

**EFFECT OF AUDIT COMMITTEE CHARACTERISTICS ON
FRAUD DETECTION AND PREVENTION: A STUDY OF
COUNTY GOVERNMENTS IN WESTERN REGION**

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DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGEMENT	iii
DEDICATION	iv
LIST OF TABLES	viii
LIST OF ABBREVIATIONS	ix
ABSTRACT	x
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study.....	1
1.1.1 Audit Committee Characteristics.....	2
1.1.2 Fraud Detection and Prevention	3
1.1.3 Audit Committee Characteristics and Fraud Detection and Prevention	4
1.1.4 County Governments in Western Region	5
1.2 Research Problem	7
1.3 Research Objective	9
1.4 Value of the Study.....	10
CHAPTER TWO	12
LITERATURE REVIEW	12
2.1 Introduction.....	12
2.2 Theoretical Framework	12
2.2.1 Agency Theory.....	12
2.2.2 Stakeholder Theory.....	13
2.2.3 Fraud Triangle Theory	14
2.3 Determinants of Fraud Detection and Prevention.....	15
2.3.1 Audit Committee Composition.....	16
2.3.2 Audit Committee Independence	16

2.3.3 Audit Committee Meetings.....	17
2.3.4 Audit Committee Expertise	17
2.4 Empirical Review.....	18
2.4.1 Global Studies.....	18
2.4.2 Local Studies	20
2.5 Conceptual Framework	22
2.6 Summary of the Literature Review	23
CHAPTER THREE	25
RESEARCH METHODOLOGY	25
3.1 Introduction	25
3.2 Research Design.....	25
3.3 Population	25
3.4 Data Collection	26
3.5 Data Analysis	26
3.5.1 Diagnostic Tests.....	26
3.5.2 Analytical Model	27
3.5.3 Tests of Significance.....	28
CHAPTER FOUR.....	29
DATA ANALYSIS, RESULTS AND FINDINGS	29
4.0 Introduction.....	29
4.1 Response Rate	29
4.2 Reliability Results	29
4.3 Descriptive Results	30
4.3.1 Audit Committee Composition.....	30
4.3.2 Audit Committee Independence	31
4.3.3 Audit Committee Meetings.....	32
4.3.4 Audit Committee Expertise	34

4.3.5 Fraud Detection and Prevention	35
4.4 Diagnostic Tests	36
4.5 Correlation Results.....	38
4.6 Regression Results	39
4.7 Discussion of Findings	41
CHAPTER FIVE	44
SUMMARY, CONCLUSION AND RECOMMENDATIONS	44
5.1 Introduction	44
5.2 Summary of Findings.....	44
5.3 Conclusions	46
5.4 Recommendations for Policy and Practice	47
5.5 Limitations of the Study.....	48
5.6 Suggestions of Further Research.....	49
REFERENCES.....	50
APPENDICES	55
Appendix I: Questionnaire	55
Appendix II: County Governments in the Western Region	60

LIST OF TABLES

Table 4.1: Response Rate.....	29
Table 4.2: Reliability Results.....	30
Table 4.3: Descriptive Statistics for Audit Committee Composition	31
Table 4.4: Descriptive Statistics for Audit Committee Independence.....	32
Table 4.5: Descriptive Statistics for Audit Committee Meetings	33
Table 4.6: Descriptive Statistics for Audit Committee Expertise.....	35
Table 4.7: Descriptive Statistics for Fraud Detection and Prevention.....	36
Table 4.8: Multicollinearity Test for Tolerance and VIF	36
Table 4.9: Normality Test	37
Table 4.10: Autocorrelation Test	37
Table 4.11: Heteroskedasticity Test.....	38
Table 4.12: Correlation Results	39
Table 4.13: Model Summary	39
Table 4.14: ANOVA.....	40

LIST OF ABBREVIATIONS

AC	Audit Committee
ANOVA	Analysis of Variance
BOD	Board of Directors
BQ	Bill of Quantity
COSO	Committee of Sponsoring Organizations
EACC	Ethics and Anti-Corruption Commission
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IIA	Institute of Internal Auditors
IPPD	Integrated Personal Payroll Data program
MCA	Member of County Assembly
NSSF	National Social Security Fund
PWC	Price Waterhouse Coopers
SACCO	Savings and Credit Cooperative Societies
SOD	Segregation of Duties
SPSS	Statistical Package for Social Sciences
VIF	Variance Inflation Factors

ABSTRACT

There have been many high profile mega scandals in both the public and the private sector with regards to corruption as highlighted through print and electronic media some being brought before court of competent jurisdiction raising eyebrows on the effectiveness of the board audit committees in ensuring policies and guidelines are followed. Counties in western region have hit the headlines for several fraud cases. The main aim of this research study was to establish how audit committee characteristics influence fraud detection and prevention among counties in the western region in Kenya. The research adopted agency theory, stakeholder theory and fraud triangle theory. The study utilized a descriptive survey design. The study population was the 7 counties in the western region in Kenya. The unit of observation was the 7 departments in each of the 7 counties giving a total of 49 respondents. Data from 48 of the 49 respondents (98% response) was obtained. The study used primary data obtained from the original sources using questionnaires. The questionnaires issued via email and drop and pick method. Data obtained using questionnaires was converted from simple responsive into a quantitative form to be useful in the analysis that was done using SPSS. This process generated descriptive statistics which included frequencies and percentages and inferential statistics. A multiple linear regression model was used to show how the variables relate. Regression results produced an R-square value of 0.552, meaning that 55.2 percent of changes in fraud detection and prevention among western region county governments was the result of the four independent variables while 44.8 percent of changes was the result of other factors which are not highlighted. This research showed independent variables had a strong association with fraud detection and prevention ($R=0.743$). ANOVA results showed a substantial F statistic at 5% level with $p=0.000$. This implies that the overall regression was appropriate in explaining the influence of the independent variables on fraud detection and prevention. Findings also showed that audit committee composition, independence and expertise have a positive and significant influence on fraud detection and prevention while audit committee meetings exhibited positive but not significant influence on fraud detection and prevention. The study recommends the need for having audit committee that are more independent, diverse and with expertise as this will significant contribute towards fraud detection and prevention. The findings of this study will help western region county governments to focus on critical factors that will be useful to detect and prevent fraud. The main limitation of the study was that it covered only three aspects of audit committee characteristics and so there are other areas that require research.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The fundamental question as to why fraud occurs remains shrouded in many explanations. Audit Committees (AC) may hinder, enhance or have no influence at all on occurrence of fraud (Agoraki & Panagiotis, 2009). Boven (2013) argues that public accountability practices can be understood as answers for fraud detection and prevention. This has however elicited debate on effect of audit committees on fraud mitigation. Bhagat and Romano (2011) aver that accountability practices have influence on fraud occurrences. Several investigations have been done on the audit committees, accountability practices and fraud detection and prevention with results that remain inconclusive. According to Soltani (2014) weak audit committees contribute to incidences of fraud. Musa (2006) posits that the size and the expertise are essential in fraud detection.

This study's theoretical foundation was built on agency theory, stakeholder theory and fraud triangle theory. Berle & Means (1932) developed the agency theory which shows an agent and principal's constrained relationship characterized by competing interests and mistrust. Conversely, mistrust in the agency theory is replaced with congruence in the stakeholder theory. Stakeholders' theory includes accountability to more stakeholders like customers, suppliers, employees, other organizations and the community (Freeman, 1984). Fraud triangle theory points out perceived opportunity, pressure and its rationalization are the three crucial factors of fraud (Albrecht, Turnbull, Zhang & Skousen, 2010). Organizations ought to address these three if they

are to detect and prevent fraud. This theory can help explain the increase in fraud incidences in both the public and private sectors.

The county governments as units of devolved system of governance are required to avail services to the people effectively, be accountable to them and transparent. Audit committees are formed in county governments to ensure that they run operations smoothly for the people of that particular county. They have a role of oversight of responsibility and assist in monitoring responsibilities of an organization hence their effectiveness is crucial in proper financial management (Fiia, 2013). Despite having this audit committees set in place fraud remains a major segment for scrutiny in the counties. Notable number of cases has been recorded in the county of Kisumu, county of Busia, county of Bungoma among others where millions of public funds were lost to procurement related fraud as reported through daily print media and newspapers (Controller of budgets, 2017).

1.1.1 Audit Committee Characteristics

This refers to a chosen number of members of an organization's board whose role among other things is to assist auditors to maintain their independence against management (Raghunandan & Rama, 2007). The audit committee is an administration system and control instrument that oversees the process of financial reporting, the audit process, and the company's internal controls and ensures compliance with laws and regulations (Amudo & Inanga, 2009). Audit committees are expected to carry out certain functions, like oversight, evaluation, monitoring, assurance services to lower agency costs (Abbott, 2000). Audit committee also has influence to institute organizational change and ease processes supporting the mission of the institution (Adari, 2007).

The audit committees are required to deeply interrogate current public entity internal controls and the functioning of the public service audit systems (Mutai, 2011). Committees in the public sector dealing in audit should be effective more importantly during this time in which several financial scandals have been discovered among public institutions. Globally these committees have been criticized because of their failure to identify and eliminate fraud that took place within Enron in its downfall (Ogoro & Simiyu, 2014).

In public sector, audit committees should have a number of characteristics for effective operation as they vet financial statements' integrity. The characteristics including: independence indicated by the number of independent nonexecutive directors, director tenure, committee size, committee's financial expertise, frequency of meetings and multiple board directorships have been used as proxies for evaluating how effective they are in Kenya (Ogoro & Simiyu, 2014). The current study will adopt the following indicators of audit committee; composition, independence, number of meetings and expertise.

1.1.2 Fraud Detection and Prevention

Fraud is defined by the International Standard on Auditing (ISA No.240) as a deliberate act by employees in an organization which results in material misrepresentation of facts. According to the ACFE (2008), the definition of fraud is criminal or wrongful deception that will benefit the perpetrator personally or financially and waste public resources. Mintzer (2016) also defines fraud as the various ways that a person formulates and as well caused by a human being to exploit untrue proposals or refutation of truthfulness. It includes every category of ploys, deception or even pretense, and else biased ways that a different person is lured. The

two embezzlement definitions tend to come into agreement in involving luring of people to have financial gain in order to supersede another person financial wise.

Most fraudulent activities are usually perpetrated through manipulation of records and activities to aid in loss of financial resources for personal gain. Many researchers have found out that fraud identification and prevention should be emphasized, because preventing and detecting it is more affordable and efficient (Abdullahi & Mansor, 2015). Barra (2010) in his study found out the responsibility of corporate governance on modern day to day conditions is significant and vital and this is due to the essence of strong governance structures in monitoring and closing loopholes that can cause fraudulent activities.

The major factor to keep in mind in fraud prevention is opportunity. If these are few, then it will be easy to curb or reduce fraud in institutions. Prevention of fraud is cheaper than its detection since it will be hard to recover losses caused by fraudulent activities (Baird & Zelin, 2009). Ogola, K'Aol and Linge (2016) posit that the mostly used measures of fraud mitigation are magnitude of loss, frequency and recovery rate.

1.1.3 Audit Committee Characteristics and Fraud Detection and Prevention

Theoretical literature has cited three components of monitoring mechanisms that drive the firm towards fraud detection and prevention. These are: internal auditing, external auditing and the directorship (Anderson et al., 1993). However, another component namely the audit committee has been added by the Institute of Internal Auditors (IIA, 2008). The Cadbury Committee in 1992 recommended an effective audit committee that is essential for securing responsible corporate governance. In its Report, the committee states that an effective audit committee is crucial for effective management of the firm. The report further recommends that in the annual company reports, the

directors' report should recommend on how effective the committee is (MicroSave, 2007). A governance structure that has an effective audit committee is expected to help in detection and mitigation of fraud.

A properly directed entity has superior performance which is an indicator of efficient audit committees while inefficient audit committees results to failure of organizations (Kyerbaah & Biekpe, 2006). Precisely, poor audit committees' triggers many issues like mismanagement, unreliability in service delivery, wastage pilferage, inefficiency and red tapes. A combination of these problems leads to the collapse of an institution if assumed. Therefore, it is highly vital that a firm institutes an effective committee; in this case fraud incidences would be lowered (Kyerbaah & Biekpe, 2006).

There are varied conclusions by earlier investigations on the relation between audit committee and fraud prevention. Majority of past research agree that audit committees are vital in fraud prevention. There are two key ways in which audits contributes to fraud prevention. First, audit committee greatly help by examining the operational practices and policies of a company and by doing so detecting any possible loopholes through which fraudulent activities could be executed. This therefore gives the company a chance to seal these loopholes with the help of the decisions and opinions given by the auditors (Iyer & Samociuk, 2016).

1.1.4 County Governments in Western Region

The promulgation of the CoK on August 27th of 2010 advocated for a devolved government system, creating 47 devolved county governments. The system hence relinquished power from central government to the local authority, for example, the power to incur expenses and collect revenues and so on. Articles 174 to 200 in

Chapter (11) CoK, 2010 deals with devolution. The western region has seven counties namely; Nandi, Vihiga, Kakamega, Kisumu, Busia, Siaya and Bungoma.

Article 183 covers the county audit committees. This article compels the county audit committees to ensure that the counties follow the contractual and legal commitments to its stakeholders. It also has the mandate to oversee governors and to ensure that the welfare of stakeholders and their value is maximized (CoK, 2010). There have been growing concerns over inefficiency, poor allocation and use of resources, and poor accountability practices in the counties which have led to poor service delivery (Auditor General Report, 2016).

Fraud prevention in the county governments has been a difficult assignment for the stakeholders thus calling for the intervention of the audit committees. The financial calamity has increased in the recent years due to fraud scandals in both the central and devolved governments hence need for audit committees. Kenya currently faces massive corruption scandals. News of new scandals hit the headline every day, with the amounts in question continuously increasing. These scandals are connected to a government agency or a government-owned corporation. National youth service and Commercial banks among others have been on the forefront (Auditor General Report, 2016).

To achieve their mandate and to operate efficiently and effectively, County governments in the western region and all counties in general should develop an effective and efficient audit committee lower costs and improve revenue while operating. The committee is key in the overall organization strategy to enhance efficiency and improve productivity in the public sector (Sundaram & Inkpen, 2004). Developing the optimal audit committee can enable a public institution to reduce

wastage and losses that negatively affects operational efficiency (Cohen, Ding, Lesage & Stolowy, 2011).

1.2 Research Problem

Audit committees and fraud prevention and detection are critical areas in conceptual and empirical investigations covering corporate governance (Jacobs, 2012). According to a report by PWC (2018) on fraud in public institutions, it was reported that 37% of the total respondents globally drawn from various enterprises that are owned by the government have at least suffered from economic crime in the period of last 12 months. This according to PWC ranks highest in comparison to other organizations and this has raised the threat level of fraud in public institutions. PWC also confirmed that over 65% of those countries reporting economic crimes have also suffered from misappropriation of assets. This problem requires that there be a review of how efficient audit committees are in the public sector (Boritz, Kotchetova & Robinson, 2008).

There have been many high profile mega scandals in the public and private sector with regards to corruption as highlighted through print and electronic media some being brought before court of competent jurisdiction raising eyebrows on the effectiveness of the board audit committees in ensuring policies and guidelines are followed. Counties in western region have hit the headlines for several fraud cases for instance recently Bungoma County was accused of purchasing 600 hand washing Jerry cans at an exaggerated price of shillings 10,000 each (Business daily, 2020). Busia County made salary payments not included in the IPPD Payroll contrary to section 5.10 of Government Financial Regulations & Procedures and with county officers having no IPPD Identification Numbers their personal files were not availed

making it impossible for examination for the terms of agreement. Nandi County Foreign Travel and Subsistence Allowance Information availed for audit review show that MCAs were paid for a travel to Uganda for a study tour in May 2014 in which Kshs.10, 912,706 was allocated for transport and accommodation and the payments expensed. The public financial regulations and procedures requires an imprest to be made for such an expense and furthermore no evidence of the travel in form of documents was provided to ascertain travel hence justify the payment(Auditor General Report 30th June 2014).The County also has pending cases at the EACC linked with alleged theft of millions of shillings (EACC, 2019).

Siaya County lost ksh 649,113 to corruption as a project at Fish Banda in Mageta and a two door latrine at Kuoyo beach was stalled and abandoned further the lintels and walls had collapsed citing poor works despite payments having been made. Vihiga County incurred unusual payments to several individuals but the purposes for the payments were not indicated. The County Executive statements maintained at the Central Bank revealed that some staff and non-staff were paid amounts totaling Ksh 239,675,566 for undisclosed purposes (Auditor General Report for the year ended 30th June 2017).Kakamega County incurred an irregular legal expense in which a law firm that sued a senator and deputy speaker for defamation was paid khs 1,740,000 for taking instructions. No justification was made for payment of that sum amount after the legal department failed to avail statement of defense as well as evidence of proceedings. Kisumu County had ghost workers ascertained in the IPPD Database System in which the county paid all works through cheques collected by the employees however 25employees did not turn up to pick their cheques that still remained uncollected in September that year even though ksh 2,379,315 could not be accounted for (Auditor General Report 2015).

From past studies, Andi (2011) argues that the proactive involvement of the board in fraud risk management activities comes with the benefit of mitigating fraud by increasing the chances for detection. The study of Dumitrascu and Savulescu (2012) revealed that the expertise of the audit committees increase monitoring efforts which in turn improves financial reporting quality. An investigation by Wan and Roshayani (2014) reveals that the effectiveness of the committee has negative substantial impact to the occurrence of fraudulent reporting. This implies that the effectiveness of audit committees has lowered the occurrence of fraudulent reporting in establishments.

Locally, Ragama (2013) studied the audit committee effectiveness among deposit taking SACCOs in Kenya. Githinji & Muage (2013) studied the place of audit committee in an organization in promoting corporate governance. Ruto (2016) focused on effectiveness of audit committee in government ministries in Kenya and found that audit committees with more than 3 members are more effective on ministerial financial management compared to those with fewer members. Okiro (2018) sought to assess how county audit committees impact performance of county governments in Kenya and established a strong relationship between the committees and performance of these governments. From the foregoing, although there are related studies done both locally and internationally on audit committees, this studies have not focused on how audit committees impact fraud detection and prevention among county governments in Kenya and this is the gap the study sought to fill by answering the research question; what is the effect of audit committee characteristics on fraud detection and prevention among county governments in Western Region?

1.3 Research Objective

The general objective was to assess the effect of audit committee characteristics on fraud detection and prevention among county governments in western region.

Specifically, the objectives were:

- i. To establish how audit committee composition impacts fraud detection and prevention among county governments in western region
- ii. To determine how audit committee independence impact fraud detection and prevention among county governments in western region
- iii. To assess the effect of audit committee meetings on fraud detection and prevention among county governments in western region
- iv. To assess the effect of audit committee expertise on fraud detection and prevention among county governments in western region

1.4 Value of the Study

The findings will create a deeper comprehension on audit committee theories and practices. It will also be an added knowledge on existing research covering the association between audit committee and fraud mitigation among firms and bridged the gap on the relation between these variables for the benefit of future researchers. These researchers will find it invaluable since it assists them to identify what has been researched before and identify gaps in research that have not yet been explored.

The study is beneficial to the county governments in understanding the linkage between audit committee and fraud prevention, which is necessary in having a sound decision-making team with a variety of perspectives and expertise necessary for success and maintaining trust among stakeholders.

To the national government and policy formulators, it will be beneficial in aiding the formulation of policies and procedures that would steer county governments in

adopting audit committee mechanisms that would improve their fraud mitigation strategies which in turn will improve county performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

A review of theories which on which this study is based will be presented in this section. Additionally, prior research on this subject and related areas will be presented. Other discussions in this chapter will cover the determinants of fraud detection and prevention, conceptual framework showing how the variables under study relate and summary of the literature under review.

2.2 Theoretical Framework

The theoretical frame shall cover the existing theories that explain the correlation between corporate governance and fraud mitigation. Theories discussed include agency theory, stakeholders' theory and the fraud triangle theory.

2.2.1 Agency Theory

This theory was pioneered by Jensen and Meckling (1976). It contends that in a company there is an agency relationship whereby the management of the company are the agents and on the contrary the shareholders are the principals. This theory further opines that because of the difference in interest amongst the management and the owners of a company, there is a likelihood of agency problems arising which are being encountered in most of the organizations today.

Due to the variation of company's management interests from those of the shareholders, the principal who are the owners and the one who gives decision making authority to the agents' bears agency costs. As per the Jensen and Meckling, agency costs denotes the sum of monitoring cost, bonding cost and residual loss. In

spite of the principal incurring the bonding and monitoring costs, residual loss will in any case happen owing to the interest of the shareholders and managers diverging. Convergence of interest only occurs when there is harmonization of the agents' objectives and those of the entire organization (Jensen & Meckling, 1976).

Some of the ways which could be used in aligning the agents and the principals interest comprises of use of incentives for example bonuses, share ownership plans and rewards based on profits. This is because these incentives to the agents are dependent on how well they realize the interest of the shareholders first so as to realize their own interest. Agency theory proposes for self-motives by the shareholders and management. Therefore, it means that agents ought to undertake their work bearing in mind the interest of the principals. The principal makes the rules which are the ones that govern the agents and have the main objective being shareholders' wealth maximization.

2.2.2 Stakeholder Theory

Stakeholders' theory, which as originally pioneered by Freeman (1984) was to be used as a management tool. It has however since found new use as a theory of the firm that has high interpretive potential. The theory emulates a framework covering ethics in business, and organization of management that seeks to illuminate the moral and ethical principles in the management of a business or any other organizations. The theory has a major focus on equilibrium of the interests of the stakeholders as the core consideration of corporate policy. The theory has a large contribution to risk management coming up as an addition to implicit contracts theory as well as other forms of agreements, like financing and sales (Moses, 2019).

Stakeholder theory assumes that managers will regulate the various wants for diverse classifications of stakeholders, and fairly distributing the assets and outcomes (Othman et al., 2014). In this study, the stakeholder theory asserts that the managers of corporations must be aware of the interests in an organization as well as its stakeholders, and invest the maximum activities in a bid to be compliant to the acceptable regulations as well as solutions, and article of association and finally the firm's internal laws.

2.2.3 Fraud Triangle Theory

The theory by Cressey (1953), states that fraud has three components such as perceived opportunity, perceived pressure and the ability to rationalize the act of fraud. The fraud elements include opportunity which presents itself where there is a chance to execute a felony with a minimal possibility of being detected. This element usually occurs due to the availability of loopholes in the system, for example, weak internal control system, weak governance structures, failure to discipline the fraud perpetrators and lack of the management to stick to the stipulated rules and regulations of the organization (Albrecht & Albrecht, 2008).

For an organization to circumvent the fraudulent opportunities they should give the internal control system factors a priority and these factors entail environmental control, assessment of risk, monitoring, information and communication among others. These factors will enable them to reduce the general cost of detecting the fraud that has already occurred. Pressure, as the second element of fraud, is generally, a need to commit fraud. It can be due to real financial need for instance debt or just a perceived need which is motivated by greed or alcohol and drug addiction. Cressey (1953) classified pressure as arising from difficulty in honoring one's obligations,

uncontrollable business failures like recession and unfair treatment of the employees by the managers.

The third element of fraud is rationalization as it is the ability to justify your reasons for committing fraud. The individual committing the fraud possesses an attitude that enables them to rationalize fraud. Albrecht, et al. (2010) pinpointed that perpetrators of the offense must always look for ways to justify their illegal acts as allowable in the society. Waigumo (2012) defined rationalization as the element that keeps the fire blazing. He further explained that auditors can access the personal values of each worker by evaluating the general culture adopted by the entity since it is impossible to access each employee individually. Cressey (1953) concluded that fraud rationalization possess no problem with dishonest people but prove to be a hard task to people with high social status and they always perceive themselves as victims of the circumstances The fraud triangle theory enlightens about the dangers associated with the fraud and provides appropriate mechanisms such as forensic accounting practices as means of fighting dangers that comes with the fraudulent activities.

2.3 Determinants of Fraud Detection and Prevention

The need to mitigate fraud cannot be ignored and firms need to undertake strong measures to detect and prevent fraud. Efficient detection can be challenging and thus a number of issues should be put into consideration if indeed successful mitigation needs to be accomplished. Both directors and management have roles to play in mitigation of fraud. A few determinants of fraud prevention and detection are discussed in this research and they include: audit committee composition, independence, charter, expertise and clear separation of duties.

2.3.1 Audit Committee Composition

This committee comprises of directors tasked with the responsibility of formulating decisions concerning the use and management of a company's finances. They normally give the ultimate decision prior to any financial transaction. Appointment of the committee is usually made in accordance with the charter. Its members are said to be independent if, in the directors' opinion, they have no relation that could interfere with them exercising their independence in conducting their responsibilities as directors. All members are required to have the ability to read and comprehend financial statements, like a balance sheet, statement of income, and cash flows (Bond & Dent, 2008).

One of the members must have prior experience in finance or accounting, a professional certification in accountancy or any related experience or background that improves his or her financial understanding, including serving as a CEO, CFO, or a senior position overseeing financial activities or otherwise have standards for financial expertise which is a requirement for the audit committees of companies (Gbegi, 2015).

2.3.2 Audit Committee Independence

This committee monitors the role the ministries play in providing crucial information to the legislative arm of government, political parties, the media, the citizens, and other organizations in controlling the state and its bureaucracy, and derives value by serving the public interest. It is hence crucial that the committee remains independent to enable execution of its duties of financial management appropriately. A lack of independence the committee may render it inefficient and unable to execute its duties efficiently (Baxter & Cotter, 2009).

Committee independence is a crucial factor influencing its efficiency in overseeing the financial statements. Its independence can serve as a control mechanism of the process of reporting. Therefore, audit committee independence is substantially related to measures of earnings quality in previous research (Baxter & Cotter, 2009).

2.3.3 Audit Committee Meetings

The professional guidance of the Institute of Internal Auditors (IIA) states that in every entity, the committee should formulate an appropriate audit charter which will specify the manner in which the administration and approval of the audit function will take place by the senior management. Such meetings should be timely and regularly held and their proceedings, recommendations and discussions be recorded in form of minutes. An agenda for the meetings should be set and distributed prior to the meeting to enable committee members evaluate it. A detailed agenda and strong chairmanship is critical in maintaining the focus of the meetings. The agenda-setting committee determines its own agenda (IIA, 2008).

Audit committee meetings help an organization in improving financial risk occurrence, control, and governance processes. Davidson et al. (2005) argued that it is the responsibility of an auditor to give a fair and honest review of the client's company accounts, but cannot give the guarantee that the accounts are free from errors and irregularities.

2.3.4 Audit Committee Expertise

Members of this committee with academic and professional qualifications in financial institutions are effective in reducing financial related fraud such as earnings management. The experience of the committee members is generally looked at as an important element in its operation. The experience and expertise of the committee

members in accounting and/or financial management is positively related to the quality and timeliness of financial reporting (Kyerbaah & Biekpe, 2006).

Audit committee with high frequency of training in accounts usually has a substantial impact on ROE and ROA and hence organizational performance. This arises as a result of better controls and sealing leakages resulting to loss of funds (Miring'u & Mouria, 2011). Similarly, Qin (2007) asserts that firms with higher quality of earning have a greater association with audit committee members with training in accounting.

2.4 Empirical Review

Various empirical investigations have been done in the domestic and global scene to support the correlation between audit committee and fraud detection and prevention, but these studies have addressed different aspects and contexts.

2.4.1 Global Studies

Firsteberg (2014) studied the role of internal audit committee function on performance of a public institution, a case study of the National Social Security Fund (NSSF), Uganda in determining if it impacts performance. The key findings showed that it had a substantial positive impact on performance in areas such as control environment, risk assessment, control activities, information and communication, monitoring and advisory services.

Eyisi & Ezuwore (2014) investigated how forensic accounting influences corporate Governances. This study utilized secondary data. The researchers concluded that the financial auditor does not necessary have to undertaking detection of embezzlement of funds during auditing, the role of internal control remains with the administration and thus administration seeks skilled forensic accountants to protect the internal control system. They therefore carry out this by incorporating software while

processing data purposively for detection of mistakes and embezzlement of funds. This assists the administration in improvement of accountability to every shareholder.

Bou-Raad (2015) explored the relation between internal audit (experience and qualifications) audit and firm performance with growth prospects and the independence of audit committees in Malaysia. He selected a sample using a questionnaire and secondary data from annual accounts. It was composed of 60 listed firms on Malaysia Bursa in 2003. A multiple regression analysis was used in testing the association between the variables and reported a substantial relation between quality experience and firm performance.

In'airat (2015) undertook an investigation on the part that corporate governance plays in reduction of the extent of embezzlement of funds. The study examined 3 main segments of corporate governance (internal auditing and controlling and external auditing). The researcher carried out a survey of 160 executives producing 43.8% response. The major results of regression analysis indicated that most of the respondents had a perception that internal auditing was the main fundamental in reduction of the degree of embezzlement of funds. The thorough research of the elements' dimensions indicated that effectiveness was the main fundamental in reduction of the extent embezzlement of funds.

Eferakeya et al. (2016) did an examination on the correlation between corporate governance and mitigation of embezzlement of funds in Nigeria. The research concentrated on the correlation between internal and external auditing, BOD governance techniques and mitigation of embezzlement of funds. Data was gathered from questionnaires that covered the administration science faculty, accountants, internal and external auditors, and share middlemen. Descriptive statistics employed

indicated on the segregation of the distribution. Data analysis was done through regression estimation method. The results indicate there was a fundamental and negative correlation that existed between internal and external auditing, BOD governance techniques and mitigation of embezzlement of funds. This means these factors have a capability in reduction of occurrences of embezzlement of funds in a firm. The research further makes a recommendation on emphasizing in encouragement and embedment of an efficient: internal and external audit task, audit consultants, and a principled and efficient BOD in a firm.

2.4.2 Local Studies

Ruto (2016) focused on effectiveness of audit committee in government ministries in Kenya. The study utilized a descriptive design whereby a survey design were used. The population consisted of the members of the audit committee who made a target population of 60 respondents. Primary data was used in this study by use of questionnaires. Correlation and regression analysis were used to draw a causal relation between the variables. The study found that audit committees with more than 3 members have been found to be more effective on ministerial financial management compared to those with fewer members. The study also established that competency is a determinant of the efficiency of the auditor in adopting a systematic approach in evaluating and improving risk management efficiency, control, and governance processes in your ministry.

Ogola et al. (2016) sought to examine how corporate governance impacts fraud occurrence in Kenyan banks. The population comprised 13,092 top management staff of all the banks. A 169 sample size of the staff in Nairobi was drawn by employing stratified random sampling method. Collection of Primary data was done by both open ended and close ended questionnaires. Analysis of data employed descriptive

statistics and inferential statistics. The conclusion was that a more positive tone at the top limited the probability of embezzlement of funds occurring, the more strict the prudential control systems set by the regulator the lower the a minute probability of embezzlement of funds occurring, the more commensurate the pay, the less likelihood fraud occurrence and finally, the more sound the procedures for reporting fraud incidences, the less the probability of fraud through falsifying documents by the staff.

Opiyo (2017) sought to investigate the part that forensic accounting plays in preventing embezzlement of funds amongst Parastatals in Kenya. The data obtained for this research was obtained using questionnaires. The research's conclusion was that each and every parastatals have an active audit embezzlement of fund, vigorous internal controls and court procedures that assist in preventing embezzlement of funds to a very great degree. The research made a conclusion that Kenyan parastatals have complying policies, administration superseding controls and segregation of responsibilities assist in preventing embezzlement of funds to a higher degree. Resolving conflicts affects prevention of embezzlement of funds to a moderate extent. The study further concluded that there is a powerful correlation between forensic accounting and prevention of embezzlement of funds among parastatals in Kenya.

Musila (2018) sought to determine how internal control services impact on fraud detection and prevention among public universities in Kenya. A descriptive cross-sectional design was chosen. He selected all the 31 public universities in Kenya. Primary sources of data were employed. The study applied correlation analysis and multiple linear regression equation with the technique of estimation being ordinary least squares so as to establish the relationship of internal controls on detecting and preventing fraud. The study showed that a substantial positive association exists

between policy compliance and fraud detection and prevention. The other predictor variables employed in the study did not have an effect on the response variable.

Okiro (2018) investigated how county audit committees impact performance of Kenyan county governments. The investigation utilized a purposive judgment sampling model. The targeted population was the 47 Kenya county governments with the audit committees being the analysis unit. Hypothesis testing was made using regression and Pearson's Correlation analysis. Descriptive statistics were then computed for the study objectives on the key elements. Findings showed that county audit committees had a substantial impact on county government performance

Ouma (2019) sought to determine the how corporate governance influences fraud mitigation among commercial banks in Kenya. All 42 banks in Kenya formed population of this work. A five year period, January 2014 and December 2018, was studied through gathering of secondary data. Descriptive research design method was employed while multiple linear regressions model was applied in analysis the variables. The study revealed that presence of an audit committee, number of board committees and board concentration had a negative and statistically significant influence on fraud mitigation. Board size, board independence, board meetings and audit tenure produced insignificant values for this research work.

2.5 Conceptual Framework

This is an illustration of the relation between the factors. The elements considered are audit committee and fraud detection and prevention. The independent variable is audit committee as measured by composition, independence, meetings and expertise. Fraud detection and prevention is the dependent variable that the study intends to explain and is given by both the number of frauds reported in a year.

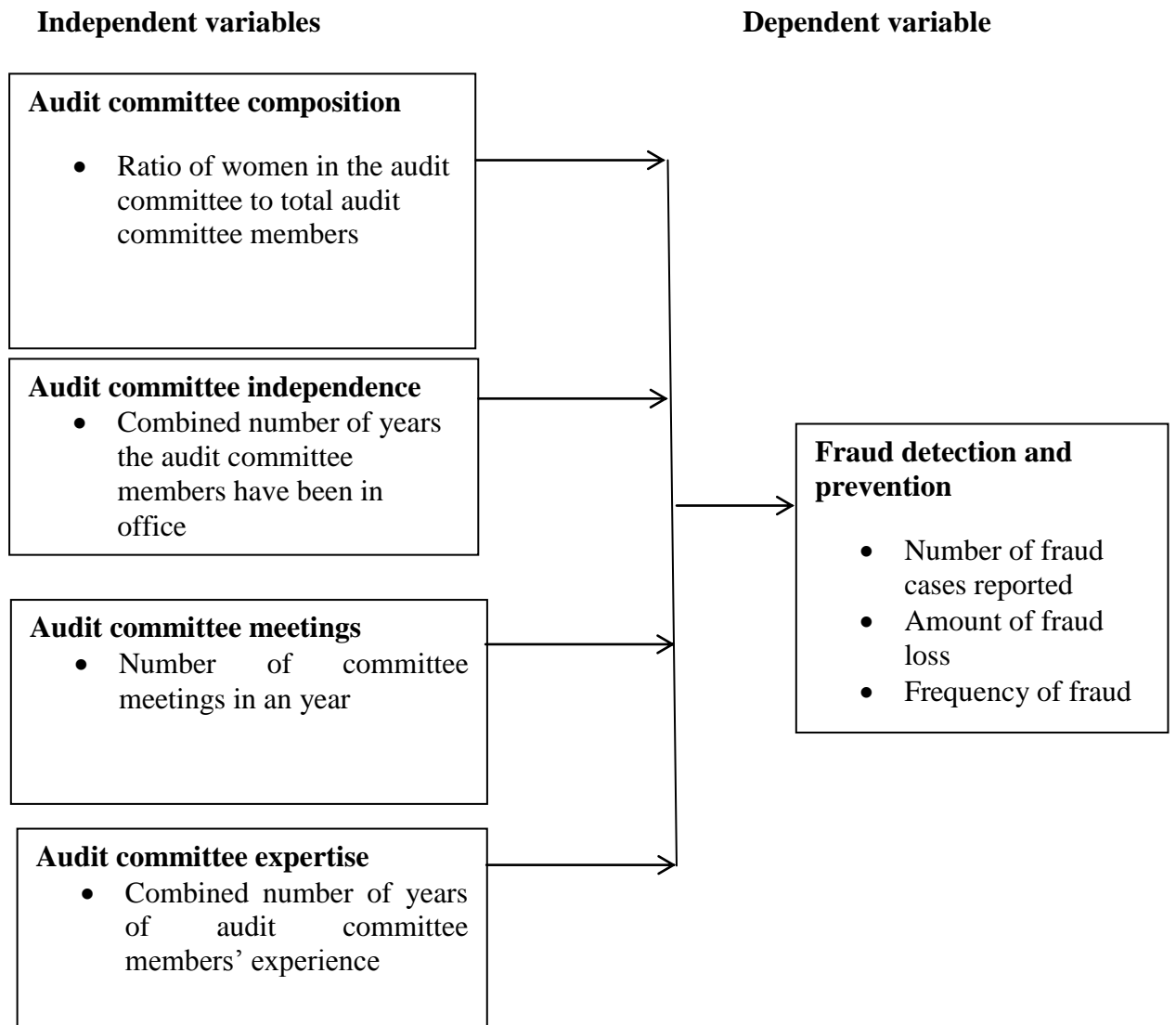


Figure 2.1: The Conceptual Model

Source: Researcher (2020)

2.6 Summary of the Literature Review

Different theoretical models have elaborated the concept of audit committee and fraud detection and prevention. The study has utilized three theoretical frameworks which are: agency theory, stakeholder theory and the fraud triangle theory. The major determinants of fraud detection and prevention have been elaborated in this section. Various empirical reviews have been undertaken both globally locally on audit committee and fraud detection and prevention. These studies' results have also been explored in this chapter.

Locally, researches mostly concentrated on the impact of internal controls on fraud mitigation without addressing the influence of audit committee on fraud mitigation (Musila, 2018; Opiyo, 2017). Ouma (2019) focused on the influence of corporate governance on fraud among commercial banks in Kenya but did not take into account the public sector. Although Ruto (2016) and Okiro (2018) addressed audit committees, the focus of their studies were on financial management and financial performance respectively and not fraud detection and prevention.

The above review shows that little study has been done in establishing the correlation between audit committee and fraud detection and prevention and thus more work is needed in the area. This study seeks to clearly demonstrate the association between audit committee and fraud detection and prevention among Kenyan county governments.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In determining the effect of audit committee on fraud detection and prevention, the study ought to have a research methodology which layout the procedure through which the research was conducted. Five sections are incorporated in this chapter that includes the research design, the population, the procedure of collecting data, the diagnostics tests to validate the data and lastly the technique of analyzing the data.

3.2 Research Design

A descriptive design was utilized to assess the effect of audit committee on detection and mitigation of fraud among county governments in Kenya. The research used a descriptive design as it enabled obtaining of the state of affairs as the actually exists (Khan, 2008). It was also appropriate because the nature of the phenomenon being studied and how they relate was of major interest to the researcher. More so, the aim of descriptive research is provision of an authentic and correct representation of the study variables and this aid when it comes to answering the research questions (Cooper & Schindler, 2008).

3.3 Population

Burns and Burns (2008) stated that a population is the elements of interest for which the study intends to make conclusions. It comprised of the 7 county governments in the western region. The unit of observation was the 7 departments in each of the 7 counties. The departments were namely; finance and accounts, legal, procurement, human resource and administration, internal audit, ICT and committee services in each of the 7 counties. This gave a total of 49 departments as the unit of observation.

3.4 Data Collection

Primary data was obtained using structured questionnaires using the Likert Scale which had close-ended questions. Close-ended questions helped this study by getting structured responses and tangible recommendations additionally they helped in reducing similar answers which means different responses were obtained. The research instrument was administered by the researcher to ensure that all the questionnaires were issued to respective respondents.

3.5 Data Analysis

Data analysis was achieved through the aid of SPSS software version 23. Tables and graphs were utilized in presenting the findings quantitatively. Descriptive statistics was used to calculate the measures of central tendency as well as dispersion together with standard deviation for each variable. Inferential statistics on the other hand entailed correlation and regression analysis. Correlation analysis established the degree of relationship amongst the variables whereas regression analysis entailed knowing the variables' cause and effect. A multivariate regression analysis was utilized in determining how the dependent and independent variables relate.

3.5.1 Diagnostic Tests

To determine the viability of the study model, several diagnostic tests were done, which included normality test, test for Multicollinearity, test for homogeneity of variances and the autocorrelation test. Normality tests the presumption that the residual of the response variable have a normal distribution around the mean. The test for normality was done by the Shapiro-wilk test or Kolmogorov-Smirnov test. In the case where one of the variables was not normally distributed it was transformed and standardized using the logarithmic transformation method. Autocorrelation measures how similar a certain time series is in comparison to a lagged value of the same time

series in between successive intervals of time. This was measured by the Durbin-Watson statistic and in case the assumption was violated the study employed robust standard errors in the model (Khan, 2008).

Multicollinearity occurs when an exact or near exact relation that is linear is observed between two or several predictor variables. Variance Inflation Factors (VIF) and the levels of tolerance were used. Any multicollinear variable should be dropped from the study and a new measure selected and substituted with the variable which exhibits collinearity. Heteroskedasticity tests if the variance of the errors from a regression is reliant on the independent variables. The study assessed for heteroskedasticity using the Levene test and in case, the data fails the assumption of homogeneity of variances the study used robust standard errors in the model (Burns & Burns, 2008).

3.5.2 Analytical Model

From the primary data collected using the questionnaire, the study applied the following model to establish the relation between variables:

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

Where;

Y = Fraud detection and prevention in county governments

β_0 = Constant Term

β_i = Beta Coefficient of variable i which measures the change Y to change in i

X_1 = Audit committee composition

X_2 = Audit committee independence

X_3 = Audit committee meetings

X_4 = Audit committee expertise

ε = Error term

3.5.3 Tests of Significance

Parametric tests were carried out to assess significance of the entire model and individual parameters. F test determined the model's significance and was obtained from Analysis of Variance (ANOVA) while a t-test determined significance of the variables.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND FINDINGS

4.0 Introduction

This chapter consisted of data analysis, findings and discussion. Results were illustrated using tables and figures. The sections in this chapter include the response rate, reliability results, demographic information and diagnostic tests. The chapter also outlines the descriptive and inference statistics in line with the study objectives.

4.1 Response Rate

In survey research, a response rate is the number of responses obtained divided by the number of target respondents. The response rate is also denoted as the completion rate or return rate and it is usually expressed in percentage form. Information on the rate of response for this research is displayed in Table 4.1.

Table 4.1: Response Rate

Response Rate	Frequency	Percent
Returned	48	98
Unreturned	1	02
Total	49	100

Source: Primary Data (2020)

4.2 Reliability Results

Reliability analysis was completed to evaluate survey constructs. This was accomplished using Cronbach's alpha. Sekaran & Bougie (2013) noted that coefficients higher than or equal to 0. were accepted for standard research. Results are indicated below.

Table 4.2: Reliability Results

Variable	Cronbach's Alpha	Number of items	Comment
AC composition	0.701	4	Reliable
AC independence	0.799	4	Reliable
AC meetings	0.747	4	Reliable
AC expertise	0.841	4	Reliable
Fraud detection and prevention	0.715	8	Reliable

Source: Primary Data (2020)

The findings on Table 4.2 indicated that audit committee composition, audit committee independence, meetings, expertise and fraud detection and prevention had reliability of 0.701, 0.799, 0.747, 0.841 and 0.715 respectively. All variables showed that the Cronbach's Alpha were higher than 0.7 confirming reliability of variables.

4.3 Descriptive Results

The subsection describes the descriptive findings for each of the variables under study, presented in terms of means and standard deviations.

4.3.1 Audit Committee Composition

The mean and standard deviation for the specific attributes of audit committee composition are as presented in Table 4.3. On average, the respondents agreed that the audit committee were diversified in terms of age, gender, experience and specialized skills. This is supported by the fact that on a five-point likert scale, the mean scores for attributes related to audit committee composition was greater than 4.02. The mean score for audit committee consist of members from different age groups was 4.27 and a standard deviation of 0.53 implying that indeed the AC members were diversified in terms of age. The mean score for providing gender diversification among the AC in the county governments was 4.19 and a standard deviation of 0.78. This implies that the audit committees composed of both male and female to a great extent.

The mean score for audit committee with a minimum of one member with relevant qualifications and expertise in audit, financial management, or accounting with public service experience was 4.08 and standard deviation of 0.61 implying that the respondents agreed on this statement. The mean score for the statement that the committee co-opts persons with specialized skills on demand if the necessary skills aren't available in the committee was 3.54 and standard deviation of 0.87 implying an agreement.

Table 4.3: Descriptive Statistics for Audit Committee Composition

Statement	N	Mean	Std. Dev
The audit committee consist of members from different age groups	48	4.27	0.53
The audit committee can be said to be diversified in terms of gender	48	4.19	0.78
The audit committee has a minimum of one member with requisite knowledge and expertise in audit, financial management, or accounting and experience in public service	48	4.08	0.61
The committee co-opts persons with specialized skills on demand in instances where specialized skills are unavailable within the committee	48	3.54	0.87
Average		4.02	0.48

Source: Primary Data (2020)

4.3.2 Audit Committee Independence

The mean and standard deviation for the specific attributes of audit committee independence are as presented in Table 4.4. Results demonstrate that the county governments audit committees were independent to a great extent. This is supported by the fact that on a five-point likert scale, the mean scores for attributes related to audit committee independence was greater than 3. The mean score for the statement that the audit committee in the county government assesses the independence and objectivity of the external auditor yearly was 4.21 and a standard deviation of 0.71.

The mean score for the assertion that a written declaration of conflict of interest through the chair by members is done periodically was 4.02 and a standard deviation of 0.69.

The mean score for the affirmation that the rotation of the members has been done where members are disallowed from serving after 3 years was 4.08 and standard deviation of 0.53. The mean score for the statement that the committee seeks to be assured that auditors and their staff have no financial, business, employment or family and personal relations with the government which would compromise the auditor’s independence and objectivity was 4.42 and standard deviation of 0.57. It can thus be concluded that the respondents agreed that the audit committees in their respective Western county governments were independent.

Table 4.4: Descriptive Statistics for Audit Committee Independence

Statement	N	Mean	Std. Dev
The audit committee in the county government assesses the independence and objectivity of the external auditor yearly	48	4.21	0.71
A written declaration of conflict of interest by members is done periodically through the chair	48	4.02	0.69
Rotation of the committee members has been done in which no one member can serve for over 3 years	48	4.08	0.53
The audit committee seeks to be assured that auditors and their employees have no financial, business, employment or family and other personal relations with the County government that would impact their independence and objectivity	48	4.42	0.57
Average		4.18	0.41

Source: Primary Data (2020)

4.3.3 Audit Committee Meetings

The mean and standard deviation for the specific attributes of audit committee meetings are as presented in Table 4.5. Results demonstrate that the western county

governments audit committees had adopted meetings to a great extent. This is supported by the fact that on a five-point likert scale, the mean scores for attributes related to audit committee meetings was greater than 3. The mean score for the statement that the audit committee meetings are held at least 4 times in a year in specified intervals was 4.21 and a standard deviation of 0.58.

The mean score for the assertion that the timing meetings is made annually in advance to ensure member availability was 4.25 and standard deviation of 0.69. The mean score for the statement that the timing is communicated to other staff like internal and external audit and line management, to confirm their availability since they may be required to attend selected meetings was 3.98 and a standard deviation of 0.66. Further, the means score for the assertion that the agenda and documentation in support of the matters that will be under discussion are circulated to members and persons attending the meeting at least 14 days in advance was 3.56 and standard deviation of 0.86.

Table 4.5: Descriptive Statistics for Audit Committee Meetings

Statement	N	Mean	Std. Dev
Audit committee meetings are held at least 4 times in a years in specified intervals	48	4.21	0.58
The timing of audit committee meetings s made annually in advance to make sure all members are available	48	4.25	0.69
Communication of the timing is made to other personnel like internal and external audit and line management, to confirm their availability since they may be required to attend some meetings.	48	3.98	0.66
Agenda and documentation supporting discussion matters is availed to the audit committee members and persons attending the meeting 14 days in advance	48	3.56	0.86
Average		4.00	0.53

Source: Primary Data (2020)

4.3.4 Audit Committee Expertise

The mean and standard deviation for the specific attributes of audit committee expertise are as presented in Table 4.6. Results demonstrate that the western county governments audit committees consist of experts to a great extent. This is supported by the fact that on a five-point likert scale, the mean scores for attributes related to audit committee expertise was greater than 3. The mean score for the assertion that the audit committee members are picked on merit was 4.02 and a standard deviation of 0.52.

The mean score for the assertion that the audit committee members have relevant in audit, financial management and accounting experience in devolved system of governance and are members of a professional body in good standing was 3.85 and standard deviation of 0.71. The mean score for prior extensive work experience in other areas / sectors of the members is checked and proven was 3.81 and a standard deviation of 0.81. Further, the means score for the statement that there are frequent accounts training organized for the audit committee members increasing their understanding of their audit function was 3.92 and standard deviation of 0.79.

Table 4.6: Descriptive Statistics for Audit Committee Expertise

Statement	N	Mean	Std. Dev
The audit committee members are picked on merit	48	4.02	0.52
The audit committee members have relevant qualifications and experience in audit, financial management and accounting in a devolved governance structure and are members of a professional body in good standing	48	3.85	0.71
Prior extensive work experience in other areas / sectors of the members is checked and proven	48	3.81	0.81
There are frequent accounts training organized for the audit committee members increasing their understanding of their audit function	48	3.92	0.79
Average		3.90	0.48

Source: Primary Data (2020)

4.3.5 Fraud Detection and Prevention

The mean and standard deviation for the specific attributes of fraud detection and prevention are as presented in Table 4.7. Results demonstrate that fraud detection and prevention has improved to a great extent. This is supported by the fact that on a five-point likert scale, the mean scores for attributes related to fraud detection and prevention was greater than 3. The mean score for the statement that the frequency of fraud cases has decreased was 3.63 and a standard deviation of 0.70.

The respondents further agreed that the number of fraudulent expense claims have reduced, cases of bribery and corruption in the county government has been on a decline, cases of procurement fraud have reduced, there are less cases of inappropriate journal vouchers, cases of payroll fraud have been on a decline, there is a decline in cases of financial accounting mis-statements and that theft of cash and other physical assets have reduced. This is supported by mean scores above three and an average standard deviation of 0.56.

Table 4.7: Descriptive Statistics for Fraud Detection and Prevention

Statement	N	Mean	Std. Dev
The frequency of fraud cases has decreased	48	3.63	0.70
The number of fraudulent expense claims have reduced	48	3.46	0.73
Cases of bribery and corruption in the county government has been on a decline	48	3.77	0.65
Cases of procurement fraud have reduced	48	3.88	0.63
There are less cases of inappropriate journal vouchers	48	3.88	0.78
Cases have payroll fraud have been on a decline	48	3.63	0.70
There is a decline in cases of financial accounting mis-statements	48	3.46	0.73
Theft of cash and other physical assets have reduced	48	3.68	0.65
Average		3.73	0.56

Source: Primary Data (2020)

4.4 Diagnostic Tests

Diagnostic tests were carried out on the data. A test for multicollinearity was also done. The VIF and Tolerance where values greater than 0.2 for Tolerance, and values lower 10 for VIF showed no multicollinearity. To use the multiple regressions a substantial relation should not be found among the independent variables. Tolerance values >0.2 and VIF values <10 for variables shown table 4.8 indicating the lack of Multicollinearity among the predictor variables.

Table 4.8: Multicollinearity Test for Tolerance and VIF

Variable	Collinearity Statistics	
	Tolerance	VIF
AC composition	0.398	2.513
AC independence	0.388	2.577
AC meetings	0.376	2.659
AC expertise	0.386	2.591

Source: Research Findings (2020)

Shapiro-walk ascertained normality. Null hypothesis tested assumptions that data was not normally distributed. A p-value of greater than 0.05, would lead to rejection of the null hypothesis. Findings are on table 4.9.

Table 4.9: Normality Test

Fraud detection and prevention	Statistic	Shapiro-Wilk Df	Sig.
AC composition	.881	48	.723
AC independence	.892	48	.784
AC meetings	.918	48	.822
AC expertise	.874	48	.812

Source: Research Findings (2020)

The Shapiro-Wilk tests gave p-values greater than 0.05 which implied that study data was normally distributed hence rejecting the null hypothesis. This showed that data was suitable for parametric testing like the Pearson’s correlation, regression analysis and ANOVA.

Tests for autocorrelation were run in determining correlation of error terms overtime through the Durbin Watson test. Statistic of 2.495 showed there was no serial autocorrelation since the value lied within 1.5 and 2.5 that was acceptable.

Table 4.10: Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.743 ^a	.552	.511	.393552	2.495

a. Predictors: (Constant), AC expertise, AC meetings, AC independence, AC composition
b. Dependent Variable: Fraud prevention

Source: Primary Data (2020)

Heteroskedasticity tests if the variance of the errors from a regression is reliant on the independent variables. The study assessed for heteroskedasticity using the Levene test. As a rule of thumb, using Levene test, we conclude that the variances

are not equal if “Sig.” > 0.05. Since the sig was > 0.05, then the variances were found not to be equal and therefore the null hypothesis was rejected.

Table 4.11: Heteroskedasticity Test

	Levene Statistic	df1	df2	Sig.
AC composition	0.939	2	48	0.397
AC independence	0.03	2	48	0.97
AC meetings	2.344	2	48	0.106
AC expertise	0.87	2	48	0.425

Source: Primary Data (2020)

4.5 Correlation Results

Assessment of how two variables are related is made by a correlation analysis. The relation may be between a (-) strong negative correlation and (+) strong positive correlation. This was done using Pearson correlation. The correlation results demonstrate a moderate, positive and significant association between AC composition and fraud detection and prevention as reflected by a Pearson correlation coefficient of 0.470 and a P-value of 0.001. The correlation results also demonstrate a strong, positive and substantial association between AC independence and fraud detection and prevention as reflected by a Pearson correlation coefficient of 0.563 and a P-value of 0.000.

Further, the correlation results demonstrate a strong, positive and substantial association between audit committee expertise and as reflected by a Pearson correlation coefficient of 0.669 and a P-value of 0.000. Audit committee meetings were however found to exhibit a weak positive and not statistically significant correlation with fraud detection and prevention.

Table 4.12: Correlation Results

		Fraud prevention	AC composition	AC independence	AC meetings	AC expertise
Fraud prevention	Pearson Correlation	1				
	Sig. (2-tailed)					
AC composition	Pearson Correlation	.470**	1			
	Sig. (2-tailed)	.001				
AC independence	Pearson Correlation	.563**	.302*	1		
	Sig. (2-tailed)	.000	.000			
AC meetings	Pearson Correlation	.194	.374*	.079	1	
	Sig. (2-tailed)	.187	.009	.593		
AC expertise	Pearson Correlation	.669**	.332*	.302*	.292*	1
	Sig. (2-tailed)	.000	.000	.005	.044	

** . Correlation is significant at the 0.01 level (2-tailed).
* . Correlation is significant at the 0.05 level (2-tailed).
c. Listwise N=48

Source: Primary Data (2020)

4.6 Regression Results

The regression analysis encompasses the model fitness, the Analysis of Variance (ANOVA) and the regression coefficients. This is as demonstrated in below. Outcomes displayed that R squared was 0.552. This implied that audit committee composition, independence, meetings and expertise explained 55.2% of fraud detection and prevention. The model summary results were illustrated in Table 4.13.

Table 4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.743 ^a	.552	.511	.393552	2.495

a. Predictors: (Constant), AC expertise, AC meetings, AC independence, AC composition
b. Dependent Variable: Fraud prevention

Source: Primary Data (2020)

Outcomes displayed that the overall model was significant. Audit committee characteristics had significant effect on fraud detection and prevention in western

county governments in Kenya ($F=13.258$, $p=0.000$). The ANOVA results were displayed in Table 4.14.

Table 4.14: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.214	4	2.053	13.258	.000 ^b
	Residual	6.660	43	.155		
	Total	14.874	47			

a. Dependent Variable: Fraud prevention
b. Predictors: (Constant), AC expertise, AC meetings, AC independence, AC composition

Source: Primary Data (2020)

Results demonstrated a positive substantial relation between audit committee composition and fraud detection and prevention (β 0.353, P 0.037). This illustrates that increase in audit committee composition by one unit would cause an improvement on fraud detection and prevention by 0.353 units. Results also portrayed a positively substantial relation between audit committee independence and fraud detection and prevention (β 0.513, P 0.007). This point out that increase in audit committee independence by one unit would cause an improvement on fraud detection and prevention by 0.513 units. Further, results demonstrated a positively significant relationship between audit committee expertise and fraud detection and prevention (β 0.621, P 0.000). This illustrates that increase in the level of audit committee expertise by one unit would cause an improvement on fraud detection and prevention by 0.168 units.

Table 4.10: Regression Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
	(Constant)	-.751	.718		-1.045	.302
1	AC composition	.353	.161	.346	2.192	.037
	AC independence	.513	.180	.376	2.851	.007
	AC meetings	.028	.120	.026	.233	.817
	AC expertise	.621	.141	.539	4.391	.000

a. Dependent Variable: Fraud prevention

Source: Primary Data (2020)

The resulting regression model is as follows:

$$Y = -0.751 + 0.353X_1 + 0.513X_2 + 0.621X_3 + \epsilon$$

Whereby:

Y- Fraud detection and prevention

X₁- Audit committee composition

X₂ - Audit committee independence

X₃-Audit committee expertise

4.7 Discussion of Findings

This chapter included the study general information encompassing the response rate and demographic information. The descriptive statistics showing the means and standard deviation for each of the study variables, and the inferential statistics section which presents the correlation and multiple regression analysis results. The outcomes displayed audit committee composition among western region county governments is diversified in terms of gender, age, experience and specialized skills. Correlation outcomes showed a positive substantial correlation between audit committee composition and fraud detection and prevention. Regression results revealed that there

was a positive and significant effect of audit committee composition on fraud detection and prevention ($r=0.353$, $p=0.037$). This implied that improvement in AC composition by one unit would lead to improvement in fraud detection and prevention by 0.353 units. These outcomes were consistent with that of Okiro (2018) who stated that there exists a strong relation between county audit committees and county government performance.

The outcomes further displayed audit committees among western county governments were independent to a great extent. Correlation outcomes showed that there was a positive substantial relation between audit committee independence and fraud detection and prevention. This implied that improvement in audit committee independence would lead to better fraud detection and prevention. Outcomes further displayed that there was a positive and significant effect of audit committee independence on fraud detection and prevention ($r=0.513$, $p=0.007$). This implied that improvement in audit committee independence by one unit would lead to improvement in fraud detection and prevention by 0.513 units. These findings agreed with that of Bou-Raad (2015) who explored the relation between internal audit (experience and qualifications) audit and firm performance with growth prospects and the independence of audit committees in Malaysia. The findings revealed a substantial relation between independence and firm performance.

The outcomes further displayed that audit committees in Western county governments in Kenya hold meetings regularly and that the meetings are well organized. Correlation outcomes showed that there was a weak positive but not statistically significant correlation between audit committee meetings and fraud detection and prevention. In addition, regression results revealed that there was a positive but not significant influence of audit committee meetings on fraud detection and prevention

($r=0.028$, $p=0.817$). This implied that improvement in management audit committee meetings by one unit would not lead to a significant improvement in fraud detection and prevention. These findings agreed with Ouma (2019) who sought to determine the how corporate governance influences fraud mitigation among Kenyan banks and concluded that board meetings have no statistically significant influence on fraud mitigation.

The outcomes also displayed that western county governments had audit committees that were to a great extent composed of the required expertise. Correlation analysis showed a positive substantial correlation between audit committee expertise and fraud detection and prevention. Regression outcomes stated that there was a positive and significant effect of audit committee expertise on fraud detection and prevention ($r=0.621$, $p=0.000$). This implied that improvement in audit committee expertise by one unit would lead to improvement in fraud detection and prevention by 0.621 units. These findings agreed with that of Ruto (2016) who focused on effectiveness of audit committee in government ministries in Kenya and concluded that audit committee expertise was substantial to performance of government ministries in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section presents a discussion, conclusion, and recommendations. The discussion, conclusion, suggestions for improvements for the study are presented in line with the study research objectives. Recommendations for further research and limitations are also discussed.

5.2 Summary of Findings

The study was to find out how audit committee characteristics impact fraud detection and prevention among western county governments in Kenya. Descriptive design was used for this purpose. The study targeted 7 departments in each of the 7 western county governments in Kenya. Data was from 48 persons giving a response rate of 98% which was adequate for this study. Respondents were given questionnaires to facilitate collection of primary data. Types of statistics used were descriptive and inferential. The descriptive analysis included mean and standard deviation. Inferential statistics included use of Pearson's correlation and regression analysis.

The results revealed that the audit committee among western county governments were diversified in terms of age, gender, experience and specialized skills. The findings further revealed that the committee had at least one member who had the appropriate qualifications and experience in audit, financial management, or accounting with experience in public service. It was further revealed that the committee co-opts persons with specialized skills were not available in the committee. Correlation results revealed a positive correlation between AC composition and fraud

detection and prevention while regression results revealed that AC composition has a substantial positive effect on fraud detection and prevention.

The results further displayed that county governments in the western region had audit committees that were independent to a great extent. Respondents agreed that a written declaration of conflict of interest through the chair by members is done periodically and that audit committee member rotation has been done where members are disallowed from serving for over 3 years. Further, it was revealed that the audit committee seeks to be assured that the auditors and their employees have no financial, business, employment or family and other personal relationship with the County government which could impact their independence and objectivity. Regression outcomes showed that there was a positive substantial impact of audit committee independence on fraud detection and prevention

The results further displayed that the audit committee meetings are held at least 4 times in a year in specified intervals and that the timing of the meetings is planned annually so that all members could be available. Further, communication of the timing is made to other staff like internal and external audit and line management, to make sure they are available as they may be required to be in attendance and the agenda and documents on matters to be discussed circulated to the members at least 14 days in advance. Regression outcomes showed that there was a positive but not significant effect of audit committee meetings on fraud detection and prevention.

The findings also displayed that the audit committee members are picked on merit. Further, it was revealed that the audit committee members have qualifications and expertise in audit, financial management and accounting in devolved governance system and are members of a professional body in good standing and prior extensive

work experience in other areas / sectors of the members is checked and proven. In addition, the results revealed that there are frequent accounts training organized for the audit committee members increasing their understanding of their audit function. Regression results showed that there was a positive and significant effect of audit committee expertise on fraud detection and prevention

5.3 Conclusions

Findings showed a positive substantial influence of audit committee composition on fraud detection and prevention among western county governments. This implied that improvement in audit committee composition would lead to increased fraud detection and prevention. The study therefore concludes that audit committee composition helps in detecting and preventing fraud among western county governments.

There was a positive substantial effect of audit committee independence on fraud detection and prevention among western county governments. This implied that improvement in audit committee independence would lead to increased fraud detection and prevention. It hence concludes that having an audit committee that is independent can help in detecting and preventing fraud among western county governments.

There was a positive substantial impact of audit committee expertise on fraud detection and prevention among western county governments. This implied that improvement in audit committee expertise would lead to fraud detection and prevention. It hence concludes that audit committee expertise has a positive substantial influence on fraud detection and prevention among western county governments in Kenya.

The findings revealed that there was a positive but weak influence of audit committee meetings on fraud detection and prevention among western county governments in Kenya. This implied that improvement in audit committee meetings would not lead to a significant increase in fraud detection and prevention. The study therefore concludes that audit committee meetings have no substantial influence on fraud detection and prevention.

5.4 Recommendations for Policy and Practice

From the research conclusion, there was a positive and significant effect of audit committee composition on fraud detection and prevention among western county governments in Kenya. Western county governments and other counties and institutions in general should ensure they have diversified audit committee in terms of age, gender experience and specialized skills as this will help in detection and preventing fraud.

From the research conclusion, there was a positive and significant effect of audit committee independence on fraud detection and prevention among western county governments in Kenya. Western county governments and other institutions in general should therefore strive towards having independent audit committees as this will help in detecting and preventing fraud.

From the research conclusion, there was a positive and significant effect of audit committee expertise on fraud detection and prevention among western county governments in Kenya. To ensure effective fraud detection and preventing among these counties and other counties in general, they should strive to come up with audit committees with diverse expertise and experience.

5.5 Limitations of the Study

Firstly, this study relied on primary data collected with an aid of a questionnaire, some failed to fill the questionnaires. Others partly filled the questionnaires thus affecting the reliability of the results. The researcher had to make regular follow up both on mail and phone calls. Further, some of the respondents feared of their confidentiality while answering the questions. However, the researcher assured them information will be utilized for academic purposes only.

The focus was on some factors that are hypothesized to influence fraud detection and prevention among western county governments. Specifically, the study focused on four explanatory variables. In reality however, there are other variables that are likely to influence fraud detection and prevention among these counties some which are internal such as internal controls and corporate governance while others are external such as political interference.

The study adopted the analytical approach which is highly scientific. The research also disregarded qualitative information which could explain other factors that influence the association between audit committee characteristics and fraud detection and prevention among western county governments. Qualitative methods such as focus group discussions, open ended questionnaires or interviews can help develop more concrete results.

In completing data analysis, multiple linear regression model was used. Because of the drawbacks involved when using the model like erroneous and wrong findings from a change in variable such as fraud detection and prevention, findings cannot be generalized accurately. If data was added to the model, the model may fail to perform as before.

5.6 Suggestions of Further Research

Additional studies should focus on identified gaps. The current study focused on effect of audit committee characteristics on fraud detection and prevention among western county governments in Kenya. Therefore, a similar study can be done in other counties in Kenya or other regions for purposes of comparisons.

This study did not exhaust all the factors influencing fraud detection and prevention among western county governments in Kenya and therefore recommends that future studies done on elements like corporate governance, internal controls, political interference among other variables. By assessing the effect of each variable on fraud detection and prevention, the policy makers will implement sufficient mechanisms to enhance fraud detection and prevention.

Finally, this study was based on a multiple linear regression model, which has its own limitations like errors and misleading results resulting from a change in variable fraud detection and prevention. Future researchers should focus on models like the Vector Error Correction Model (VECM) in exploring the various relations between audit committee characteristics and fraud detection and prevention.

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APPENDICES

Appendix I: Questionnaire

This questionnaire has been made for the collection of information on the effectiveness of audit committee on fraud detection and prevention among county governments in western region. Kindly read the questions carefully and provide honest responses to the questions. The information obtained will be treated with strict confidentiality and is purely for academic research.

Instructions

1. Tick appropriately in the box or fill in the space provided.
2. Feel free to give further relevant information to the research.

PART A: BACKGROUND INFORMATION

1. Which department do you represent in the county government?

Finance and accounts

Legal

HR and administration

Procurement

Internal audit

Committee services

ICT

PART B: AUDIT COMMITTEE COMPONENTS

Component One: Audit committee composition

Please mark (x) in the box which best describes the degree to which you agree with the statements that follow: Use 1- strongly disagree, 2-disagree, 3-moderate, 4- agree, 5- strongly agree

Statement	1	2	3	4	5
The audit committee consist of members from different age groups					
The audit committee can be said to be diversified in terms of gender					
The audit committee has a minimum of one member with required qualifications and experience in audit, financial management, or accounting having worked in the public service					
The committee co-opts persons with the necessary skills as required if the skills are not available among committee members					

Component Two: Audit Committee Independence

Please mark (x) in the box which best describes the degree to which you agree with the statements that follow: Use 1- strongly disagree, 2-disagree, 3-moderate, 4- agree, 5- strongly agree

Statement	1	2	3	4	5
The audit committee in the county government assesses the independence and objectivity of the external auditor yearly					
A written declaration of conflict of interest is made periodically by members through the chair					
Audit committee member rotation has been done in which they are disallowed to serve continuously for more than 3 years					
The audit committee seeks to be assured that the auditors and employees hold no financial, business, employment					

or family and personal relations with the County government that would limit the auditor's independence and objectivity					
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Component Three: Audit Committee Meetings

Please mark (x) in the box which best describes the degree to which you agree with the statements that follow: Use 1- strongly disagree, 2-disagree, 3-moderate, 4- agree, 5- strongly agree

Statement	1	2	3	4	5
Audit committee meetings are held at least 4 times in a years in specified intervals					
The timing of committee meetings is made annually in advance to make sure all members are available					
Communication of timing is made to other personnel like internal and external audit and line management, to confirm if they will be available as may be required					
The agenda and supporting documentation for matters to be discussed are circulated to members and persons attending 14 days in advance					

Component Four: Audit committee expertise

Please mark (x) in the box which best describes the extent to which you agree with each of the following statements? Use 1- strongly disagree, 2-disagree, 3-moderate, 4- agree, 5- strongly agree

Component	1	2	3	4	5
The audit committee members are picked on merit					
The audit committee members have required					

qualifications and experience in audit, financial management and accounting in devolved government and are members of a professional body in good standing					
Prior extensive work experience in other areas / sectors of the members is checked and proven					
There are frequent accounts training organized for the audit committee members increasing their understanding of their audit function					

FRAUD DETECTION AND PREVENTION

To what extent do you agree on fraud detection and prevention in the county? Rate your agreement using the likert scale below: 1- Very low extent, 2-Low extent, 3- Moderate extent, 4- Great extent, 5- Very great extent

(Please tick appropriately)

Component	1	2	3	4	5
The frequency of fraud cases has decreased					
The number of fraudulent expense claims have reduced					
Cases of bribery and corruption in the county government has been on a decline					
Cases of procurement fraud have reduced					
There are less cases of inappropriate journal vouchers					
Cases have payroll fraud have					

been on a decline					
There is a decline in cases of financial accounting mis-statements					
Theft of cash and other physical assets have reduced					

THANK YOU

Appendix II: County Governments in the Western Region

1. Bungoma
2. Busia
3. Kakamega
4. Kisumu
5. Nandi
6. Siaya
7. Vihiga