

**EFFECTIVENESS OF AUDIT COMMITTEES IN THE PUBLIC SECTOR: A CASE
OF PARASTATALS IN KENYA**

BY

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DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

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EFFECTIVENESS OF AUDIT COMMITTEES IN THE PUBLIC SECTOR

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ABSTRACT

The study looked at the relationship between the characteristics of audit committees and its effectiveness in reducing the number of financial statement restatements and the number of financial statement fraud for State Corporations in Kenya. It used the following six characteristics of audit committees; independence of directors, committee size, meeting frequency, financial expertise, tenure and multiple directorships for 177 State corporations. The agency theory of finance was used as the theoretical underpinning for the study. The aim was to provide answers to two main research objectives by the use of cross sectional secondary data collected from the audited financial statements of the 177 State corporations in Kenya. The objectives were, first, to find out if the audit committees meet the legislative requirements on audit committee characteristics, and the second was to determine the effect of audit committees' characteristics on their effectiveness. The sampling frame was state corporations in Kenya consisting of 177 firm year observations for the year 2012 selected using purposive sampling. The logistic regression model was used to test the effect of the characteristics of the committee on its effectiveness. The findings indicate that the most important and influential characteristics of audit committees is multiple directorships as it is statistically significant in reducing the number of financial statement restatements and financial statement fraud. A key recommendation of this study is that the Kenya government should enact legislation that governs audit committees and impose stiff penalties on audit committees that are not effective.

Key words: Audit Committees; Audit Committee effectiveness and Characteristics

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DEDICATION

To my beloved late father and mother

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ACCRONYMS AND ABBREVIATIONS

AER	Accounting & Auditing Enforcement Releases
AC	Audit committee
ANOVA	Analysis of Variance
BRC	Blue Ribbon Committee
CEO	Chief Executive Officer
CMA	Capital Markets Authority
CPA	Certified Public Accountant
EACC	Ethics and Anti -Corruption Commission
GAAP	Generally Acceptable Accounting Practices
HFCK	Housing Finance Corporation
ICPAK	Institute of Certified Public Accountants of Kenya
IFRS	International Financial Reporting Standards
IIA	Institute of Internal Auditors
KCC	Kenya Cooperative Creameries
KMC	Kenya Meat Commission
NHIF	National Hospital Insurance Fund
OAG	Office of the Auditor General
SEC	Securities and Exchange Commission
SPSS	Statistical Package for Social Sciences
SCAC	State Corporations Advisory Committee
ISIC	International Standard Industrial Classification

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CHAPTER ONE

INTRODUCTION

1.1 Background

The Treasury Circular No 6, of 2005 in the case of all public sector institutions, regulates audit committees of State Corporations in Kenya. The Circular dated 4 October 2005, that directs the operationalization of public sector audit committees. In relation to setting up of audit committees section five of the Public Finance Management Act, (2012) requires all public entities to set up effective audit committees in all national government public entities (ministries, departments, State Corporations, and local authorities).The guidelines indicate the composition and the operation of the committees. It maintains that if these committees function effectively they will contribute to the enhancement of oversight, governance, and accountability in the public service. The audit committees of State Corporations in Kenya therefore derive their authority from this circular and public finance management Act (2012).An audit committee is an appointed body that is meant to aid the management of an entity in the role of over sighting the checks and internal controls of an entity including the monitoring of the internal audit function (Institute of internal auditors, 2004). This definition is in line with the requirements of the agency theory of finance which proposes that for the effective monitoring of the agents (management) by the principals who are the providers of resources to the public entities an effective audit committee that is well constituted as per legislation is important.

Under the agency relationship, there is always the disagreement that arises because of the different approaches between the agents and the principals in terms of management of the entity. Researchers Eichenseher and Shields (1985) view audit committees as monitoring tools that reduce information asymmetry between the management of an entity and the stakeholders of the entity. Effective audit committees are beneficial to various stakeholders such as the auditors both internal and external and the agents that are appointed to run the entities.Psaros and Seamer (2004) in their study on audit committees and accountability in the South African public sector point out that a number of benefits result from an effective audit committee. They indicate that when the audit committees carry out their functions effectively the quality of financial reporting is maintained.

The audit committee has been extensively used in organizations globally to monitor the financial reporting process and corporate governance. They have been in existence for decades, but there are criticisms regarding their effectiveness as a result of the role of vetting

the financial statement integrity of the entity and the monitoring of financial statement fraud. The criticisms mainly center on the recurrence of financial scandals even where such committees exist. In Kenya, effective audit committees in the public sector are important especially during this moment when countless financial scandals have plagued the public institutions. They include Anglo Leasing scandal of 2005, Grand Regency scandal of 2008, The Housing Finance Scandal, The Triton oil scandal of 2009 among others. On the international scene, these committees have been critiqued due to their failure to pinpoint and put an end to the fraudulent activities within the Enron Corporation following its downfall. The business week reported on the downfall of Enron Corporation as follows:

“One of the mysteries of Enron Corp.’s fall from grace is how an audit committee full of talent could have been blind to the company’s financial manipulation The audit committee followed all the rules – but it let the shareholders down”, (Business Week, 21 January 2002, p. 28).

While investigating and analyzing the effective working of audit committees at the largest listed companies in South Africa, researchers like Brewer (2001) reports that these committees should be made effective in their formation and operation and that they should not just be constituted for compliance purposes only as required by various pieces of legislation. Therefore having an audit committee and realizing the benefits that go with it are not always synonymous. The study of the Audit Committees is important at this time in order to evaluate the effectiveness of these committees in relation to the occurrence of these financial frauds. In light of the above-mentioned, this study was motivated to find out if audit committees of state corporations in Kenya that are established with the specific characteristics are effective in the context of ensuring that the financial statements of state corporations are prepared to reflect a true and fair view of the financial position within a reporting financial year, and in the monitoring cases of financial statement fraud.

In Kenya, the State corporation audit committees are required to have a number of characteristics for effective operation in their roles of vetting the integrity of financial statements and monitoring financial statement fraud. The characteristics that were used in the study include director independence which is represented by having the proportion of independent non-executive directors in the board, tenure of the directors, size of the committee, financial expertise, frequency of committee meetings and multiple directorships in the board as proxy for evaluating the effectiveness of these committees in Kenya. The Kenya government decided to enforce the establishment and strengthen audit committees in all ministries, departments, State Corporations, and local authorities through the release of

Treasury Circular of 4 October 2005 and the public finance management Act 2012. The committees are expected to carry in depth interrogation of the existing public entity internal controls as well as the operation of the audit function of the public service.

1.2 Statement of the Problem

Audit committees are recognized as the best practice in monitoring financial statement fraud and vetting the integrity of financial statements of public entities around the world. The 2001 Enron Corporation's scandal in the United States was a wakeup call for governments globally. This led to steady moves which were aimed at ensuring the integrity of financial statements in order to ensure that the interests and activities of the principals are protected from any activities of management that are not intended for the benefit of the principal. This is because the principals rely on the public entities financial statements for decision making in the provision of resources. As a measure of ensuring that the committees of audit are effective in their monitoring function, the United States government introduced the Sarbanes-Oxley Act in 2002. The implementation of the Act is compulsory and it is one of the outcomes of this consistent move towards accurate and quality financial reporting (Whittington, 1993).

Various stakeholders are interested in the prudent management of the public sector entities. This is because the stakeholders contribute to the public sector in different ways. Goddard and Masters (2000) report that audit committees are an important establishment in the public sector. However, few studies have been carried out on their effectiveness. The findings of Kalbers and Fogarty (1993) indicate that the subject of audit committee effectiveness in the monitoring and oversight role remains insufficiently understood. Hussein (2003) scrutinized the effect of audit committees on major announcements and other characteristics of companies listed at the Nairobi Stock Exchange (NSE). However he did not conclusively address the question of whether audit committees are effective in their roles or which characteristics influence audit committee effectiveness. In the Kenyan public sector because of the recognition accorded to accurate and quality financial reporting by several interested parties (principals under the agency theory), the establishment of effective audit committees has been included in audit committee legislation through the issue of Treasury Circular of 4 October 2005 and the Public finance management Act, (2012). These pieces of legislation require all the public sector entities, to establish audit committees.

Despite the legislation that has been enacted to establish effective audit committees with the required characteristics in the public sector in Kenya, there have been reported cases

of failure of several state corporations among them the National Social Security Fund (NSSF), the Kenya Meat Commission (KMC), Kenya Cooperative Creameries (KCC) etc. due to fraudulent financial reporting. Following these events, it is important to find out if these committees are effective in the public sector in Kenya following these various pieces of legislation on audit committees in Kenya. Therefore, this study needed to address the gap in literature concerning audit committee characteristics and their influence on audit committee effectiveness in state corporations in Kenya. The study tried to seek answers on whether the public sector committees of audit are effective in their roles of vetting the integrity of financial statements and monitoring the financial statement fraud of State Corporations in Kenya.

1.3 Research Objectives

This study examined the effectiveness of audit committees within national public entities, with a specific focus on State Corporations. The study was meant to meet the following specific objectives:

1. To find out if the audit committees meet the legislative requirements on audit committee characteristics.
2. To determine the effect of audit committees' characteristics on their effectiveness.

1.4 Research Hypotheses

The following research hypotheses were generated to realize the objectives of the study.

H1: The proportion of independent directors in the audit committee has a positive influence on its effectiveness.

H2: The proportion of multiple directorships positively influences the audit committee.

H3: The proportion of financial experts in the audit committee has a positive influence on its effectiveness.

H4: The frequency of audit committee meetings has a positive influence on its effectiveness.

H5: The size of the audit committee has a positive influence on audit committee effectiveness.

H6: Long tenure directorship in the audit committee has a positive influence on its effectiveness.

1.5 Significance of the Study

The study findings will give important inferences that will guide various stakeholders in decision making regarding the establishment of effective audit committees in the public sector. This is because of the persistent calls by the stakeholders that all public entities in Kenya should establish functional and effective audit committees in line with the legislation requirements and best practices. The study will invoke important ideas for public institutions in Kenya and result in a more improved understanding of the concept of audit committee effectiveness and the various ways in which it could be improved, especially as it acts as a monitoring mechanism, which affects the integrity of financial statements and financial statement fraud in the public sector.

Additionally the study will help improve the understanding of the relationships between the audit committee characteristics and audit committee effectiveness. Lastly, the study will also add to the existing literature on the effectiveness of audit committees in the public sector and provide comparison to similar past studies conducted in various developed countries on audit committee effectiveness.

1.6 Scope of the Study

The scope of the study included all the state corporations that are incorporated by a common constitutive instrument, the State Corporations Act Cap 446 of the laws of Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the theoretical underpinning used in the study as well as a review of empirical literature on effective audit committees by focusing on the variables that are the focus of this study.

2.2 Theoretical Framework

The role of theory in making clear the subject effectiveness and understanding its effectiveness in the public sector for the benefit of various stakeholders cannot be overstressed. Theories form meanings and help in the scrutiny of ideas and their inferences to various subjects (Riahi-Belkaoui, 2000). This section of the chapter discusses the theory that has shaped the meaning and importance of audit committee effectiveness and that has been used in the study to achieve its objectives.

2.3 Agency Theory

The main reason why monitoring of the agent is important in agency theory is because agents (managers or directors) of the business are inclined more to serve their personal interests than those of the principals (employers and shareholders). This is according to the Institute of Chartered Accountants in England and Wales (2006). They posit that this relationship is premised on the assumption of the principal (the provider of resources) that some agents can be untrustworthy because of the self-serving interests given the choice of enriching themselves using the principal's resources. Under the agency relationship, the principal surrenders the power of managing the entity to the agent because of the premise that the agent has expertise in running the entity on behalf of the principal. Muth and Donaldson (1998) states that agency arises as a result of the delegation of some power, authority and accountabilities by the principal to a team of experts (agents) who are expected to carry out their duties diligently while putting the entity interest before their own interests and subsequently leading to its operational success. Agency relationship exists when one person called the principal appoints another one called the agent to act on his behalf in the conduct of the business that belongs to the principal (Jensen and Meckling 1976).

Under agency theory there is the assumption that a conflict of interest arises between the principal and the agent. Millichamp and Taylor, (2008) posit that in the agency theory of finance creates conflicts of interest between the principals (the provider of resources) and the

agents (the management). These conflicts are a product of the divergent interests between the principal and the agent. Whereas the principals expect the agents to provide factual, accurate and timely financial reports to the principal for decision-making, the agents that are motivated by personal interests manipulate the financial reports to meet their objectives. They recommend that the report that is released by the agent to the principal should bear information on the operations of the firm and reflect a true and fair value of the firm's operations. They go on to state that the reports issued by the management (agent) including the financial statements on behalf of the principal may contain various levels of restatements, non-disclosure of fraudulent activities in the firm, deliberate misrepresentation and they may also not comply with the laid down regulations and legislative requirements. They state that the solution to the credibility problem that emanates from the reports is the appointment of oversight experts (audit committees) to protect the principals' interests in the entity.

According to Eisenhardt (1989), the theory is premised on the principal agent relationship, which causes a conflict of interest and leads to the emergence of different attitudes towards management of the entity. These conflicts of interests subsequently lead to agency problems for the firm, because divergent interests motivate the principal and the agent. While offering support to this argument, (Berle and Means 1932) posit that conflicts arise because most of the time the agents are motivated by the desire of using the resources of the firm for their own benefit instead of concentrating in the activity of maximization of the wealth of the principal. This they suggest could be as a result the failure of the principals to create an effective monitoring mechanism. However, it is only possible to offer close monitoring of the activities of the agents when the principals are aggressively involved in the process of monitoring. Because of the fact that the monitoring process involves high costs and various levels of expertise, the lack of resources to meet the high costs and lack of the expertise by the principals, makes it impossible for them to be actively involved in the monitoring process. The activity is therefore effectively carried out by a committee of audit, which among its responsibilities is the setting up of effective mechanisms on behalf of the principal. This study posits that the principle of close of monitoring of the activities of the agent by the principal forms the foundation of the effective audit committees. This is because the principal represented by the government, entrusts the management and running of the state corporations to the agents (managers) who can only perform their roles effectively in ensuring sound financial reporting in an entity, which reflects a true and fair view of the entity's operations. To meet the study objectives, the agency theory guides this study on the subject of audit committee effectiveness in the public sector in Kenya. This is because

effective audit committees are used as a monitoring mechanism as they act on behalf of the principal (the provider of resources) to monitor the activities of the agent (management of the State Corporations) in the areas of vetting financial statement integrity and monitoring financial statement fraud.

2.4 Empirical Literature

Different researchers define Audit committee effectiveness (ACE) in different ways depending on the context. Rittenberg and Nair (1993) are of the opinion that an effective audit committee is the one that fulfils its responsibilities effectively while; others are of the view that audit committee effectiveness is measured as the ability to carry out their roles competitively Kalbers and Fogarty (1993). It can be concluded from the definitions that that an effective committee is the one that carries out its oversight duties and responsibilities of monitoring the agent on behalf of the principal effectively. However, the definitions do not identify the factors or characteristics that influence the effectiveness of these committees.

This study defines an effective committee as one that complies with the legislative requirements in its formation and operation including compliance with the requirements of legislation in the requirements of the combination of the right characteristics that include independence, meeting frequency, expertise in finance, and tenure. This definition lends support to the findings of (DeZoort 1998, Kalbers and Forgaty 1993; Dezoort et al.2002; Abbott et al.2004; Carcello et al.2002; Beasley 1996) who define effective committees as those committees with the right combination of characteristics.

Studies on effective audit committees have identified the most important goals of audit committees as ensuring and maintaining external auditor independence in their functions and contact with the management of the public institutions (Carcello and Neal 2000) and protecting the interests of the public institution investors by vetting the process of financial reporting including the statements that are presented by the agents. The literature in audit committee effectiveness has put forward varying proxies to determine the effectiveness of audit committees in their monitoring roles. The literature proposes five proxy variables to test audit committee effectiveness in public institutions. To start with, Abbott et al. (2003) consider audit committee effectiveness as the ability of the audit committee to maintain an independent external audit function in the institution in which they are appointed as an audit committee. They argue that the ratio of non-audit to audit service fees is the measure of the ability of the audit committee effectiveness.

On the other hand, researchers Carcello et al. (2002) put forward the opinion that the

effectiveness of the committee can be measured through the procurement of high quality audit services to vet the integrity of financial statements and monitor financial statement fraud. They go on to explain that the amount of audit services fees is a measure of quality audit service. Other researchers like Abbott et al. (2004) and Aier et al. (2005) put forward the opinion that the measure of audit committee effectiveness is the ability of the committee to reduce prior-period financial statement restatements as a way of maintaining the integrity of financial statements. Financial statement fraud disclosure, which is a way of maintaining financial statement integrity according to researchers like Farber (2005), acts as a proxy measure for the effectiveness of audit committees. Others like Klien (2002) use abnormal accruals as a proxy for effectiveness of the audit committee in the role of vetting the integrity of financial statements.

While agreeing with prior studies it is reported that, possessing the relevant characteristics will be used as a gauge of the effectiveness of the audit committee according to a study by English (1994) who conducted a research on audit committees in Australia in the early 1990s. He posits that the competence of the audit committee according from the perception of the senior management of the public institution, and the board together with its audit committee charter act as proxies to measure audit committee effectiveness. The findings of Marx, (2009) indicate that for the audit committees to be perceived as effective, it is important that they improve on their interaction with stakeholders and within themselves. He goes on to state that it is important that they get respect and understanding as they perform their roles duties and responsibilities. This he opines will make it easy and possible for creation of an honest, open and constructive working relationship between themselves and the stakeholders. On the variable of financial statement restatements, researchers Eilifsen and Messier (2000) enumerate some of the causes of financial statement restatements. They state that restatements occur because of several causes key among them the existence of some inbuilt risks like the wrong application of the generally accepted accounting practices (GAAP). A financial statement restatement could also occur in a public entity because of it not being prevented or detected by the entity's internal controls.

From the findings of Eilifsen and Messier (2000), a condition is classified as a restatement when it meets these conditions. The erroneous application of the generally accepted accounting practice, personnel problems and management's hard line accounting practices. Restatement could also be as a result of failure of the internal controls of the public entity or the failure of the external auditors. Among the first studies in the area of financial statement restatements was that of Kinney and McDaniel (1989) who did a study on 73

companies for the period 1976 to 1985 that had restated their unaudited financial statements. They found these companies to be of a small asset base, and had low profitability. While studying 41 companies that had restated their financial statements, DeFond and Jiambalvo (1991) report most of the 41 companies had in place functioning committees of audit. Their study however did not address the question of which committee characteristics influence the effectiveness of the audit committees positively or negatively leading to the presence and prevalence of restatements. For this reason, this research also reviews the fraud literature related to audit committees. Research examining the impact of the audit committee on fraud is relatively more developed than the restatement literature. Although more extensive, this stream of research yields somewhat mixed results. For example, Beasley (1996) does not find that audit committee presence is significantly associated with the likelihood of financial statement fraud. From the fraud literature, Deco et al. (1996) and McMullen (1996), who have studied the relationship between committees of audit and fraud, report that the availability of a committee of audit significantly reduces the number of reported financial statement fraud in the reported financial statements of the entity.

In general, these studies focus on the relation between audit committee presence and the incidence of financial statement fraud. This study makes an addition to the prior studies by addressing the impact of audit committee characteristics on financial statement restatements and financial statement fraud. Consistent with the earlier studies (Abboth et al. 2003; Aier et al.2005; Farber 2005; Klein 2002).The roles of audit committees in vetting the integrity of financial statements and monitoring the financial statement fraud of the State Corporations in Kenya was used to measure audit committee effectiveness in form of reduced number of financial statement restatements and financial statement fraud respectively. The study therefore hypothesized that if the audit committees effectively carry out their role of vetting the integrity of financial statements and monitors financial statement fraud then the result would be a reduced number of cases of financial statement restatements and financial statement fraud.

2.5 Monitoring cases of Financial Statement Fraud

According to the Association of certified fraud examiners (2010), financial statement fraud is a material misrepresentation resulting from an intentional failure to report financial information in accordance with generally accepted accounting principles. In its 2010 Report to the Nations on Occupational Fraud and Abuse the Association of the certified fraud examiners (ACFE) reports that Public and private businesses commit financial statement

fraud to secure investor interest or obtain bank approvals for financing, as justification for bonuses or increased salaries or to meet expectations of shareholders. In Kenya, the Treasury circular (2005) on operationalization of audit committees gives one of the duties and responsibilities of the audit committee as ensuring sound financial management in the public entities. This can only be achieved through the regular review of organizational key strategies and business plans and the assessment of the achievability of goals in light of current circumstances. Goals should be structured to avoid a rigid short-term focus that might push management or employees to commit financial statement fraud.

According to (Ernst & Young, 2007) one of the roles of the audit committee is the monitoring of cases of financial statement fraud through the activity of detection, investigation and prevention of fraud in the financial statements. They are of the opinion that the realization of the objective of fraud prevention can only be successful if the audit committee makes efforts to make the expectations for management and the external auditors in fraud prevention as consistent as possible. It is recommended by the findings that for the committee to be seen as being effective it should as part of its guidelines has a policy of zero tolerance to fraud in an organization, and all cases of fraud need to be taken seriously, investigated, and resolved.

One of the researchers of audit committee effectiveness Beasley (1996) used archival data for the period when the audit committees were voluntary in the public sector to study the relationship between occurrence of financial statement fraud and the presence of audit committees in the public sector. The study found out that the existence of an audit committee reduced the likelihood of stakeholder and management disagreements in the area of corporate fraud. He scrutinized the association between the structure of the audit committee of an entity and the probability of the occurrence of financial statement fraud. In addition, he examined if the presence of an audit committee has the effect of reducing financial statement fraud in an entity. This he did by using a sample of fraud and non- fraud firms with the finding that non-fraud entities have a greater percentage of non -executive directors than fraud entities. The results gave a more detailed definition of outside directors, by separating outside directors into grey and independent directors. Despite the distinction of the director definition, the results indicate that the presence of an audit committee was not associated with a reduced likelihood of financial statement fraud if the full board characteristics are not evaluated. Finally, complementary analysis suggests that the likelihood of fraud decreases as (1) the level of stock ownership by outside director's increases; and (2) the number of years of board service for outside director's increases. Further, the likelihood of fraud increases as the

number of directorships held by outside directors in other firms increases. Collectively, these results highlight the importance of examining corporate board-level factors when evaluating the impact of corporate governance on financial reporting quality.

In studying the effect of non-executive directors on the effectiveness of audit committees in their monitoring role on financial statement fraud, Beasley et al. (2000) used fraud companies that are guided by the Securities and Exchange Commission requirements and benchmarked the companies with the best corporate governance practices in the industry. They reported that the findings from the comparisons indicate that fraud companies have a lower proportion of non-executive directors in their audit committees than non-fraud companies. This study hypothesized that state corporations whose audit committees are properly formed to include the recommended characteristics as required by legislation in Kenya and global best practices are effective in reducing the number of financial statement restatements and reported cases of financial statement fraud respectively.

2.6 Vetting Financial Statements Integrity

State Corporations financial statements are used as communication tools to various stakeholders who include the Kenya Revenue Authority (KRA), the Public Accounts Committee (PAC), and the Office of the Auditor General (OAG). The Public Financial Management Act (2012) article 81 section 3 requires all public entities to prepare factual financial statements that show a true and fair view of the public entity during the financial year of the government. The regulations require that the statements are prepared in accordance with the generally accepted accounting standards that are issued from time to time. The OAG on the other hand is mandated by section 4 of the same Act to audit the financial statements in order to ensure that they reflect a true and fair view of the public entity in question. One of the responsibilities of the AC is to independently ensure that there exists sound financial management in state corporations. This can only be achieved through the vetting of the integrity of financial statements in the state corporation in which they are appointed. (Abbott et al. 2004; Aier et al. 2005) suggest that the reduction in the number of financial statement restatements, their magnitude and impact to an entity can be used as a proxy measure of the AC effectiveness.

Financial statement restatements arise when the financial statements that are released by an entity are re-issued in the subsequent financial year to reflect the true position after re-adjustment. Researchers like Plumlee, M., (2010) who have studied causes of public institutions financial statement restatements are of the view that the restatements are because

of varying causes that arise from accounting transactions. They posit that these accounting transaction problems could arise from weak financial policies that are applied in the public institution, the treatment of revenue and expenses in the financial statements and restructuring of the public institutions. They therefore suggest that an effective audit committee has an oversight role in policy formulation regarding financial reporting.

Researchers Stanley and DeZoort (2007) who studied the occurrence of financial statement restatements that have happened after the enactment of the Sarbanes-Oxley Act of 2002 state that such restatements are as a result of fraudulent intentions and erroneous accounting practices. They posit that such restatements arise out of failures that come from the original financial statements of the entity, which originally contained the material errors. In order for the study to meet the two objectives of the study, first to find out if the audit committees meet the legislative requirements on audit committee characteristics and secondly to determine the effect of audit committees' characteristics on their effectiveness the study hypothesized that state corporations that experience financial statement restatements have ineffective audit committees.

2.7 Characteristics of Effective Audit Committees

The State Corporations Act Cap 446 section 6 requires all the public sector entities to establish effective audit committees. The committees established are required by the Act to have the following characteristics among others director independence, size, tenure, expertise in terms of financial abilities, and have frequency of meetings that are well set. Researchers (Kalbers and Fogarty 1993; DeZoort 1998; Lindsell 1992), have evaluated audit committee effectiveness in the public sector have used the audit committee characteristics as criteria for evaluating the phenomena. Their findings and literature though at variance has acknowledged a number of characteristics that are perceived to represent effective audit committees. They posit that some of the characteristics of effective audit committees include having a financial expert in the audit committee, having a majority of independent audit committee members, the meeting frequency of the committee, the size of the audit committee and prescribed audit committee tenure as per various pieces of legislation on audit committee composition. This study uses the proxy variables of director independence, multiple directorships, director financial expertise, meeting frequency of the committee, size of the committee and tenure to measure audit committee effectiveness. Each of the characteristics of effective audit committees used in this study is reviewed below and hypothesis developed to guide the study.

2.8 Independence

The State Corporations Act Cap 446 section 6 and the Treasury Circular No 6, of 2005 requires that the audit committees of State Corporations should be independent of the management of the state corporation. This the regulation states will subsequently aid in the committee's ability to achieve the oversight role effectively because the independent directors are not actively involved in the day-to-day running of the affairs of the public entity. Independence has been defined by (Goodwin and Yeow, 2001) as the relationship that enables the directors in the audit committee to exercise objective and independent judgment without interference or bias in their functions while serving in the audit committee. Studies give divergent views on whether all the directors should be independent of the management as the Blue Ribbon Committee (1999) recommends or whether this is dependent on the entity's circumstances, Hussein (2003) posits that the director's independence can be premised on the entity's circumstances or the entire committee should be composed of independent directors. They however do not conclusively state whether they should all be independent or its entity dependent.

Others like Joshi and Wakil (2004) in their study on the behavior of committees of audit and the resultant effectiveness after the implementation of recommendations of the Blue Ribbon committee, which guides the formation of the committee, and its roles report that director independence is an important characteristic for an entity's audit committee. The argument that independent directors are better suited to ensure high integrity financial statements in the public entity in which they are serving is put forward by a number of researchers (Abbot and Parker, 2000; Carcello and Neal, 2000) who put forward a number of reasons for this argument. First, they posit that director independence is not tied economic dependence that the full time directors are tied to in the public entity in which they serve. Because of this less economic dependence then they are said to exhibit less bias in the public entity's financial reporting and will not accept any of the unprofessional conduct from the management that may distress its financial outcome.

Secondly, they argue that independent directors who exhibit professional skepticism are likely to demand higher quality of audits from both the internal and external auditors while carrying out their oversight functions in the public entity. They conclude that the expected high quality of service from internal and external auditors will only be achieved if the independence of the directors is given prominence it serves. Using the reputational capital theory in their study Fama and Jensen (1983) explain why independent directors are better decision makers in the entities in which they serve. They opine that the high reputation

expected of them by the stakeholders of the public entity makes them perform their roles more professionally in order to develop and guard their reputations in decision-making. This therefore makes the independent directors guard their reputation against impairment because of financial statement restatement occurrence.

Beasley (1996) in his research gives the opinion that once the shareholders are aware that an audit committee is made up of a large proportion of independent directors it will act as a signal to the stakeholders that the resultant audit committee is effective in their monitoring and oversight roles in the public entities. While supporting the results of Fama & Jensen (1983) on reputational capital enhancement theory, Abbott and Parker (2000) are of the opinion that the independent directors guard against damaging their reputations while serving in the audit committee. This they suggest is due to the opinion that the failure of the audit committee to carry out its monitoring roles effectively when they are perceived to be independent will make the stakeholders to react negatively to the independent directors. They posit that a committee that is composed of a large proportion of independent directors is likely to demand a higher audit quality service and this will subsequently lead to the identification and reduction in the number of the financial statement restatements and financial statement fraud in the entity.

Lastly they report that, having a large proportion of independent directors in the committee helps create a conducive and helpful environment for the internal and external audit activity in an entity. This environment makes the audit committee effectively monitor the financial statement fraud and vet the integrity of financial statements. These findings are in agreement with those of (Haniffa and Cooke, 2002) who posit that when an audit committee is made up of a large proportion of independent directors it acts as a monitoring instrument in the vetting of financial statement integrity in a public entity. While explaining the circumstances that inspire the directors who are independent of management in their oversight roles other researchers (Carcello and Neal 2000, 2003; Baysinger and Butler 1985) are of the opinion that they are able to perform their roles effectively because they have little baggage in terms of economic or psychological linkages with the management entity in which they serve. While agreeing with these findings, (Abbott et al. 2003) suggest that a committee that is composed of a larger proportion of independent directors is likely to concentrate its efforts in ensuring that the internal controls in the area of financial statement reporting are strong. They conclude that stronger internal controls therefore reduce the likelihood of financial statement restatements and financial statement fraud. This definition offered by this study of an independent director is one who has no close relationship with the

State Corporation either in person or through close family members or through close business relationships.

2.9 Multiple Directorships

Despite the several pieces of legislation such as the State Corporations Act Cap 446 and the Treasury circular (2005) on audit committees, which requires some of the audit committee characteristics such as independence uniform across all public entities in Kenya, this study posits that the independence of most is negatively affected when they sit in more than one board (multiple directorships). In Kenya, the appointment of directors has for long been the prerogative of the cabinet secretary responsible for the state corporation. This is according to the findings by Odhiambo (2003) who reports that this type of appointment is mainly because of the factor of political preferentialism. From the foregoing observation of multiple directorships in Kenya, this study postulates that there are other factors that affect the director independence in an entity among them which is the variable of multiple directorships (AC-MD). This study will address the effectiveness of the committee by using the proxy variable of multiple directorships in order to answer the question of whether multiple directorships is associated with the effectiveness of the audit committee. The variable of multiple directorships that will be used in this study will be based at the overall committee level.

One of the proponents of agency theory and labor market theory Lambert, R. A. (2006) envisage that audit committee multiple directorships can affect their effectiveness in their various roles through different ways. He proposes that a committee that has a high proportion of directors holding more than one seat in other entities is likely to face a negative effect in terms of time constraints because they cannot effectively cope with the more than one seat where they are expected to offer oversight roles. The other view put forward is that a committee with a large proportion of multiple directorships will put more effort in their oversight role in the entity more diligently because they are more concerned about their reputation from the eyes of the stakeholders. They hence have more experience and skills that they have gathered across entities, which they may transfer across firms. He concludes that multiple directorships in the committee are associated with financial statement integrity. Therefore, the committee with high multiple directorships are highly effective in the role of vetting financial statement integrity than a committee composed of a small proportion of multiple directorships.

In their study of ACMD and the design of a reward system in the committee researchers Zheng, X., and Cullinan, (2010), posit that there is no relationship between ACMD at the overall committee level and financial statement quality. They however indicate that there is a positive relationship between ACMD and financial statement quality when the chair of the audit committee has financial expertise. They conclude that for the committee to be effective in its vetting of the financial statement integrity it is important that the chair of the committee to have financial expertise so that they can be able to guide the committee in financial statement vetting. This they state is important irrespective of the number of seats that they hold in other entities. Research carried out by Fich and Shivdasani (2007) while using the agency theory perspective offers a consistent finding to that of agency theory by giving the opinion that directors holding multiple directorships are ineffective in their roles due to time constraints and efforts. This is in agreement with the finding of (Lambert, 2006). While trying to extend the findings of the prior literature on ACMD this study defines multiple directorships as the proportion of directors holding more than one seat/directorship in the audit committee. In doing so, the study concentrates on multiple directorships at the audit committee level. This is in departure from the definition offered by (Zheng, X., and Cullinan 2010).

2.9.1 Financial Expertise

The Kenya Treasury Circular 2005 on the operationalization of the audit committees gives the audit committee among others the duty of financial system review in order to ensure that there ensure the existence of sound public financial management. This duty therefore requires that the directors should have the most recent and relevant financial expertise to enable them carry out oversight in financial management. The legislation therefore implies that for the committee to be effective in ensuring sound financial reporting, they should have financial expertise. Regulatory bodies in Kenya including accounting bodies, government agencies such as the Kenya revenue authority (KRA) and the world over have developed so much interest in the quality of financial statements that the public sector entities produce. This is because the financial statements of public entities are a means of communicating information about the public entity to stakeholders.

Financial statements of an entity act as a standard way of communicating to the outsiders the financial position (Johnson, Khurana and Reynolds, 2002). Others like Warren and Reeve, (2007) on the other hand express the opinion that the stakeholders depend on the financial information of the public entities because this information is used as a way of

assessing the economic performance and situation of the entity because of the interest of the stakeholders in making economic decisions regarding the public entity and to evaluate and monitor the management actions. The interest that is shown by the stakeholders including the government on the economic performance and financial position of public entities has made it a requirement that the audit committee, which is a tool of monitoring management actions of the public entity, should comprise of financial experts in its composition. Researchers on audit committee financial expertise report contradictory opinions on whether audit committees of public entities should possess financial expertise in their establishment. The foundation underlying the recommendation is that the ability to read and understand the financial statements of an entity by the audit committee is highly made effective when the committee directors have the most relevant and most recent financial expertise.

Researchers Kalbers and Fogarty (1993) in their findings contend that the financial expertise is a great tool to an individual director in the committee. They posit that the relevant financial expertise makes it more convenient and improves their monitoring function. Researchers Abbott et al. (2003), while using the demand based theory report that a committee that is composed of a large proportion of financial experts is likely to demand more audit services of high quality in the area of financial statement vetting hence the incidence of financial statement restatements and financial statement fraud is significantly reduced in the entity in which they serve. According to (DeFond et al. 2004; McDaniel et al.2002; DeZoort and Saltero 2001; Archambeault and DeZoort, 2001), financial expertise is the number of directors of the committee with financial expertise. They measure financial expertise as the number of directors who poses the most recent and relevant financial expertise in the audit committee. They use this proxy variable to measure if there is at least one financial expert in the audit committee. They suggest that an audit committee that has a minimum of one financial expert it is highly effective and is likely to reduce the incidence of financial statement restatements and financial statement fraud their findings however ignore the definition of a financial expert.

In their definition of financial expertise (Rezaee et al 2003) defined a financial expert in terms of the director who is able to read and comprehend basic statements of financial reporting in a public entity in which he serves as an audit committee member. In departure from prior researchers, Jonathan and Carey (2001) offer a different view and opine that it is unrealistic and unnecessary to have financial experts as directors in the audit committee. They posit that financial and accounting standards are ever dynamic and even trained accountants are not able to keep pace with the ever changing standards hence financial

expertise and audit committee effectiveness are not synonymous. They posit that for a director to be effective he needs to constantly update himself with the most recent financial standards.

Research carried out by (Chen, Houghton & Moroney, 2005) indicates that public sector audit committees are considered effective if in their monitoring role they reduce the incidence of financial statement restatements. In agreement with the prior researchers Bedard (2006, p.227) in a research on audit effectiveness, collected data on audit committee effectiveness by conducting an interview on senior managers, the chief audit executive, audit committee chair, and two audit committee members in three Canadian public firms. The findings were that that on average 79% of the Canadian public firm directors of audit had financial and accounting expertise.

Their results emphasize the fact that directors with expertise in financial matters are able to contribute effectively to the audit committee in the role of maintaining financial statement integrity and monitoring financial statement fraud. They state that for the committee to be effective the directors require a mixture of good skills. DeZoort (2001) used a sample of directors who were assigned and had completed a monitoring function in internal control and had the relevant financial expertise to study the effectiveness of the audit committee. Their findings indicate that the sampled directors in comparison with their counterparts with non-financial expertise were more effective in their monitoring role. Their findings support the opinion of prior researchers like McDaniel et al. (2002) who compared executive M.B.A graduates as proxy for financial managers and audit managers as proxy for financial experts. They found that the directors who had the relevant financial expertise were able to carry out their roles effectively in the role of ensuring the integrity of financial statements subsequently leading to reduction of the incidence of financial statement restatements.

They suggest that an audit committee that is composed of directors with financial expertise is more effective while monitoring financial statement fraud and vetting the integrity of financial statements. They conclude that a committee that is made up of financial experts is more inclined to critically evaluate the important and delicate matters of financial nature in the public entity than would financial literates in the committee. Agrawal and Chadha (2005)'s findings lend support to the prior findings by stating that committees that have at least one financial expert are more likely to reduce the incidence and number of financial statement restatements in the public entity. This is attributed to the notion that the committees with financial expertise are more inclined to effectively oversight the financial

statement integrity. Krishnan and Visvanathan (2008), report the finding that firms with financial experts on their audit committees are more prudent in their financial reporting than firms that have fewer or no financial experts. They opine that the financial experts carry out their oversight function through the mitigation of internal control risks that might arise out of weak internal controls over financial reporting.

On the ability of the directors of the audit committee to ensure the financial statement integrity Krishnan and Visvanathan (2008), report the finding that firms whose directors have the relevant financial expertise are able to ensure financial statement integrity compared to firms with fewer or no financial experts in the audit committee. They opine that the financial experts carry out their oversight function through the mitigation of internal control risks that might arise out of weak internal controls over financial reporting. Consistent with these findings, Dhaliwal et al. (2010) find that an audit committee that is composed of a high proportion of financial experts is able to critically scrutinize the management explanations of any deviations in the financial reports of the entity in which they serve. Prior research by, Raghunandan et al. (2001) suggests a number of ways that the characteristic of financial expertise in the audit committee aids the reduction in the number and incidence of financial statement manipulation as a result of restatements and fraud. First, committees that have at least one director who has financial expertise will easily understand the audit programs and the resultant audit output. This, in turn aids the audit committee in their monitoring activities of monitoring the strength of the existing internal controls in the public entity. This helps in ensuring that there are sound management practices and good corporate responsibility, which ultimately reduces the number and incidence of financial statement restatement.

As a requirement that the audit committee in the conduct of its business should have a better understanding of the audit issues raised that touch on financial reporting, the various risk management mitigation measures put in place, and the internal control environment of the entity, DeZoort and Salterio (2001) give the opinion that an audit committee that is composed of financial experts is highly effective than one that does not have a financial expert. Consequently, when the audit committee gets a better understanding of the raised audit issues they are able to demand a greater external audit scope in the area of financial statement reporting and the detection of manipulation that arises because of restating the financial statements. Divergent findings on the effectiveness of audit committees that are made up of a large proportion of financial experts in the reduction of financial statement restatements are reported by Baber et al. (2007), that there is no significant association

between financial expertise and the effectiveness of the audit committee in reducing the number of financial statement restatements.

A financial expert is defined by the Blue Ribbon Committee (2002) as anyone who has experience that has been gained from any employment position held in the past, in the areas of financial and accounting or a director that is a certified accountant or one that has experience that can be compared to accounting or finance including holding the position of the Chief executive officer in an entity. This study defines financial experts as the directors who have the expertise in the accounting field. The definition that is used in the Accountants Act number 15 of 2008, (Revision 2009) is used as a measure of financial expertise for this study. This is used because the accounting body gives recognition to the financial expert that is registered with the body as an accountant.

2.9.2 Frequency of Meetings

Legislation in form of the Treasury Circular No 6, of 2005 on audit committees in Kenya gives the guidelines on the number of meetings that the committee should hold in a particular year. It goes on to state that the chair of the audit committee can call for additional meetings in the year depending on the enormity of work that is available for discussion. This requirement is in agreement with the Price Waterhouse (1993) report that recommends at least four meetings in a year with a provision that additional meetings can be held if warranted (Price Waterhouse, 1993). Researchers report that some committees hold between two to four scheduled meetings in a year. The number of meetings held are structured and they are held depending on the entity type and the scope of work of the audit committee. They state that for the committee to effectively carry out its activities effectively it should have the provision to hold more than one meeting (Guy and Burke 2008).

Researchers (Bedard & Gendron, 2006) posit that the quality of the committee meetings is a critical factor, which determines its effectiveness in its monitoring role. They recommend that for the audit committee to improve its effectiveness the documentation in the form of committee working papers, the dispatch of the agenda of meetings and documentation in a transparent, organized and timely manner needs to be focused on. This will enable the audit committee to conduct its meetings effectively. On the impact of meeting frequency on the effectiveness of the committee in reducing financial statement restatements, it is reported that the reduction in the incidence of financial restatements is as a result of the frequent meeting with the internal and external auditors where any material accounting or

auditing issues are discussed and resources expended for the mitigation of the issues reported promptly (Raghunandan et al. 1998).

Abbott et al. (2003) gives support to this finding with the report that an increase in frequency of meetings enables the audit committee to reduce the pressures that come because of year-end audits. They posit that the effectiveness of the committee comes because of the increased frequency of meetings where the committee is able to get timely information hence making it effective in reducing the incidence of financial statement restatements before the financial statements are issued to the public. While supporting these findings, Bryan et al. (2004), reports that the increase in the number of meetings contributes to audit committee effectiveness by assuring transparency of the financial statements that are issued to the public. They posit that by the audit committee meeting frequently they have the opportunity to detect any material restatements promptly. While supporting the prior findings, Vafeas (2005) give the finding that there is an inverse relationship between meeting frequency and audit committee effectiveness in reducing the number of financial statement restatements. This study posits that there is an inverse relationship between the number of meetings and its effectiveness.

2.9.3 Committee Size

Legislation and best practices advice entities that their audit committees should be composed of between three to five directors for effective discharge of their oversight roles. The Blue Ribbon Committee and the Cadbury Committee recommend a committee size of between three to five directors, while the Treasury Circular (2005) in Kenya requires that the number of directors of the committees of audit shall be comprised of at least five (5) members. The State Corporations Act Cap 446 section 6 on the other hand recommends a size of not more than seven (7) directors. Other researchers on the subject of committee size conclude that the show of commitment of the management and stakeholders of public entities to the establishment and maintenance of large boards in terms of resources is enough evidence of the importance of an audit committee that is established in a public in entity. They put forward the opinion that a large board influences the audit committee positively in its role of monitoring the reported financial statement fraud and vetting the integrity of financial statements of the public entity in which they serve as directors of the audit committee (Vafeas, 1999; Raghunandan and Rama, 2007 and Sharma et al., 2009).

It is suggested by Anderson et al., (2004), that considerable capital is important for an effective audit committee. This capital is in terms of a sufficient size in the number of

directors it aids the committee. They posit that this size should be large enough as it aids the audit committee to effectively carry out its oversight responsibilities. They suggest that large audit committees bring to the committee a multiplicity of experience because of more time and resources to carry out the monitoring role. In addition, other researchers on the variable of audit committee size and its effect on committee effectiveness, find that large committees act as an arbitration mechanism whenever there is a conflict between the auditors and the management of the entity. They report that the conflicts are because of the fact that audit committees handle technical matters, which they receive in the form of audit reports, which more often cause disagreements because each part has a different view in the way the audit findings and recommendations should be handled.

They report that committees that have smaller audit committees do not offer the internal auditor support when it comes to arbitration issues between the two parties. When the committees fail to support the auditor, the management of the entity arbitrarily replaces the auditors in the form of suspicious auditor switches. They conclude that whenever the management fails to support the auditors when there is a dispute between the management and the auditors, the committee is regarded as not being effective. They go on to report that large committees have the effect that leads to an increase in audit fees. This they opine is because as they suggest large audit committees demand more from the external auditor in the form of expertise and audit scope. As they demand more in terms of expertise and scope from the auditor then the audit committee incurs more resources in terms of audit fees to the auditor. This they hypothesize is synonymous to ineffectiveness (Archambeault, and DeZoort (2001), and Vafeas and Waeglein 2007).

Large size audit committees demand an external auditor with better standing, which in turn leads to high audit fees in form of reimbursement to the auditor Chen and Zhou (2007). Other studies are in agreement with these. Karamanou & Vafeas (2005), report that large committees are more effective because of the fact that they contain a larger knowledge base and expertise that comes from the large size. They posit that the large audit committee brings with it an advantage in terms of diversity of views, which in the end enhances committee effectiveness. Consistent with those who advocate for larger audit committees, s posit that small size committees have the disadvantage that is characterized by a limited number of resources in terms of advice-givers and those who are able to monitor the management of the public entity in terms of financial statement integrity and financial statement fraud (Bushman, Chen, Engel, and Smith 2004).However Karamanou & Vafeas, (2005) give diverse opinions about the effect of a large size board on committee effectiveness. They report that large size

committees are slow in decision making which comes because of opposing views between the directors of the audit committee. This they suggest is because of a defective and often slow communication system that leads to slow decision making and diffusion of responsibility in the audit committee.

Kent & Stewart (2008), state that there is a negative relationship between large size committees and committee effectiveness. In their findings from the effect of committee size on the decision to make a transition from country specific accounting standards to global generally accepted accounting standards, they report that large size boards are slow in decision making as a result of divergent opinions from the directors which leads to slow transition and subsequently lack of effectiveness in the committee. This they propose is because of the quick decision-making that comes with the small size board and the result of the collective responsibility in decision-making. Other researchers like Mangena and Pike (2005), however report no significant influence of audit committee size on its effectiveness.

Consistent with the findings on effectiveness of smaller boards Bedard, et al. (2004) report that other factor apart from committee size should be taken into consideration while determining the committee effectiveness. They suggest that factors like financial expertise, an audit charter and legislation should be taken into consideration while appointing directors of the audit committee. Other researchers like Jensen (1993) argue that one of the causes of ineffective audit committees that are composed of large boards is higher operation cost and free riding by some directors. They therefore suggest that a committee that is composed of many directors can be ineffective as a result of the two factors because when free riding effect takes over a board, then decision making is hard and directors do not take responsibility for decision making as they are simply in the committee for financial gain. They conclude that for the committee to be considered effective a combination of committee characteristics should and not a single characteristic should be considered.

2.9.4 Tenure

Section 6 (2) of State Corporations Act Cap 446 gives the guidelines regarding the tenure of directors appointed to audit committees of State Corporations in Kenya requires that all the appointments to the committees of audit shall be for a renewable period of three years or for such shorter period as may be specified in the notice. In their study on tenure and audit committee effectiveness researchers (Koznik, 1990; Singh and Harianto, 1989) report that long tenure committees have the advantage of gaining essential knowledge about the entity in which they serve. The knowledge they acquire enables them to be effective in ensuring

financial statement integrity and monitoring financial statement fraud. Studies by (Johnson et al., 2002; Carcello and Nagy, 2004), indicate that the audit committee becomes effective over a period of time by the speed at which the audit committee members gain knowledge of the public entity's financial reporting. The newly appointed directors take some time to familiarize themselves with the entity's reporting processes and the distinctive financial reporting issues. This is in agreement with the learning effect theory (Mazur and Hastie, 1978) which states that people develop a learning effect as they gather sound understanding sets as regards a given assignment as they gain more experience on the assignment. The experience gained through long tenure in service eventually leads to effectiveness.

This study hypothesizes that long tenure directors gain more experience in their roles as they serve in the audit committee that they apply in their monitoring roles. Ahdolmohammadi and Wright, (1987) report that the probability of people with more experience succeeding at difficult tasks is high especially if they rely on experience that is gained over time that acts as an advantage comparative to less experienced people. This finding suggests that experience that is gained over time results in effective performance of tasks. Other researchers like Vafeas, (2003) on the other hand give a divergent view on long tenure and committee effectiveness. They report that those directors who serve in the board for long may become entrenched with the management of the public entity in which they serve and that this eventually reduces their effectiveness. They conclude that long tenure directors eventually develop friendly relationship with the management of the entity in which they serve.

Studies by Bebchuk, Fried, and Walker (2002), Bebchuk, and Fried (2003) suggest that in order for the management to control the long tenure directors they may use their authority to skew the nomination process of directors in their favor and direction. They report that once the management of the entity develops strong attachment with the outside directors, they re-appoint those directors who develop strong personal ties and they let them survive long term in the public entity. Those directors who become entrenched overtime with the management of the entity in which they serve lose the independence that is expected of them in their service; this fact is amplified by, the former general counsel of CalPERS Richard Koppes who states, that there is a likelihood of long tenure directors becoming entrenched with the management and acting as executive directors. Thus, they conclude that effectiveness of outside directors may decrease with long board tenure (Canavan, Jones, and Potter, 2004).

Other studies by Canavan et al., (2004) find that long tenure directors are less mobile and less employable; they lack innovation and solutions to the entity's strategic issues. They posit that as businesses go through rapid change and complexities, long tenure directors find it ever increasingly difficult to adopt and keep abreast of technological changes that affect the entity's financial operations, and strategy. They are of the opinion that new audit committee directors are able to bring fresh concepts and important and rational ways of doing things to the audit committee of the public entity. However, long tenure directors may lack the talent to deal with new issues. Krishnan (2005) and Beasley (1996) report that, long tenure directors are more effective in the audit committee. Offering support to the reputational capital enhancement theory of Fama & Jensen (1983) they report that the motivation behind the long tenure directors' effectiveness is the fear of losing the reputation that they gather over time because of serving in the public entity's audit committee. They posit that in order for the individual directors in the audit committee to remain relevant and retain their space in the job market then they must be effective in their roles.

Studies by prior researchers (Salancik, 1977; O'Reilly and Caldwell, 1981) suggest that long tenure directors get committed to the organization in which they serve hence they become more effective in their monitoring roles. They hypothesize that the directors' commitment to an audit committee is further enhanced when the director appreciates that he cannot as a director invalidate the outcomes that arise out of their collective assessment. From the findings, it is evident that extended director tenure makes directors of audit committees more committed to their work and service.

2.9.5 Control Variables

The study controlled for other factors, which the study hypothesized negatively, affect audit committee effectiveness. The two control variables used in the study have their theoretical underpinning in the agency theory. Industry players (principals) are interested in the performance of the specific industry type while the others are interested in the state corporation's size in terms of the annual budgetary allocation in Kenya shillings. The control variables are industry type, and State Corporation size, which are included in the model.

2.9.6 Industry Type

Firm industry is measured by the coding that is used by the International Standard Industrial Classification of All Economic Activities (ISIC). This is supported by the categorization of state corporations in Kenya that is given by the Kipkulei report (2002).

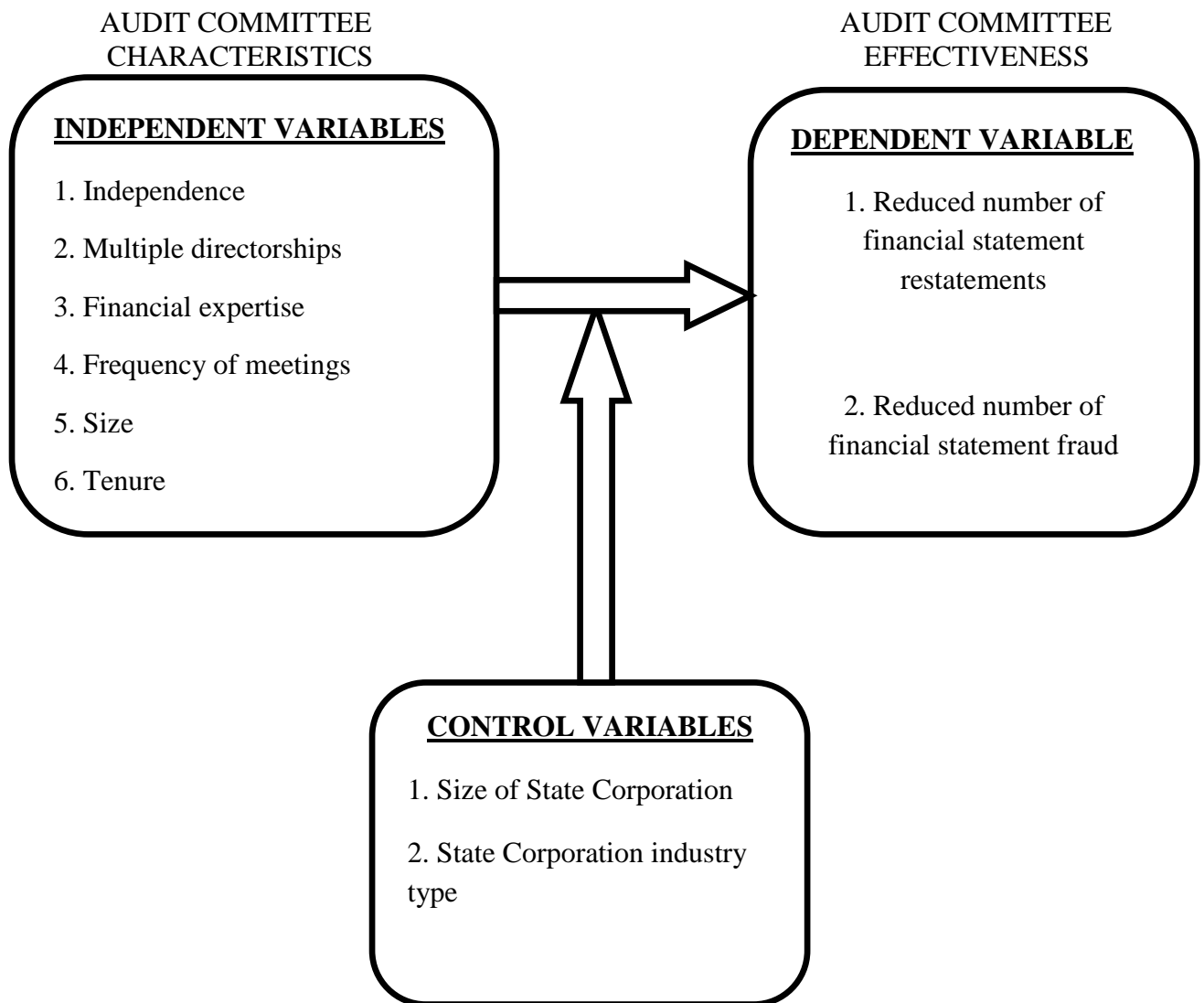
2.9.7 Size

Size of the State Corporation is measured as the amount in Kenya shillings that represents the annual budget of the State Corporation. The use of size in terms of annual budgetary allocation is influenced by the opinion of the researcher that restatements that arise from the recognition of the annual budgetary allocation are due to inconsistent accounting policies. According to the Association of certified fraud examiners report to the nations (2010) occupational fraud is influenced by organizational opportunity. The assumption therefore of using the state corporation size in terms of annual financial allocation in Kenya shillings is premised on the finding above. This study hypothesizes that fraudsters seize the opportunity of increase in financial allocation to commit fraud in an organization.

2.9.8 Conceptual Framework

In this study, it is suggested for safeguarding of the stakeholders' interests under the agency theory it is important for the audit committee to remain effective. The main outcomes of an effective audit committee are therefore (i) more credible financial statements due to reduced number of financial statement restatements, and (ii) reduced number of financial statement frauds. All these outputs ultimately lead to maximizing the State Corporations' long-term performance, which is the ultimate goal of any entity. However, it is hypothesized that two control variables affect audit committee effectiveness of state corporations in Kenya. The two control variables used in this study in the form of size (measured in Kenya shillings of annual budgetary allocation to the State Corporation) and industry type of the State Corporation classified by the International Standard Industrial Classification of All Economic Activities (ISIC).

FIGURE 1
Conceptual framework



2.9.9 Measurement of Variables

The variables used in the study to measure audit committee effectiveness are measured as follows (Appendix 1).

Audit committee effectiveness (ACE) is the variable that was being tested in this study. It is represented by the reduced number of financial statement restatements and financial statement fraud reports as the proxy for audit committee effectiveness. The measure of effectiveness is the reduced number of financial statement restatements as well as the reduced number of financial statement fraud respectively is dummy coded 1 and 0 otherwise.

To construct this composite variable to measure audit committee effectiveness, two dummy variables were created for audit committee effectiveness, where the value of 1

indicates effectiveness and 0 otherwise. The reason for such coding was based on the variables used in Abbott et al. (2004). In particular, prior literature suggests that a larger audit committee or an audit committee containing more members with financial expertise, longer tenure, more independent directors, having a higher frequency of meetings, composed of a bigger size and composed of multiple directorships is more effective at discharging its role.

Finally, this study summed up the number of occurrences of restatement and fraud for each sample observation using the dummy variables 1 and 0 to create a composite measure of audit committee effectiveness, giving it a threshold of 50 % to 100% as reported by Zheng (2008). The study therefore posits that the larger the frequency of occurrence of restatement or fraud, the more ineffective is an audit committee. That is if more than 50 % of the reported cases comprise of financial statement restatement or financial statement fraud, then the audit committee is not regarded effective. The study used six independent variables to represent the characteristics of effective audit committees. The variables used are independence, multiple directorships, expertise in financial matters, frequency of meetings, size of committee, and tenure of the committee.

Meeting frequency was measured as the number of meetings that the committee holds in a financial year. Multiple directorships measures the number of director seats held in other entities by each director. Committee size was measured by the number of committee directors. Tenure was measured as the years of service to the committee. An independent director is one who has no close relationship with the State Corporation either in person or through close family members or through close business relationships. This study defines financial experts as the directors who have the expertise in the accounting field. The definition that is used in in the Accountants Act number 15 of 2008, (Revision 2009) is used as a measure of financial expertise for this study. The control variables that were used in this study were industry type of the state corporation and the size of the state corporation. They were measured as follows. Industry type was measured using the coding for International Standard Industrial Classification (ISIC) of All Economic Activities, Rev.4 (2008) and later recoded into the following: 1 representing Commercial, 2 representing Financial, 3 representing Research, 4 representing, Regional development, 5 Regulatory, 6 Training and 7 Service industry (Appendix III). The state corporation size was measured using the annual budgetary allocation in Kenya shillings to the state corporations.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This Chapter discusses the method and procedures employed in carrying out the research. It also discusses the research design, study population, sample selection and sampling method, data collection method, model specification and data analysis method used. The chapter argues that the strategy adopted for this study represents the most realistic available given the research questions, scope and other limitations that confronted the researcher. According to Kothari (2004), research methodology is a way of systematically solving the research problem.

3.2 Research Design

The design used in this study is the descriptive cross-sectional design that has been used by prior researchers such as Babbie (2004). This is because it is more accurate and it involves a clear and carefully planned description of a phenomena in this case the established audit committees of state corporations. This research design was preferred because it portrays the characteristics of the target population of research effectively (Chandran, 2004). The use of descriptive cross sectional design was preferred because it was important to understand the phenomena of audit committee effectiveness at the particular point in time, in this case 2012 which is the period of the study. It was also important to clearly describe how the various variables of the study influence the committee effectiveness.

3.3 Target Population

The unit of analysis for this study was audit committees of Kenya State Corporations while the population of study comprised of all the Kenya state corporations that share common constitutive instruments of the state corporation Act chapter 446. In the year of the study, 2012 there were 182 State Corporations incorporated by similar constitutive instrument of the state corporations Act chapter 446. They are divided into seven categories namely, financial, commercial, regulatory, service corporations, research, training and regional development State Corporations. (State corporations advisory committee, 2012). All State Corporations in Kenya are required to follow the existing government regulations and others that are issued to guide the operations of these committees. The sampling frame of this study was therefore drawn from the 182 State Corporations in Kenya (Appendix III).

3.4 Sample Selection and Sampling Method

The sample for the study is 177 firm-year observations from 182 State Corporations, for the year, 2012. The period of 2012 was used for this study to coincide with the Public Financial Management Act, 2012 which issues guidelines on financial integrity and quality of financial statements issued by the public sector in Kenya. The study focused on State Corporations in Kenya public sector because they have a similar way of operation and are guided by similar legislation and the constitutive instruments (The State Corporations Act cap 446). From the total population of 182 State corporations in Kenya, 5 State corporations were dropped from the list because they did not meet the selection criteria for this study. The criterion adopted was that all the state corporations selected for the study were expected to have issued the annual audited financial statements at the time of the study. The dropped state corporations from the population had issued unaudited interim financial statements at the time of the study. The dropped state corporations had been in business for only six months during the year of study. This reduced the sample to 177 State corporations that are used for this study.

The sample for this study represents 97 % of the population. This was arrived at after dropping 5 state corporations that did not meet the selection criteria for this study. Purposive sampling was used because the State Corporations in Kenya have similar characteristics in terms of their operation and are governed by similar constitutive instruments as required by the State Corporations Act cap 446. Purposive sampling was therefore relevant for this study as used by (Babbie, 2004). In addition State Corporations are all expected to establish audit committees and ensure integrity in their financial reporting by common legislation (Public Financial Management Act, 2012 and the Treasury Circular No 6, of 2005). The 5 State corporations that were dropped from the sample are from the following industries, Research (N=2), Financial (N=1), and Regulatory (N=2).

3.5 Data Collection Method

This study collected and used secondary data in form of audited annual financial reports of the State Corporations in Kenya online from the website of the Office of the Auditor General (OAG) as well as the annual State Corporations' financial fraud reports from the Ethics and Anti-Corruption Commission (EACC) website for the year 2012. The State Corporations' annual financial reports were examined for compliance with legislative requirements in order to meet objective one that was to determine if the committees meet the legislative requirements on audit committee characteristics. The following characteristics that are required by legislation were collected from the financial reports. They include size of the

committee, financial expertise, meetings frequency, multiple directorships independence which was determined whether the director is an independent non-executive member, multiple directorships and tenure were collected. Audit committee members' biographical information was examined to determine whether a director possessed financial expertise in accounting and are members of ICPAK and the audit committee tenure variable measured how long the particular director served on the state corporation's audit committee. The annual financial reports were also examined to determine if there if there was any reported restatement.

The annual review reports of the Ethics and Anti-Corruption Commission on the other hand provided data regarding any reported financial statement fraud. The study adopted the use of secondary data for a number of reasons, first the fact that the data that was essential to conduct this study are publicly available; it was not considered necessary to generate new data for this specific study. Secondly from the principal perspective the audit committees should be perceived as effective. The view of effectiveness of audit committees in this study is influenced by audit committee characteristics. Therefore the use of data that is publicly available to evaluate audit committee effectiveness was necessary. The annual financial reports of state corporations in Kenya are the only statutorily required piece of information providing a detailed account of the activities that the state corporations are involved in for a specified financial year. The Public Financial Management Act 2012 requires that the annual reports of public entities including state corporations have to be prepared to a certain recommended standard and that such prepared reports have to be certified by the auditor general (State Corporations) in regard to their truth and fairness.

3.6 Research Instrument

For the study to meet the requirements of objective one which was to find out if audit committees meet the legislative requirements on audit committee characteristics, the study used a checklist that was used to collect the required data from the financial statements of the State Corporations that form the population of study. The checklist was based on the requirements of the Treasury circular on operationalization of audit committees (2005), the Kenya Public Finance Management Act, (2012) and the State Corporations Act Cap 446. The data requirements were divided into several categories: Financial statement restatement disclosures, reported financial statement fraud and non-financial disclosures which include, independent directors number, the directors holding more than one seat in other state corporations, the number of financial experts, frequency of meetings in a year, the size of the

committee, committee tenure, the annual financial budgetary allocation in Kenya shillings and state corporation industry type.

TABLE 1
Check List

I. Financial Disclosures:		YES	NO
1	Financial statement restatement		
2	Financial statement fraud		
3	State Corporation size given as the annual budgetary allocation in Kenya shillings		
II. Nonfinancial Disclosures: Audit committee characteristics			
1	Number of independent non-executive directors on the Audit committee		
2	Number of directors holding more than one seat in other boards		
3	Number of financial experts in the audit committee		
4	Frequency of meetings held in a year		
5	Director tenure		
6	Audit committee size		
7	State corporation industry type		

Source: Requirements of Treasury Circular (2005), the State Corporations Act Cap 446 and Public Finance Management Act (2012).

3.7 Data Presentation Method

The data that was collected from the annual financial reports of the sampled state corporations were presented in the checklist for ease of coding and analysis.

3.8 Model Specification

The logistic regression model as used in Abbott et al. (2004) was used to test the effect of the characteristics of the committee on audit committee effectiveness in reducing the number of financial statement restatements and reported financial statement fraud. Restatement was dummy coded as 1 for a restatement and zero for no restatement. On the other hand financial statement fraud was dummy coded 1 for financial statement fraud, 0 for no fraud.

$$\text{Log (ACE)} = \beta_0 + \beta_1 \% \text{ACIND}_i + \beta_2 \% \text{ACMD}_i + \beta_3 \% \text{ACFXP}_i + \beta_4 \text{ACFMT}_i + \beta_5 \text{ACSIZE}_i + \beta_6 \text{ACTNR}_i + \beta_7 \text{SIZE}_i + \beta_8 \text{INDS}_i + \varepsilon \quad (\text{i})$$

Where

i = State Corporation 1 through 177

ACE = Audit committee effectiveness, reduced number of financial statement restatements and financial statement fraud. Dummy coded 1 and 0 otherwise.

ACIND = Independence of the audit committee, the proportion of independent directors.

ACMD = Audit committee multiple directorships, the proportion of directors holding more than one set.

ACFXP = Audit committee financial expertise, the proportion of directors with financial expertise in accounting and are ICPK members.

ACFMT = Audit committee frequency of meetings, the actual number of committee meetings held in a financial year.

ACSIZE = the actual number of directors in the committee.

ACTNR = Audit committee tenure, the time director serves in the committee.

SIZE = the total annual budgetary allocation of a State corporation in Kenya shillings millions represented by the absolute figures in Kenya shillings.

INDS = the industry type of State Corporation, classified by the coding that is used by the (ISIC).

ε = Residual.

3.9 Data Analysis Method

As a way of meeting the first objective of finding out if the audit committees meet the legislative requirements on audit committee characteristics in the State Corporations, the study used the data extracted through a checklist from the population of study. The checklist was based on the requirements of the Treasury circular (2005) on operationalization of audit committees, the Kenya Public Finance Management Act, (2012) and the State Corporations Act Cap 446. The data collected using the checklist developed for this study was coded using the variable measurement formulae for ease of analysis (Table 1). Data analysis was done through regression analysis and correlation analysis. This was done in order to obtain an understanding of the relationship between the variables of the study, to test the significance of the variables and to test the hypotheses that were generated in the study.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

The findings of the study on the effectiveness of audit committees in the public sector in Kenya are presented in this chapter. The test variable of audit committee effectiveness was tested by using six independent variables (six audit committee characteristics) and two control variables. This was done in order to meet the two research, first to find out if the audit committees meet the legislative requirements on audit committee characteristics and secondly to determine the effect of audit committee' characteristics on their effectiveness. This was also done to test the hypotheses of the study that hypothesized a positive influence of the various audit committee characteristics on its effectiveness.

4.2 Results of Descriptive Statistics

Table 2 presents the results of descriptive statistics. The results indicate that on average 0.493 of directors are independent of management (ACIND) with a minimum of 0.1 and a maximum of 1.0. On average 0.59 of the directors sit in more than one board (ACMD). On average 0.37 of the directors have financial expertise (ACFXP). The minimum is 0.1 and the maximum is 0.6. On average the committee meets six times in a year (ACFMT=6.03) with a minimum of three and a maximum of nine meetings. On average an audit committee contains about seven directors (ACSIZE=7.13) the minimum being five and the maximum being nine directors. The average tenure is about three years (ACTNR=2.87) the minimum tenure is one while the maximum is five years. The results indicate that 0.71 of State Corporations had restated their financial statements is while 0.52 percent had reported financial statement fraud.

TABLE 2
Descriptive Statistics (N=177)

Variable Description	N	Minimum	Maximum	Mean	Standard Deviation
ACIND	177	.1	1.0	.493	.2075
ACMD	177	.1	1.1	.590	.2646
ACFXP	177	.1	.6	.327	.1285
ACFMT	177	3	9	6.03	1.500
ACSIZE	177	5	9	7.13	1.103
ACTNR	177	1	5	2.87	1.108
SIZE(Kshs)	177	.00	1.00	.7175	.45149
INDS	177	1	7	4.18	2.231
RESTATEMENT	177	0	1	.71	.454
FRAUD	177	0	1	.52	.501
Valid N (listwise)	177				

4.3 Correlation Analysis

In order to obtain an understanding of the relationship between the variables of the study, correlation analysis was performed. According to Norusis (2000) correlation analysis is useful for looking at the strength of the relationship between variables. The correlation coefficients fall in the range of -1 to +1. When a correlation coefficient takes the value of -1 it is interpreted to mean that there is a perfect negative correlation between the variables. A correlation coefficient of value +1 is interpreted to mean that there is a perfect positive correlation between the variables. While a correlation coefficient of value 0 indicates that there is no correlation between the variables. The study hypothesizes in null hypothesis that there exists no relationship between the variables used in the study. SPSS was used to generate the correlation coefficients as well as the relationship between the variables.

Table 3 provides the values and the strengths of the correlation for the variables used in the study. The relationship between ACSIZE and ACIND is negative ($r = -0.393$), this is interpreted to mean that there is a perfect negative correlation between ACSIZE and ACIND. The $R^2 = 0.154449$ or 15.4%. This means that ACIND shares 15.4% of the variance with ACSIZE but still leaves 84.6% of other variables that are not accounted for. Therefore the cause of differences in ACIND can only be partially explained. The relationship between ACSIZE and ACMD on the other hand is negative ($r = -0.154$). This is interpreted to mean that there is a perfect negative correlation between ACSIZE and ACMD. The $R^2 = 0.023716$ or 2.3716% suggesting that ACMD shares 2.37% of the variance with ACSIZE (but still leaves 97.63% of other variables that are not accounted for and the cause of differences in ACMD can only be partially explained).

The relationship between ACSIZE and ACFXP is negative ($r = -0.294$). This is interpreted to mean that there is a perfect negative correlation between ACSIZE and ACFXP. The $R^2 = 0.086436$ or 8.6% suggesting that ACFXP shares 8.6% of the variance with ACSIZE (but still leaves 91.4% of other variables that are not accounted for and the cause of differences in ACFXP can only be partially explained). Lastly the relationship between ACSIZE and ACFMT is negative ($r = -0.202$). This is interpreted to mean that there is a perfect negative correlation between ACSIZE and ACFMT. The $R^2 = 0.040804$ or 4% suggesting that ACFMT shares 4% of the variance with ACSIZE (but still leaves 96% of other variables that are not accounted for and the cause of differences in ACFMT can only be partially explained).

On the other hand the relationship between ACMD and ACIND is positive ($r = 0.158$) and significant at 0.10 level. This is interpreted that there is a perfect positive correlation between ACMD and ACIND. The $R^2 = 0.024964$ or 2.5%. So ACMD can only explain 2.5% of the variance in ACIND. The relationship between ACFXP and ACIND is perfectly positively correlated ($r = 0.243$) and significant at 0.10 level which when squared becomes $R^2 = 0.059049$ or 5.9%. So ACFXP can only explain 5.9% of the variance in ACIND. Lastly the relationship between ACTNR and ACIND is perfectly positively correlated ($r = 0.148$) and significant at 0.10 level which when squared becomes $R^2 = 0.021904$ or 2.2%. So ACTNR can only explain 2.2% of the variance in ACIND.

In order to test for multicollinearity, the study adopted the threshold of 0.8 from prior studies. Hair et al (2010), Gujarati, and Porter (2009) suggest 0.8 as the beginning of the correlation level at which multicollinearity negatively affect the regression analysis. The correlation matrix in Table 4.2 below shows that the maximum absolute value among the correlation coefficients is -0.393 between ACSIZE and ACIND. This is below the threshold of 0.8 proposed by Hair et al (2010), Gujarati, and Porter (2009) for evidence of severe multicollinearity

TABLE 3
Correlations Analysis (N=177)

Correlation Matrix						
Variables	ACIND	ACMD	ACFXP	ACFMT	ACSIZE	ACTNR
ACIND	1.000	.158 .063*	.243 .063*	.243 .216	-.393 .000***	.148 .083*
ACMD		1.000	.071 .408	.074 .387	-.154 .070*	-.042 .625
ACFXP			1.000	.036 .677	-.294 .000***	.048 .578
ACFMT				1.000	-.202 .017**	-.045 .600
ACSIZE					1.000	-.124 .147
ACTNR						1.000

Notes: *** significant 0.01 level; ** significant at 0.05 level; * significant at 0.10 level.
Where:

1. ACIND- Audit committee independence
2. ACMD- Audit committee multiple directorships
3. ACFXP- Audit committee financial expertise
4. ACFMT- Audit committee frequency of meetings
5. ACSIZE- Audit committee size
6. ACTNR- Audit committee tenure

4.4 Regression Analysis

In Chapter one, six hypotheses were formulated. They were used to test the relationship between the characteristics of audit committees and its effectiveness. Table 4 contains the results of the regression analysis that examines the effect of audit committee characteristics on audit committee effectiveness in reducing the number of financial statement restatements to test H1 to H6. The variable that measures audit committee independence (ACIND) showed a significant negative relationship between audit committee independence and committee effectiveness. The ACIND produced a co-efficient of -1.556. The 0.211 odds ratio for ACIND indicates that a one unit change in the proportion of independent audit committee members in the audit committee decreases the odds of audit committee effectiveness in reducing the number of financial statement restatements by a factor of 0.211. These results are inconsistent with H1 which states that, the proportion of independent directors in the audit committee has a positive influence on its effectiveness. Therefore H1 is not accepted. The researcher expected a positive beta coefficient because of

the H1 alternative hypothesis. These results are consistent with those of Piot and Janin (2007) who do not find any association between reduced financial statement restatement and the existence of majority independent directors. They report that only the presence of an audit committee is associated with lower financial statement restatements.

This could be attributed to the opinion that the audit committee members could be perceived as independent of the State Corporation but this independence is eroded as they become affiliated with the management and as a result of the resource dependence theory they rely more and more on the financial rewards from the State Corporation. The variable that measures multiple directorships (ACMD) showed a significant positive relationship between audit committee multiple directorships and committee effectiveness. It produced a co-efficient of 9.200. The 0.0989 odds ratio for ACMD indicates that a one unit change in the proportion of audit committee multiple directorships increases the odds of audit committee effectiveness in reducing financial statement restatements by a factor of 0.0989. Thus the likelihood of the audit committee being effective given multiple directorships is 0.0989 %. These results allow acceptance of H2 which states that, the proportion of multiple directorships in the audit committee has a positive influence on its effectiveness. These results are consistent with those in the Zheng (2008)'s study that the number of financial statement restatements decreases as the proportion of multiple directorships increases in the audit committee. This could be attributed to the opinion that as multiple directorship increases the audit committee members with multiple directorships bring varying degrees of expertise and skills to the audit committee which in turn aids the committee in vetting the integrity of financial statements hence reducing the number of financial statement restatements.

The variable that measures audit committee financial expertise (ACFXP) showed a significant negative relationship between audit committee financial expertise and committee effectiveness. The ACFXP produced a co-efficient of -17.600. The 0.000 odds ratio for financial expertise ACFXP inconsistent with H3 indicates that for each one point increase on the audit committee financial expertise reduces the audit committee effectiveness in reducing the number of financial statement restatements by one point. This therefore allows the rejection of H3. These results are consistent with those in the (McDaniel *et al.*, 2002; Thornton, 2002)'s study that the number of financial statement restatements increases as the proportion of financial experts increases in the audit committee. These results could be attributed to the argument is that audit committee members with financial expertise may actually be less effective than members with other qualifications, such as hands-on

management experience (AIMR, 1999). Additionally, financial experts and literates provide different but matching viewpoints (McDaniel *et al.*, 2002; Thornton, 2002). Hence, an audit committee composed of a high proportion of financial experts may be less effective at reducing the number of financial statement restatements than a more balanced board.

The variable that measures audit committee frequency of meetings (ACFMT) produced a co-efficient of -.500 and a non-significant negative relationship between audit committee frequency of meetings and committee effectiveness. The 0.606 odds ratio for ACFMT indicates that a one point increase in the audit committee frequency of meetings increases the odds of audit committee effectiveness in reducing the number of financial statement restatements by a factor of 0.606. This is inconsistent with H4 which states that the frequency of audit committee meetings has a positive influence on its effectiveness. This allows us to reject H4. These results are consistent with those in the Davidson *et al.* (2005) and He *et al.* (2007)'s studies which find no evidence of a positive influence on audit committee effectiveness in reducing the number of financial statement restatements by the frequency of meetings. This could be attributed to the institutional theory that focuses on systems and processes. This suggests that an entity's activities and processes are influenced by particular requirements that are aimed at increasing effectiveness. This study therefore suggests that the frequency of meetings is influenced by the legislative requirements that the audit committee shall meet at least four times in a year.

The variable that measures audit committee size (ACSIZE) showed a non-significant positive relationship between audit committee size and committee effectiveness. The ACSIZE produced a co-efficient of 0.015. The 1.015 odds ratio for ACSIZE) indicates that a one point increase in the audit committee size increases the odds of audit committee effectiveness in reducing financial statement restatements by a factor of 1.015. This is consistent with H5 which states that the size of the audit committee has a positive influence on audit committee effectiveness. Therefore H5 is accepted. These results are consistent with those in the Beasley (1996)'s study that the number of financial statement restatements decreases as the proportion of multiple directorships increases in the audit committee. The plausible explanation for these results is that as the audit committee size increases then the audit committee gets more combination of skills from the increased committee on vetting the quality of financial statements. They are therefore able to monitor financial statement preparation and hence reduce the number of financial statement restatements.

The variable that measures audit committee tenure (ACTNR) showed a significant positive relationship between audit committee tenure and committee effectiveness. The

ACTNR produced a co-efficient of 1.251. The 3.493 odds ratio for ACTNR indicates that a one point increase in the audit committee tenure increases the odds of audit committee effectiveness in reducing the number of financial statement restatements by a factor of 3.493. This is consistent with H6 which states that long tenure directorship in the audit committee has a positive influence on its effectiveness. Therefore H6 is accepted. These results are consistent with those in the Beasley (1996)'s study that the number of financial statement restatements decreases as the tenure of the audit committee increases. The plausible explanation for these results is that as the audit committee tenure increases then the audit committee becomes more aware of the State Corporation's environment and acquires more skills on the quality of financial statements. They are therefore able to monitor financial statement preparation and hence reduce the financial statement restatements. The conclusion is that the variable of multiple directorships and committee size are the key variables which influence audit committee effectiveness in reducing financial statement restatements. However the variable of committee size is statistically not significant.

TABLE 4
Financial statement restatements

	B	S.E	Wald	Df	Sig.	Exp(B)
Step 1 ^a ACIND	-1.556	.721	4.659	1	.031**	.211
ACMD	9.200	4.810	3.658	1	.056*	0.0989
ACFXP	-17.600	6.201	8.055	1	.005**	.000
ACFMT	-.500	.557	.806	1	.369	.606
ACSIZE	.015	.167	.008	1	.930	1.015
ACTNR	1.251	.627	3.982	1	.046**	3.493
SIZE (Kshs)	-.429	.0679	.398	1	.528	.651
INDS	-.080	.081	.967	1	.325	.923
Constant	2.195	2.039	1.159	1	.282	8.979

*** Significant at 0.01 level; ** significant at 0.05 level; * significant at 0.10 level.

Table 5 contains the results of the regression that examines the effect of audit committee characteristics on audit committee effectiveness in reducing the number of financial statement fraud.

The variable that measures audit committee independence (ACIND) showed a significant negative relationship between audit committee independence and committee effectiveness. The ACIND produced a co-efficient of -1.780. The 0.169 odds ratio for ACIND indicates that a one unit change in the proportion of independent audit committee members in the audit committee decreases the odds of audit committee effectiveness in reducing the

number of financial statement fraud by a factor of 0.169. These results are inconsistent with H1 which states that, the proportion of independent directors in the audit committee has a positive influence on its effectiveness. Therefore H1 is rejected. These results are consistent with those of Piot and Janin (2007) who do not find any association between reduced financial statement fraud and the existence of majority independent directors. They report that only the presence of an audit committee is associated with lower financial statement fraud.

This could be attributed to the opinion that the audit committee members could be perceived as independent of the management of the State Corporation but this independence is eroded as they become affiliated with the management and as a result of the resource dependence theory they rely more and more on the financial rewards from the State Corporation. The characteristic of AC multiple directorship (ACMD), is not significant. It however produces a co-efficient value of 2.917. The log odds of 18.483 indicate that a one point increase in the number of multiple directorships in the audit committee increases odds of the audit committee effectiveness by a factor of 18.483. However this variable is not significant and this could be due to chance. That is AC multiple directorships does not have an influence in audit committee's effectiveness in reducing the incidence of financial statement fraud. H2 which states that the proportion of multiple directorships in the audit committee has a positive influence on its effectiveness is not supported. This result could be attributed to the explanation that audit committee members hold seats in more than one state corporation not because of their effectiveness but because of their relationship with the appointing authority and because of economic gains. This finding adds support to that of Lambert, (2006) who reports that the effectiveness of multiple directors is negatively affected by time constraints because the directors serve in more than one entity hence they cannot offer their full effort in serving one entity.

The variable that measures audit committee financial expertise (ACFXP) showed an insignificant negative relationship between audit committee independence and committee effectiveness. The ACFXP produced a co-efficient of -.141 and an odds ratio of 0.869 which means that a one point increase in the number of financial experts in the audit committee increases the odds of audit committee effectiveness by a factor of 0.869. However this could be due to chance as it is not statistically significant. That is financial expertise does not influence the audit committee effectiveness in reducing the incidence of financial statement fraud. Therefore H3 which states that the proportion of financial experts in the audit committee has a positive influence on its effectiveness is not supported. This finding could be

attributed to the notion that financial experts are not necessarily certified fraud examiners hence they may not be able to detect financial statement fraud.

The characteristic of AC meeting frequency (ACFMT) is not statistically significant. It produces a co-efficient of 0.057 and an odds ratio of 1.059 which means that a one point increase in the frequency of meetings increases the odds of audit committee effectiveness by a factor of 1.059. However this could be by chance as the variable is not significant. That is AC meeting frequency does not influence the audit committee's role in reducing the incidence of financial statement fraud. H4 which states that the frequency of audit committee meetings has a positive influence on its effectiveness is therefore not supported. This could be attributed to the argument that audit committees that meet more than four times in a year could be motivated by economic gains from the board allowances. This finding is similar to that of researchers Davidson et al. (2005) and He et al. (2007) whose results report no indication of a significant relation between the number of audit committee meetings and financial statement fraud.

The characteristic of AC size (ACSIZE) produces a co-efficient of -0.091 and an odds ratio of 0.913 however it is not significant. That is AC size does not influence the audit committee in its role of reducing the incidence of financial statement fraud. H5 which states that the size of the audit committee has a positive influence on audit committee effectiveness is not supported. The plausible explanation to this finding is that more audit committees in state corporations in Kenya are motivated by the financial gains and rewards by the appointing authority. This finding is similar to that of Jensen (1993) who argues that, larger boards could be insignificant because of more free riding by members. This is because most of the directors are not actively involved in decision making but enjoy a passive role and serving their own interests in the audit committee. This argument lends support to the agency theory which argues conflict of interest between the agent and the principal is as a result of self-serving interests of the agent.

The characteristic of AC tenure (ACTNR) produces a co-efficient of -0.368 and an odds ratio of 0.692 however it is not significant. Therefore audit committee tenure does not influence the audit committee effectiveness in reducing the incidence of financial statement fraud. H6 which states that long tenure directorship in the audit committee has a positive influence on its effectiveness is therefore not supported. The plausible explanation for this finding could be that as the audit committee members spend more years in the audit committee, they will be more entrenched in the system of management and are likely to be less effective in their oversight role. These findings add support to those of Vafeas, (2003)

argument that long tenure directors are more likely to have a friendly relationship with the management, which is developed over time hence making them less effective. The conclusion is that AC with higher multiple directorships, and more frequent meetings will be more effective in reducing the number of financial statement fraud in the state corporations in Kenya. However the influence of frequency of meetings could be by chance as it is statistically not significant. Audit committee independence, financial expertise and meeting frequency, have no influence on the audit committee effectiveness in reducing the incidence of financial statement fraud.

TABLE 5
Financial Statement Fraud

		B	S.E	Wald	Df	Sig.	Exp (B)
Step 1 ^a	ACIND	-1.780	.745	5.704	1	.017**	.169
	ACMD	2.917	4.496	.421	1	.516	18.483
	ACFXP	-.141	5.925	.001	1	.981	.869
	ACFMT	.057	.558	.011	1	.918	1.059
	ACSIZE	-.091	.155	.348	1	.555	.913
	ACTNR	-.368	.596	.382	1	.537	.692
	SIZE (Kshs)	2.580	.718	12.920	1	.000***	13.200
	INDS	-.008	.077	.011	1	.916	.992
	Constant	-1.025	1.957	.274	1	.600	.359

*** Significant at 0.01 level; ** significant at 0.05 level; * significant at 0.10 level.

4.5 Results of Control Variables

The control variable results do not generally support the predictions of the prior literature. In this study, results for control variables often lack significance. The results in Table 4 indicate that there is no significant association between the two control variables of size and industry type and audit committee effectiveness in reducing the number of financial statement restatements. The results in Table 5 on the other hand indicate that the 13.200 odds ratio for state corporation size indicates that a one point increase in the size of the state corporation in budgetary allocation reduces the audit committee effectiveness in reducing the number of financial statement fraud by a factor of 13.200.

The results imply that as the size of the State Corporations in terms of annual financial allocation in Kenya shillings increases, financial statement fraud also increases. This could be attributed to the fact that the management of the State Corporations (agents) is interested in serving their own interests rather than championing the interest of the (government) principal. This finding gains support from the agency theory as defined by Millichamp and Taylor (2008) who report that the conflict of interest that arises between the principal and agent is as a result of the agents not acting in the interest of the principal.

4.6 Overall Model Evaluation

From the regression results relative to previous studies, the model fairly explained audit Committee effectiveness concept measured by the reduced number of financial statement restatements and financial statement fraud respectively. The explanatory power of the model is fairly better than previous studies on audit committee effectiveness. For instance, Collier and Gregory (1996) in their research reported a 13% (R^2) correlation compared to the researcher's models that generated a Nagelkerke R^2 of 24.4% for financial statement fraud and a Nagelkerke R^2 of 14.1% for financial statement restatement respectively. This means that for financial statement fraud the variables of the study can only explain 24.4 % of audit committee effectiveness. While for financial statement restatement the variables can only explain 14.1% of audit committee effectiveness.

TABLE 6
Overall Model Evaluation

Financial Statement Restatement			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	194.203 ^a	.099	.141
Financial Statement Restatement			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	209.377 ^a	.183	.244

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

4.7 Goodness of Fit Test

In order to test the null hypothesis that there is a linear relationship between the independent variables and the log odds of the dependent variable the Hosmer and Lemeshow test was used while to compare the observe and expected frequencies in the model, the Chi-square was computed. From the results of the Chi-square of the Hosmer and Lemeshow tests, a non-significant chi-square of 0.198 for financial statement restatement and a chi-square of 0.960 for financial statement fraud indicates that the data for the 177 state corporations used in this study fit the model well.

TABLE 7
Goodness of Fit Test

Financial Statement Restatement			
Step	Chi-square	df	Sig.
1	11.061	8	.198
Financial Statement Fraud			
Step	Chi-square	df	Sig.
1	2.543	8	.960

4.8 Assessment of Predicted Probabilities

The decision rule for assessment of predicted probabilities adopted by this research is in the following form: if the probability of the event (financial statement restatement and financial statement fraud) is greater than or equal to 0.5 (50%), the researcher predicted that the event took place. The study classified the subject to mean audit committee effectiveness (ACE) category if the estimated probability was 0.5 (50%) or less and classified the subject otherwise if the estimated probability of the event (financial statement restatement or financial statement fraud) was 0.5 (50%) and above. The classification tables show that the model correctly predicted 75.1% of financial statement restatement and 69.5% of financial statement fraud. This is the probability that financial statement restatement and financial statement fraud did occur. Overall, the predictions of the study on financial statement restatement were correct 133 times out of the expected 177 (75.1%), and for financial statement fraud the predictions were correct 123 times out of the expected 177 (69.5%).

TABLE 8
Assessment of Predicted Probabilities

Financial Statement Restatement					
Observed			Predicted		Percentage Correct
			Financial statement restatement		
			No Restatement	Restatement	
Step 1	Financial statement	No Restatement	13	38	25.5
	restatement	Restatement	6	120	95.2
	Overall Percentage				75.1
Financial Statement Fraud					
Observed			Predicted		Percentage Correct
			Financial statement fraud		
			No reported fraud	Reported fraud	
Step 1	Financial statement fraud	No reported fraud	46	39	54.1
		Reported fraud	15	77	83.7
	Overall Percentage				69.5

a. The cut value is .500

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter's objective was to conclude the study, recommend the mitigating measures necessary to improve the effectiveness of audit committees and give suggestions for further research. This is drawn from the results of the analysis that is given in chapter four.

This chapter is organized as follows: section 5.2 summarizes the work done and the study findings are presented in section 5.3, the discussion is presented in section 5.4, the conclusion of the study is given in section 5.5, recommendations of the study are presented in section 5.6, Limitations of the study in section 5.7, while the suggestions for further research are presented in section 5.8.

5.2 Research Summary

The public sector in Kenya was the focus of the study with a particular emphasis on the State corporations in Kenya, where the influence of the characteristics of the committees of audit on their effectiveness were assessed. To assess perceived effectiveness of audit committees, secondary data from the annual audited reports of State Corporations in Kenya were used, whereby the reports of State Corporations with financial restatements and those with reported financial fraud were taken from the selected sample of State Corporations.

The study provided two research objectives at the beginning of the study including the expected outcomes/significance of the study. The significance of the study /anticipated outcome is reviewed below to see how well the objectives and the expected outcomes have been achieved. Objective one was to find out if the audit committees meet the legislative requirements on audit committee characteristics while objective two was to determine the effect of audit committees' characteristics on their effectiveness. In order for the study to meet the requirements of objective one, which sought to find out if the audit committees of the sampled State Corporations in Kenya meet the legislative requirements on audit committee characteristics a checklist, was developed. The checklist was based on the requirements of the Treasury circular on operationalization of audit committees (2005), the Kenya Public Finance Management Act, (2012) and the State Corporations Act Cap 446.

The data requirements were divided into several categories: Financial statement restatement disclosures, reported financial statement fraud and non-financial disclosures which include, the proportion of independent directors, proportion of multiple directorships, proportion of directors having financial expertise, meeting frequency, committee size and

director tenure, the, annual financial budgetary allocation in Kenya shillings and state corporation industry type. However to meet the requirements of objective two which sought to determine the effect of audit committees' characteristics on their effectiveness and to assess the significance of the relationship between the variables, Pearson Correlation and regression analysis were used. The two proxy variables used to measure audit committee effectiveness (dependent variable) used in this study namely financial statement restatement and financial statement fraud were regressed against the independent variables.

It was anticipated that the study, will invoke important ideas for public institutions in Kenya and result in an improved comprehension of the concept of audit committee effectiveness and come up with the various ways of improving its effectiveness. Additionally the study anticipated that the findings will help improve the understanding of the relationships between committee characteristics and its effectiveness. Lastly it was anticipated that the results of the study would make an addition to the existing literature on committee effectiveness the public sector while providing a comparison to similar studies conducted in various developed countries.

The research objectives were expressed into six testable hypotheses which were based on the agency theoretical assumptions of setting an effective monitoring mechanism to check the activities of the agent. The testable hypotheses were as stated below:

H1: The proportion of independent directors in the audit committee has a positive influence on its effectiveness.

H2: The proportions of multiple directorships in the committee positively influence its effectiveness.

H3: The proportion of financial experts in the audit committee has a positive influence on its effectiveness.

H4: The frequency of audit committee meetings has a positive influence on its effectiveness.

H5: The size of the audit committee has a positive influence on audit committee effectiveness.

H6: Long tenure directorship in the audit committee has a positive influence on its effectiveness.

5.3 Research Findings

The study demonstrates that the audit committees of state corporations in Kenya have complied with legislation regarding the requirement that they be formed with particular

characteristics. From the descriptive results in Table 2 it is noted that on average 49.3% of the directors in the audit committees are independent. On the variable of multiple directorships on average 59% of the directors in the audit committees hold more than one seat in other public entities. On average 32.7% of the directors have financial expertise. On average the committee meets 6 times in a year. On the variable of committee size, on average the committees are made up of 7 directors. The number of years a director serves in the audit committee is on average of 3 years, while lastly the average State Corporations size in terms of annual budgetary allocation in Kenya shillings is Kshs 717,500.

The results however indicate, that more than eight years (2005-2012) after implementation of State corporation audit committees, 71% (126) of the committees failed to reduce the number of financial statement restatements while 52% (92) failed to reduce the number of reported financial statement fraud according to the descriptive results of this study. Overall the results indicate that all the committees are ineffective because the number of financial statement restatements and financial statement fraud is above the threshold of 50% used in this study to measure effectiveness.

The overall finding from the two results in table 4 and table 5 is that the characteristic of multiple directorships is key in audit committee effectiveness in the two roles of vetting the integrity of financial statements and monitoring financial statement fraud. This is because the variable has appositive co-efficient value of 9.200 and is statistically significant in the audit committee effectiveness in reducing financial statement restatements, while in reducing financial statement fraud it gives a co-efficient value of 2.917 but it is not statistically significant. These results are consistent with those in the Zheng (2008)'s study that the integrity of financial statements increases as the proportion of multiple directorships increases in the audit committee.

The variable of director independence (ACIND) is statistically significant and it produced a co-efficient of -1.556 in audit committee effectiveness in reducing financial statement restatements and a co-efficient of -1.780 under financial statement fraud. These results are consistent with those of Piot and Janin (2007) who do not find any association between reduced financial statement restatement and the existence of majority independent directors. The variable of financial expertise (ACFXP) was statistically significant. It produced a co-efficient of -17.600. These results are consistent with those in the (McDaniel *et al.*, 2002; Thornton, 2002)'s study that the number of financial statement restatements increases as the proportion of financial experts increases in the audit committee.

The variable of director tenure (ACTNR) is statistically significant in the audit committee role in reducing financial statement restatements. It produced a co-efficient of 1.251. These results are consistent with those in the Beasley (1996)'s study that the number of financial statement restatements decreases as the tenure of the audit committee increases. While lastly the controlling variable of State Corporation size (SIZE) is statistically significant under audit committee role of monitoring financial statement fraud. It produces a co-efficient of 2.580. This means that as the size of the state corporation increases financial statement fraud also increases.

5.4 Discussion

Prior researchers like Ismail, Iskander and Rahmat (2008) in their cross sectional study, of 108 firms listed on Bursa Malaysia for the year 2002, investigated the effectiveness of audit committees in terms of the quality of reporting in the financial statements and got different results from this study. Their study used three control variables of company size in terms of assets, financial year-end and industry classification to identify their sample. They carried out their research by selecting 54 companies with good financial reporting matched with 54 other companies with poor financial reporting practice. Their results showed no significant difference in assets. In contrast this study finds that firm size measured as the annual budgetary allocation in Kenya shillings is highly significant in financial statement fraud. Therefore an increase in size of a state corporation in terms of the financial allocation in Kenya shillings millions increases the chances of financial statement fraud.

Their study used the variables of financial expertise, meeting frequency, director independence; numbers of directorships held in other entities and audit as variables that proxy for characteristics of audit committees. They defined financial expertise as the proportion of directors registered with the Malaysian Institute of Accountants (MIA). This study on the other hand defined financial literacy as the proportion of directors who have financial expertise in accounting and are registered with the accountants' body in Kenya, the Institute of Certified Public Accountants of Kenya (ICPAK). Unlike Ismail, Iskander and Rahmat (2008) this study did not use external audit as an independent variable because in the Kenya public sector, it is mandatory that all the state corporations must be audited by the Office of the Auditor General (OAG) with the option of engaging external auditors where special investigation is required.

For control variables, this study used similar control variables of industry classification and size with a different measurement of company size in terms of annual

financial allocation in Kenya shillings unlike the prior study that uses total assets to measure size of the company. This study however unlike that of Ismail, Iskander, and Rahmat (2008) did not use the control variable of financial year end because in Kenya legislation requires all state corporations to maintain uniform financial year ends. This therefore does not require the comparison of financial year ends of state corporations in Kenya, (Public Financial Management Act, 2012). Their results are similar to this study that found that in all the 177 state corporations used in this study 59% hold more than one seat in other state corporations. The results also indicate that for financially restated state corporations the multiple directorships variable shows a positive significance of 0.056 while financial statement fraud state corporations indicate a factor of 0.516 which is not highly significant.

5.5 Conclusion

The findings resulted in a more improved understanding of the concept of audit committee effectiveness in the public sector and suggested various ways of improving the effectiveness, in their roles of vetting the integrity of financial statements of State Corporations and monitoring financial statement fraud in the public sector.

Additionally the study resulted in an improved the understanding of the relationships between the audit committee characteristics and audit committee effectiveness. Lastly an addition to existing literature on audit committee effectiveness and comparison to similar past studies conducted in various developed countries on audit committee effectiveness was achieved.

5.6 Recommendations

The Kenya government should enact legislation that governs audit committees and impose stiff penalties on audit committees that are not effective. This will help improve the effectiveness of audit committees with regard to vetting the integrity of financial statements and monitoring cases of financial statement fraud.

An effective legal framework should be put in place to set the mandatory number of multiple directorships that an audit committee member should hold in a public entity in order to limit the number of seats each director should hold.

There is an urgent need to create an effective legal framework that requires the audit committee chair and a majority of the directors to be fully qualified accountants and registered as members of the ICPAK. It is important that the accounting body and the Kenya government champion this if there is to be greater understanding of the importance of a strong AC, and the financial implications that follow.

5.7 Limitations of the Study

As with most studies, this research is not perfect and has various limitations; therefore, findings from the study should be used with caution to the extent of the following limitations. Firstly, the public sector in Kenya is made up a number of ministries, boards, commissions, departments, councils, local authorities and State Corporations. All the public sector institutions in Kenya are required to establish functional audit committees hence the public sector in Kenya is wide. Therefore, this study covered only the State Corporations in Kenya. Results from the study will therefore not be generalized on the whole public sector in Kenya. The study was faced with limitation because the phenomenon of audit committees in the public sector is a sensitive topic. Thirdly, the choice of variables that would be used to rightly measure the effectiveness of audit committees in the public sector was a challenge. Fourthly, this study is essentially a cross sectional study that examines the audit committee phenomenon at a particular point in time, in this case 2012. This may not give a complete picture of the phenomenon studied. Lastly, logistic constraints cannot be overemphasized, as they limited the intensity of the spread or area of coverage of the study. Moreover, the study started when the use of audit committees in the public sector in Kenya had just taken off hence, it is a new phenomenon.

However, a variety of efforts were used to mitigate these limitations: first, the criterion for measuring the effectiveness of audit committee performance were compared with principles and guidelines that guide the operationalization of effective public sector audit committees such as the Kenya Treasury Circular of 4 October 2005; secondly, to make it valuable, the study was focused only on audit committee functions of monitoring cases of financial statement fraud, and scrutinizing of financial statement integrity the Kenyan State Corporations. And lastly to proxy for unobservable phenomena like independence a criteria was given by defining independence for this study as directors that are neither current nor former employees nor have contractual or through immediate family member any relationship with the state corporation.

5.8 Suggestions for Further Research

It will be valuable to study the relationship between the appointing mechanism audit committee effectiveness in the public sector. This will help in understanding how the appointing mechanism influences audit committee effectiveness.

A study that investigates the relevance of legislation on audit committee characteristics and committee operation could be important to the body of knowledge. This

will help in the understanding on how the various pieces of legislation influence audit committee effectiveness.

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APPENDICES

APPENDIX I Measurement of Variables

Variable	Definition	Measurement
Audit committee Effectiveness (ACE)	Reduced number of financial statement restatements and financial statement fraud.	Dummy coded 1 if effective 0 otherwise.
Audit committee independence (ACIND).	Directors that are neither current nor former employees nor have contractual or through immediate family member any relationship with the state corporation.	Number of independent directors divided by audit committee size given as: ACMD/ACSIZE.
Audit committee multiple directorships (ACMD).	Number of director seats held.	Number of director seats divided by the committee size given as: ACMD/ACSIZE.
Audit committee financial expertise (ACFXP).	Directors that have the relevant and most recent financial expertise in the field of accounting and are members of ICPAK.	Number of financial experts divided by the committee size given as: ACFXP/ACSIZE.
Audit committee frequency of meetings (ACFMT).	The number of board meetings held in a year.	Number of board meetings held in a year in absolute figures.
Audit committee size (ACSIZE).	The number of directors on the audit committee (both executive and independent Non-Executive Directors).	Number of directors in the audit committee in absolute figures.
Audit committee tenure (ACTNR).	The number of years of service in the audit committee.	It is given a 4 years board service cut-off point because this level is close to the average tenure of directors in Kenya State Corporations.
State corporation size (SIZE)	The annual budgetary/financial allocation of State corporations.	Annual financial allocation given in Kenya shillings to the state corporation.
State corporation industry type (INDS)	The industry type of State Corporation.	Measured by the International Standard Industrial Classification coding (ISIC).

APPENDIX II
Industry Classification

Sector	Frequency	Percent
Commercial	41	23.2
Financial	14	7.9
Research	13	7.3
Regional development	3	1.7
Regulatory	50	28.2
Training	22	12.4
Service	34	19.2
Total	177	100.0

Source: State Corporations Advisory Committee (SCAC) website www.scac.go.ke

APPENDIX III
State Corporations in Kenya

1. Agricultural Development Corporation
2. Agricultural Finance Corporation
3. Agro-Chemicals and Food Company
4. Bomas of Kenya
5. Capital Markets Authority
6. Catering Training and Tourism Dev. Levy Trustees
7. Central Water Services Board
8. Centre for Mathematics Science and Technology in Africa
9. Chemelil Sugar Company
10. Coast Development Authority
11. Coffee Board of Kenya
12. Coffee Research Foundation
13. Commission for Higher Education
14. Communications Commission of Kenya
15. Consolidated Bank
16. Cooperative College of Kenya
17. Council for Legal Education
18. Deposit Protection Fund Board
19. Draught Management Authority
20. East African Portland Cement Company
21. Egerton University
22. Electricity Regulatory Board
23. Ewaso Ng'iro North Development Authority
24. Ewaso Ng'iro South Development Authority
25. Export Processing Zones Authority
26. Export Promotion Council
27. Gilgil Telecommunications Industries
28. Higher Education Loans Board
29. Horticultural Crops Development Authority
30. Industrial and Commercial Development
31. Industrial Development Bank
32. Investment Promotion Center

33. Jomo Kenyatta Foundation
34. JKUAT
35. KASNEB
36. Kenya Agricultural Research Institute
37. Kenya Airports Authority
38. Kenya Airways – KQ
39. Kenya Broadcasting Corporation
40. Kenya Bureau of Standards
41. Kenya Civil Aviation Authority
42. Kenya College of Communications Technology
43. Kenya Dairy Board
44. Kenya Education Staff Institute – KESI
45. Kenya Electricity Generating Company
46. Kenya Ferry Service – KFS
47. Kenya Film Commission
48. Kenya Flower Council
49. Kenya Forest Service – KFS
50. Kenya Forestry Research Institute
51. Kenya ICT Board
52. Kenya Industrial Estates
53. Kenya Industrial Property Institute
54. Kenya Institute of Administration
55. Kenya institute of Education (KIE)
56. Kenya Institute of Highways and Building Technology
57. Kenya Institute of Public Policy Research and Analysis
58. Kenya Institute of Special Education – KISE
59. Kenya Literature Bureau
60. Kenya Marine and Fisheries Research Institute
61. Kenya Maritime Authority – KMA
62. Kenya Meat Commission – KMC
63. Kenya Medical Research Institute
64. Kenya Medical Supplies Agency
65. Kenya Medical Training College
66. Kenya National Assurance Co. (2001)

67. Kenya National Examination Council
68. Kenya National Highway Authority – KNHA
69. Kenya National Library Services
70. Kenya News Agency
71. Kenya Ordinance Factories Corporation
72. Kenya Pipeline Company
73. Kenya Plant Health Inspectorate Services
74. Kenya Ports Authority
75. Kenya Post Office Savings Bank
76. Kenya Power and Lighting Company
77. Kenya Railways Corporation
78. Kenya Re-Insurance Corporation
79. Kenya Revenue Authority
80. Kenya Roads Board
81. Kenya Rural Roads Authority – KeRRA
82. Kenya Safari Lodges and Hotels
83. Kenya Seed Company Limited
84. Kenya Sisal Board
85. Kenya Sugar Board
86. Kenya Sugar Research Foundation
87. Kenya Tea Development Agency – KTDA
88. Kenya Tourist Board
89. Kenya Tourist Development Corporation
90. Kenya Urban Roads Authority – KURA
91. Kenya Utalii College
92. Kenya Water Institute
93. Kenya Wildlife Service
94. Kenya Wine Agencies
95. Kenyatta International Conference Center
96. Kenyatta International Conference Center
97. Kenyatta National Hospital
98. Kenyatta University
99. Kerio Valley Development Authority
100. Lake Basin Development Authority

101. Lake Victoria North Water Services Board
102. Lake Victoria South Water Services Board
103. Maritime Authority
104. Maseno University
105. Moi Teaching and Referral Hospital
106. Moi University
107. Nairobi Water Services Board
108. National Aids Control Council
109. National Bank of Kenya
110. National Biosafety Authority
111. National Cereals and Produce Board
112. National Council for Law Reporting
113. National Environment Management Authority
114. National Hospital Insurance Fund
115. National Housing Corporation
116. National Irrigation Board
117. National Museums of Kenya
118. National Oil Corporation of Kenya
119. National Social Security Fund
120. National Sports Stadia Management Board
121. National Tea Zones Development Authority
122. National Water Conservation and Pipeline Corporation
123. NGO Co-ordination Bureau
124. Northern Water Services Board
125. Numerical Machining Complex
126. Nzoia Sugar Company
127. Postal Corporation of Kenya
128. Public Procurement Oversight Authority
129. Pyrethrum Board of Kenya
130. Retirement Benefits Authority
131. Rift Valley Water Services Board
132. School Equipment Production Unit
133. South Nyanza Sugar Company
134. Tana and Athi Rivers Development

135. Tea Board of Kenya
136. Tea Research Foundation
137. Teachers Service Commission
138. Telkom Kenya Limited
139. University of Nairobi
140. University of Nairobi Enterprises and Services Limited
141. Water Services Trust Fund
142. Athi Water Services Board
143. Bomas of Kenya
144. Kenya Accountants and Secretaries National Examinations Board
145. Ethics and Anti-Corruption Commission
146. Catchment Area Advisory Committee
147. Coast Water Services Board
148. Kenya Industrial Research and Development Institute
149. Kenya Institute of public policy research and analysis
150. Kenya National Shipping Line
151. Kenya National trading Corporation
152. Kenya Utalii Hotel
153. Western university college of science and technology
154. Local authority provident fund
155. National water conservation and pipeline corporation
156. Agricultural Information resource center
157. Sugar arbitration board
158. Anti-counterfeiting agency
159. Kenya investments authority
160. Industrial property tribunal
161. Public complaints standing committee
162. Poverty eradication commission
163. Public archives advisory council
164. Betting control and licensing board
165. Central bank of Kenya
166. Capital markets tribunal
167. State Corporations Appeals Tribunal
168. National Council for Science and Technology

169. Public Universities Inspection Board
170. Kenya Veterinary Board
171. Kerio Valley Development Authority
172. Kenya Petroleum Refinery
173. Transport Licensing Board
174. Kenya Cultural Center
175. National Disability Council
176. National Gender Commission
177. Hotels and Restaurants Authority