state corporations.

Financial report misstatement will be assessed using the extent of manipulation of the financial reports noted by auditor general, number of improper of failure to disclose noted and the number of misstatement noted in the financial statements. Similarly, asset misappropriation will be assessed using Level Fraudulent disbursements, Levels Theft of cash receipts, Levels of Theft of cash on hand, Level of False sales and shipping. Finally, corruption will be measured using Number of illegal gratuities paid and number of bribery cases reported.

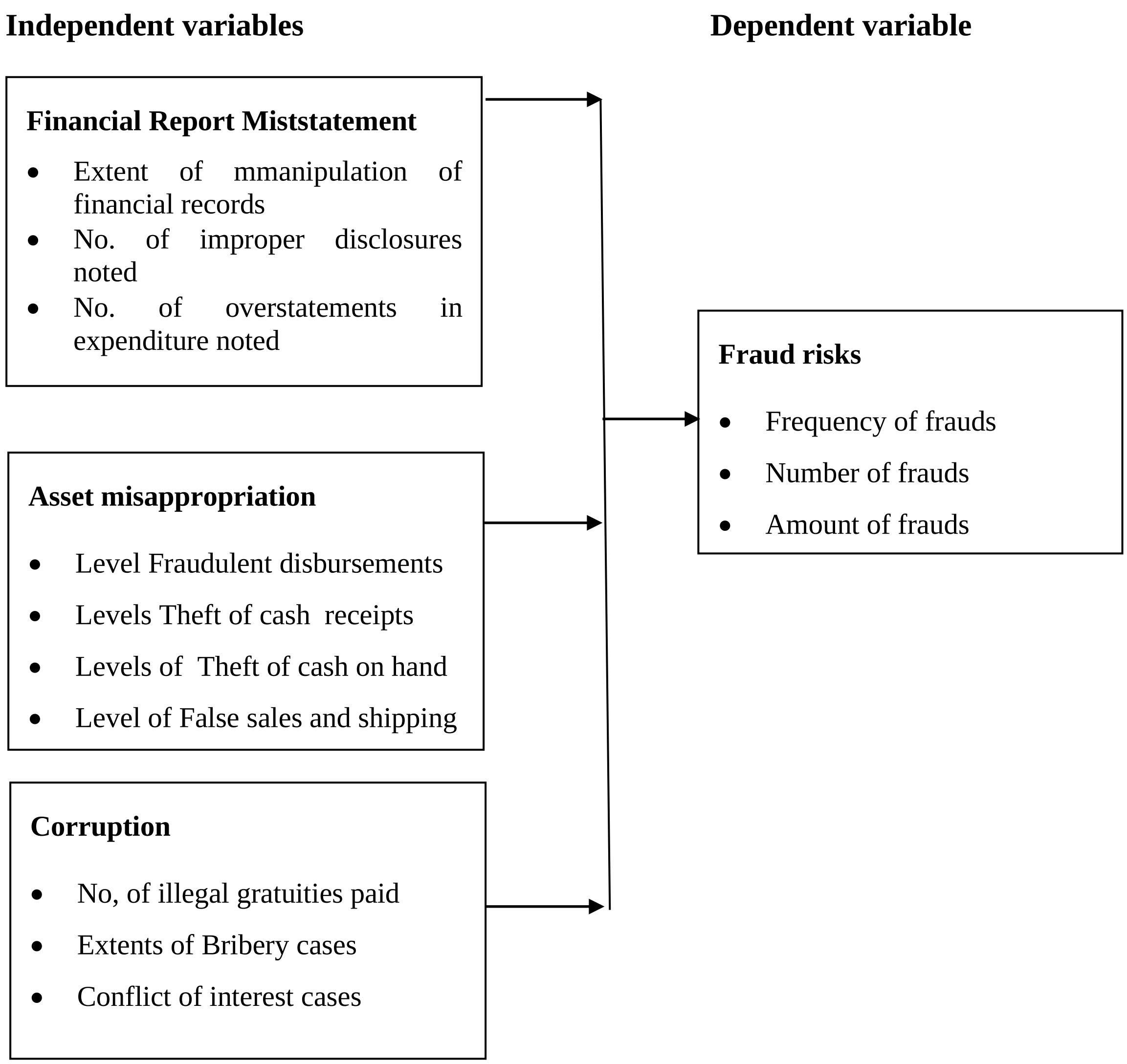

Figure 2.2 Operational framework

2.6 Research Gaps

The review of literature indicates that although studies have been conducted relating to drivers of fraud risk among state corporations in Kenya; few studies have focused on the effect of drivers of fraud risk among state corporations in Mombasa county. Kanu and Okorafor (2013) conducted a study to determine the extent and the nature of economic effect of Fraud on Bank Deposits in Nigeria to determine the amount of Bank funds caught up in fraud, this presented a contextual gap. Another study by Kiragu *et al* (2013) carried out a study on the effect of Bank growth on occupational fraud risk in Commercial banks in Kenya. This study presented a conceptual gap focusing on only one variable. The current study filled this gap by focusing on the driver of fraud risks in Mombasa County.

Similarly, Odhiambo (2013) conducted a study that focused on the effects of financial fraud and liquidity on financial performance of commercial banks in Kenya, the study also presented a contextual gap. On the other hand, Adepoju and Alhassan (2010) carried out a study on the challenges of ATM usage and fraud occurrences in Nigeria focused on a narrow view of fraud, measured by incidences along and concentrated on ATM driven frauds. The conceptual gap was bridged in this study by focusing on state corporations in Mombasa County. Gikiri (2012) did a study to determine the influence of fraud risk management practices in commercial banks and their effect on fraud risk exposure. In that study the scope was commercial banks and hence a narrow focus as it focused on fraud risks in commercial banks only. From the review of the literature, it is evident that there is need to conduct more studies to examine the drivers of fraud risk among state corporations in Mombasa County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out various stages and phases that were followed in the collection, measurement and analysis of data. Specifically the following subsections are included; research design, target population, data collection instruments, data collection procedures and the data analysis.

3.2 Research Design

This study was carried out through a descriptive research design. The major purpose of descriptive research is description of the affairs as it exists in present. A descriptive research design was adopted because it allows for close examination of data, determination and reporting of information within a specific context. The main objective of the study was to seek for answers for the specific questions from a large number of respondents as what the greatest contributor of fraud risk is in the state corporations in Kenya specifically in Mombasa County.

3.3 Sampling Frame

Sampling frame is a physical representation of the target population and comprises all the units that are potential members of the sample (Kothari, 2014). A sampling frame is a comprehensive list of all sampling units, which a sample can be selected. The sampling frame describes the list of all population units from which the sample is selected (Williams, 2011). The sampling frame should capture, in a statistical manner the target population and it should also be complete, accurate and up-to-date. The sampling frame of the current study comprised of a list of 32 internal auditors and 32 accountants of state corporations in Mombasa County. The list was obtained from Kenya national treasury for all state corporations situated in the county. The study focused on state corporations in Mombasa County to determine the causes of high fraud cases reported in the County.

3.4 Target Population

A population is an entire group of people, events or things of interest that the study wishes to investigate (Serekan & Bougie, 2010)**.** Similarly**,** a population is a well-defined set of people, services, elements and events, group of things or households that are being investigated (Jha, 2014). This study will target all internal auditors and accountants working in state corporations in Mombasa County. There are 32 state corporations operating in Mombasa County. The unit of analysis for the study will be the state corporations in Mombasa County. The unit of observation will be the internal auditors and accountants. The population for this study therefore consisted of all the 32 internal auditors and 32 accountants of State Corporations operating in Mombasa County, Kenya.

3.5 Sample Size and Sampling Technique

A sampling frame describes a list of all population from which a sample is selected (Render et al, 2012). The sampling frame for this study was a list of 64 internal auditors and accountants of State Corporations operating in Mombasa County, Kenya. The population of this study was regarded as a small population and there was therefore no need to do sampling and therefore all the 64 officers comprising of internal auditors and accountants of state corporations were subject of this study.

3.6 Data Collection Instruments

Data collection refers to the process of collecting raw and unprocessed information that can be processed into meaningful information, following the scientific process of data analysis (Gall, Gall & Borg, 2007). Burns and Grove (2003) define data collection as the precise, systematic gathering of information relevant to the research problems, using methods such as interviews, participant observations, FGD, narratives and case histories. The level of measurement and availability of information points to be most appropriate too to be used in research. This study has two classes of variables, that is, independent variable and response variable.

In the case of independent variable, primary data was collected using a semi structured questionnaire and it will be captured using a 5-point Likert scale. Likert scale with close-ended questions was a key informant and was distributed to respondents, after approval to collect data by the University’s School of Graduate Studies and Research.

Likert scale is an interval scale that specifically uses five anchors of strongly disagrees, disagree, neutral, agree and strongly agree. The Likert measures the level of agreement or disagreement. This type of questionnaires is more appropriate because it will enable consistency in questions asked and data yielded will be easy to analyze. Likert scales are good in measuring perception, attitude, values and behavior. The Likert scale has scales that assist in converting the qualitative responses into quantitative values (Upagade & Shende, 2012). In addition, in order to confirm the consistency of the primary data for the dependent variable, secondary data will be collected from the Auditor General's annual audit report for the last three years. This was useful for triangulation of the study. In this case a secondary data collection sheet was used.

3.7 Data Collection Procedure

Burns and Grove (2010) define data collection as the precise, systematic gathering of information relevant to the research problems, using methods such as interviews, participant observations, focus group discussion, narratives and case histories. The study will collect data using drop and pick method. Questionnaires will be dropped and picked later to enable the respondents have enough time to respond to the questionnaires. The data will be collected after a successful pilot study. Data collection was conducted between December 1st and December 8th 2017.

3.8 Pilot Study

In order to check the validity and reliability of the questionnaires, a pilot study was carried out. The purpose of pilot testing was to establish the accuracy and appropriateness of the research design and instrumentation. A pilot Questionnaires will be given to the selected sample of general managers of five state corporations in Nairobi County. The rule of the thumb for sample size of a pilot is a minimum of 10% of the target final sample form the study (Cooper & Schindler, 2011). The percentage adopted in the current study was hence adequate for and an acceptable percentage when rated alongside the Cooper & Schindler (2011) threshold.

3.8.1 Reliability of the Research Instrument

Reliability refers to the extent to which independent administration of the same instrument yields the same results under comparable conditions. The less variation the instrument produces in repeated measurements of an attribute the higher the reliability, (Polit & Hungler, 1999).

Reliability analysis was used to assess internal consistency among the variables of study. The reliability of the study measures was examined by generating the Cronbach's Alpha coefficient for all items in the questionnaire. Cronbach alpha coefficient was used to assess the internal consistency among research instrument items. Alpha equals zero when the true score is not measured and there is only an error component. Alpha equals 1.0 when all items measure only the true score and there is no error component. If the values are too low, either too few items were used or the items had little in common. This study achieved a reliability level of 0.745 when assessed through Cronbach alpha coefficient. Nunnally's (1978) suggestion is that a value of not less than 0.7 to be acceptable and therefore the data collection instrument was regarded as reliable for the study. The reliability analysis results are as presented in table 4.1 in chapter four.

3.8.2 Validity of Data Collection Instruments

Validity is used to check whether questionnaire is measuring what it purports to measure (Bryman & Cramer, 1997). Content validity is the extent to which the content of the instrument appears to comprehensively examine the scope it is intended to measure (Bowling, 2014). The determination of content validity is not numerical, but subjective and judgmental. In this research, Content validity was tested by subjecting the research instrument to two experts in fraud research that is, the supervisor and another expert from fraud examiner Kenyan Chapter. Content validity was also be checked by comparing the study with existing literature.

3.8 Data Analysis and Presentation

Cooper & Schindler (2010) define data analysis as the application of reasoning to understand the data that have been gathered with the aim of determining consistent patterns and summarizing the relevant details revealed in the investigation. Descriptive and inferential statistics were used to analyze the collected primary and secondary data. Descriptive statistics including mean and standard deviation was assessed for each of the variables of this study.

To establish the influence of financial statements on fraud risk in state corporations in Mombasa County, Kenya, bivariate regression expression 3.1 was used. In this expression, (FR) is fraud risk, α is the constant level of fraud risk not influenced by the regressor; β_1 is the rate of change of fraud risk with a unit change in predictor and X_1, the composite measure of Financial Report Misstatements'.

$$FR = \alpha + \beta_1 X_1 \qquad (3.1)$$

Similarly, to determine the asset misappropriation on fraud risk in State Corporations in Mombasa County, Kenya, a bivariate linear expression (3.2) was used. In this expression, β_2 is the rate of change in fraud risk associated with a unit chance in asset misappropriations measure.

$$FR = \alpha + \beta_2 X_2 \qquad (3.2)$$

Further, to explore the influence of corruptions on fraud risk in State Corporations in Mombasa County, Kenya, a bivariate equation (3.3) was used. In this expression, β_3 is the rate of change in fraud risk associated with a unit change in corruption measures.

$$OFR = \alpha + \beta_3 X_3 \qquad (3.3)$$

To determine the extent to which drivers of fraud risk affect the performance of state corporations in Mombasa County in Kenya, the following equation was modeled:-

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where; Y = Fraud Risks among State Corporations, X_1 = Financial Report Misstatements, X_2= Asset Misappropriation while X_3= Corruption and ε= Error term

In the Bivariate Linear and also the Multiple Linear regressions models, all statistical tests were subjected to 5% level of significance. Statistics of Model fitness (R-Square) and Significance tests (F-Statistics and associated p-Values were generated and interpreted. Finally, the regression coefficients will be used to make inferences in each of the research question generated in this study. Interactive Tables and pie charts were used to present the findings of the study for each of the study objective one (1) to study objective three (3).

3.9 Ethical Considerations

To ensure ethical considerations are considered, permission was sought from the relevant authorities and a letter obtained to allow the researcher to carry out the research study. In order to avoid suspicion and skepticism the researcher assured the respondents utmost confidentiality and that the information they provided was only used for academic purposes. Moreover, the researcher acknowledged all the sources of information collected from textbooks and other research materials.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter contains analysis of data collected for the study. It also contains results presentation for this study; the results were presented in forms of figures and tables. Figures were used to present results on demographics while tables were used to show results on descriptive and inferential analysis. The analyzed data was arranged under themes that reflect the research objectives.

4.2 Response rate

The study sought to determine the response rate of the study. The total number of questionnaires that were administered was 64. A total of 54 questionnaires were filled and returned. This represented an overall successful response rate of 84.38% as shown in Figure 4.1. This confirms an argument by Kothari (2004) that a response rate of 50% or more is adequate for a descriptive study. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good.

Based on these assertions from renowned scholars, 84.38% response rate is adequate for the study. The high response rate was achieved despite the busy schedules of the respondents because the researcher exercised patience during the data collection period. The respondents were given enough time to respond to the questionnaires.

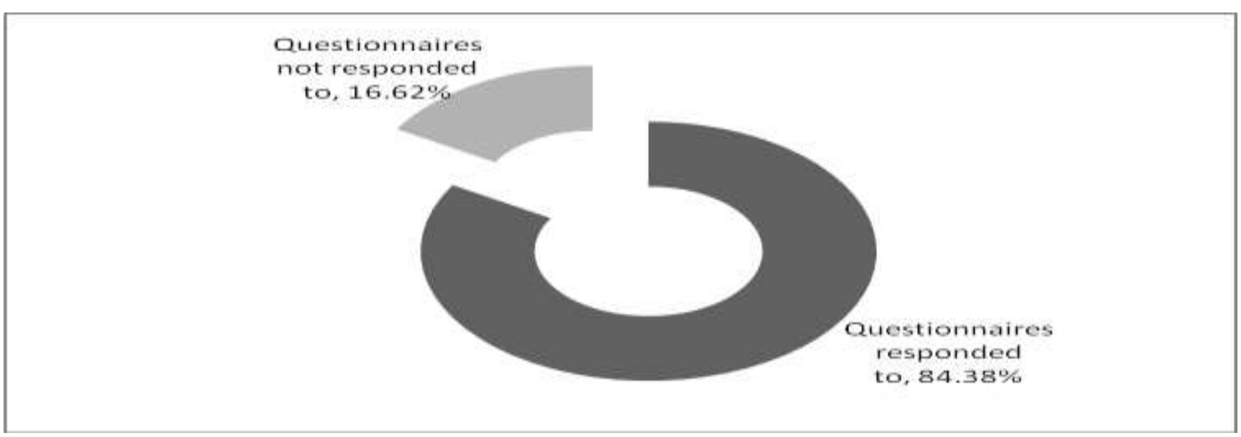

Figure 4.1 Response Rate

4.2.1 Respondent's Analysis Results on Age

The study sought to establish the age bracket of the respondents. The results are as shown in Figure 4.2 below. The study findings showed that of the 20.4% of the respondents were aged below 30 years; those who were aged between 31 to 40 years and those between 41 and 50 years were both 24.1%. Finally, the results of the study revealed that those who were aged above 50 years were 31.5%. The results of the study imply that the majority of the staff working in state corporations was aged above 30 years.

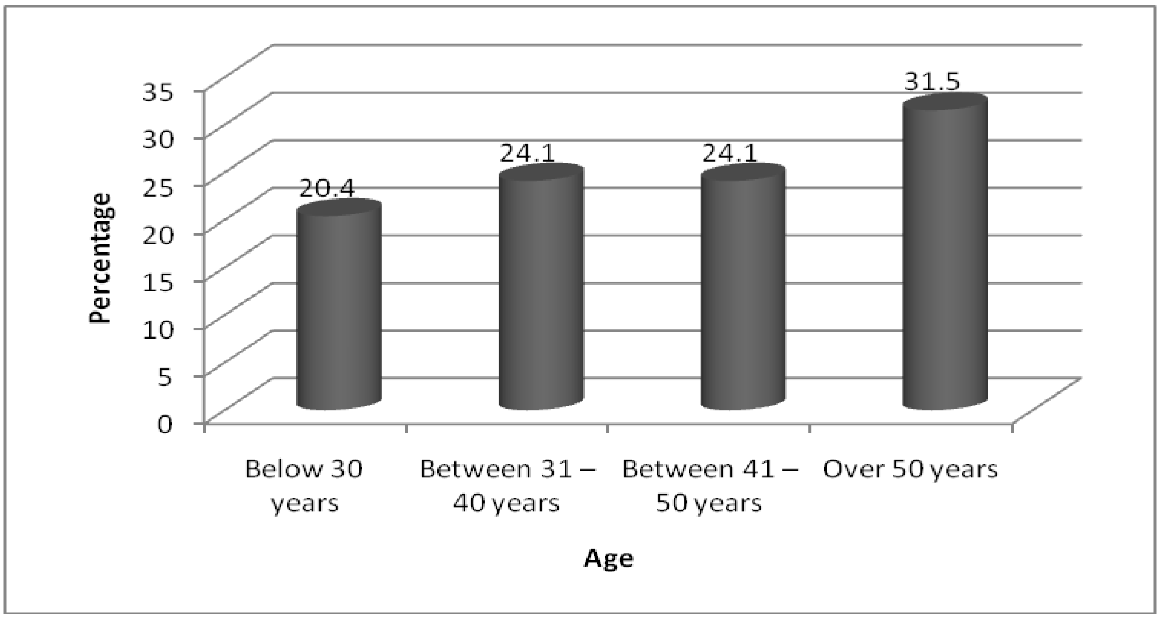

Figure 4.2 Respondents Age

4.2.2 Respondent's Analysis Results on Education Level

The study sought to establish the level of education of the respondents. The results are as shown in Figure 4.3 below. The findings indicated that 37% of the respondents had diplomas, 31.5% have bachelor's degree, those that have master's degree were 16.7% while those that have PhD degree level education were 14.8%. The findings reveal that majority of the respondents are literate. This indicates that with literacy, interpretation of the questions was easy and it contributed to the high reliability.

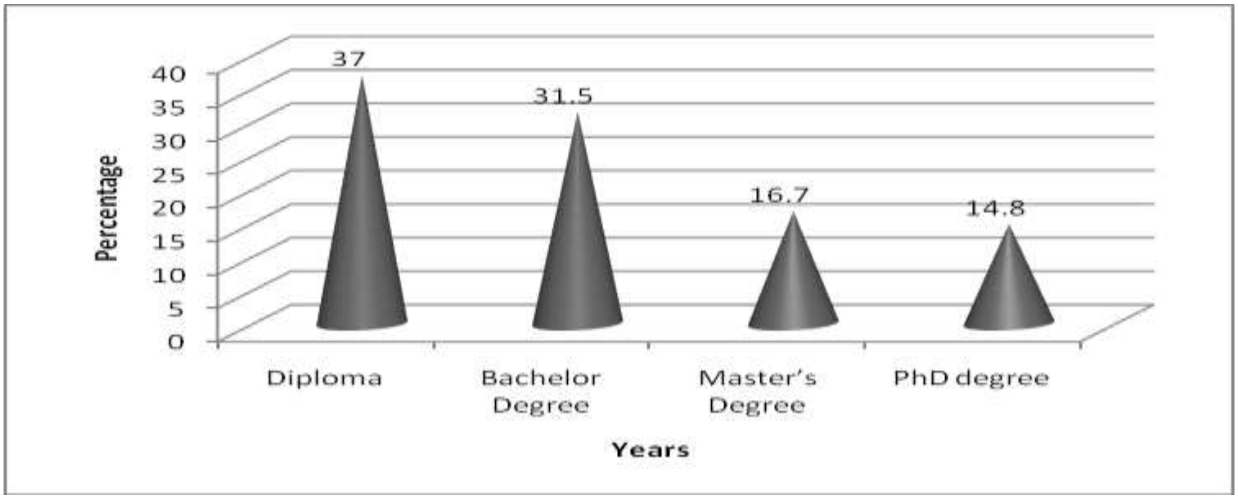

Figure 4.3 Respondents Education Level

4.2.3 Effects of Financial Fraud on the Performance of State Corporations in Kenya

The study also sought to determinate effects of financial fraud on the performance of state corporations in Kenya. The findings of the study revealed that majority 35.2% of the respondents indicated that financial fraud leads to a sharp decrease in the organizational performance, those that indicate that it leads to a decrease were 33.3% while those who indicated moderate were 13% and about 18.5% of the respondents indicated that they did not observe any effect of fraud on the organizational performance.

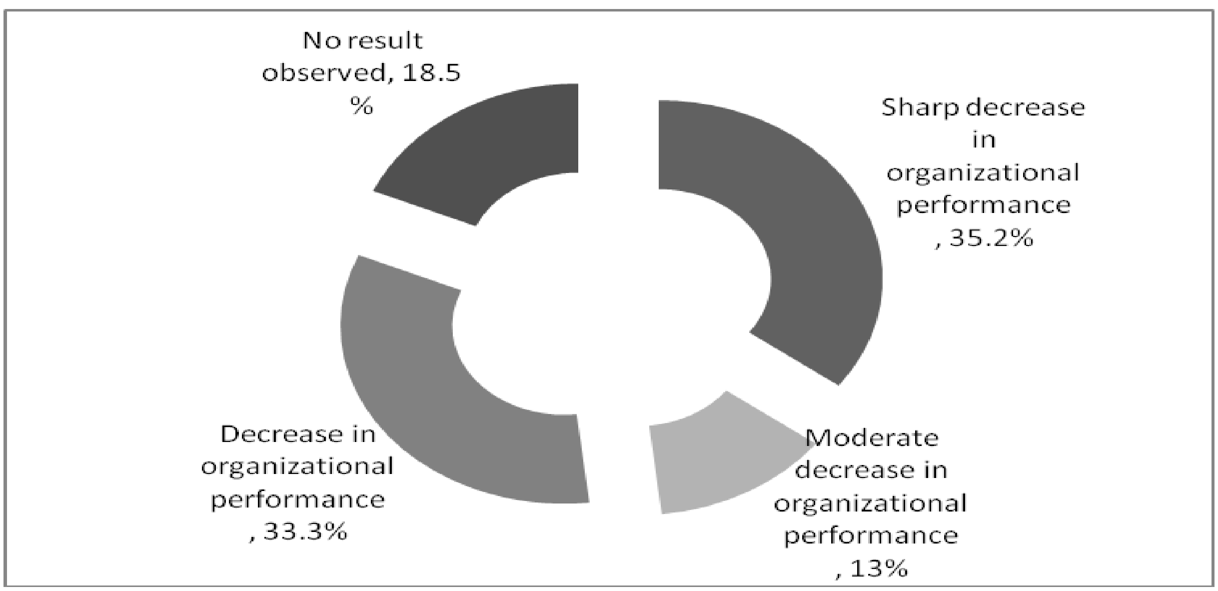

Figure 4.4 Effects of Financial Fraud on the Performance of State Corporations in Kenya

4.3 Pilot Test for the study variables

The study conducted a pilot of the questionnaire before using it for the final data collected. Both reliability and validity test were conducted. Content Validity did not use data. The results of the study revealed that corruption had a high reliability of 0.811 followed by asset misappropriation with 0.789 and lastly financial misstatement with 0.727. The Cronbach's coefficient results for all the variables were above 0.7. The study hence concluded that the questionnaire was reliable to be used to collect data. According to Bryman and Cramer (2005), reliability of 0.7 and above is considered acceptable.

Table 4.1: Pilot Test Results

Variable	Cronbach's Alpha	Number of Items	Interpretation
Financial Misstatement	0.727	5	Acceptable
Asset Misappropriation	0.789	5	Acceptable
Corruption	0.811	5	Acceptable

4.4 Analysis Results on Fraud Risk

The study sought to determine the extent to which the respondents agree or disagree with the statements regarding frauds risks in their corporation within Mombasa County. The results of the study are as presented in table 4.2 below.

The findings showed that 49.2% of the respondents indicated that they strongly agree that Fraud incidences are frequent in our corporation, those who indicated agree were 37.8% while only 13% of them neither agreed nor disagreed with the statement. The results of the study also revealed that 32.2% of the respondents indicated that they strongly that the number of reported fraud cases in their organization has been increasing while the majority of them indicated agree and only 2.3% of them neither agreed nor disagreed. Finally, the results of the study showed that majority of the respondents strongly agreed with the statement that the amount of revenue lost in terms of fraud has been on the rise, those who indicated agree were 17.9% while only 5.8% of them neither agreed nor disagreed.

Table 4.2 Descriptive Analysis Results for Fraud Risk

Statement	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean	SD
Fraud incidences are frequent in our corporation	13	37.8	49.2	4.06	1.04
Number of reported fraud cases in our organization has been increasing	2.3	65.5	32.2	4.11	0.87
The amount of revenue lost in terms of fraud has been on the rise	5.8	17.9	76.3	4.37	0.64
Average				**4.18**	**0.85**

4.5 Regression Tests Results

The study conducted diagnostic tests to ascertain whether the data was fit to run an OLS regression model. The tests of Autocorrelation, Multicollinearity and normality were conducted before running the regression model.

4.5.1 Normality Tests Results

The Gaussian test results are presented in table 4.3. The table shows that normality test statistics computed for fraud risk using both Kolmogorov-Smirnov (K-S) and Shapiro-Wilk tests are significant with p-value of .200 and .881 respectively. The results revealed that p-values are greater than 0.05 and thus null hypothesis (H_0) is accepted implying the data is fit for the study.

Table 4.3 Test for Normality for Study Variables

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Fraud Risk	0.259	54	.200*	0.792	54	.881

a Lilliefors Significance Correction

*. This a lower bound of the true significance

4.5.2 Test for Multicollinearity

Normally if the association between the independent variables has a value of more 0.8, then multicollinearity is said to be present. The presence of Multicollinearity produces spurious standard errors and gives a wrong prediction. This study used a variance inflation factor (VIF) method to test for Multicollinearity of the study variables. The results indicated in Table 4.4 showed that there was no presence of Multicollinearity since all the values of VIF were below 10. This implies that the use of OLS in estimating the effect of the drivers of fraud risk in state corporations in Mombasa County would not give spurious results.

Table 4.4 Test of Multicollinearity Results

Variable	**Tolerance**	**VIF**
Financial Misstatement	0.996	1.004
Asset Misappropriation	0.995	1.005
Corruption	0.994	1.006

4.5.3 Test of Independence Results

The study sought to establish whether the error term of the OLS regression model was auto correlated. One of the assumptions of OLS is that the error term should not be auto correlated over time. The study used Durbin-Watson test to establish the presence of Autocorrelation. A value of 2 indicates the absence of autocorrelation, a value less than 2 indicates a positive autocorrelation while a value greater than 2 reveals presence of negative autocorrelation. The findings in Table 4.5 revealed the presence of a positive autocorrelation. A rule of thumb is that test statistic values in the range of 1.5 to 2.5 are relatively normal. Values outside of this range could be cause for concern. Field (2009) suggests that values under 1 or more than 3 are a definite cause for concern.

.Table 4.5 Results for Tests for Independence

Variable	**Test**	**Statistic**
Financial Misstatement	Durbin Watson	1.921
Asset Misappropriation	Durbin Watson	1.966
Corruption	Durbin Watson	1.837
Fraud Risk	Durbin Watson	1.843

4.5.4 Linearity Analysis Results

The study used a correlation analysis to determine the relationship between the study variables. A Pearson correlation was used since the data was discrete. A negative Pearson correlation value indicates negative correlation while a positive Pearson correlation value indicates a positive correlation. The strength of the association increases as the value approaches either -1 or +1. The correlation findings are presented in Table 4.6.

Table 4.6 Correlation Results for the Study Variables

Correlations		Financial Misstatement	Asset misappropriation	corruption	Fraud Risk
Financial Misstatement	Pearson Correlation	1			
	Sig. (2-tailed)				
Asset misappropriation	Pearson Correlation	0.029	1		
	Sig. (2-tailed)	0.833			
corruption	Pearson Correlation	0.050	-0.059	1	
	Sig. (2-tailed)	0.718	0.670		
Fraud Risk	Pearson Correlation	.498**	.384**	.358**	1
	Sig. (2-tailed)	0.000	0.004	0.008	
	N	54	54	54	54

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

The findings of the study showed that financial misstatement had a positive and significant influence on fraud in state corporations in Mombasa County as indicate by a Pearson coefficient of 0.498 and significance level of 0.000. This implies that an increase in financial misstatement practices such as cases of manipulation of financial records, improper disclosure of financial statement information in the organization, cases of overstating of expenditure while providing accountability reports, organizational policy on how to handle financial statements, Forensic accounting and auditing leads to a positive and significant effect among the state corporations in Mombasa County. The study findings are consistent with the findings of a study by Akindele (2011) which found out that lack of training, communication gap and leadership skills were the greatest causes of fraud in Banks. Moreover, Abiola and Oyewole (2013) in agreement showed a statistically significant positive relationship between risk assessment and fraud detection.

Similarly, Akinyomi (2010) in a study on the effect of financial statements on Nigerian banks found that there was a strong positive relationship between risk assessment and fraud management while studying fraud in Nigerian banks.

Correlation results showed that there was a positive and significant association between asset misappropriation and fraud risk among state corporations in Mombasa County as indicated by a Pearson coefficient of 0.384 and significance level of 0.004. This implies that a rise in asset misappropriation practices such as presence of cases of misappropriation of funds in the organization, presence of ghost employees' cases, presence of unauthorized cash transfer and the presence of misappropriation of funds cases leads to a positive and significant effect among the state corporations in Mombasa County. The study findings are consistent with the findings of a study by Gullkvist and Jokipii (2012) which revealed that significant differences in perceptions exist among the participant groups. Internal auditors report a higher perceived importance of red flags related to detecting asset misappropriation than those related to fraudulent financial reporting, whereas the economic crime investigators perceived red flags for fraudulent financial reporting as more important than that of asset misappropriation. External auditors reported equal perceived importance of red flags across the two fraud types as well as across within-subject categories. Similalrly, Majid *et al* (2010) study revealed that the most likely assets to be misused in a local authority are vehicles and internet connection. Similarly, a study by Mustafa and Youssef (2010) revealed that the higher the percentage of financial expert members and the higher the percentage of independent members in the audit committee, the lower the likelihood of asset misappropriation.

Finally, the results of the study revealed that there was a positive and significant relationship between corruption and fraud risk among state corporations in Mombasa County as shown by a Pearson coefficient of 0.358 and significance level of 0.008. This implies that an increase in corruption practices like cases of bribery of employees by management to benefit them, presence of policies to regulate cases of payoffs and kickbacks, presence of heavy penalties levied against perpetrators of payoffs and kickbacks and presence of cases of bribery of employees by management to benefit them leads to a positive and significant effect among the state corporations in Mombasa County. The study findings are consistent with the findings of a study by Graycar et al (2012) which concluded that deficiency in control structure positively and significantly influences the existing opportunities for corruption thereby developing systematic methods. Thanos and Petrou (2014) in concurrence, attest that corruption acts as a “helping hand” to commerce. Evidence from bank records show that bribing mechanisms had helped facilitate transactions and enable private agents to pursue economic activities they could not pursue otherwise. Similarly, Maxwell et al (2012) revealed that accurate targeting of those who need assistance poses significant corruption risk.

4.6 Descriptive Findings and Analysis of the Study Variables

Descriptive findings were used to establish the percentages, mean and standard deviation of the responses based on Likert scales used in the study. A scale of 1 to five was used in the study. Quantification of Likert scale categories was done by assigning numerical values to the different categories so as to aid in statistical representation of data. Descriptive findings were presented according to each study objective.

4.6.1 Financial Misstatement and Fraud Risk

The study sought to assess the effects of financial misstatement on fraud risk among state corporations in Mombasa County. The respondents were asked to indicate the extent to which they agree or disagree with the statements on financial misstatement in their organization based on a Likert scale where 1= strongly disagree, 2= disagree, 3= Neutral, 4= Agree, 5= Strongly Agree. The findings of the study were as shown in table 4.7.

Results of the study showed that 38.9% of the respondents strongly agreed that the organization has cases of manipulation of financial records, those who indicated agree were also 38.9% while those who neither agreed nor disagree were 14.8% and only 7.4% of them indicated disagree. The results also revealed that majority 81.5% of the respondents strongly agreed with the statement that there is improper disclosure of financial statement information in the organization while 18.5% of them neither agreed nor disagreed. Moreover, findings showed that majority 85.2% of the respondents strongly agreed that their organization has cases of overstating of expenditure while providing accountability reports while 14.8% of them indicated agree. Furthermore, the study revealed that 14.8% of the respondents strongly agreed that there is an organizational policy on how to handle financial statements, 25.9% indicated agree, those who neither agreed nor disagreed were the majority 40.7% while those who disagreed were only 7.4% and 11.1% of the respondents strongly disagreed. Finally, results revealed that 11.1% of the respondents strongly agreed with the statement that Forensic accounting and auditing is often done to establish if there are cases of financial fraud, 33.3% of them indicated agree, 22.2% of them neither agreed nor disagreed while those who indicated disagree were 18.5% and 14.8% of the respondents strongly disagreed with the statement.

These results imply that majority of the respondents agreed with the statements on financial misstatement as indicated by a mean of 3.98. The responses given by the respondents had a small variation as shown by a standard deviation of 0.89. The results are consistent with the findings of a study by Odhiambo (2013) which found out that financial fraud loss and liquidity ratios had a strong and significant influence on financial performance of commercial banks in Kenya.

Table 4.7 Descriptive statistics for Financial Misstatement

Statements	**Strongly disagree** (%)	**Disagree** (%)	**Neutral** (%)	**Agree** (%)	**Strongly agree** (%)	**Mean**	**SD**
The organization has cases of manipulation of financial records	0.0	7.4	14.8	38.9	38.9	4.09	0.92
There is improper disclosure of financial statement information in the organization	0.0	0.0	18.5	0.0	81.5	4.63	0.78
The organization has cases of overstating of expenditure while providing accountability reports	0.0	0.0	0.0	14.8	85.2	4.85	0.36
There is an organizational policy on how to handle financial statements	11.1	7.4	40.7	25.9	14.8	3.26	1.15
Forensic accounting and auditing is often done to establish if there are cases of financial fraud	14.8	18.	22.2	33.3	11.1	3.07	1.26
Average						**3.98**	**0.89**

To establish the influence of financial statements on fraud risk in state corporations in Mombasa County, Kenya, a bivariate regression expression was used. The bivariate linear regression model is of the form $FR = \beta_0 + \beta_1 X_1$. The bivariate linear regression model linking Financial Misstatement and fraud risk is shown in table 4.8 below. The linear regression analysis shows that there is a relationship, R= 0.498 and R^2 = 0. 248 which mean that approximately 24.8% of the variation in fraud risk in state corporations in Kenya is due to a unit change in financial misstatement.

Table 4.8 Model Summary for Financial Misstatement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.498	0.248	0.234	0.362

a Predictors: (Constant), Financial Misstatement

The bivariate linear regression model significance was determined using ANOVA. The findings of the study are shown in Table 4.9. Regression results indicate that the linear relationship between Financial Misstatement and fraud risk has an F value of F=17.151 which is significant with p value p=.0.000<p=0.05 meaning that the overall model is significant in predicting the effect of Financial Misstatement in state corporations in Kenya.

Table 4.9 Analysis of Variance for Financial Misstatement

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.247	1	2.247	17.151	.000
	Residual	6.814	52	0.131		
	Total	9.061	53			

a Dependent Variable: Fraud Risk
b Predictors: (Constant), Financial Misstatement

The regression coefficients for the model are presented in table 4.10. The test results revealed that the beta coefficient of the resulting regression model, the constant β_0= 2.778 is significant with p value p= 0.000 < p=0.05. The coefficient β = 0.403, has a p value, p= .000 which is less than p= 0.05. This implies that financial misstatement as a driver of fraud risk is significant in the regression model. The study findings are consistent with the findings of a study by Akindele (2011) which found out that lack of training, communication gap and leadership skills were the greatest causes of fraud in Banks. Moreover, Abiola and Oyewole (2013) in agreement showed a statistically significant positive relationship between risk assessment and fraud detection. Similarly, Akinyomi (2010) in a study on the effect of financial statements on Nigerian banks found that there was a strong positive relationship between risk assessment and fraud management while studying fraud in Nigerian banks.

Table 4.10 Regression Coefficients for Financial Misstatement

Model	Coefficients	B	Std. Error	Beta	t	Sig.
1	(Constant)	2.778	0.39		7.12	0.000
	Financial Misstatement	0.403	0.097	0.498	4.141	0.000

a Dependent Variable: Fraud Risk

4.6.2 Asset Misappropriation and Fraud Risk

The study sought to evaluate the effects of asset misappropriation on fraud risk among state corporations in Mombasa County. The respondents were asked to indicate the extent to which they agree or disagree with the statements based on a Likert scale where 1= strongly disagree, 2= disagree, 3= Neutral, 4= Agree, 5= Strongly Agree. The results of the study were as presented in table 4.11.

The results of the study revealed that majority 37% of the respondents strongly agreed that there are cases of misappropriation of funds in this organization, 25.9% of them indicated agree, those who neither agreed nor disagreed were 14.8% while those who indicated disagree were 13% and only 9.3% of them indicated strongly disagree. The findings also revealed that majority 51.9% of the respondents strongly agreed that there are cases of ghost employees in the organization, those who neither agreed nor disagreed were 18.5% while those who disagreed were 22.2% and only 7.4% of them indicated strongly disagree. Moreover, the findings of the study showed that majority 66.7% of the respondents strongly agreed that there are cases of unauthorized cash transfer in the organization, 14.8% of them indicated agree, 5.6% of them neither agreed nor disagreed while 7.4% of them indicated disagree and those who strongly disagreed were 5.6%. In addition, the study revealed that 33.3% of the respondents strongly agreed that Cases of misappropriation of funds have affected the performance of this organization, those who indicated agree were 14.8%, those who neither agreed nor disagreed were 25.9% while those who disagreed were 16.7% and those who strongly disagreed were 9.3%. Lastly, the findings of the study showed that 14.8% of the respondents strongly agreed that there are cases of misappropriation of funds in this organization, 48.1% of them indicated agree, 27.8% of them neither agreed nor disagreed while only 1.9% and 7.4% of them strongly disagreed.

These results imply that most of the respondents agreed with the statements on Asset Misappropriation as a driver of Fraud Risk among state corporations in Kenya as indicated by a mean of 3.74. The responses given by the respondents were less varied as shown by a standard deviation of 1.28. The findings agree with the results of a study by Mustafa and Youssef (2010) which revealed that the higher the percentage of financial expert members and the higher the percentage of independent members in the audit committee, the lower the likelihood of asset misappropriation.

Table 4.11 Descriptive Results for Asset Misappropriation

Statements	**Strongly disagree (%)**	**Disagree (%)**	**Neutral (%)**	**Agree (%)**	**Strongly agree (%)**	**Mean**	**Std Dev**
There are cases of misappropriation of funds in this organization	9.3	13.0	14.8	25.9	37.0	3.69	1.34
There are cases ghost employees in the organization	7.4	22.2	18.5	0.0	51.9	3.67	1.48
There are cases of unauthorized cash transfer in the organization	5.6	7.4	5.6	14.8	66.7	4.30	1.21
Cases of misappropriation of funds have affected the performance of this organization.	9.3	16.7	25.9	14.8	33.3	3.46	1.36
There are cases of misappropriation of funds in this organization	7.4	1.9	27.8	48.1	14.8	3.61	1.02
Average						**3.74**	**1.28**

To establish the influence of asset misappropriation on fraud risk in state corporations in Mombasa County, Kenya, a bivariate regression expression was used. The bivariate linear regression model is of the form $FR = \beta_0 + \beta_2 X_2$. The bivariate linear regression model linking Asset Misappropriation and Fraud Risk is presented in table 4.12 below. The linear regression analysis shows that there is an association, R= 0.384 and R^2 = 0.147 which implies that 14.7% variation in fraud risk is accounted for by a unit change in asset misappropriation in state corporations in Mombasa county.

Table 4.12 Model Summary for Asset Misappropriation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.384	0.147	0.131	0.3855

a predictors: (constant), Asset Misappropriation

The bivariate linear model significance was evaluated using ANOVA. The findings of the study are presented in Table 4.13. Regression results indicate that the linear association between Asset Misappropriation and Fraud Risk has an F value of F=8.972 which is significant with p value p=0.004< p=0.05 implying that the overall model is significant in predicting the effect of Asset Misappropriation on the performance of state corporations in Mombasa County.

Table 4.13 Analysis of Variance for Asset Misappropriation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.333	1	1.333	8.972	.004
	Residual	7.728	52	0.149		
	Total	9.061	53			

a Dependent Variable: Fraud Risk
b Predictors: (Constant), Asset Misappropriation

The regression coefficients for the model are presented in table 4.14. The test results revealed that the beta coefficient of the resulting regression model, the constant β_0= 3.623 is significant with p value p= 0.004 < p=0.05. The coefficient β = 0.203, has a p value, p= .004 which is less than p= 0.05. This implies that asset misappropriation as a driver of fraud risk is significant in the regression model. The findings agree with the findings of a study by Majid et al (2010) which revealed that the most likely assets to be misused in a local authority are vehicles and internet connection. In agreement, Gullkvist and Jokipii (2012) study found that significant differences in perceptions exist among the participant groups. Internal auditors report a higher perceived importance of red flags related to detecting asset misappropriation than those related to fraudulent financial reporting, whereas the economic crime investigators perceived red flags for fraudulent financial reporting as more important than that of asset misappropriation. External auditors reported equal perceived importance of red flags across the two fraud types as well as across within-subject categories. Mustafa and Youssef (2010) in agreement revealed that the higher the percentage of financial expert members and the higher the percentage of independent members in the audit committee, the lower the likelihood of asset misappropriation.

Table 4.14 Regression Coefficients for Asset Misappropriation

Model	Coefficients	B	Std. Error	Beta	t	Sig.
1	(Constant)	3.623	0.259		14.014	0.000
	Asset misappropriation	0.203	0.068	0.384	2.995	0.004

a Dependent Variable: Fraud Risk

4.6.3 Corruption and Fraud Risk

The study sought to explore the influence of corruption on fraud risk among state corporations in Mombasa County. The respondents were asked to indicate the extent to which they agree or disagree with the statements based on a Likert scale where 1= strongly disagree, 2= disagree, 3= Neutral, 4= Agree, 5= Strongly Agree. The results of the study were as shown in table 4.15.

The results of the study showed that 29.6% of the respondents strongly agreed that there are cases of bribery of employees by management to benefit them, 33.3% of them indicated agree, those who neither agreed nor disagreed were 13% while those who indicated disagree were 9.3% and 14.8% of them strongly disagreed. The results also revealed that 44.4% of the respondents strongly agreed that Bribery cases have affected the performance of this organization, those who indicated agree were 14.8% while those who neither agreed nor disagreed were 25.9% while 3.7% of them indicated disagree and 11.1% of the respondents indicated strongly disagree. Further, the findings of the study revealed that majority 55.6% of the respondents strongly agreed that the organization has policies to regulate cases of payoffs and kickbacks, 29.6% of them indicated agree, 7.4% of respondents failed to neither agree nor disagree while 7.4% of them also indicated disagree and those who strongly disagreed were 3.7%. Moreover, the study revealed that 11.1% of the respondents strongly agreed that there are heavy penalties levied against perpetrators of payoffs and kickbacks, those who indicated agree were 55.6%, those who neither agreed nor disagreed were 7.4% while those who disagreed were 14.8% and only 11.1% of them strongly disagreed. Finally, the findings of the study showed that 33.3% of the respondents strongly agreed that there are cases of bribery of employees by management to benefit them, 25.9% of them indicated agree, 11.1% of them neither agreed nor disagreed while only 22.2% and 7.4% of them strongly disagreed.

These results imply that most of the respondents agreed with the statements on corruption as indicated by a mean of 3.70. The results also showed that the responses given by the respondents were varied as indicated by a standard deviation of 1.28. The findings agree with the results of a study by Graycar *et al* (2012) which concluded that deficiency in control structure positively and significantly influences the existing opportunities for corruption thereby developing systematic methods.

Table 4.15 Descriptive Results for Corruption

Statements	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	SD
There are cases of bribery of employees by management to benefit them	14.8	9.3	13.0	33.3	29.6	3.54	1.40
Bribery cases have affected the performance of this organization	11.1	3.7	25.9	14.8	44.4	3.78	1.36
The organization has policies to regulate cases of payoffs and kickbacks	3.7	7.4	7.4	25.9	55.6	4.22	1.11
There are heavy penalties levied against perpetrators of payoffs and kickbacks	11.1	14.8	7.4	55.6	11.1	3.41	1.21
There are cases of bribery of employees by management to benefit them	7.4	22.2	11.1	25.9	33.3	3.56	1.36
Average						**3.70**	**1.28**

To establish the influence of corruption on fraud risk in state corporations in Mombasa County, Kenya, a bivariate regression expression was used. The bivariate linear regression model is of the form $OFR = \beta_0 + \beta_3 X_3$. The summary of a bivariate linear regression model linking System Surveillance and tax fraud is presented in table 4.16 below. The linear regression analysis shows that there is a relationship, R= 0.464 and R^2 = 0.215 which means that approximately 21.5% of the resultant changes in tax fraud among large taxpayers as indicated by a unit variation in System Surveillance.

Table 4.16 Model Summary for Corruption

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.358	0.129	0.112	0.3897

a Predictors: (Constant), Corruption

The bivariate linear model significance for corruption and fraud risk was determined using ANOVA. The findings of the study are presented in Table 4.17. Regression results revealed that the linear relationship between corruption and fraud risk has an F value of F= 7.668 which is significant with p value $p=.008<p=.05$ meaning that the overall model is significant in predicting the effect of corruption on the performance of state corporations in Mombasa county.

Table 4.17 Analysis of Variance for Corruption

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.165	1	1.165	7.668	.008
	Residual	7.897	52	0.152		
	Total	9.061	53			

a Dependent Variable: Fraud Risk
b Predictors: (Constant), Corruption

The regression coefficients for the model are presented in table 4.18. The test results revealed that the beta coefficient of the resulting regression model, the constant $\beta_0= 3.727$ is significant with p value $p= 0.000 < p=0.05$. The coefficient $\beta = 0.177$, has a p value, $p= 0.000$ which is less than $p= 0.05$. This implies that the regression model linking corruption and fraud risk is significant. The findings agree with the findings of a study by Maxwell et al (2012) which revealed that accurate targeting of those who need assistance poses significant corruption risk. The study findings are consistent with the findings of a study by Graycar et al (2012) which concluded that deficiency in control structure positively and significantly influences the existing opportunities for corruption thereby developing systematic methods. Thanos and Petrou (2014) in concurrence, attest that corruption acts as a “helping hand” to commerce. Evidence from bank records show that bribing mechanisms had helped facilitate transactions and enable private agents to pursue economic activities they could not pursue otherwise.

Table 4.18 Regression Coefficients for Corruption

Model	Coefficients	B	Std. Error	Beta	t	Sig.
1	(Constant)	3.727	0.242		15.378	0.000
	Corruption	0.177	0.064	0.358	2.769	0.008

a Dependent Variable: Fraud Risk

4.7 Combined Effect of Drivers of Fraud Risk on Fraud Risk

The study used a multivariate regression model to so as to establish the drivers of fraud risk among state corporations in Mombasa County in Kenya. The overall regression model of the study was $Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$ Where; Y= Fraud Risk, X_1 = Financial Misstatement, X_2= Asset Misappropriation, X_3= Corruption and ε = Error term. The model summary results for the study variables are presented in Table 4.19.

The results of the study indicated that Financial Misstatement, Asset Misappropriation and Corruption all account for 51.2% of the variation in fraud risk among state corporations in Mombasa County. This is indicated by an R-square value of 0.512. The regression results show that R was 0.715 which means that the relationship between the independent variables and the dependent variable is positive.

Table 4.19 Model Summary for the Study Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.715	0.512	0.482	0.2975

a Predictors: (Constant), Corruption, Financial Misstatement, Asset misappropriation

The results of the analysis of variance for the study variables showed that the overall regression model linking Financial Misstatement, Asset Misappropriation, Corruption and their effect on fraud risk among state corporations in Mombasa County was significant as indicated by F (3, 50) statistic at 0.000 level of significance which was less than 0.05 significance level. F calculated is 17.467 while f critical is 2.79. F calculated is greater than the F critical (17.467 >2.79), this showed that the overall model was statistically significant at 5% significance level. The results of the study are as shown in table 4.20.

Table 4.20 Analysis of Variance for the Study Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.637	3	1.546	17.467	.000
	Residual	4.424	50	0.088		
	Total	9.061	53			

a Dependent Variable: Fraud Risk

b Predictors: (Constant), Corruption, Financial Misstatement, Asset misappropriation

To determine the association linking the dependent variables and the dependent variable, regression coefficients were produced as shown in table 4.21 below.

Table 4.21 Regression coefficients for the Study Variables

Model	Coefficients	B	Std. Error	Beta	t	Sig.
1	(Constant)	1.446	0.411		3.522	0.001
	Financial Misstatement	0.379	0.08	0.469	4.733	0.000
	Asset misappropriation	0.206	0.052	0.391	3.948	0.000
	Corruption	0.177	0.049	0.358	3.613	0.001

a Dependent Variable: Fraud Risk

Therefore, optimal multivariate Regression Model for the study is as shown below

Fraud Risk = **1.446 + 0.379** Financial Misstatement **+ 0.206** Asset misappropriation **+ 0.177** Corruption

Regression coefficients for the study variables showed that financial misstatement had a positive and significant effect among state corporations in Mombasa County ($\beta = 0.379$, Sig = 0.000). This implies that an increase in the cases of manipulation of financial records, improper disclosure of financial statement information in the organization, cases of overstating of expenditure while providing accountability reports, organizational policy on how to handle financial statements, Forensic accounting and auditing leads to 0.379 unit effect on fraud risk among state corporations in Mombasa County. The findings agree with the findings of a study by Odhiambo (2013) which found out that financial fraud loss and liquidity ratios had a strong and significant influence on financial performance of commercial banks in Kenya. Similarly, Makori (2016) showed that internal control systems influence fraud risk management; positively and significantly. Akindele (2011) in concurrence advised that adequate internal control mechanism be put in place and that workers satisfaction and comfort be taken care of. Moreover, Abiola and Oyewole (2013) in agreement showed a statistically significant positive relationship between risk assessment and fraud detection. Similarly, Akinyomi (2010) in a study on the effect of financial statements on Nigerian banks found that there was a strong positive relationship between risk assessment and fraud management while studying fraud in Nigerian banks.

Moreover, the findings of the study also indicated that asset misappropriation had a positive and significant impact on fraud risk among state corporations in Mombasa County ($\beta = 0.206$, Sig = 0.000). This implies that an increase in presence of cases of misappropriation of funds in the organization, presence of ghost employees' cases, presence of unauthorized cash transfer and the presence of misappropriation of funds cases leads to 0.161 unit effect on fraud risk among state corporations in Mombasa County. The findings agree with the findings of a study by Majid *et al* (2010) which revealed that the most likely assets to be misused in a local authority are vehicles and internet connection. Similarly, a study by Mustafa and Youssef (2010) revealed that the higher the percentage of financial expert members and the higher the percentage of independent members in the audit committee, the lower the likelihood of asset misappropriation. Gullkvist and Jokipii (2012) in their study also revealed that significant differences in perceptions exist among the participant groups. Internal auditors report a higher perceived importance of red flags related to detecting asset misappropriation than those related to fraudulent financial reporting, whereas the economic crime investigators perceived red flags for fraudulent financial reporting as more important than that of asset misappropriation. External auditors reported equal perceived importance of red flags across the two fraud types as well as across within-subject categories. They provided a list of red flags for asset misappropriation and fraudulent financial reporting.

In addition, the findings of the study also showed that corruption had a positive and significant influence among state corporations in Mombasa County ($\beta = 0.177$, Sig = 0.001). This implies that cases of bribery of employees by management to benefit them, presence of policies to regulate cases of payoffs and kickbacks, presence of heavy penalties levied against perpetrators of payoffs and kickbacks and presence of cases of bribery of employees by management to benefit them leads to 0.234 unit effect on fraud risk among state corporations in Mombasa County. The findings agree with the findings of a study by Maxwell et al (2012) which revealed that accurate targeting of those who need assistance poses significant corruption risk. The study findings are consistent with the findings of a study by Graycar et al (2012) which concluded that deficiency in control structure positively and significantly influences the existing opportunities for corruption thereby developing systematic methods. Thanos and Petrou (2014) in concurrence, attest that corruption acts as a “helping hand” to commerce. Evidence from bank records show that bribing mechanisms had helped facilitate transactions and enable private agents to pursue economic activities they could not pursue otherwise.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section of the study presents a summary of the findings, recommendations, conclusions and areas for further studies that the study identified. The summary of the findings was done according to each research objective. The conclusions were also presented per objective.

5.2 Summary of Findings

This part details a summary of findings drawn from statistical results depending on the level of significance. From the summary of the findings, conclusions were presented.

5.2.1 Financial Misstatement

The study revealed that there was a positive and significant correlation between Financial Misstatement and fraud risk among state corporations in Mombasa County. Financial Misstatement practices include cases of manipulation of financial records, improper disclosure of financial statement information in the organization, cases of overstating of expenditure while providing accountability reports, organizational policy on how to handle financial statements and Forensic accounting and auditing leads to a positive effect of fraud risk among state corporations in Mombasa County.

Regression results also indicated that Financial Misstatement had a positive and significant effect on fraud risk. A unit increase in the financial misstatement activities leads to a 0.379 unit increase in fraud risk among state corporations in Mombasa County.

5.2.2 Asset misappropriation

The descriptive results revealed that an increase in Asset misappropriation practices such as presence of cases of misappropriation of funds in the organization, presence of ghost employees' cases, presence of unauthorized cash transfer and the presence of misappropriation of funds cases leads to an increase in fraud risk among state corporations in Mombasa County. Correlation findings were positive and significant.

Regression results also showed that the effect of asset misappropriation on fraud risk was significant. A unit increase in asset misappropriation practices leads to a 0.206 unit increase in fraud risk among state corporations in Mombasa County.

5.2.3 Corruption

The descriptive results indicated that an increase in corruption practices such as cases of bribery of employees by management to benefit them, presence of policies to regulate cases of payoffs and kickbacks, presence of heavy penalties levied against perpetrators of payoffs and kickbacks and presence of cases of bribery of employees by management to benefit them leads to an increase in fraud risks among state corporations in Mombasa County. Correlation results showed that the association linking corruption and fraud risk was positive and significant.

The regression results also revealed that the impact of corruption on fraud risk was significant. A unit increase in corrupt activities leads to a 0.177 unit increase in fraud risk among state corporations in Mombasa County.

5.3 Conclusion of the Study

The study made conclusions according to each study objective based on the summary results. The conclusions allowed the study to come up with the recommendations to the study.

5.3.1 Financial Misstatement

The study concluded that the effect of financial misstatement as a driver of fraud risk among state corporations in Mombasa County was positive and significant. The study concluded that an increase in financial misstatement activities for instance cases of manipulation of financial records, improper disclosure of financial statement information in the organization, cases of overstating of expenditure while providing accountability reports, organizational policy on how to handle financial statements and Forensic accounting and auditing has a positive and significant effect on fraud risk among state corporations in Mombasa County.

5.3.2 Asset misappropriation

The study established that asset misappropriation had a positive and significant effect fraud risk among state corporations in Mombasa County. The study concluded that presence of cases of misappropriation of funds in the organization, presence of ghost employees’ cases, presence of unauthorized cash transfer and the presence of misappropriation of funds cases positively and significantly affects fraud risk among state corporations in Mombasa County.

5.3.3 Corruption

The study concluded that the effect of corruption on fraud risk among state corporations in Mombasa County was positive and significant. The study concluded that an increase in corrupt activities for instance cases of bribery of employees by management to benefit them, presence of policies to regulate cases of payoffs and kickbacks, presence of heavy penalties levied against perpetrators of payoffs and kickbacks and presence of cases of bribery of employees by management to benefit them positively and significantly affect fraud risk among state corporations in Mombasa County.

5.4 Recommendations

To reduce financial misstatement reporting, the study recommends the management of state corporations in Mombasa County to adopt more robust monitoring measures to avoid manipulation of their financial records. There is also need for the management of state corporations to emphasize on proper disclosure of financial statement information. The study also recommends the management of state corporations to ensure that their expenditures are not overstated through the provision of accountability reports. The study further recommends for the adoption of policies to handle financial statements such as Forensic accounting and auditing.

The study also recommends the management of state corporations in Mombasa County to put in place punitive measures to curb misappropriation of funds. The study also recommends the management of corporations in the county to audit their personnel databases to get rid of ghost employees. The study further recommends for a strict cash transfer policies to be put in place so as to reduce misappropriation of funds.

Finally, the study recommends the management of state corporations in Mombasa County to put in place policies to regulate cases of payoffs and kickbacks. There is also need for the state corporation’s management to adopt severe and punitive penalties measures against perpetrators of payoffs and kickbacks. There is also need for state corporations’ management to enhance their employee’s remuneration so as to discourage them from taking bribes.

5.5 Areas for Further Research

The study recommends future scholars to investigate more on other drivers of fraud risks that affect the performance of state corporations in Mombasa County since financial misstatement reporting, asset misappropriation and corruption all account for 51.2% of the variation in fraud risk among state corporations in Mombasa County in Kenya. There is a need to center on the effects of fraud risk drivers on state corporations in other counties in Kenya as this study only focused on state corporations in Mombasa County.

REFERENCES

Abiola, J. (2013). *The Impact of ICT on Internal Control's Effectiveness in Prevention and detection of Fraud*. Available: http://www.dora.dmu.ac.uk

Adepoju, A. S., & Alhassan, M. E. (2010). Challenges of Automated Teller Machine (ATM) Usage and Fraud Occurrences in Nigeria-A Case Study of Selected Banks in Minna Metropolis. *Journal of Internet Banking and Commerce*, *15*(2), 1.

Ajzen, J. (2012). Problem of Financial Fraud, Conflicts of Interest, and Institutions, *Journal of Financial Institutions*, 2, 266-285.

Akindele, R. I. (2011). Fraud as a negative catalyst in the Nigerian banking industry. *Journal of Emerging Trends in Economics and Management Sciences*, *2*(5), 357-363.

Akinyomi, O. J. (2012). Examination of fraud in the Nigerian banking sector and its prevention. *Asian Journal of Management Research*, *3*(1), 182-194.

Akinyomi. O. J (2010). The effect of internal control systems on Nigerian banks. *International journal of accounting*, 2 (1).

Alexander L. (2015). *Preventing Fraud and Corruption in World Bank projects*: A guide for staff.

Association of Certified Fraud Examiners (ACFE) (2010) *Global Fraud Study*. Report to the Nations on Occupational Fraud and Abuse.

Association of Certified Fraud Examiners (ACFE) (2012) *Global Fraud Study*. Report to the Nations on Occupational Fraud and Abuse.

Association of Certified Fraud Examiners (ACFE) (2014) *Global Fraud Study*. Report to the Nations on Occupational Fraud and Abuse.

Baums, O. (2012). The unethical practices of accountants and auditors and the compromising stance of professional bodies in the corporate world: Evidence from Corporate Nigeria, *Accounting Forum*, 31, 277-303

Bebchuck (2013). *Structural Issues in the Kenyan Financial System*: Improving Competition and Access', World Bank Policy Research Working Paper 3363. Available at: http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2

Botton J and Hall. , M. (2011). Deterring Fraud: The Internal Auditor's Perspective, Altamonte Springs, FL: *The Institute of Internal Auditor's Research Foundation*)

Bowling, A. (2014). Research methods in health: investigating health and health services. McGraw-Hill Education (UK).

Bryman, A., & Cramer, D. (1997). Quantitative data analysis with SPSS for Windows. London: Routledge.

Burns, J. M. (2010). *Transforming leadership*: A new pursuit of happiness (Vol. 213). Grove Press.

Business Daily, Tuesday 21st February 2012. *Kenya Seeks Insurance Fraud Prosecution Unit*. Available at: http://www.businessdailyafrica.com/Kenya-seeks-insurance-fraud-prosecution-unit/-/539552/1332022/-/lq20nrz/-/index.html

Chiezey, U., & Onu, A. J. C. (2013). Impact of fraud and fraudulent practices on the performance of banks in Nigeria. *British Journal of Arts and Social Sciences*, *15*(1), 12-25.

Cooper, D.R., & Schindler, P.S. (2011). *Business Research Methods* (11th ed.). New Delhi-India. McGraw-Hill Publishing, Co. Ltd.

Cressey (1950), *Theories of Fraud and Corruption*.

Cressey, D. (2012). Other People's Money: A study in the Social Psychology of Embezzlement, *New Jersey, Patterson Smith Publishing Corporation*

Cressey, D. R. (1953). *Other People's Money*. Montclair, NJ: Patterson Smith, pp.1-300.

Cronbach, L.J. (1951).*Coefficient Alpha and the Internal Structure of Tests*. Psychometrika, 16297-334. Doi: 10.1007/BF02310555.

Gall, M. D. Gall. JP, & Borg, WR (2007). *Educational research: An introduction, 8*.

Garg, G., & Kothari, C. R. (2014). *Research Methodology*. Methods and Techniques. New Age International Publishers. New Delhi-110002.

Gerstman, B. (2003). *Sample size*, *Precision and Power*. Retrieved on 26th August 2011 from http://www.sjsu.edu/faculty/gerstman/StatPrimer/sampsize.PDF

Gikiri, M. M. (2012). *Effects of attitude, norms, and perceived behavior control on intentions to become a teen father* (Doctoral dissertation, Capella University).

Granter B. Kummer, T., Singh, K., & Best, P., (2014) the *Effect of Fraud on Risk Management in Not-For-Profit Organizations.* Corporate Ownership & Control, Vol. 12 Issue 1, pp. 641-652

Graycar, A., & Sidebottom, A. (2012). Corruption and control: a corruption reduction approach. *Journal of Financial Crime*, *19*(4), 384-399.

Gugino, B. K., Abawi, G. S., Idowu, O. J., Schindelbeck, R. R., Smith, L. L., Thies, J. E., ... & Van Es, H. M. (2009). *Cornell soil health assessment training manual*. Cornell University College of Agriculture and Life Sciences.

Hoffman, D. G. (2012). *Managing Operational Risk*: 20 firm-wide best practice strategies. London, John Wiley and Sons.

Hollinger, R. C., and Clark, J. P. (1976). *Deterrence in the workplace*: Perceived certainty, perceived severity and employee theft. Social Forces, 62, 398-418.

Hooper T. (2016). The Fight against Fraud", *Internal Auditor*, Vol. 62 No. 1, pp. 62-6.

Hooper, M. J. & Pornelli, C. M. (2010). *Deterring and detecting financial fraud: A platform for action*

Hopwood, D. (2005), *Fraud management as tool to attract new customers*, American Banker,Vol. 170 No. 38, pp. 12.

IFCP (2011) Benchmarking Your In-House Fraud Investigation Team. *A Publication of ACFE*, Global Headquarters, USA

Jha, A. (2014). *Social Research Methods*. Tata McGraw-Hill Education.

Kanu, S. I., & Okorafor, E. O. (2013). The nature, extent and economic impact of fraud on bank deposits in Nigeria. *Interdisciplinary Journal of Contemporary Research in Business*, 4(9), 253-265.

Keber, (2015) *Effect of Human Resource Management Strategies on Performance of Commercial Banks in Kenya*. PhD Dissertation Presented to Jomo Kenyatta University of Science and Agriculture

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).

Kiragu, D. N., Wanjau, K. L., Gekara, M., & 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.

Kwame N., G.O, (2014) *Bank management principles and practice*. Lagos Malthouse press Ltd, Lagos Nigeria.

Makori, R. G. (2016). *Influence of internal control systems on fraud risk management among commercial banks in Kisii town, Kenya* (Doctoral dissertation, School of Business and Economics).

Maxwell, D., Bailey, S., Harvey, P., Walker, P., Sharbatke-Church, C., & Savage, K. (2012). Preventing corruption in humanitarian assistance: perceptions, gaps and challenges. *Disasters*, *36* (1), 140-160.

Mena, J. (2009). Investigative Data Mining for Security and Criminal Detection, Butterworth Heinemann.

Mohamed, N. (2013). Financial Statement Fraud Control: Audit Testing and Internal Auditing Expectation Gap. *International Proceedings of Economics Development and Research*, 65, 62.

Mustafa, S. T., & Ben Youssef, N. (2010). Audit committee financial expertise and misappropriation of assets. *Managerial Auditing Journal*, 25(3), 208-225.

National Commission on Reporting Financial Fraudsters in America (2007)

Newing, H. (2011). *Conducting Research in Conservation: Social science methods and practice*. Routledge, New York, United States of America.

Njiru, (2011Fraudulent activities and forensic accounting services of banks in Nairobi Kenya. *Asian Journal of business management*, Vol. 4, issue 2.

Nunnally, J. C. (1978). *Psychometric Theory*. New York: Mcgraw-Hill.

Odhiambo (2013) *Evaluation of Fraud Management Strategies Adopted By Insurance Companies in Kenya*.

Okumbi, A., (2013) Corporate Governance: A Comparative Study of the Corporate Codes of Developing Economy with Developed Economies. *Research Journal of Finance and Accounting*, Vol. 4 No. 1, pp. 65-77

Okumbur Vincent Purohit, K. K. and Mazumdar, B. C (2010) Bank frauds, causes and prevention, *an empirical Analysis Publishers*.

Oseni K. (2007) Proactive Measures to guard against fraud/ cash theft in the banking industry and in organizations, *NDIC Quarterly*, volume 17 September/ December

Petrou, A. P., & Thanos, J. C. (2014). The grabbing hand or the helping hand view of corruption: Evidence from bank foreign market entries. *Journal of World Business* 49, 444-454.

Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International journal of nursing studies*, 47(11), 1451-1458.

PPDA (2008). *Report on Compliance Checks undertaken on 120 Procuring and Disposing Entities.*

Price water house Coopers, (2015). *The report on the Statistics and Trend of Frauds for the year 2015,* Central bank of Kenya

Prieston, A. J. and Dreyer, J. A., (2011). Mortgage Fraud. The Impact of Mortgage Fraud on Your Company's Bottom Line. *Mortgage Bankers Association of America*.

Rae and Subramane (2008). Bank Frauds in India: Emerging Challenges, *Journal of Commerce*

Richards J. Griffin, J.J. and Mahon, J.F. (2004). The corporate social performance and corporate financial performance debate: twenty-five years of incomparable research. *Business and Society*, Vol. 36, pp. 5-31.

Rubin H. (2015). Fraud as a Negative Catalyst in the Nigerian banking industry. *Journal of Emerging Trends in Economics and management Sciences* (JETEMS)

Serekan (2013) *Research Methodology and Techniques,* 2nd Ed. New Delhi, Age Publishers.

Serekan S., Norwani, N.M., Mohamad, Z.Z., & Chek, I.T., (2003) Corporate Governance Failure and Its Impact on Financial Reporting within Selected Companies. *International Journal of Business and Social Science*, Vol. 2 No. 2, pp 205-213

Serekan, U., & Bougie, R. (2010). *Research methods for business: A skill building approach.* New Jersey, USA: John Wiley & sons publishers.

Sharma, S. K., Sengupta, A., Panja, S. C., & Nandi, T. *Corruption risk assessment methods*: a review and future direction for organizations.

Soltani H. (2013) *Accounting and Financial Analysis in the Hospitality Industry*. Butterworth-Heinemann

Upagade, V., & Shende, A. (2012). *Research methodology*. S. Chand& Company Ltd. New Delhi, India.

Wanjiru S. (2000). The role of ethics in fraud prevention: a practitioner's perspective. *Business Ethics: A European Review,* Vol. 9 No. 4, pp. 268-72.

Wanyama G. (2009). Commercial Banking Crises In Kenya: Causes and remedies. *African Journal of Accounting, Economics, Finance and Banking Research*, 4 (4), 12-33.

Webster T., (2013). Internal Control system on Fraud Detection: Nigeria Experience. *Journal of Accounting and Finance*, Vol. 13 (5) pp 141-152

Williams, C. (2011). Research methods. *Journal of Business & Economics Research* (JBER), 5(3).

Yang, K., & Miller, G. (2008). *Handbook of Research Methods in Public Administration*. New York: Taylor & Francis Group.

Zahra, S. A., Priem, R. L., and Rasheed, A. A. (2007), *Understanding the Causes and Effects of Top Management fraud*', Organizational Dynamics, 36 (2), 122-139

APPENDIX I: Letter of Introduction

Mr. Gilbert Masengeli

P.O. Box 43844-00100,

Nyeri, Kenya.

Dear Respondent,

RE: REQUEST TO FILL A RESEARCH QUESTIONNAIRE

I am a student at student at Dedan Kimathi University of Technology Masters of Science in Forensics and Security Management Business. As part of my course requirement, I am required to undertake a research project relevant to the course. ***The study seeks to examine the drivers of fraud risk among state corporations in Mombasa County***. In respect to the above requirement, I kindly request you to give me the necessary support and assistance to enable me obtain the necessary data for the research project.

By completing the questions, all data and information gathered is purely for academic purposes and will be treated with confidentiality. I appreciate your cooperation in this regard and may God bless you.

Thank you and best regards

Gilbert Masengeli

Appendix II: Questionnaire

This questionnaire seeks information on the drivers of fraud risk among state corporations in Mombasa County.

SECTION A: Demographic information

Kindly indicate an option that best describes you where appropriate by use of a tick (√). Also fill in the blanks where necessary.

1. Age Bracket
   a. Below 30 years
   b. 31 – 40 years
   c. 41 – 50 years
   d. Over 50 years
2. Your level of Education
   a. Diploma
   b. Bachelor Degree
   c. Master's Degree
   d. PhD degree

3. What have been the effects of financial fraud on the performance of your organization?
   i. Sharp decrease in organizational performance
   ii. Moderate decrease in organizational performance
   iii. Decrease in organizational performance
   iv. No result observed

SECTION B: FINANCIAL STATEMENT FRAUD

1. Think of the present financial statement operations in your organization. Basing on your opinion tick (√) one cell for each statement provided in the table below.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree

The organization has cases of manipulation of financial records.					
There is improper disclosure of financial statement information in the organization.					
The organization has cases of overstating of expenditure while providing accountability reports.					
There is an organizational policy on how to handle financial statements.					
Forensic accounting and auditing is often done to establish if there are cases of financial fraud.					

2. Comments

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SECTION C: ASSET MISAPPROPRIATION

Kindly indicate your level of agreement on the statements

Statement	**Strongly disagree**	**disagree**	**Neutral**	**Agree**	**Strongly agree**
There are cases of misappropriation of funds in this organization.					
There are cases ghost employees in the organization.					
There are cases of unauthorized cash transfer in the organization.					
Cases of misappropriation of funds have affected the performance of this organization.					

SECTION E: CORRUPTION

Basing on the corruption practices by this organization, please tick (√) one cell for each statement provided in the table below.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
There are cases of bribery of employees by management to benefit them.					
Bribery cases have affected the performance of this organization.					
The organization has policies to regulate cases of payoffs and kickbacks.					
There are heavy penalties levied against perpetrators of payoffs and kickbacks.					

Give at least two suggestions on what the organization should do to curb cases of payoffs practices.

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SECTION F: FRAUD RISKS

Kindly indicate the extent to which you agree or disagree with the following statements regarding frauds in your corporation

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Fraud incidences are frequent in our corporation					
Number of reported fraud cases in our organization has been increasing					
The amount of revenue lost in terms of					

fraud has been on the rise					

APPENDIX V: List of State Corporations in Mombasa County

1. Coast Development Authority
2. Coast Water Services Board
3. Kenya Coconut Development Authority
4. Kenya Ferry Services Limited
5. Kenya Ferry Services Limited
6. Kenya Forestry Research Institute
7. Kenya Industrial Estates
8. Kenya Industrial Property Institute
9. Kenya Marine & Fisheries Research Institute
10. Kenya Maritime Authority
11. Kenya National Library Service
12. Kenya National Shipping Line
13. Kenya National Trading Corporation Limited
14. Kenya Ordinance Factories Corporation
15. Kenya Pipeline Company Ltd
16. Kenya Port Authority
17. Kenya Post Office Savings Bank
18. Kenya Re-insurance Corporation
19. Kenya Revenue Authority
20. Kenya Roads Board
21. Kenya Safari Lodges & Hotels
22. Kenya Sisal Board
23. Kenya Sugar Board
24. Kenya Tourist Board
25. Kenya Tourist Development Corporation
26. Kenya Utalii College
27. Kenya Water Institute
28. Kenya Wildlife Service
29. Mombasa Polytechnic University College
30. National Council for Law Reporting
31. National Environmental Management Authority
32. National Hospital Insurance Fund