



Electronic Theses and Dissertations

2025

Effect of financial internal control practices on audit opinions among commercial state corporations in Kenya.

Kiprop, Totona
Strathmore Business School
Strathmore University

Recommended Citation

Kiprop, T. (2025). *Effect of financial internal control practices on audit opinions among commercial state corporations in Kenya* [Strathmore University]. <https://hdl.handle.net/11071/16187>

Follow this and additional works at: <https://hdl.handle.net/11071/16187>

**EFFECT OF FINANCIAL INTERNAL CONTROL PRACTICES ON AUDIT OPINIONS
AMONG COMMERCIAL STATE CORPORATIONS IN KENYA**

KIPROP TOTONA

ADMISSION NO. 150126



**A RESEARCH THESIS SUBMITTED TO THE STRATHMORE UNIVERSITY
BUSINESS SCHOOL IN PARTIAL FULFILLMENT FOR THE MASTER OF
COMMERCE OF STRATHMORE UNIVERSITY**

DECEMBER 2024

DECLARATION

I hereby declare that neither this university nor any other university has previously accepted my work as a submission for a degree. Except for the instances when appropriate citation is provided within the proposal itself, to the greatest degree of my understanding and belief, no previous written or published work has been included in the Thesis.



Kiprop Kimaiwa Totona

Approval

The Thesis of Kiprop Kimaiwa Totona was reviewed and approved by the following:

Name of Supervisor: Dr David Mathuva, PhD



Faculty Affiliation: Senior Lecturer

Institution: Strathmore University Business School

TABLE OF CONTENTS

DECLARATION	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABBREVIATION AND ACRONYMS.....	ix
DEFINITION OF KEY TERMS	x
DEDICATION.....	xi
ABSTRACT	xii
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.1.1 Financial Internal Control Practices and Audit Opinions.....	5
1.1.2 Accounting Standards and Audit Opinions	7
1.1.3 State Corporations in Kenya	8
1.2 Statement of the Problem.....	9
1.3 Research Objectives.....	10
1.3.1 General Objective.....	10
1.3.2 Specific Objectives.....	10
1.4 Research Questions.....	10
1.5 Significance of the Study.....	11
1.5.1 Policymakers.....	11
1.5.2 Government Agencies	11
1.5.3 Scholars and Researchers	11
1.5.3 Empirical Review and Theories.....	11
1.6 Scope of the Study	12
1.7 Chapter Summary	12
CHAPTER TWO: LITERATURE REVIEW.....	13
2.1 Introduction	13
2.2 Theoretical Framework.....	13
2.2.1 Accountability Theory.....	13
2.2.2 Policeman Theory	14
2.3 Empirical Reviews.....	15
2.3.1 Audit Opinions.....	15

2.3.2 Effects of Control Activities on Audit Opinions	16
2.3.3 Effects of Monitoring Activities on Audit Opinions.....	18
2.3.4 Effect of Risk Assessment on Audit Opinions	20
2.3.5 Moderating Effect of Accounting Standards on the Relationship between Financial Internal Control Practices and Audit Opinions.....	23
2.4 Summary of Literature and Gaps.....	24
2.5 Conceptual Framework	29
CHAPTER THREE: RESEARCH METHODOLOGY.....	32
3.1 Introduction	32
3.2 Research Philosophy.....	32
3.3 Research Design	32
3.4 Population and Sampling	33
3.5 Data Collection Methods	34
3.6 Data Analysis	35
3.6.1 Descriptive Statistics	35
3.6.2 Pearson Correlation.....	35
3.6.3 Regression Model.....	35
3.7 Diagnostic Tests	36
3.7.1 Normality Test	36
3.7.2 Multicollinearity Test.....	36
3.8 Ethical Considerations	37
3.9 Summary	37
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, AND DISCUSSION.....	38
4.1 Introduction	38
4.2 Response Rate	38
4.3 Respondents' Personal Information.....	38
4.4 Control Activities and Audit Opinions	40
4.5 Monitoring Activities and Audit Opinions	41
4.6 Risk Assessment Activities and Audit Opinions.....	43
4.7 Moderating Effect of Accounting Standards on the Relationship between Internal Control Practices and Audit Opinions.....	45
4.8 Audit Opinions	46
4.9 Diagnostic Test Results.....	47

4.9.1 Normality and Multicollinearity Tests	47
4.10 Pearson Correlation (r).....	48
4.11 Linear Regression Results	49
4.12 The Interactive Effect of the Moderating Variable (Accounting Standards)	50
4.12.1 Moderating Effect of Accounting Standards on the Relationship between Control Activities and Audit Opinions	50
4.12.2 Moderating Effect of Accounting Standards on the Relationship between Monitoring Activities and Audit Opinions	52
4.12.3 Moderating Effect of Accounting Standards on the Relationship between Risk Assessment and Audit Opinions	54
CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS.....	56
5.1 Introduction	56
5.2 Discussions.....	56
5.2.1 Control Activities and Audit Opinions among Commercial State Corporations in Kenya	56
5.2.2 Monitoring Activities and Audit Opinions among Kenya's Commercial State Corporations	57
5.2.3 Risk Assessment Activities and Audit Opinions among Commercial State Corporations-Kenya	58
5.2.4 Moderating Effect of Accounting Standards on the Relationship between Internal Control Practices and Audit Opinions	60
5.2.5 Audit Opinions	61
5.3 Conclusions	61
5.4 Recommendations.....	62
5.5 Limitations	63
5.6 Areas for Further Research	63
REFERENCES	64
APPENDICES	68
APPENDIX I: INTRODUCTION LETTER	68
APPENDIX II: QUESTIONNAIRE	69
APPENDIX III: INTERVIEW GUIDE FOR EXTERNAL AUDITORS	72
APPENDIX IV: LIST OF COMMERCIAL STATE CORPORATIONS IN KENYA	73
APPENDIX V: BUDGET.....	74
APPENDIX VI: SU-ISERC LETTER	75

APPENDIX VII: NACOSTI CERTIFICATE	76
APPENDIX VIII: SU-ISERC LETTER.....	76
APPENDIX X: NACOSTI CERTIFICATE.....	77



LIST OF TABLES

Table 1.1: Audit Opinions Reports on National Government Entities	4
Table 2.1: Summary of Literature and Research Gap.....	25
Table 2.2: Operationalization of Variables for Structured Questionnaire (Quantitative Data)....	30
Table 4.1: Respondents' Personal Information	39
Table 4.2: Control Activities and Audit Opinions	40
Table 4.3: Monitoring Activities and Audit Opinions	42
Table 4.4: Risk Assessment Activities and Audit Opinions.....	43
Table 4.5: Moderating Effect of Accounting Standards on the Relationship between Internal Control Practices and Audit Opinions.....	45
Table 4.6: Audit Opinions	46
Table 4.7: Tests for Normality and Multicollinearity	47
Table 4.8: Pearson Correlation (r)	48
Table 4.9: Model summary.....	49
Table 4.10: ANOVA ^a	49
Table 4.11: Coefficients	50
Table 4.12: Model summary.....	51
Table 4.13: ANOVA	51
Table 4.14: Coefficients	52
Table 4.15: Model summary.....	52
Table 4.16: ANOVA	53
Table 4.17: Coefficients	53
Table 4.18: Model summary.....	54
Table 4.19: ANOVA	54
Table 4.20: Coefficients	55

LIST OF FIGURES

Figure 2.1: Conceptual Framework	29
--	----



ABBREVIATION AND ACRONYMS

COSO:	Committee of Sponsoring Organizations of Treadway Commission Framework
EAPCC:	East African Portland Cement Company
IAASB:	International Auditing and Assurance Standards Board
GAAP:	Generally Accepted Accounting Principles
IFRS:	International Financial Reporting Standards
ISA:	International Standard on Auditing
KAA:	Kenya Airports Authority
KBC:	Kenya Broadcasting Corporation
KMC:	Kenya Meat Commission
KEMSA:	Kenya Medical Supplies Authority
KPA:	Kenya Ports Authority
KPC:	Kenya Pipeline Company
KPLC:	Kenya Power and Lighting Company
KPOSB:	Kenya Post Office Savings Bank
NSSF:	National Social Security Fund
OAG:	Office of Auditor General
PAT:	Positive Accounting Theory
PCK:	Postal Corporation of Kenya
PSASB:	Public Sector Accounting Standards Board
SCAC:	State Corporations Advisory Committee
SCs:	State Corporations
SPSS:	Statistical Packages for Social Sciences
IAR:	Internal Audit Review
NSE:	Nairobi Securities Exchange

DEFINITION OF KEY TERMS

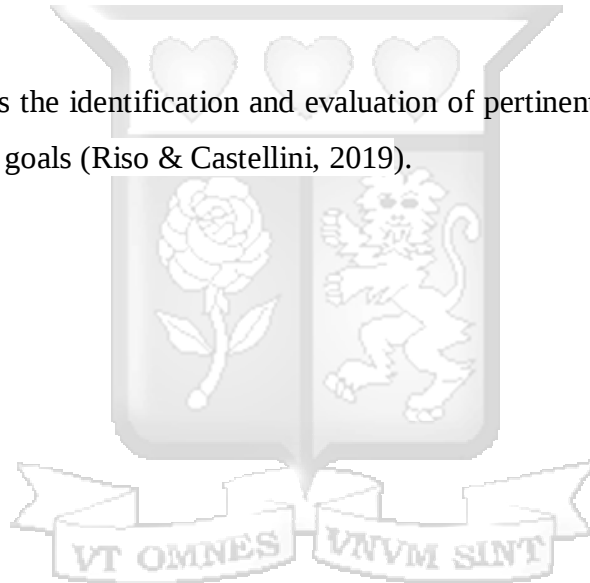
Audit Opinions: This is defined as a non-satisfaction or satisfaction endorsement that is attached to financial statements (Chung & Kim, 2023).

Control Activities: They are rules and regulations that ensure management's directions are followed (Bruwer et al., 2018).

Internal Control: These are procedures and policies enforced by management to ensure entities operate most effectively to guarantee complete compliance with accounting standards (Gontara et al., 2023).

Monitoring: Procedures for evaluating internal controls' effectiveness over time (Nor & Ishak, 2020).

Risk Assessment: This is the identification and evaluation of pertinent risks that may derail the attainment of any entity's goals (Riso & Castellini, 2019).



DEDICATION

This thesis is dedicated to my family for their unwavering assistance while I was undertaking my postgraduate studies.



ABSTRACT

Effectively executed internal control practices improve the reporting process and create accurate financial reports thus strengthening the management's accountability role among state corporations. However, commercial state corporations have had mixed audit reports (modified or unmodified) from the OAG. In this vein, this research assessed the effect of financial internal control practices on audit opinions among Kenyan commercial state corporations. The specific research objectives included: investigating the effect of control activities on audit opinions on Kenyan commercial state corporations, assessing the effect of monitoring on audit opinions on Kenyan commercial state corporations, establishing risk assessment's effect on audit opinions on Kenyan commercial state corporations, and to find out the moderating effect of accounting standards on the relationship between financial internal controls and audit opinions. The study was premised on Accountability Theory and Policeman theory, an explanatory sequential mixed research design alongside pragmatism philosophy. The study only sampled 46 commercial state corporations with a target population of 1380 employees from the accounting and internal audit departments. Meanwhile, the external auditors were interviewed. This research gathered data from primary sources using a questionnaire and interview guide. The study used statistical software called Statistical Packages for Social Sciences (SPSS) V. 25.0. Descriptive statistics, correlations, and regression were used to examine the data. Diagnostic tests including normality and multicollinearity determined the fitness of the regression model. It was established that control activities, monitoring activities, and risk assessment had a positive significant relationship with audit opinions. This means that an increase in controls monitoring, and risk assessments could lead to the formation of unqualified opinions. Further, accounting standards had a significant effect on the relationship between financial internal control practices and audit opinions. The study concludes that most of the commercial state corporations had internal control activities in place however implementation was lacking. Regarding monitoring activities, the study concludes that commercial state corporations adhered to monitoring activities including internal mechanisms and regular evaluations of financial statements. Concerning risk assessment, the study concludes that it was inadequately embraced across several commercial state corporations thus leading to the provision of qualified, adverse, or disclaimer opinions if not corrected. It concludes that most commercial state corporations failed to receive unqualified opinions from the OAG. It recommended that all commercial state corporations must ensure that risk assessment practices are upheld to ensure that cases of errors and any form of malpractice are sealed. Further, commercial state corporations should incessantly review and evaluate their internal control procedures including methods for conducting internal checks and balances. Again, it recommends that when assigning tasks to employees, management—and in particular, human resource management—should assess each worker's honesty and integrity, particularly for those handling private financial data. It again recommends that; commercial state corporations should make sure that their monitoring plans are focused on achieving unqualified opinions and efficient operations to boost stakeholder confidence.

CHAPTER ONE: INTRODUCTION

This chapter entails a study background based on the funnel approach. Further, the study presented the connection between audit opinions and financial performance. This is followed by a problem statement and research objectives are highlighted. The rest of the sections are the research questions, scope, and the study's significance.

1.1 Background of the Study

The audit opinion acts as a barometer for the precision of the financial data in the financial statements. Organizations that obtain a clean report or an unaltered audit opinion will inspire confidence in investors, thereby drawing capital and investments. Investors will, however, be alerted to the poor quality of financial reports and lack of responsibility by companies that receive a modified audit opinion from auditors. This could have detrimental effects on the company, such as making it harder for it to get funding or even causing a drop in share returns. Therefore, commercial state corporations sought to adhere to financial internal controls to receive qualified audit opinion.

According to Khalmurzayevna et al. (2023), state corporation's management should implement a variety of controls, notably internal control practices, to ensure that the resources committed to all personnel at the public organization are used to their fullest potential as this plays a crucial role in the audit opinion formation (Ojera, 2018). Internal control practices have thus become more significant presently since it ensures the long-term viability of an organization (Fernandhytia & Muslichah, 2020). This is because, effective control practices are essential to both the accomplishment of organizational objectives and accounting system that is effective and consequently, the formation of audit opinion.

Internal control practices are thus crucial for identifying and stopping fraud while safeguarding public entity's resources. According to Pamungkas and Avrian (2018), low efficiency in the public sector is primarily caused by financial mismanagement; therefore, internal control has become increasingly important in the wake of frequent fraudulent practices occasioned by the introduction of modern technologies across the globe.

Further, Oussii and Taktak (2018) say that internal control practices have risen to the top of the priority list for public entities. The justification for this is that an effective accounting system depends on the control practices used by every public organization. The leadership of public organizations has been driven to promote internal control practices as a component of improving accounting norms due to the rising volatility globally and the requirement for increased shareholder returns (Chang et al., 2019). This is crucial for government organizations since one of the main reasons for an adverse or disclaimer audit judgment is poor internal control practices. From a management perspective, it is crucial to ensure that internal control practices are adhered to lessen the likelihood of fraud.

As a result, internal control procedures are crucial for identifying and stopping fraud and safeguarding an organization's resources thereby increasing the chances of receiving unmodified audit opinion (Chalmers et al., 2019). Therefore, because of poor performance in public sector is primarily caused by fraudulent actions in organisation that auditors have discovered, many organizations seldom receive unmodified audit opinion. Internal control procedures thus aid in avoiding errors and achieving organizational objectives thereby enhancing the chances of receiving unqualified opinions (Chang et al., 2019).

Globally, with specific attention to the United States, public organizations boast of strong internal control systems that have resulted in improved management of finances. Nevertheless, when audit committees are confronted with a lack of expertise in financial and accounting problems, some organizations are linked with shortcomings in internal control. Additionally, if an auditor is granted adequate and proper independence, an organization may be able to identify internal control problems. According to Brown (2020), adherence to auditors' independence, the size of the audit committee, effective risk assessments, and efficient monitoring of financial statements have been reported as core elements that have led to unmodified audit opinions.

In Malaysia, good accounting principles have been adhered to by internal audit in public sector organizations, which has resulted in the development of unmodified audit among these institutions. The Malaysian government uses two different forms of audits to accomplish this. The very first is the external audit, for which the auditor's general office is responsible, and the internal audits, which are designed to make certain that public organizations increase their control and protect their assets (Hasan et al., 2020). Internal auditing comes before external auditing. In light of this,

the auditor general's office has been pushing for the implementation of internal audits for the past few years to ensure that independent assessment roles are present in every public organization, which goes hand in hand with helping controlling officers to fulfill their roles as planned and stipulated.

In Africa, with particular attention to Nigeria, because the majority of internal auditors do not carry out their duties independently, internal control procedures at public institutions have come under scrutiny (Abiodun, 2020). This is because top management, which is in charge of initiating all actions impacts internal control mechanisms. Nevertheless, as stated by Ejoh and Ejom (2014), some public organizations strictly abide by the budgetary control rule and methods stipulated in the yearly budget, and the control is introduced to avoid paying for expenses outside the budgeted amounts.

Fraudulent transactions have kept on increasing in Kenya despite that internal control systems have been introduced in majority of public organisations throughout the years, including Kenya Medical Supplies Authority (KEMSA), Mumias Sugar Company, among others (Mwangi & Muturi, 2018). Several publicly traded companies have experienced a rise in financial crimes like financial irregularities, cooperation among highly trusted workers, and control violations despite the presence of internal controls. Programs that are ineffective ultimately result in losses due to weak internal controls or a lack of application of internal control practices (Ahmed & Nganga, 2019).

According to Ndegwa and Mungai (2019), inadequate financial internal control structures are to blame for the widespread failures of companies and accounting frauds that have been observed. This occurs even though public firms have operational internal audit units tasked with giving management comfort that financial internal control mechanisms are sufficient and that high-quality services are in place. However, there is still widespread poor financial mismanagement, including budget violations, rules and regulations violations, and large amounts of unaccounted-for money. Due to this, public corporations now face a higher chance of operational failure. The audit opinions statistics are expressed in Table 1.1.

Table 1.1: Audit Opinions Reports on National Government Entities

Year	2015/2016		2016/2017		2017/2018		2018/2019		2019/2020		2021-2022	
Audit Opinion	No. of financial statement	%	No. of financial statement	%	No. of financial statement	%	No. of financial statement	%	No. of financial statement	%	No. of financial statements	%
Unqualified (Unmodified)	30	27.5	46	35.7	42	33.9	51	33.8	65	41.7	324	25.25
Qualified (modified)	51	46.8	59	45.7	48	38.7	70	48	71	45.5	836	65.16
Adverse	13	11.9	13	10.1	20	16.1	14	9.5	9	5.8	72	5.61
Disclaimer	15	13.8	11	8.5	14	11.3	13	8.8	11	7.1	51	3.98
Total	109	100	129	100	124	100	148	100	156	100	1,283	100

Source: Annual OAG report (2015-2023)

1.1.1 Financial Internal Control Practices and Audit Opinions

To conduct the operations of an organization, in an orderly and efficiently, compliance with management policies, and safeguarding and securing records' accuracy and completeness are important (Pamungkas et al., 2018). These can be achieved by using effective financial internal controls. Therefore, the identification and prevention of financial fraud are the benchmarks by which internal controls are evaluated. Using a methodical approach to risk handling effectiveness, internal controls help the organization accomplish its objectives (Handoyo & Bayunitri, 2021). As per Abdillah et al. (2019), the objectives behind financial internal control are to permit the management to receive specialized and high-level services and to permit the organization's employees to receive assistance in carrying out their responsibilities as effectively as possible.

Five elements make up internal control, according to Oussii and Taktak (2018): control setting entity's risk assessment procedure, information and communications networks, monitoring and control activities. An evaluation of these five components leads to a judgment on the specific internal control system's effectiveness (Chalmers et al., 2019). By analyzing data from sources, such as the auditor's assessment of controls, errors found in the statements, and other recognized control flaws, the auditor can generate an opinion.

Financial internal control mechanisms including internal audits are often created to improve financial accountability amongst people who supply corporations with information (Gebrayel et al., 2018). Consequently, the goal of financial internal control is much greater, and it explores links among the material disclosure weaknesses' fraudulent acts, and restatements, among other things. Financial internal control also offers an individualistic assessment of the caliber of management performance in executing delegated duties for increased revenue collections. According to Li et al. (2020), an organization's performance in hitting its earnings target level is undeniably correlated with having a strong system for internal controls. According to Bhaskar et al. (2019), the majority of organizations now establish internal control systems not only because doing so serves to ensure that all management operations are properly carried out but also because it is a legal obligation. All risk management practices should be used at all organizational levels and across all departments to guarantee that risks that could influence a company's capacity to fulfill goals are effectively avoided (Muhunyo & Jagongo, 2018).

Financial internal controls are methods management uses to ensure an organization achieves its financial and other goals (Tumwebaze et al., 2018). Therefore, financial internal controls will support internal audits of the company, aid in fraud detection and prevention, and improve the firm's financial performance. Internal controls are not solely evaluated regarding fraud detection or prevention, though. It also aids in the formation of audit opinion. In a rejoinder, Muhunyo and Jagongo (2018) say that auditors must assess the records presented by management under the requirements of the International Standards on Auditing (ISA), to put forth its yearly report on financial internal controls. Auditors adhere to guidelines if they find that any essential components of annual reports on financial statements are missing or poorly provided (Li, 2020). Therefore, the external auditor has to choose whether to withdraw their judgment or terminate the contract because of a scope constraint.

According to Handoyo and Bayunitri (2021), auditors' goal in examining businesses' annual reports is to provide their assessment of the likelihood that serious issues may arise once Indonesian accounting standards have been adopted. The auditor should assess information from available records including control failures, misstatements, and any reporting errors before opinion formation (Li et al., 2020). The auditor should therefore plan their control testing inside a comprehensive internal control over reporting on finances audit and accounting records such that the goals of both audits are met at the same time (Chalmers et al., 2019; Gontara et al., 2023; Khalmurzayevna et al., 2023). Therefore, having effective financial internal control practices will determine the opinion formation by the auditors.

Globally, a number of studies have been done. For instance, in Indonesia, Pamungkas et al. (2018) studied whether criteria of audit opinion formation have a significant influence on opinion formation among municipal government financial statements. However, it was done in developed nations with strong internal control mechanisms hence their findings cannot be used to infer the Kenyan scenario.

In South Africa, Dubihlela and Nqala, (2017) researched how businesses improved their internal control practices to reduce risks. Despite that, there are the International Auditing and Assurance Standards Board (IAASB) and ISA that all institutions must conform to, South Africa as a county also has its own initiated internal controls governing public institutions that could differ from those

put in place by Kenya hence the reason the results could not be used to generalize the Kenyan situation.

In Ghana, Ziniyel et al. (2018) assessed the internal audit practices' effectiveness on financial management among firms. The study found that the audit practice promotes financial management. However, despite that it was done in a developing country like Kenya, the study was done among organizations operating in a different geographical context hence a contextual research gap necessitating this research. Further, Mawanda (2008) studied internal control mechanisms' effect on Ugandan higher education's financial performance. However, it used financial performance as a dependent variable hence a conceptual research gap that was bridged by using audit opinion.

The studies above also presented mixed and contradicting results on the effect of internal control practices across various countries. The mixed results could be because several studies failed to use financial internal control practices and audit opinion as variables concurrently thus a conceptual research gap. The unclear results indicate that more research with a local approach ought to be conducted. Therefore, to seal both conceptual (variation on variables) and contextual (different countries), the study investigated the internal control practices' effect on audit opinions amongst Kenya's commercial state corporations.

1.1.2 Accounting Standards and Audit Opinions

This research used accounting standards as a moderating variable to moderate the relationship between financial internal control practices (monitoring, internal controls, and risk assessments) and audit opinions among commercial state corporations. According to Joyce and Lenggu (2019), accounting standards serve as the foundation for Generally Accepted Accounting Principles (GAAP) regarded as authoritative guidelines for financial reporting.

According to Chung and Kim (2023), it is necessary to put together financial accounts in line with International Financial Reporting Standards (IFRS). Another prerequisite for all audits issued by the Institute of Certified Public Accountants of Kenya (ICPAK) is conformity with ISA. Businesses are required to prepare financial and cash flow statements, statements of equity changes, and disclosures required by the International Auditing Standards (IAS) (Joyce & Lenggu, 2019). The auditors will be able to form opinions—either disclaimer, adverse, qualified, or unqualified—by providing these papers.

1.1.3 State Corporations in Kenya

Government-owned organizations known as state corporations provide services to the general population. The Companies Act or any law enacted by parliamentarians is followed by establishment of corporations (State Corporations Act (Cap. 446). There are 248 State Corporations, 46 of them are commercial state corporations while 202 are non-commercial ones. Due to severe market share losses, Kenya Post Office Savings Bank (KPOSB), East African Portland Cement Company (EAPCC), Kenya Broadcasting Corporation (KBC), Postal Corporation of Kenya (PCK), Kenya Airways, and Mumias Sugar Company have all been classified as loss-making enterprises (Business Daily, February 07, 2023).

According to Mwangi (2018), the lack of effective use of internal control practices has been reported as a problem affecting government organizations in the social service providers' sector run below cost recovery despite possessing substantial social missions to provide basic services. Specifically, Kenya National Examinations Council, Kenya Wildlife Service (KWS), Kenyatta National Hospital, Kenya Airports Authority (KAA), Kenya Ports Authority (KPA), Athi Water Works Development Agency, Kenya Pipeline Company (KPC), and KenGen are just a few of the numerous State Corporations (SCs) identified.

For example, in 2021, the Auditor General offered a disclaimer opinion on the Kenya Meat Commission (KMC) (Auditor-General report on KMC in June 2021). The auditor failed to form an opinion on the accompanying financial statements and reported an inability to get adequate audit evidence to offer an audit opinion on the provided financial statements. KMC did not comply with the Public Sector Accounting Standards Board Templates in addition to FS inaccuracies. Further, Oruke et al. (2022) reported that most of Kenya's SOEs got modified audit opinions leading to 68% of audit reports provided. Again, the Auditor General reported a qualified opinion for Kenya Power and Lighting Company (KPLC) with a financial position that reflected accumulated deficits with an unclear explanation of the source of deficit financing (Auditor-General report on KPLC, 2021).

In commercial state corporations as opposed to public companies, the citizens including the various government monitoring and supervision stakeholders including the OAG are interested in having unmodified opinions. This means these state corporations must ensure responsibility is upheld in conformity with the available Committee of Sponsoring Organizations of the Treadway

Commission (COSO) framework. Because of these developments, commercial state corporations' financial performance has been a topic worth researching, and using the right financial internal control practices for audit opinion will be one of the strategies for improving that performance.

1.2 Statement of the Problem

One of the obstacles in setting up accountability among public organizations has been recognized in Kenya as the absence of reliable financial control practices and subsequent auditing procedures that lead to modified audit opinion (Kabue, 2020). For example, in the 2019/2020 audit report, 45.5% of state corporations received qualified audit opinions while in 2018/2019, 48.0% received similar opinions and 16.1% received adverse opinions (Annual OAG Report, 2020-2021). In the OAG Report (2022-2023), 836 state corporations received modified opinions, 324 received unmodified opinions, 72 received adverse ratings, and 51 received disclaimer opinions. Further, in a study by Oruke et al. (2022), 68% of audit reports were modified audit opinions, which were given to the majority of SOEs. These statistics show the existence of a problem that calls for this study.

Further, the OAG report (2021) hinted at flaws in the government's accountability systems by pointing out corruption in payments not accompanied by invoices and receipts from vendors, lax risk management procedures, and violations of procurement rules that impact audit opinions. Despite the publicly listed companies are not allowed to have modified opinions, the OAG reported a modified qualified opinion for KPLC (Auditor-General Report on KPLC, 2021). Such opinions are attributed to inadequate internal controls, disregard for accounting standards, risk assessment, and monitoring.

Research by Nyakundi et al. (2014) focused on the contribution of internal control practices on SMEs' financial performance. It however looked at SMEs' financial performance hence contextual and conceptual research gaps. Mawanda (2008) studied internal control systems' effect on Uganda Martyrs University's financial performance. The investigation was done in a different context, Uganda, as opposed to Kenyan commercial state corporations hence a contextual knowledge gap. Khamis (2013) studied internal control systems (control activities and evaluation/monitoring) contributions to financial institution's performance while the current study was limited to

commercial state corporations using audit opinion as the dependent variable. Korir (2022) studied the internal control systems (risk assessment, monitoring, and control activities) effect on commercial banks' financial performance in Bomet and Kericho Counties and used financial performance as the dependent variable hence a conceptual knowledge gap that was filled by using audit opinion to bridge the knowledge gap. Studies on internal controls and financial performance have not directly demonstrated internal control practices' effect on audit opinion among commercial state corporations hence a limited research leading to a research knowledge gap. Specifically, studies in this area are scanty thus necessitating a knowledge gap, hence the need for this investigation to establish the effect of financial internal control practices on audit opinions among commercial state corporations.

1.3 Research Objectives

This research presented the study's general objective. This part also included the specific objectives.

1.3.1 General Objective

This study's main objective was to assess the effect of internal control practices on audit opinions amongst Kenya's commercial state corporations.

1.3.2 Specific Objectives

- i) To investigate the control activities' effect on audit opinions on Kenya's commercial state corporations.
- ii) To assess monitoring activities' effects on audit opinions on Kenya's commercial state corporations.
- iii) To establish risk assessment's effect on audit opinions on Kenya's commercial state corporations.
- iv) To find out the moderating effect of accounting standards on the linkage between financial internal control practices and audit opinions on Kenya's commercial state corporations.

1.4 Research Questions

- i) What is the effect of control activities on audit opinions among Kenya's commercial state corporations?

- ii) What is the effect of monitoring activities on audit opinions among Kenya's commercial state corporations?
- iii) What is the effect of risk assessment on audit opinions among Kenya's commercial state corporations?
- iv) What is the moderating effect of accounting standards on the connection between financial internal control practices and audit opinions among Kenya's commercial state corporations?

1.5 Significance of the Study

1.5.1 Policymakers

The government's creation of risk-based audit policies may also be guided by the study. The results can help public agencies and regulatory organizations create programs and policies to improve accountability (internal control mechanisms) in Kenya's state-owned commercial enterprises. Further, the outcomes of this investigation shall be advantageous to the treasury and OAG policymakers since they will use the identified recommendations to improve or introduce policy changes on the delivery of audit opinion to promote internal financial controls among public institutions.

1.5.2 Government Agencies

The findings will allow the state corporations in whose dockets various public institutions fall to assess and enhance the available internal auditing policies by improving the internal control mechanisms of their respective institutions.

1.5.3 Scholars and Researchers

Because the findings fill knowledge gaps and add to existing knowledge, the results will be of greater significance to scholars in this subject. More importantly, various scholars, academics, and researchers will find the results valuable since they will be a reference for further studies.

1.5.3 Empirical Review and Theories

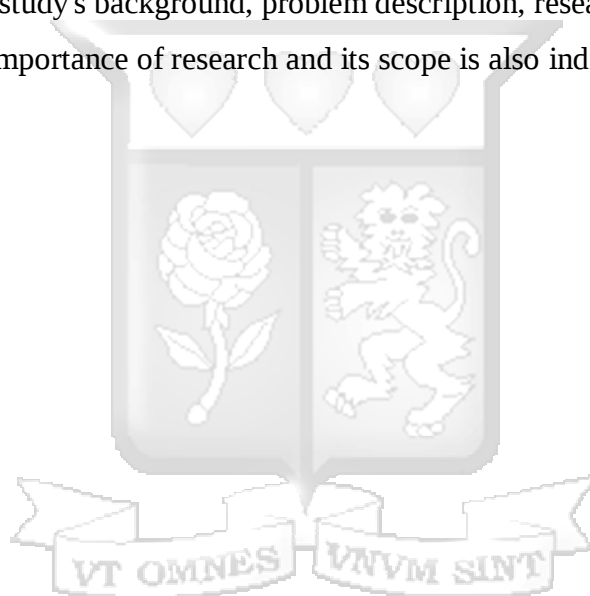
The study's findings will help fill the knowledge gaps from inadequate empirical studies on financial internal control, accounting standards, and audit opinion among Kenya's state corporations. The study will help researchers apply similar theories used in this study to do additional studies in similar fields.

1.6 Scope of the Study

The research investigated internal control practices' effect on audit opinions among Kenya's commercial state corporations. Specifically, it focused on variables such as financial internal controls measured by elements including control activities, risk assessment, and monitoring. The dependent variable, audit opinions was measured by adverse, unqualified, qualified, and disclaimer. All commercial state corporations formed the target population. The researcher conducted this study in 18 months (July 2023 to December 2024). This research gathered data from primary sources using a questionnaire and interview guide.

1.7 Chapter Summary

The chapter included the study's background, problem description, research objectives, and specific objectives. The importance of research and its scope is also indicated in this chapter.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The section presents a literature review on the effect of internal control practices on audit opinions amongst commercial state corporations in Kenya. Specifically, empirical reviews on control activities' effect on audit opinion, to assess the effect of monitoring on audit opinion and the effect of risk assessment on audit opinion were presented in detail. Both conceptual and theoretical frameworks are presented as well. A summary of the literature alongside operationalization and variable definition also presented.

2.2 Theoretical Framework

2.2.1 Accountability Theory

It was introduced by Tetlock in 1983. According to this definition, accountability is the process of accomplishing declared objectives while adhering to accepted standards and laws. When evaluating the impact of internal control on the segregation of duties on amended audit views, the theory is useful. The approach suggests giving multiple people in charge of different public organizations' operations a task to avoid fraud and mistakes. Research on accountability has demonstrated that legislation is the most effective way to guarantee that public organizations give thorough and accurate information (Bergsteiner, 2012).

According to Jagadeesan et al. (2009), compliance with the established norms, laws, and rules alongside the reporting methods is important. Since the mentioned problems are too complex and important for handling just by corporate governance, only mandatory, standardized reports (internal control practices) will produce unqualified audit opinions. As a result, public corporations must be held more accountable. Well-informed stakeholders can offer opinions on important subjects. Accountability should focus on quality financial reporting and its effects on the organization when employing the proper internal control methods.

The theory is relevant since it is through the use of effective control procedures, prompt monitoring of financial usage, and proper risk management practices that an organization can effectively account for the used finances to the satisfaction of the auditor during auditing. Specifically, the theory argues for the need of the management of an organization to put in place internal control mechanisms such as control activities, monitoring, and risk assessments that protect the entire system from financial unaccountability thus exposing a given state corporation to unanswered

financial statement queries from the OAG. Therefore, it links control practices including control activities, risk assessment, and monitoring to accountable financial statement reporting that forms part of audit reporting.

Nevertheless, this theory has weaknesses too. For example, accountability is always seen as a threat and a means of punishment. This is because we never hold somebody responsible for exceeding expectations or accomplishing something extraordinary; we only question them for failing to meet expectations. This is the downside of this theory!

2.2.2 Policeman Theory

Charles F. Hickson proposed the theory in the late 1920s. The theory states that an auditor's primary duties include preventing and detecting fraud and confirming the accuracy of financial reports' mathematics. Hayes et al. (1999) recommend that auditors function as watchful overseers, spotting and discouraging financial inconsistencies, misstatements, deceit, and inaccuracies in financial reporting.

According to the policeman idea, an auditor monitors and prevents fraud by acting as a policeman and concentrating on arithmetical precision. This point of view holds that as the auditor acts as an objective, dispassionate judge, the financial situation of a business is fairly and accurately represented in its financial statements. As a defense against financial irregularities, the theory puts auditors in a position to monitor financial activities (Humphrey et al., 1993). The idea outlines the requirements that all parties involved expect of the auditors, which include a general guarantee of financial well-being, warnings of impending insolvency, and protection against fraud.

It is pertinent to the present research since it emphasizes the auditors' responsibilities and the customer's expectations. Nevertheless, if the auditor's independence is undermined to the point that they make biased decisions for state entities, their ability to spot problems could be affected. The state corporations have turned to auditor rotation as a means of filling these gaps; by doing so, the auditors' independence and, consequently, the caliber of the audit reporting, may be improved. As a result, external auditors bear the primary responsibility to look for serious misstatements, make recommendations, and provide judgments during the formation of audit opinions.

Despite its relevance to this study, the theory's flaw stems from the fact that its capacity to explain the transition from auditing to verification of the accuracy and fairness of financial statements appears to have diminished as a result of the conception of auditing theory.

2.3 Empirical Reviews

This research presents past research on the specific objectives. Specifically, the effect of control activities, monitoring activities, and risk assessment on modified audit opinion are captured. The previous studies were reviewed based on the methodologies used to help in identifying the research gaps.

2.3.1 Audit Opinions

Auditors are essential in ensuring that businesses submit truthful financial reports. In fact, managers and auditors work together to create financial reports, and this process necessitates conversations between the two sides regarding how to appropriately account for particular conditions whilst keeping the context in mind (Danescu & Spatacean, 2018). Auditors and managers generally reach a compromise based on the adequacy and accuracy of materials provided since it benefits both sides for the issuance of unqualified opinions.

Auditors offer their opinions on auditing techniques used by considering specific financial reporting requirements including GAAP (Albeity & Sinde, 2023). Owing to the auditors' opinion, individuals who obtain appropriate financial information are able to make better choices concerning the truth and fairness of significant components of the publicly available reports. These financial data become more believable and easier to understand when combined with the auditor's opinions.

Therefore, the formation of audit opinions closes information gaps between parties interested and can be used as an evaluation instrument to reduce management-induced prejudices in accounting information (Utami et al., 2020). Government agency costs can be reduced by hiring unbiased auditors as they interact with interested parties and express their opinions within the audit reports.

Consequently, an auditor's opinion may be qualified, unqualified, adverse, or disclaimed. A report containing an unqualified opinion is regarded as clean (Joyce & Lenggu, 2019). In this respect, the auditors offer unqualified audit reports that they believe the business has faithfully adhered to accounting rules. Contrarily, a qualified opinion stops an auditor from delivering a clean report

anytime they are unsure regarding a particular transaction (Su'un et al., 2020). Moreover, if auditors determine that, statements have significant errors, are pervasive, and when, considered collectively, are contrary to GAAP, an adverse opinion is provided. Yet, a disclaimer opinion is made whenever the auditor cannot form and fails to offer an opinion. This type of report is prepared and no opinion is provided.

Investors place greater importance on public corporations that receive unqualified audit opinions. State corporations that acquire unqualified views can submit financial reports (Zaid-Alkilani et al., 2019). However, because the auditor may discover serious errors in the financial records, the companies that receive qualified, disclaimer or adverse ratings usually face considerable delays in completing their auditing reports.

A study by Sumaryati et al. (2022) examined how financial performance and audit opinion affect the delay in the audit report. Multiple linear regression analysis revealed that audit report lag was positively influenced by audit opinion and profits. They utilized financial performance as an independent variable while this research will utilize internal control practices to fill the conceptual research gap. This investigation thus found a positive linkage between financial internal control practices and audit opinion.

Pamungkas et al. (2018) investigated if an audit opinion's formation criteria had a discernible impact on the audit opinion of Indonesia's government financial accounts. When providing an audit opinion, considerations such as failing to comply with laws and regulations, and shortcomings in the internal control system (ICS) are considered. The number of accounts not presented in compliance with the General Accepted Standards (GAS) indicates non-compliance with accounting thresholds. The study found that non-conformance with the GAS and regulations that cause losses to the region hurt audit opinions, while other criteria used to form audit opinions have no bearing on audit opinions. These findings contradict Sumaryati et al. (2022) which revealed a positive relationship. However, the study was conducted in a developed economy with strong internal control mechanisms hence results may not infer the local scenario.

2.3.2 Effects of Control Activities on Audit Opinions

Control activities, as described by Bruwer et al. (2018) take the form of rules and regulations that make sure management's directions are followed. Control activities play a role in ensuring that steps required to handle risks to accomplish a public entity's goals are implemented. The

responsibilities of management include setting up and upholding control practices, choosing appropriate control structures to apply during evaluation, assessing the efficacy of controls, and discovering obvious material weaknesses (Mexmonov, 2020). Thus, auditors ought to evaluate information from inaccuracies found throughout the financial statements and any found control deficiencies, before forming an opinion on the efficacy of internal control (Simamora & Hendarjatno, 2019).

Additionally, the investigation conducted by Radojević et al. (2022) determined the interdependence of control activities and monitoring on financial performance. The Pearson Coefficient was carried out in the SPSS statistical program. The data collected demonstrated the presence of both weak and large positive correlations between monitoring and control actions, and also between monitoring and the company's Return on Assets and Return on Equity indicators. Furthermore, outcomes validated that the significance of implementing internal control mechanisms, such as monitoring and control activities, remains the same throughout manufacturing enterprises of varying sizes. It also found that duty segregation plays a role in promoting internal controls for accountability purposes. The study concluded that the development of unmodified opinion will be significantly enhanced by efficient internal oversight. Thus, for a public organization to achieve goals, management needs to identify innovative ways to strengthen the internal control practices and increase the likelihood that they will receive an unqualified audit opinion, or worse, a qualified audit opinion.

Further, Ziniyel et al. (2018) assessed the effectiveness of internal audit practices on financial management in Ghana. The study used agency theory. Primary data was collected among audit and accounting workers, over multiple campuses at Ghana's universities using a questionnaire and interview guide. 58.8% of those surveyed, found that internal auditors' financial management concerning the university's mandatory guidelines is excellent. The financial health of the institution was shown to be significantly influenced by the autonomy of the internal audit's function along with leadership support. The findings contradict the results presented by Radojević et al. (2022). Lastly, it has been discovered that management's application of the internal audit advice is ineffective. However, it was done in a different context (Ghana) hence a contextual research gap. This gap was bridged by studying the effect of internal control activities on audit opinion with specific attention on commercial state corporations in Kenya.

Again, Masha (2018) sought to examine the efficacy of internal control procedures for public sector finances at Kenya's national and sub-county treasuries. It utilized both qualitative and quantitative methods in a descriptive research design. 620 accountants and internal auditors from 310 national sub-county treasuries were the target group. 184 participants were chosen using cluster and purposive sampling procedures. Whereas secondary data was obtained via reports on finance management and the results of earlier research on internal control systems, primary data was via a questionnaire. The results of the study established a strong correlation between internal control systems and money management. It found that internal control systems significantly improve financial management. It was discovered that risk assessment and control activities presented difficulties for national sub-county treasuries. The results suggested that national sub-counties treasuries should emphasize internal control systems, notably risk assessment, control environments, and control activities, to enhance the management of public finances. However, the study focused on Sub-county Treasuries hence the results cannot be used to generalize the situation at the National government in its entirety and this is the reason the current research focused on commercial state corporations.

Further, Kakucha (2009) evaluated the effectiveness of internal controls among enterprises in Nairobi. It used control activities such as procedures and policies to measure internal controls. A sample of thirty small enterprises that were included within the National Social Security Fund (NSSF)-Kenya was used in this quantitative analysis. Interviews with managers and a review of internal control-related records were used to obtain primary data. The research found that there were shortcomings in internal control systems, particularly about readily accessible procedures, and that the severity of these shortcomings varies throughout businesses hence a negative relationship thus contradicting the work of Masha (2018). Nevertheless, the study was done among SMEs while this study focused on commercial state corporations using internal control and audit opinions.

2.3.3 Effects of Monitoring Activities on Audit Opinions

Monitoring refers to procedures evaluating the effectiveness of internal controls over time (Nor & Ishak, 2020; Lee et al., 2018). Monitoring increases the likelihood of gaining an unqualified opinion by giving public organizations the comfort that the results of audits and other reviews are quickly decided (Handoyo & Bayunitri, 2021). Through evaluation and regular audits, monitoring

guarantees that internal controls are operating effectively. During auditing, auditors use monitoring to analyze the effectiveness of the management-designed and implemented procedures and guidelines to form an opinion (Mustafa et al., 2016). Therefore, Monitoring ensures that the findings of audits and other evaluations are promptly handled so that upon subjecting the financial statements to external independent auditors, such organizations will stand a high chance of receiving unqualified opinions rather than disclaimer, adverse, or qualified opinions.

Chen et al. (2016) study was titled "Do Financial Analysts Perform a Monitoring Role in China's Audit Opinions". Their study used a descriptive research design. The research finds that outside governance mechanisms improved the financial reporting standards of Chinese corporations. It does this via a sample of Chinese publicly traded companies from 2003 to 2009. Non-state-owned businesses, or private companies, are more affected since they depend more on outside equity funding and are, thus, under additional strain to produce accurate accounting information. Moreover, companies with greater motivations to falsify financial reports benefit more from using analysts. Results withstand the endogeneity control problem with resilience. In agreement, Christopher (2019) indicates that monitoring is done to find out if internal control is effectively planned, implemented, and maintained because it is through the available records that the auditor will form an opinion. However, it utilized a descriptive research design while this research used a mixed research method.

In another study, Boyle et al. (2015) studied the relationship between internal audit monitoring and internal auditors' risk judgments. In particular, 108 seasoned auditors assessed fraud and control risk. Supplemental data show that internal auditors' support for providing a descriptive Internal Audit Review (IAR) to external stakeholders is mixed and modest and found that internal control line managers must regularly review financial statements to aid audit opinion formation. It revealed a positive relationship between monitoring and auditors' judgment. Nevertheless, research focused on a developed nation hence the finding cannot be used to determine the local happenings insofar as financial internal control and audit opinion is concerned. Therefore, the current research found a positive link between financial internal control and audit opinion.

Viegas, Bond, Ribeiro, and Selig (2013) reviewed environmental monitoring and auditing in the context of risk. To help understand the ideas and features of environment monitoring and auditing, it offers a thorough literature analysis of theoretical and review works. It also makes

recommendations for future research to help clear up any remaining ambiguities. Similarities, hierarchy, overlaps, breadth, risk concerns, and timeliness were identified to be the main causes of confusion. Responsive management, as originally conceived in the impact evaluation sector, was discovered to have been disregarded and follow-up methods became more flexible as a result of the evolution of auditing and accounting throughout time. Improved environment monitoring and auditing may be achieved by implementing adaptive management, which has been reclaimed from impact assessments and more current specialized research. The research, however, failed to employ audit opinion as a dependent variable. Further, the study was on environmental monitoring contrary to financial control activities.

A study by Mawanda (2008) examined internal control mechanisms and their effect on Ugandan higher education institutions' financial performance. Using inferential statistics, it observed a significant connection between internal control system (monitoring) and financial performance hence findings are in support of Boyle et al. (2015) study. Consequently, Nawal and Rosnadzirah (2018) found that strong monitoring procedures must be introduced by management and interested parties to encourage the production of an unqualified audit opinion. However, it used financial performance as a dependent variable hence a conceptual research gap was bridged by using audit opinion. The current study was premised on a positive relationship between financial internal controls and audit opinions.

Hassan (2013) investigated the quality of financial reporting and monitoring features of listed industrial companies in Nigeria. A 32-year longitudinal panel with 160 samples is used for estimating panel OLS and accounting for fixed and random influences. The outcome demonstrates a positive correlation between financial reporting and the monitoring attributes. Audit committees, institutional shareholdings, block shareholdings, and management shareholdings are all major indicators that financial reporting is influenced by monitoring features. Despite the study's relevance, it did not use audit opinion as a dependent variable hence a conceptual research gap.

2.3.4 Effect of Risk Assessment on Audit Opinions

The systematic analysis of factors that may affect the possibility that a public entity's objectives won't be achieved is known as risk assessment. Risk assessment entails identifying and assessing relevant risks to achieve the organization's objectives (Riso & Castellini, 2019). Further, risk assessment is a method for locating and evaluating hazards associated with the management of the

compilation of financial reports that could be reported fairly by GAAP to improve the creation of unqualified audit opinion (Kasiva, 2012). Without unqualified opinions, a public entity will likely receive a disclaimer, qualified or adverse opinion depending on materials provided (Pérez-Cornejo et al., 2019).

Another research by Sityata (2020) evaluated the risk management methods, disclosures, and risk oversight competence of South African universities. An exploratory study methodology was used to analyze the results using a risk disclosure checklist. The findings showed that more than 80% of universities in the sample had published the majority of their risk management procedures, demonstrating enhanced disclosure as a result of King IV's 2016 introduction of the "apply and explain" attitude. Nevertheless, some areas needed advancement, including defining and approving risk assessment, confirming that the university was unprepared to integrate risk management into the institution's daily operations. The results generally showed a negative relationship between risk assessment and auditing oversight. The study was not done in Kenya but among Universities in South Africa thus findings cannot be utilized to draw local inferences about financial internal controls and audit opinion among commercial state corporations.

In another study, Were et al. (2023) studied risk-based internal audit practices' effects on insurance firms listed at the NSE's financial performance. The study used the information System Success Model, Agency Theory, Chaos Theory, and Growth of the Firm Theory. The NSE, Kenya licensed six insurance businesses for trading, and a causal study methodology with a positivist research ethic was used for the survey. According to the research, financial performance was positively impacted, statistically significantly, by controls over cybercrime security. On the other hand, it was discovered that the risk-based internal audit procedures are not moderated by firm size. It found that risk management must be improved to help the organization in question identify issues early. However, a study by Were et al. (2023) contends that one area that should be heavily relied on during internal auditing is the fraud risk assessment. In this regard, it is argued that insider auditors are well-suited to conduct fraudulent risk assessments since they are more familiar with the day-to-day affairs of their companies than external auditors. Despite the study's relevance to the current research, it only dwelt on firms listed at NSE hence a knowledge research gap that called for the current investigation.

Further, Dubihlela and Nqala (2017) researched how businesses in South Africa are improving their internal control practices to reduce risks. According to the survey, companies that adopted controls and developed contingency risk plans are less vulnerable to fraudulent activity, and most earned unqualified audit opinions. There was thus a positive link between risk reduction and internal control practices thereby contradicting a study by Sityata (2020). However, they limited their results to descriptive statistics whereas this research blended it with regression analysis.

Additionally, Tayo and Temidayo (2021) investigated how risk management affected financial success in Nigeria. Panel data from 10 firms, covering the years 2010–2019, were used in the study. Techniques for panel-based estimation and correlation analysis were applied. The results demonstrated that, for the tested firms quoted in Nigeria, market risk (estimated by interest rate risk) had a negative and minor impact on profit after tax but liquidity risk had a positive and considerable effect. The research concluded that good risk management, particularly internal risk management like liquidity risk management, will have a favorable impact on the performance of listed Nigerian companies. It showed that internal controls should include risk assessment strategies to cushion organizations from fraud and financial mismanagement. Through such risk assessment control measures, quality financial reporting will be encouraged thus encouraging the formation of unmodified audit opinions hence leading to a positive link. The results conformed to a study by Dubihlela and Nqala (2017) that found similar results. Despite its value in the current research, it failed to use audit opinion as a dependent variable hence a research gap bridged by using audit opinion and risk assessment as dependent and independent variables, respectively.

In another study, Jones (2008) focussed on corporate governance, accountability, and internal control in Mediaeval and Modern Britain. He examined medieval internal controls employed through a contemporary referential framework (control setting, risk evaluation, communication and information, control and monitoring activities). He proved that the majority of modern internal controls existed in medieval England. It was discovered that fundamental components of medieval internal controls were stewardship and individual accountability. However, the research was done among well-structured organizations in a developed economy hence a contextual research gap.

Additionally, Amudo and Inanga (2009) in Uganda assessed the internal control frameworks established by the African Development Bank Group's regional members for government projects. Eleven projects' worth of data were received and examined. The control setting, assessing risks,

control procedures, evaluation (monitoring), and IT were revealed to be key elements of an efficient internal control system. The evaluation procedure revealed that certain control elements were absent from projects, including risk assessment and efficient internal control systems. Due to these, the control systems were no longer functional hence a negative relationship was witnessed among the variables. These results resonate with a study by Tayo and Temidayo (2021). However, the study was done in Uganda but not Kenya thus necessitating localized research focusing on the effect of risk assessment on audit opinion among commercial state corporations in Kenya.

2.3.5 Moderating Effect of Accounting Standards on the Relationship between Financial Internal Control Practices and Audit Opinions

Accounting standards are the primary framework of GAAP which are considered authoritative standards for financial reporting (Joyce & Lenggu, 2019). International Financial Reporting Standards (IFRS) must be followed when preparing the financial statements (Chung & Kim, 2023). International Standards on Auditing (ISA) compliance is another requirement of the Institute of Certified Public Accountants of Kenya (ICPAK) for all audits. The following documents must be prepared by businesses: the disclosures needed by international auditing standards (IAS) and IFRS, cash flows and income statements, and statements of equity changes (Joyce & Lenggu, 2019). It is through the provision of such documents that the auditors will be able to form their opinions that could be either disclaimer, adverse, qualified, or unqualified. In Kenya, the Public Sector Accounting Standards Board (PSASB) establishes minimum requirements for maintaining accurate books of accounts at all governmental levels. It also provides frameworks and generally accepted standards for the establishment including oversight of accounting and financial procedures by all public entities (Opanyi, 2016).

Muthaher (2019) assessed accounting standards, internal controls, and financial supervision in receiving unqualified opinions. Up to 50 Regional Work Units (SKPD) made up the research population. The head of the SKPD, accounting, and finance section made up the sample of 75 participants. Using regression the findings indicate that while organizational dedication/commitment is a moderating variable, it has no discernible impact on financial statements' quality. Instead, accounting practices including internal controls and local oversight of finances have a significant nexus with financial report performance quality. The study, however, used organizational dedication/commitment as a moderating variable hence a research gap.

King, Setiyawati, and Mappanyuki (2020) analyzed the effect of the internal control system on auditor opinions moderated by Accounting Standards. This research potentially advances public sector accounting and assists governments in their duties. Specifically, it can help to comprehend internal controls by obtaining opinions on their financial reports and highlighting the significance of complying with accounting standards. The findings demonstrate that the implementation of internal control systems affects the attainment of auditor opinions. However, the utilization of accounting standards, when moderated, also strongly impacts the attainment of auditor opinions; thus, this moderation is quasi-moderating, meaning that the occurrence of unqualified opinions is more likely when moderating variables are used. However, the study did not use a diagnostic test to ascertain the reliability of the regression model.

Sutrisna et al. (2022) examined the effect of human resource competence, internal control systems, and accounting standards on financial reporting quality in the South Aceh Government. Primary data was retrieved via questionnaires from 110 respondents. Analysis using multiple linear regression is the analytical technique employed. The outcomes suggest that the effectiveness of internal control, human resources, and accounting standards all work to influence the caliber of financial reporting. Additionally, the partial research's findings indicate that the government's adoption of accounting standards, internal control, and HR competence all impact its level of financial reporting. The current study thus used accounting standards as a moderating variable. It was used to moderate the relationship between internal control practices (monitoring, internal controls, and risk assessments) and audit opinions among commercial state corporations in Kenya.

2.4 Summary of Literature and Gaps

Table 2.1 presents an overview of the examined empirical research, broken down by author, title, methodology, findings, and discovered gaps.

Table 2.1: Summary of Literature and Research Gap

Author	Study	Country	Methodology	Key Findings	Gaps	How to fill the gaps
Ziniyel et al. (2018)	The effectiveness of internal audit practice on financial management in Ghana	Ghana	A descriptive cross-sectional design was used. Primary data was collected from audit and account personnel throughout multiple campuses at Ghana's institutions using a survey and interview guide.	According to 58.8% of the respondents, the survey shows that internal auditors' financial performance concerning the institution's mandatory guidelines is excellent. The independence of internal audit function and management assistance were identified as	However, this study was done in a different context hence a research gap	This gap was bridged by studying the effect of internal control activities on audit opinions with specific attention on commercial state corporations in Kenya

Author	Study	Country	Methodology	Key Findings	Gaps	How to fill the gaps
				significant determinants of financial performance in the university. Finally, management implementation of internal audit recommendations has been found ineffective.		
Kakucha (2009)	Evaluating the effectiveness of internal controls among Nairobi's enterprises.	Kenya	A sample of thirty small enterprises included in the NSSF register was used. Meanwhile, interviews with managers and a review of internal control-related documents were used to obtain primary data.	The study established deficiencies in internal controls especially on procedures available, with each enterprise having different	Nevertheless, the study was done among SMEs	Meanwhile, this study focused on commercial state corporations by using internal control and audit opinions as independent and dependent variables, respectively.

Author	Study	Country	Methodology	Key Findings	Gaps	How to fill the gaps
				levels of shortcomings.		
Mawanda (2008)	Influence of internal control mechanisms on Ugandan higher education institutions' financial performance	Uganda	The study focused on all higher learning institutions, used a descriptive research design, and analyzed data descriptively.	The study established a significant relationship between internal control systems (monitoring) and financial performance.	However, the study used financial performance as a dependent variable hence a conceptual research gap was bridged using audit opinions.	The study bridged the conceptual research gap using audit opinions as the dependent variable.
Amudo and Inanga (2009)	Assessed the internal control frameworks established by the African	Uganda	Eleven project data were obtained and examined.	It found that some control components such as risk assessment lacked adequate	However, the study was done in Uganda but not Kenya hence the	Hence, a local study was carried out with a specific focus on risk assessment's effect on audit opinions amongst

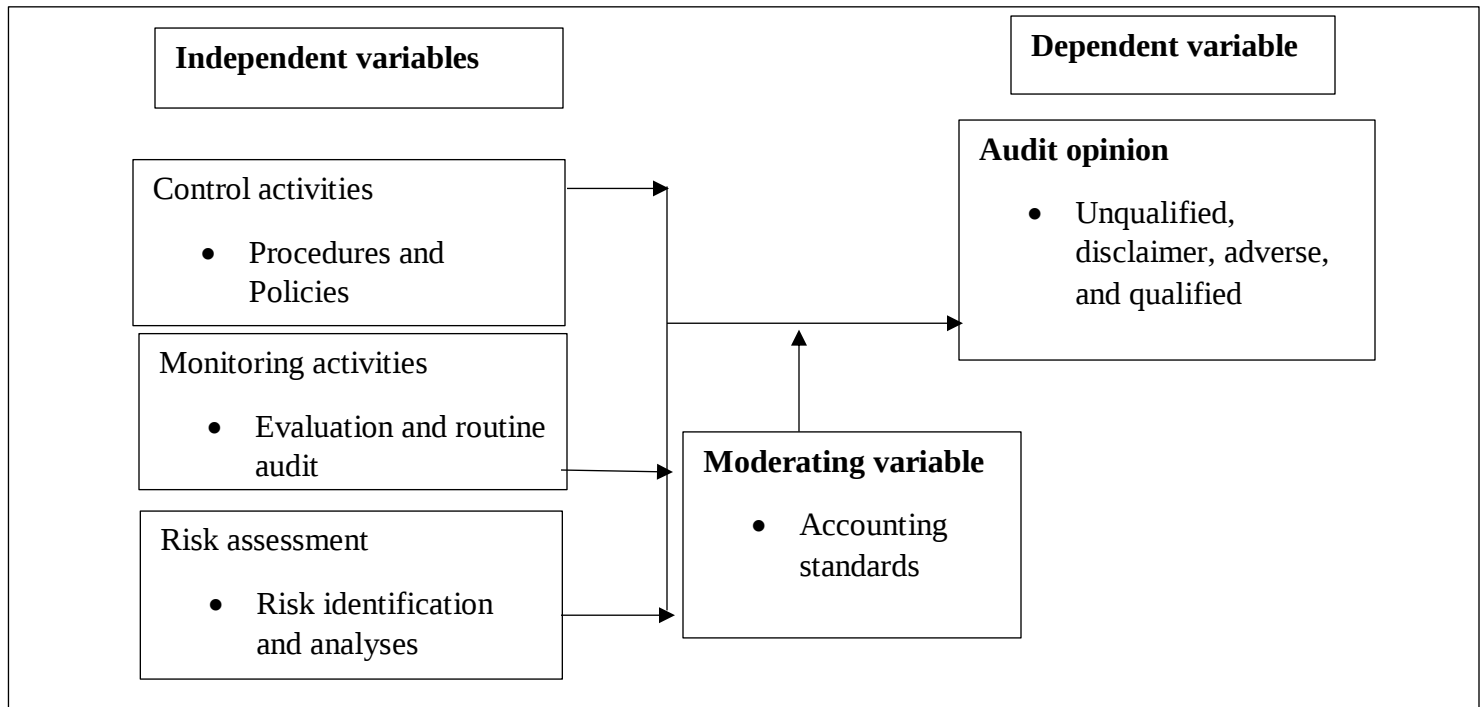
Author	Study	Country	Methodology	Key Findings	Gaps	How to fill the gaps
	Development Bank Group's regional members for government projects.			internal control measures and because of these, the control systems were no longer functional.	need for local research.	Kenya's commercial state corporations.

Source: Author (2024)



2.5 Conceptual Framework

This framework indicates the interconnection between dependent, moderating, and independent variables. The relationships are illustrated in Figure 2.1.



Source: Author (2024)

Figure 2.1: Conceptual Framework

Figure 2.1 shows the connection between independent (control activities, monitoring, and risk assessment), moderating, and dependent variables (audit opinions). Control activities were measured using procedures and policies, monitoring was measured using evaluation and routine audits, and risk assessment was measured using risk identification and analyses. Meanwhile, the dependent variable was measured using a disclaimer, the adverse, unqualified, and qualified opinions. The moderating variable was the adoption of accounting standards/principles.

Table 2.2: Operationalization of Variables for Structured Questionnaire (Quantitative Data)

Variable	Variable indicators	Variable definition	Measurement scale	Supportive literature
Dependent variable				
Audit opinions	Disclaimer, adverse, qualified, unqualified	Formation of modified opinion based on the presence of disclaimer, adverse, qualified. Formation of unmodified opinion using unqualified opinions	5-point Likert scale	Pamungkas et al. (2018); Utami et al. (2020)
Independent variables				
Control activities	Procedures and Policies	The existence of channels for diverse approvals, adherence to procedures for authorizations, effective verification mechanisms, procedures for reconciliations, duty segregation to prevent fraud & error, rules for asset security	5-point Likert scale	Bruwer et al. (2018); Radojević et al. (2022)
Monitoring activities	Evaluation and routine audit	Internal auditors frequently execute audits to enhance audit opinion formation, monitoring teams routinely use internal mechanisms to ensure that staff follow the required accounting standards, managers	5 point Likert scale	Boyle et al. (2015); Mustafa et al (2016)

		regularly review financial statements to aid audit opinion formation, and evaluations usually consist of self-assessments of internal audit tools that aid in modified audit opinion		
Risk assessment activities	Risk identification and analyses	Availability of risk assessment mechanisms for identifying threats, presence of effectively developed contingency risk plans to minimize the vulnerability of financial malpractices, projects initiated have adequate risk management plans, measures that analyze risks that may lead to fraudulent practices are adequate	5-point Likert scale	Were et al. (2023); Dubihlela & Nqala (2017)
Moderating variable				
Accounting standards	PSASB, GAAP, & IFRS	Conformity to accounting principles as enshrined in the Public Sector Accounting Standards Board (PSASB), adherence to International Financial Reporting Standards (IFRS), conformity to GAAP	5-point Likert scale	Joyce & Lenggu (2019); Chung & Kim (2023).

Source: Author (2024)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The section consisted of methodologies. Particularly, it described research philosophy, study design, population and sampling procedures, data gathering and analysis, and research ethics.

3.2 Research Philosophy

The essential principle that guides how data on a phenomenon should indeed be retrieved, analyzed, and presented when choosing a research stance is known as the research philosophy (Bauer, 2017). The pragmatism research philosophy was used in this investigation. A research philosophy based on pragmatism, especially in mixed methods inquiry, enables the blending of quantitative and qualitative techniques, resulting in more robust interpretations and the possibility of beneficial societal change. For instance, information for this study was gathered from primary sources (using both a questionnaire and an interview guide). Thus, pragmatism permits data retrieval based on primary data, and the information obtained can subsequently be analyzed without affecting the data to offer context and interpretation of study findings. The study specifically used pragmatism since it helped in the quantitative and qualitative investigation of the effect of financial internal control practices on audit opinions among commercial state corporations. The philosophy has been used by researchers such as Tayo and Temidayo (2021) and Kelly and Cordeiro (2020).

3.3 Research Design

The research used an explanatory sequential mixed research design. The study used this design because both quantitative (questionnaire) and qualitative (interview guide) were employed to collect data for the variables (McLeod, 2019). Specifically, the design was appropriate since it aided in examining the effect of internal control practices (internal control activities, monitoring, and risk assessment) on audit opinions among commercial state corporations in Kenya. The design specifically aided in studying how the variables affected audit opinions among commercial state corporations in Kenya by utilizing primary data.

3.4 Population and Sampling

The study targeted all 46 Kenya's commercial state corporations (Appendix IV). The study only targeted all employees from accounting and internal audit departments in all the commercial state corporations. The 46 commercial state corporations were chosen because organizations including KPLC received qualified opinions from the OAG (Auditor-General Report on KPLC, 2021). Meanwhile, KAA, KPC, and others lacked effective use of internal control practices (Mwangi, 2018). It is in this vein that the study focussed on all commercial state corporations. The 46 were chosen based on the mixed audit opinions provided annually by the OAG.

Regarding sample size, the study selected all 46 commercial state corporations in Kenya (Appendix IV). The study thus sampled all 46 state corporations (commercial) with a target population of 1,380 staff (PSC, 2024). As per Mugenda and Mugenda (2006), a sample of at least 10% of the target population is an acceptable representative of the entire population while a percentage sample size of between 20-50% satisfies thresholds for generalizing results. The study used a purposive sampling technique to sample the 46 commercial state corporations. Meanwhile, the study selected 25 external auditors. These auditors were interviewed to provide additional information on financial internal controls, accounting standards, and audit opinions.

Yamane's (1967) scientific formula states that: $n = N/(1 + Ne^2)$ will be used.

n = sample size

N = Total population (1,380)

e = Margin of error (0.05)

$$n = 1,380 / (1 + 1,380 \times 0.05^2)$$

$$n = 310.11$$

$$n \approx 310 \text{ respondents}$$

The above scientific formula justifies the selection of only 310 respondents across the 46 commercial state corporations. Selection criteria using a scientific formula gave a fair representation of other employees excluded from the exercise. To ensure all 310 employees were offered an equal chance during recruitment processes, the study used a simple random sampling

technique to sample the employees from the accounting and internal audit departments of all 46 commercial state corporations (Etikan & Bala, 2017). Simple random sampling was considered since it is unbiased and all the employees from the accounting and internal audit departments of the commercial state corporations had an equal chance in the study (Seeram, 2019). Questionnaires were distributed based on the organizational departmental strength. For example, some corporations had about 10 employees in the two departments whereas others had up to 70 employees across the same departments hence they received more questionnaires. This trend was used until the researcher arrived at the saturation point of 310 respondents.

Meanwhile, all 46 commercial state corporations were sampled using a purposive sampling technique. The study preferred using the sampling technique because it often removes response bias, yielding more accurate information tailored to research needs. The sampling increased the likelihood that the investigator received high-quality responses because a great deal of information could be gathered from a group of devoted participants in the study area (in this case, internal control practices and audit opinions).

3.5 Data Collection Methods

It employed primary data collected via a questionnaire constructed by the researcher. The questionnaire was close-ended. Using a questionnaire as the main method for data collection enables the researcher to get a considerable amount of data in a reasonable period (McLeod, 2019). It also assures anonymity since they can ensure invisibility while checking standardization.

The questionnaire was subdivided into six parts. The first part had personal information for the respondents. The second part presented information on the first objective; the effect of control activities on audit opinions. The third part assessed effect of monitoring on audit opinions while the fourth part solicited information on the third objective; the effect of risk assessment on audit opinions. The fifth part sought responses on the moderating variable; moderating effect of accounting standards on the linkage between internal control practices and audit opinions. The last section solicited responses on the audit opinions as measured by qualified, unqualified, disclaimer, and adverse. The questionnaire was constructed on a 5-point Likert scale of 1-5; 1 (strongly disagree), 2 (disagree), 3 (not sure), 4 (agree), and 5 (strongly agree).

Meanwhile, the researcher conducted the interviews face-to-face. The interview schedules were organized by the researcher based on the availability of the interviewee. Each interview took around 15 minutes.

3.6 Data Analysis

The research used statistical software known as Statistical Packages for Social Sciences (SPSS) version 25.0 to analyze data (Elliott, 2018). Based on the quantifiable values of each variable, the software analyzed primary data for all State Corporations. Both descriptive statistics and regression were used to examine data. Further, running several diagnostic tests enabled the regression model fitness test. Meanwhile, qualitative data from interviews were analyzed using thematic analysis. In this method, data was grouped into themes (in line with research objectives) and presented as such.

3.6.1 Descriptive Statistics

For descriptive statistical findings, the study used frequencies and percentages. The results were presented in table and figure formats. Descriptive statistics was used because it is easy to understand and simple to interpret (Mishra et al., 2019).

3.6.2 Pearson Correlation

There are two possible values for the correlation coefficient (r): -1 and +1. The two variables have no positive relationship when their value is 0. A perfect positive correlation, or +1, indicates that the values of all the variables grow in tandem with the value of one variable. Armstrong (2019) defines a negative association as one in which an integer of r equal to -1 indicates that the numbers of both variables decline as one increases.

3.6.3 Regression Model

The regression was utilized as the analytical model. Audit opinion was the responsive variable and the predictor variables were control activities, monitoring, and risk assessment. The moderating variable was the accounting standards. The model was homogeneous, as such the regression model took the form;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots \dots \dots \text{Eq. 1}$$

$$\text{Therefore, AO} = \beta_0 + \beta_1 \text{CA} + \beta_2 \text{MO} + \beta_3 \text{RA} + \varepsilon \dots \dots \dots \text{Eq. 2}$$

Where:

AO = Audit opinion

β_0 = A constant

$\beta_1, \beta_2, \& \beta_3$ = Beta coefficients

CA = Control activities

MO = Monitoring

RA = Risk assessment

ϵ = Error term

Testing moderator interaction with independent variables:

$$AO = \beta_0 + \beta_1 CA + \beta_2 MO + \beta_3 RA + \beta_1 CA * AS + \beta_2 MO * AS + \beta_3 RA * AS + \epsilon \dots \dots \dots \text{Eq. 3}$$

AS = Accounting standards (Moderating Variable)

3.7 Diagnostic Tests

This study utilized normality and multicollinearity tests. The identified tests helped in testing the assumption of the regression model.

3.7.1 Normality Test

To determine the data's normal distributions, the study used a normality test. In essence, the examination helped in determining the accuracy and dependability of the data (Mishra et al., 2019). The Shapiro-Wilk test was favoured to accomplish this.

3.7.2 Multicollinearity Test

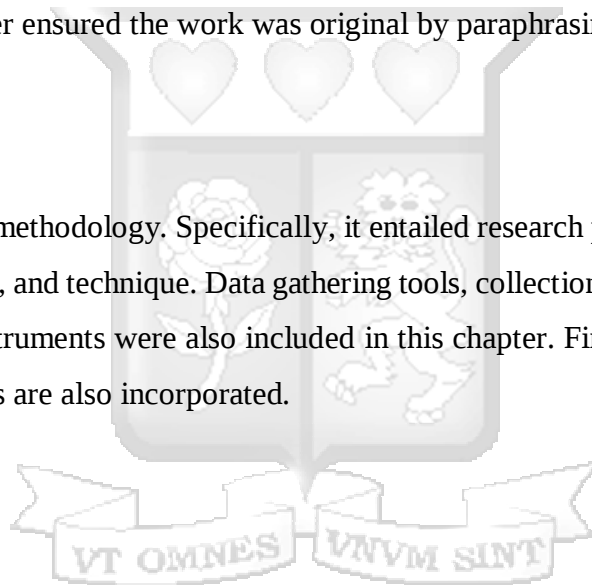
The test ensures that data obtained are not skewed (Ullah et al., 2019). Multicollinearity can happen when there is a precise linear correlation between numerous variables or in an almost exact linear connection. The study employed both the Tolerance and Variance of Inflation Factor (VIF) to determine whether multicollinearity is present or not. The test's cut-off is a VIF of 5-10, which shows the absence of multicollinearity (Craney & Surles, 2002). Meanwhile, a tolerance value above 0.25 is acceptable for a lack of multicollinearity.

3.8 Ethical Considerations

Participants were asked to express their agreement, either verbally or in written form, regarding their intention to engage in the procedure after being informed that the investigation was to be conducted for academic objectives. By not requiring participants' names on the surveys, the investigator employed security measures to protect the participants' identity. The researcher applied for an authorization letter from Strathmore University. By providing an authorization letter, the investigator applied for a license from the National Commission for Science Technology and Innovation (NACOSTI). As part of data dissemination, the researcher delivered a copy of the research work to relevant bodies upon request. Further, the researcher ensured that every source used in the study was properly cited. To prevent plagiarism, every in-text citation was also referenced. The researcher ensured the work was original by paraphrasing earlier studies to avoid plagiarism.

3.9 Summary

It presented the research methodology. Specifically, it entailed research philosophy, design, target population, sampling size, and technique. Data gathering tools, collection procedures, validity, and reliability of research instruments were also included in this chapter. Finally, a data analysis plan and ethical considerations are also incorporated.



CHAPTER FOUR: DATA ANALYSIS, PRESENTATION, AND DISCUSSION

4.1 Introduction

This chapter presents the outcomes of the collected data. Specifically, results on response rate and respondents' personal information were provided. The second section entail findings based on the specific research objectives. This is followed by the results of the diagnostic tests. The final and last section consists of correlation and regression results.

4.2 Response Rate

The researcher distributed questionnaires to 310 sampled respondents. Out of the 310, 251 gave back their feedback giving a questionnaire return rate of 80.97%. However, 19 external auditors gave responses leading to a 76% return response. The response rate was deemed satisfactory as asserted by Mugenda and Mugenda (2009).

4.3 Respondents' Personal Information

The respondents' personal information results were analyzed and presented herein. These included age, academic qualifications, and duration as a public servant. The results are presented in Table 4.1

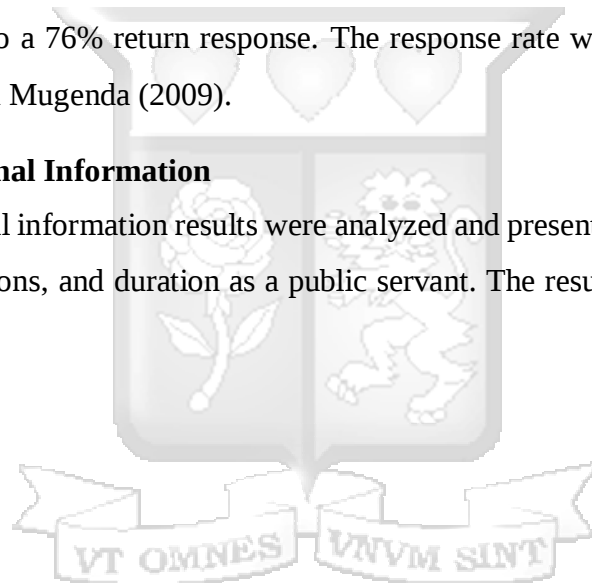


Table 4.1: Respondents' Personal Information

Categories	Frequency	Percent
Age in years		
18-25	20	8.0
26-35	57	22.7
36-45	93	37.1
46-55	39	15.5
56 and above	42	16.7
Total	251	100.0
Academic		
Certificate	5	2.0
Diploma	69	27.5
Degree	126	50.2
Master	48	19.1
PhD	3	1.2
Total	251	100.0
Duration as an employee		
1-5yrs	31	12.4
5-10yrs	88	35.1
Over 10 years	132	52.6
Total	251	100.0

From the results presented in Table 4.1, 37.1% fell in the age category of 36-45 years and this was the majority. The second highest age category was for those who fell in the age bracket of 26-35 years as represented by 22.7%. Further, 16.7% reported that they had 56 and above years while 15.5% were in the age category of 46-55 years. Based on the findings, it can be said that majority of the employees across the commercial state corporations (specifically accounting and internal audit departments) in Kenya were mature individuals.

On academic qualifications, 50.2% had obtained various university degrees as their highest educational qualifications and this turned out to be the majority. Those with diploma certifications as their highest academic qualifications were reported to be 27.5%. Meanwhile, employees with master's degrees were 21.1%. From the findings, it can be said that most employees in the accounting and internal audit were learned hence they could be entrusted with the affairs of their respective departments.

Concerning duration as a public servant, the results show that most respondents had garnered over ten years as public servants and this is reported by 52.6%. Secondly, those who had been in the

public service for 5-10 years were reported to be 35.1%. Meanwhile, only 12.4% had a duration of 1-5 years. It can thus be said that the majority of the employees in the accounting and internal audit departments of the commercial state corporations had acquired adequate experience, hence they understood internal control practices and the basis for audit opinion formation.

4.4 Control Activities and Audit Opinions

Under the first objective, respondents were required to respond to various items regarding the effect of control activities on audit opinion formation on Kenya's state corporations. The results are represented in Table 4.2.

Table 4.2: Control Activities and Audit Opinions

Items	N	Mean	Std. Deviation
The internal control activities provide effective verification mechanisms	251	3.46	0.036
Duty segregation embraced to prevent fraud & error	251	3.82	0.940
There is the existence of independent checks and evaluations of internal control functions	251	3.47	1.272
There is efficiency in the procedures available on internal controls	251	3.18	0.840
Appropriate internal control structures are applied during the evaluation	251	3.33	0.833
Internal control systems conform to the required accounting rules	251	3.78	0.835
Authorization and approvals are upheld within the institution	251	4.03	0.831
Composite mean/std. dev		3.58	0.941

In Table 4.2, the study established that the internal control activities provide effective verification mechanisms as reported by a mean of 3.46 (std. dev 1.036). It was also found that duty segregation was upheld to prevent fraud and error as supported by 3.82 (std. dev 0.940). However, most respondents were not sure whether there was the existence of independent checks and evaluations of internal control functions as reported by a mean of 3.47 (std. dev 1.272). Further, most respondents were not sure if efficiency in the procedures was available on the internal controls as shown by a mean of 3.18 and std. dev 0.840. It was also revealed that respondents were not sure if appropriate internal control structures were applied during evaluation as reported by a mean of 3.33 (std. dev 0.833). It was also revealed that internal control systems conform to the required

accounting rules as supported by a mean of 3.78 (std. dev 0.835). Lastly, authorization and approvals were upheld within the institutions as reported by a mean of 4.03 (std. dev 0.831). The composite mean of 3.58 indicates that most respondents agreed that commercial state corporations had internal control activities.

The study sought qualitative information regarding internal control activities from the external auditors. Some respondents argued that the internal controls available were adequate but not effective. Specifically, one respondent indicated that....

"The internal controls available should be dynamic and should consider the changing environments to cater for the emerging risks".

It was also found that lack of implementation impeded the effective use of available internal control mechanisms. For instance, one respondent reported that...

"Most state corporations lacked plans to implement internal controls to prevent errors or fraud".

From the findings, state corporations had internal controls but implementation was a challenge for most of them thereby leading to their ineffectiveness.

4.5 Monitoring Activities and Audit Opinions

Regarding the second objective, respondents were required to provide their responses on various item concerning the effect of monitoring activities on audit opinions among Kenya's state corporations. The results are represented in Table 4.3.

Table 4.3: Monitoring Activities and Audit Opinions

Items	N	Mean	Std. Deviation
Internal auditors frequently execute audits to enhance audit opinion formation	251	3.76	0.819
The monitoring team routinely uses internal mechanisms to ensure that staff follow the required accounting standards	251	3.60	1.077
Monitoring mechanisms able to determine if procedures and rules are efficiently embraced by staff	251	3.48	0.882
Evaluations usually consist of self-assessments of internal audit tools that aid in audit opinion formation	251	3.44	0.805
Managers regularly review financial statements to aid audit opinion formation	251	3.72	0.973
		3.60	0.911
Composite mean/std. Dev.			

According to the findings in Table 4.3, the study found that the internal auditors frequently execute audits to enhance audit opinion formation as indicated by a mean of 3.76 (std. dev 0.819). Again, it was found that the monitoring team routinely uses internal mechanisms to ensure that staff follows the required accounting standards as reported by a mean of 3.60 (std. dev 1.077). On whether monitoring mechanisms determine if procedures and rules were efficiently adhered to by a mean of 3.48 (std. dev 0.882). The study again revealed that evaluations usually consist of self-assessments of internal audit tools that aid in audit opinion formation as supported by a mean of 3.44 (std. dev 0.805). Lastly, it was established that managers regularly reviewed financial statements to aid audit opinion formation and this was supported by a mean of 3.72 (std. dev 0.973). The composite mean is 3.60 an indication that most respondents agreed with the existence of monitoring activities.

Regarding qualitative information for monitoring activities from the respondents, the study found that monitoring activities exist among state corporations. However, one of the respondents indicated that.....

“The activities were ineffective and inefficient because of poor implementation of internal controls available.....the poor implementation was attributed to understaffing that impeded frequent monitoring”

Further, another respondent reported that....

"Poor funding/inadequate financial resources also hampered the follow-up of monitoring activities meant for executing internal control mechanisms".

It is clear that the monitoring activities were available but inadequate funding and understaffing hampered their execution.

4.6 Risk Assessment Activities and Audit Opinions

The study sought to find out the effect of risk assessment activities on audit opinions. The results are shown in Table 4.4.

Table 4.4: Risk Assessment Activities and Audit Opinions

Items	N	Mean	Std. Deviation
Risk assessment mechanisms for identifying threats are available	251	2.56	0.853
The organization has effectively developed contingency risk plans to minimize the vulnerability of financial malpractices	251	2.95	1.184
Organizational internal control practices include risk assessment strategies to prevent financial mismanagement	251	2.98	0.959
All projects initiated by the institution have adequate risk management plans	251	2.78	1.155
The organization has put in place measures that identify potential financial risk exposures	251	3.14	1.047
Measures that analyze risks that may lead to fraudulent practices are adequate	251	3.18	1.193
Composite mean/Std. Dev		2.93	1.065

As recorded in Table 4.4, respondents disagreed that risk assessment mechanisms for identifying threats were available as shown by a mean of 2.56 (std. dev 0.853). The study also found that most respondents disagreed that organizations have effectively developed contingency risk plans to minimize vulnerability of financial malpractices as represented by a mean of 2.95 (std. dev 1.184). Moreover, most respondents disagreed and remained neutral that the organizational internal control practices included risk assessment strategies to prevent financial mismanagement with a mean of 2.98 (std. dev 0.959). Meanwhile, the majority disagreed while others were not sure whether all projects initiated by the institution have adequate risk management plans as reported by a mean of 2.78 (std. dev 1.155). Further, the majority were not sure whether the organizations had put in place measures that identify potential financial risk exposures whilst many agreed with the statement with a mean of 3.14 (std. dev 1.047). On whether measures that analyze risks that

may lead to fraudulent practices were adequate, most respondents agreed as reported by a mean of 3.18 (std. dev 1.193). The composite mean of 2.93 indicate that risk assessment measures were not satisfying since most respondents disagreed with the statements.

Concerning the information on risk assessment, the study found that most of the external auditors indicated that indeed they were satisfied with risk assessments adhered to by the commercial state corporations. However, quite a number were unsatisfied with the available risk assessment practices. The latter group reasoned that the available risk assessment practices were shallow, hence they called for the need for in-depth risk assessment activities. Further, the board of directors were also found to have played a role by interfering with the available risk assessment activities.

Regarding the interview guide, the external auditors were also asked to mention the accounting concerns they have come across when auditing commercial state corporations. From the findings, one of the respondents indicated that.....

“Issues such as misstatements of financial statements, errors of omission or omission, and inconsistencies in the reporting framework were evidenced among the commercial state corporations in Kenya”

Further, another respondent said that.....

“Procurement irregularities, incompetent accounting staff, poorly implemented accounting software, and inconsistent application of accounting standards are common among commercial state corporations”.

Additionally, the study found that inconsistent accounting policies led to modified opinions. For example, one of the respondents reported that.....

“Lack of consistent accounting policies from one year to another, failure to submit financial statements on time, failure to disclose material balances, assets, and liabilities are some of the accounting concerns among commercial state corporations”.

Again, the study found that lack of management commitment in following the set out internal audit controls and lack of approvals from authorized personnel, especially payment vouchers were common.

4.7 Moderating Effect of Accounting Standards on the Relationship between Internal Control Practices and Audit Opinions

Concerning the moderating variable, the respondents were required to respond to items regarding the moderating effect of accounting standards on the relationship between internal control practices and audit opinion. The results are represented in Table 4.5.

Table 4.5: Moderating Effect of Accounting Standards on the Relationship between Internal Control Practices and Audit Opinions

Items	N	Mean	Std. Deviation
The management ensures there is conformity to accounting principles as enshrined in the Public Sector Accounting Standards Board	251	3.53	0.056
The organization ensures adherence to International Financial Reporting Standards	251	3.45	1.077
The staff usually follow the generally accepted standards to enhance the provision of unqualified opinion	251	2.90	0.151
The organization routinely publishes and disseminates accounting and financial standards to promote audit opinion formation	251	3.22	0.044
Composite mean/Std. Dev		3.27	0.033

Table 4.5 shows results for the moderating effect of accounting standards. Specifically, the management ensures conformity to accounting principles as enshrined in the Public Sector Accounting Standards Board as agreed by most respondents (mean =3.53; std. dev 0.056). Further, it revealed that the organization ensures adherence to International Financial Reporting Standards as agreed by most respondents (mean = 3.45; std. dev =1.077). Additionally, the majority were not sure whether the staff usually followed the generally accepted standards to enhance the provision of unqualified opinion while a good number disagreed with the statement (mean = 2.90; std. dev 0.151). Lastly, it found that the commercial state corporations routinely publish and disseminate the accounting and financial standards to promote audit opinion formation as agreed by the majority (mean = 3.22; std. dev = 0.044). The composite mean of 3.27 imply that most respondents agreed that the accounting standards across the commercial state corporations determined the audit opinion formation.

4.8 Audit Opinions

In connection to the dependent variable (audit opinions), the respondents were asked to respond to various audit opinion measures. The findings are presented in Table 4.6.

Table 4.6: Audit Opinions

	Strongly disagree		Disagree		Not sure		Agree		Strongly agree	
	N	%	N	%	N	%	N	%	N	%
Organizations often receive an unqualified opinion	93	37.1	23	9.2	69	27.5	51	20.3	15	6.0
Instances of qualified opinion have been witnessed	5	2.0	13	5.2	21	8.4	132	52.6	80	31.9
Cases of disclaimer opinion are common in the organization	33	13.1	25	10.0	24	9.6	138	55.0	31	12.4
In certain instances, OAG has ever expressed adverse opinions on financial reports	25	10.0	93	37.1	62	24.7	50	19.9	21	8.4

In Table 4.6, the study established that 37.1% strongly disagreed that commercial state corporations often receive unqualified opinions while 27.5% were not sure. The study also found that instances of qualified opinion have been witnessed as revealed by 52.3% and 31.9% of the respondents who agreed and strongly agreed, in that order. Again, it revealed that cases of disclaimer opinion are common in the organization as represented by 55.0% and 12.9% of the respondents who agreed and strongly agreed with the statement, respectively. Finally, 37.1% disagreed that in certain instances, OAG has ever expressed an adverse opinion on financial reports while 24.7% remained neutral.

Further, the auditors were also asked to state the circumstances under which they formed unmodified or modified audit opinions. On the unmodified opinions, one of the respondents indicated that....

“They formed unmodified opinion whenever financial statements meet the expected standards and lack financial errors”.

Regarding modified opinions, the study found that the auditors mostly based their conclusion whenever errors in the financial statements are material. For instance, one respondent said that....

“Modified opinion was found to be formed whenever the auditors found out that the financial statements presented by state corporations contained inaccuracies or incomplete disclosures or falsely stated or due to a lack sufficient evidence and absence of ledger during an audit could lead to modified opinions and vice versa ”

4.9 Diagnostic Test Results

The study tested for diagnosis using normality and multicollinearity tests. The tests were applied to help determine the assumption of regression model and data reliability.

4.9.1 Normality and Multicollinearity Tests

The research performed diagnostic tests for multicollinearity and normality in this part. Table 4.7 below provides an analysis, presentation, and interpretation of the findings.

Table 4.7: Tests for Normality and Multicollinearity

Variables	Normality	Multicollinearity	
	Sig.	Tolerance	VIF
Audit opinions	0.062	-	-
Control activities	0.070	0.644	5.552
Monitoring activities	0.068	0.876	6.142
Risk assessments	0.081	0.517	5.936
Accounting standards	0.059	0.509	7.964

a. Dependent Variable: Audit opinions

In Table 4.7, the results for the normality tests using the Shapiro-Wilk show that the p-values for audit opinions, control activities, monitoring, risk assessments, and accounting standards were 0.062, 0.070, 0.068, 0.081, and 0.059, respectively. The p-values were all >0.05 . These results mean that the data used in this study was normally distributed.

On multicollinearity, the research utilized VIF and tolerance values. The study found that control activities (5.552), monitoring (6.142), risk assessments (5.936), and accounting standards (7.964)

had VIFs $>5 < 10$ and tolerance levels >0.25 . This means that multicollinearity was not present as supported by Craney and Surles (2002) who propose a threshold of less than 10 as a cut-off point.

4.10 Pearson Correlation (r)

The study used correlation to establish the association between the independent and dependent variables. The two variables have no positive relationship when their value is 0. A perfect positive correlation, or +1, indicates that the values of all the variables grow in tandem with the value of one variable and -1 means as one variable declines the opposite variable increases. The findings are shown in Table 4.8.

Table 4.8: Pearson Correlation (r)

		Control activities	Monitoring activities	Risk assessments	Accounting standards	Audit opinions
Control activities	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	251				
Monitoring activities	Pearson Correlation	.344**	1			
	Sig. (2-tailed)	.000				
	N	251	251			
Risk assessments	Pearson Correlation	-.478**	-.103	1		
	Sig. (2-tailed)	.000	.102			
	N	251	251	251		
Accounting standards	Pearson Correlation	.493**	.155*	-.672**	1	
	Sig. (2-tailed)	.000	.014	.000		
	N	251	251	251	251	
Audit opinions	Pearson Correlation	.697**	.589**	-.215**	.668**	1
	Sig. (2-tailed)	.000	.000	.001	.000	
	N	251	251	251	251	251

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

* . Correlation is significant at the 0.05 level (2-tailed).

The results in Table 4.8 show that control activities had a positive and significant correlation with audit opinions ($r = .697$; sig. = .000). It was also found that monitoring activities had positive and significant association with audit opinions ($r = .589$; sig. = .000). Further, at 0.01, risk assessment was found to have a significant and negative association with audit opinions ($r = -.215$; sig. = .001). Again, at 0.01, accounting standards were found to possess a positive significant association with audit opinions ($r = .668$; sig. = .000). From the results, it can be said that an increase in control activities, monitoring activities, and accounting standards will lead to the formation of unqualified audit opinions. However, a decrease in risk assessment will lead to the formation of qualified, disclaimer, or adverse audit opinions.

4.11 Linear Regression Results

The study conducted a regression analysis. The results are portrayed in Tables 4.9, 4.10, and 4.11.

Table 4.9: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.926 ^a	0.858	0.856	1.36569

a. Predictors: (Constant), Risk assessment, Monitoring activities, Control activities

b. Dependent Variable: Audit opinions

In Table 4.9, the model summary shows that the R square is 0.858. Both R and adjusted R square are high. From the results, it can be said that the chosen variables, control activities, risk assessment, and monitoring activities account for 85.5% of the variation in audit opinions. The rest of the percentage, 14.5% can be accounted for by other variables not included in the study.

Table 4.10: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2785.727	3	928.576	497.869	.000 ^b
	Residual	460.680	247	1.865		
	Total	3246.406	250			

a. Predictors: (Constant), Risk assessment, Monitoring activities, Control activities

b. Dependent Variable: Audit opinions

In Table 4.10, significance score is 0.000 and this means that the model used in this study is significantly reliable. Therefore, the model is a good fit for this study.

Table 4.11: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.679	1.699		2.166	0.031
Control activities	1.005	0.045	0.640	22.099	0.000
Monitoring activities	1.244	0.064	0.501	19.578	0.000
Risk assessment	1.003	0.040	0.680	24.842	0.000

b. Dependent Variable: Audit opinions

In Table 4.11, the standardized β coefficient for control activities is 0.640 while its significant value is 0.000. Additionally, the standardized β coefficient for monitoring activities was 0.501 while its significant value is 0.000. Further, the standardized β coefficient for risk assessment is 0.680 with a significance value of 0.000. From the results, it can be said that all the independent variables, control activities, monitoring activities, and risk assessment have a positive and significant relationship with audit opinions. This implies that an increase in the utilization of each of the variables could result in a change in the audit opinions formed.

4.12 The Interactive Effect of the Moderating Variable (Accounting Standards)

The study tested for the interactive effect of moderating variables on the relationship between financial control practices and audit opinions. The moderating effect of accounting standards on each variable (control activities, monitoring activities, and risk assessment) was analyzed separately.

4.12.1 Moderating Effect of Accounting Standards on the Relationship between Control Activities and Audit Opinions

The study sought to establish the effect of accounting standards on the link between control activities and audit opinions of commercial state corporations in Kenya. The results are presented in Tables 4.12, 4.13, and 4.14.

Table 4.12: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.488 ^a	0.239	0.236	3.15070
2	.790 ^b	0.625	0.622	2.97856

a. Predictor: Control activities

b. Predictors: (Constant), Control activities* accounting standards

The model summary results in Table 4.12 show that the control activities' R is 0.488 and changes to 0.790. The change in R means that accounting standards have a positive change of 0.302 in the relationship between control activities and audit opinions.

Table 4.13: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1080.874	2	540.437	61.892	0.000 ^b
	Residual	2165.533	248	8.732		
	Total	3246.406	250			
2	Regression	3662.756	2	1831.378	206.427	0.000 ^c
	Residual	2200.208	248	8.872		
	Total	5862.964	250			

a. Dependent Variable: Audit opinions

b. Predictors: (Constant), Control activities

c. Predictors: Control activities*Accounting standards

The ANOVA results in Table 4.13 show that the F statistics for control activities was significant at 0.000 even after interacting the variable with accounting standards. The results mean that accounting standards present a change in the relationship between control activities and the audit opinions.

Table 4.14: Coefficients

<u>Model</u>	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	<u>B</u>	<u>Std. Error</u>	<u>Beta</u>			
1 (Constant)	49.702	2.185			22.750	0.000
Control activities	0.767	0.087	0.488		8.834	0.000
2 (Constant)	44.558	2.225			20.022	0.000
Control activities	1.179	0.107	0.751		11.007	0.000
Accounting standards	0.516	0.003	0.404		0.922	0.000
3 (Constant)	69.493	0.783			88.742	0.000
Control*accounting	0.830	0.072	0.706		16.600	0.000

a. Dependent Variable: Audit opinions

The results presented in Table 4.14 show that the standardized β coefficient for control activities is 0.488 while its significant value is 0.000. Notably, when the control activities variable interacts with accounting standards, the standardized β coefficient changes to 0.706 with a similar significance value. The results imply that accounting standards have a positive significant effect on the relationship between control activities and accounting standards.

4.12.2 Moderating Effect of Accounting Standards on the Relationship between Monitoring Activities and Audit Opinions

In Tables 4.15, 4.16, and 4.17, the study presents the results for the interactive effect of accounting standards on the link between monitoring activities and the audit opinions.

Table 4.15: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.589 ^a	0.347	0.345	3.92008
2	.683 ^b	0.466	0.464	3.54567

Predictor: Monitoring activities

b. Predictors: (Constant), Monitoring activities* accounting standards

In Table 4.15, the R (correlation of coefficient) is 0.589 and it changes to 0.683. This means a positive change of 9.4% exists when monitoring activities interact with accounting standards.

Table 4.16: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2036.583	1	2036.583	132.530	.000 ^b
	Residual	3826.381	249	15.367		
	Total	5862.964	250			
2	Regression	2732.584	1	2732.584	217.358	.000 ^c
	Residual	3130.380	249	12.572		
	Total	5862.964	250			

a. Dependent Variable: Audit opinions

b. Predictors: (Constant), Monitoring activities

c. Predictors: Monitoring activities*Accounting standards

The ANOVA results in Table 4.16 reveal that the F statistics for monitoring activities was significant at 0.000 even after interacting with accounting standards. There is a clear change in the F statistics (from 132.530 to 217.358). The results mean that accounting standards present a notable change in the relationship between monitoring activities and audit opinions.

Table 4.17: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	46.619	3.084		15.115	0.000
	Monitoring activities	1.966	0.171	0.589	11.512	0.000
2	(Constant)	40.668	2.166		18.775	0.000
	Monitoring activities	1.661	0.120	0.498	13.877	0.000
	Accounting standards	0.874	0.053	0.591	16.472	0.000
3	(Constant)	40.368	2.834		14.247	0.000
	Monitoring*accounting	1.357	0.092	0.683	14.743	0.000

a. Dependent Variable: Audit opinions

The findings in Table 4.17 indicate that the standardized β coefficient for monitoring is 0.589 with a significant value of 0.000. The monitoring activities interacted with accounting standards and the β coefficient increased to 0.689. The results indicate that accounting standards have a positive significant effect in the relationship between monitoring activities and the audit opinions.

4.12.3 Moderating Effect of Accounting Standards on the Relationship between Risk Assessment and Audit Opinions

The interactive effect of accounting standards on the link between risk assessment activities and the audit opinions are presented in Tables 4.18, 4.19, & 4.20.

Table 4.18: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.215 ^a	0.046	0.042	4.73876
2	.683 ^b	0.466	0.464	3.54567

a. Predictor: Risk assessment

b. Predictors: (Constant), Risk assessment * accounting standards

The model summary in Table 4.18 shows that the risk assessment's R is 0.215 and reported a significant change to 0.683 (a positive change of 46.8). This means that accounting standards have a positive significant effect on the relationship between control activities and audit opinions.

Table 4.19: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	271.465	1	271.465	12.089	.001 ^b
	Residual	5591.499	249	22.456		
	Total	5862.964	250			
2	Regression	2732.584	1	2732.584	217.358	.000 ^c
	Residual	3130.380	249	12.572		
	Total	5862.964	250			

a. Dependent Variable: Audit opinions

b. Predictors: (Constant), Risk assessment

c. Predictors: Risk assessment *Accounting standards

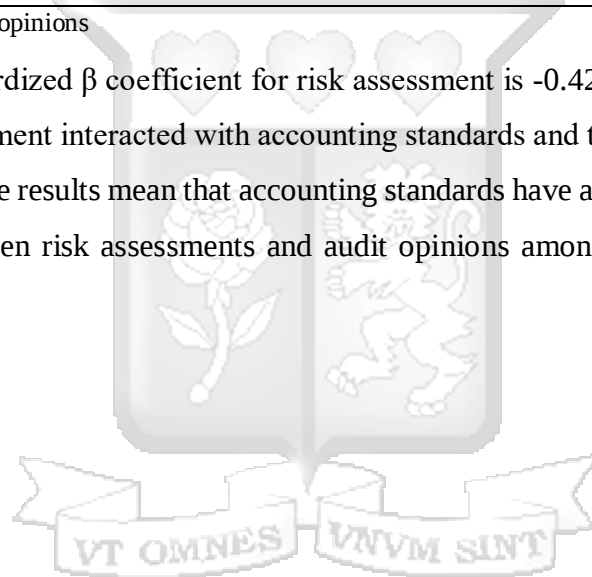
In Table 4.19, the study revealed that risk assessment is significant at 0.001. After interacting risk assessment with accounting standards, it changes to 0.000. The results mean that accounting standards have an interactive change in the relationship between monitoring activities and audit opinions among commercial state corporations in Kenya.

Table 4.20: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	89.521	2.180		41.059	0.000
Risk assessment	-0.427	0.123	-0.215	-3.477	0.001
2 (Constant)	48.604	2.897		16.776	0.000
Risk assessment	0.848	0.115	0.427	7.395	0.000
Accounting standards	1.413	0.085	0.955	16.534	0.000
3 (Constant)	40.368	2.834		14.247	0.000
Risk * Accounting standards	1.357	0.092	0.683	14.743	0.000

a. Dependent Variable: Audit opinions

In Table 4.20, the standardized β coefficient for risk assessment is -0.427 with a significant value of 0.001. The risk assessment interacted with accounting standards and the β coefficient increased significantly to 1.357. The results mean that accounting standards have a positive significant effect in the relationship between risk assessments and audit opinions among the studied commercial state corporations.



CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter consists of discussion, conclusions, and recommendations. Further, the section also present limitations encountered and areas for further research.

5.2 Discussions

5.2.1 Control Activities and Audit Opinions among Commercial State Corporations in Kenya

The study established that the internal control activities provide effective verification mechanisms. This means that most organizations studied attested that the control activities were effective and hence could provide checks and balances as championed by Accountability theory. In disagreement, a study by Ziniyel et al. (2018) discovered that management's application of the internal audit system was ineffective. The results are also supported by the Accountability theory which defines accountability as achieving stated goals whilst abiding by the established norms and regulations. It was also found that duty segregation was upheld to prevent fraud and error. It can thus be said that job specification was upheld for accountability purposes. The results conform to the Accountability theory that vouches for individual responsibility. In support, a study by Radojević et al. (2022) found that duty segregation for accountability purposes plays a key role in promoting internal controls. However, the majority were not sure whether there was the existence of independent checks and evaluations of internal control functions whereas, many indicated that indeed the independent checks of internal control functions existed. According to Accountability theory, there is a need to follow established norms and regulations as an internal control mechanism. From the results, it can be said that internal controls were available but employees were skeptical whether they provided checks and balances as supported by Accountability theory. However, a study by Kakucha (2009) found shortcomings in internal control systems, particularly readily accessible procedures, and the severity of these shortcomings varies throughout businesses.

Further, the majority were not sure if efficiency in the procedures was available on the internal controls. The available procedures might not be efficient. In another study, Masha (2018) found that control activities presented difficulties for national sub-county treasuries in Kenya. It was also

revealed that most respondents were unsure if appropriate internal control structures were applied during the evaluation. The results could mean that most employees seemed unsure if internal control structures were appropriate. In another research by Mexmonov (2020), the researcher established that like-minded firms should apply appropriate internal control structures to ensure control activities are adhered to in line with the Accountability theory. It was also revealed that internal control systems conform to the required accounting rules. Therefore, the available internal control systems widely conform to accounting standards. In congruence, Simamora and Hendarjatno (2019) found that the responsibilities of management include setting up and upholding control practices that resonate with accounting standards as per the Accountability theory.

It found that authorization and approvals were upheld within the institutions. Therefore, as part of internal control mechanisms, the commercial state corporation ensured all financial statements were authorized and approved by relevant authorities as supported by the Policeman theory. In conformity, a study by Bruwer et al. (2018) established that individuals including line managers and accounting employees charged with financial internal practices must discharge their mandates to ensure that all materials presented are authentic/authorized. Further, the Pearson correlations found that control activities have a positive correlation with modified audit opinions. Regressions found that the standardized β coefficient for control activities was 0.621 and significant; an indication that the variable had a strong relationship with modified audit opinion. In another investigation by Masha (2018), the study established a strong correlation between internal control systems and money management.

5.2.2 Monitoring Activities and Audit Opinions among Kenya's Commercial State Corporations

The study found that internal auditors frequently execute audits as a monitoring activity practice. This could imply that internal audit staff strived to supervise financial reports before subsequent audits by external auditors in line with Accountability theory. The results are in tandem with Nor and Ishak (2020) who found that monitoring was accomplished by internal auditors executing audits frequently. Again, it was found that monitoring teams routinely use internal mechanisms to ensure that staff follow the required accounting standards as supported by the positive Accountability theory. The findings imply that organizations widely required employees to

embrace accounting standards. In uniformity, Mustafa et al. (2016) found that continual monitoring activities comprise a variety of management and supervision tasks that assess and enhance internal control's conception, implementation, and efficacy by employees.

On whether monitoring mechanisms determined if procedures and rules were efficiently adhered to by staff, most respondents were not sure and this is against the Accountability theory that requires stringent conformity to accounting standards. This could mean that most staff were unaware of the efficiency of available monitoring mechanisms. In agreement, Christopher (2019) revealed that monitoring determines if internal control is effectively planned, implemented, and maintained in line with available rules and procedures. The study again found that evaluations usually consist of self-assessments of internal audit tools that aid in audit opinion formation. From the results, it can thus be said that staff were individually exposed to self-assessment tools to evaluate their performance. In agreement, Lee et al. (2018) found that monitoring through evaluation and routine audits should be regularly adhered to using internal mechanisms to ensure that public organizations follow the required accounting standards as opined by both Accountability and Policeman theories.

It was established that managers regularly reviewed financial statements to aid audit opinion formation. This means that the concerned authorities/officers played a key role in monitoring junior staff performance as suggested by the Accountability theory. In agreement, Boyle et al. (2015) found that internal control managers must regularly review financial statements to aid audit opinion formation. Again, the correlation results showed that monitoring had a positive significant association with modified audit opinion. Regarding regression results, it found that the β coefficient for monitoring activities was 0.388, and a significance value of 0.000. In a study by Mawanda (2008), a significant connection between the internal control system and monitoring was witnessed.

5.2.3 Risk Assessment Activities and Audit Opinions among Commercial State Corporations-Kenya

From the findings, most respondents disagreed that risk assessment mechanisms for identifying threats were available and this is against the Accountability theory that calls for conformity to accounting standards. The results mean that risk assessment mechanisms were not satisfactory.

The results concur with a study by Masha (2018) that discovered that risk assessment presented difficulties for national sub-county treasuries in Kenya. The study also found that most respondents disagreed that organizations effectively developed contingency risk plans to minimize the vulnerability of financial malpractices. This means that risk avoidance such as contingency risk plans was majorly lacking against the tenets of Accountability theory. Moreover, the majority disagreed while others remained neutral that the organizational internal control practices included risk assessment strategies to prevent financial mismanagement and this is an indication that risk assessment strategies were not adequate and could expose organizations to financial misuse hence qualified or disclaimer opinions. The result contradicts the goal of the Policeman theory. In yet another study, Sityata (2020) revealed that the institutions studied were unprepared to integrate risk management into the institution's daily operations thus impeding financial management.

Meanwhile, most respondents disagreed that all projects initiated by the institution have adequate risk management strategies. Again, the results indicate that the risk management strategies were insufficient thus going against the goal of Accountability theory that calls for using procedures, rules, and regulations to prevent risks associated with financial reporting. However, a study by Amudo and Inanga (2009) revealed that certain control elements were absent from projects, including risk assessment and efficient internal control systems an indication that control systems were no longer functional. Further, the majority were not sure whether the organizations had put in place measures that identify potential financial risk exposures. Therefore, all commercial state corporations should ensure that corrective measures are embraced to reduce cases of financial risk exposures as championed by the Accountability theory that calls for responsibility from employees. In congruence, a study by Tayo and Temidayo (2021) revealed that effective internal controls should include risk assessment strategies to cushion organizations from financial mismanagement. Through such risk assessment control measures, quality financial reporting will be encouraged thus encouraging the formation of unqualified audit opinions.

The research found that most participants agreed that measures that analyze risks may lead to fraudulent practices. From the results, it is evident that there were adequate risk analysis measures and the only concern was whether they were applied. The Accountability theory supports these findings by indicating that to prevent fraud and error, there is a need to assign a task to more than one individual responsible for various public organizations' activities. In yet another study

Dubihlela and Nqala, (2017) found that companies that adopted controls and developed contingency risk plans become less vulnerable to fraudulent activity, and the majority of them earned unqualified audit opinions. Were et al. (2023) however found that one area that should be heavily relied on during internal auditing is the fraud risk assessment. Correlation results found that risk assessment had a negative significant association with modified audit opinion. The regression revealed that risk assessment had a standardized β coefficient of 0.122 with a significance value of 0.006.

5.2.4 Moderating Effect of Accounting Standards on the Relationship between Internal Control Practices and Audit Opinions

The study found that management ensures conformity to accounting principles as enshrined in the Public Sector Accounting Standards Board as suggested by the Accountability theory. This means that the management was conscious of the value of adhering to PSASB to promote financial internal control practices as enshrined in the Accountability theory. According to Opanyi (2016), adherence to PSASB promotes oversight of accounting and financial procedures by all public entities. Further, it revealed that the organization ensures adherence to International Financial Reporting Standards in line with the position of the Accountability theory. From this finding, it is evident that most commercial state corporations ensure they embrace IFRS principles. The results are in tandem with Chung and Kim (2023) who revealed that adopting IFRS leads to effective financial internal controls.

Additionally, most participants were not sure whether the staff usually followed the generally accepted standards to enhance the provision of unqualified opinion thereby contradicting Opanyi (2016) who advises for conformity to GAAP. The findings also go against the goal of both the Accountability and Policeman theories. It found that commercial state corporations routinely publish and disseminate the accounting and financial standards to promote audit opinion formation as supported by the Accountability theory that argues for conformity to accounting standards. This means that most state corporations strived to conform to the available accounting and financial standards to enhance financial control practices. A study by Lenggu (2019) revealed that financial reports based on standard accounting guidelines indicate conformity to internal control practices. Through Pearson correlation, it was found that accounting standards were significantly and positively correlated to audit opinion. Using regression analysis, it was found that accounting

standards had a positive significant effect on the relationship between financial accounting practices and modified audit opinion among the commercial state corporations studied.

5.2.5 Audit Opinions

The study found that instances of qualified opinions have been witnessed as revealed. The results imply that most state corporations failed to fully adhere to internal control practices to promote the formation of unqualified opinions. The results contradict the goal of the Accountability theory which vouches for using standard accounting principles to obtain favorable audit opinions. A study by Su'un et al. (2020) revealed that qualified opinion stops an auditor from delivering a clean report to an organization. Again, it found that cases of disclaimer of opinions are common at the organization and this goes against the tenets of Policeman theory. It was finally revealed that respondents agreed that in certain instances, OAG has expressed adverse opinions on financial reports as opposed to the goal of the Policeman theory. The findings could be attributed to a lack of adherence to Accountability theories. In agreement, a study by Pamungkas et al. (2018) found that non-conformance with the GAAP and other regulations hurts audit opinions.

5.3 Conclusions

On control activities, the study found that duty segregation, authorization, and approvals were upheld to prevent fraud and error and that internal control systems also conformed to the required accounting rules. Therefore, the study concludes that most commercial state corporations embraced internal control activities as supported by the Accountability theory. Adhering to such activities plays a bigger role in achieving unmodified audit opinion.

Regarding monitoring activities, it was found that internal auditors frequently execute audits by using internal mechanisms. Further, evaluations consisted of self-assessments of internal audit tools and line managers regularly reviewed financial statements. The study thus concludes that most of the studied commercial state corporations adhered to monitoring activities such as using internal mechanisms and regular evaluations of financial statements in line with positive Accountability theory.

Concerning risk assessment, the study found that risk assessment mechanisms for identifying threats were not available, and most corporations did not effectively develop contingency risk plans to minimize the vulnerability of financial malpractices. Further, there was evidence of inadequate risk management plans and this impeded adequate risk analysis thus giving room for

fraudulent practices. Consequently, the study concludes that risk assessment activities were inadequately adhered to across several commercial state corporations thereby leading to the provision of adverse, qualified, or disclaimer opinions if not corrected. The conclusion goes against the principles of the Policeman theory.

In connection to accounting standards, it was found that most corporations conformed to accounting principles as enshrined in the PSASB and IFRS. However, not all commercial state corporations keenly follow the generally accepted accounting standards. From the findings, despite conforming to generally acceptable accounting standards being a concern for many organizations, the study concludes that most of the commercial state corporations endeavored to follow accounting standards as outlined in the PSASB and IFRS as provided for by the Accountability theory.

Concerning audit opinions, the study found that several state corporations failed to receive unqualified opinions. Therefore, the study concludes that the majority of the studied commercial state corporations did not receive an unqualified opinion from the OAG thus contradicting the aim of the Policeman theory.

5.4 Recommendations

The study recommends that all commercial state corporations ensure that risk assessment practices are used to seal cases of errors and malpractices. These organizations can implement risk management practices, including operational risk components, fraud possibilities, internal and external risk factors, and procedures for identifying and evaluating these risks. These steps will aid in locating weak points in the risk management procedure and confirming the coherence of internal financial risk assessment schemes.

Additionally, the research recommends that commercial state corporations review and evaluate their internal control procedures. For instance, the methods for conducting internal checks and assessments, the need for independent checks and evaluations, and security measures to identify and protect assets should all be fully covered by the evaluated internal checks and evaluation standards.

On policy, the study recommends that these commercial organizations should also seek to adopt cutting-edge accounting and financial management technological policies that are dependable,

easy to use, quick, user-friendly, and capable of yielding precise results. Adopting a suitable reporting system could be crucial for the internal auditing policy. The uniformity of internal check rating systems and the identification of internal check's weak points should thus be major topics of the revised internal checks practices policy.

In practice, the study recommends that state corporations should embrace effective internal control measures to direct their operations. When assigning tasks to employees, management, and in particular, human resource management, should assess each worker's honesty, particularly for those handling confidential financial data.

Lastly, commercial state corporations should ensure that their monitoring plans are focused on achieving unqualified opinions via efficient operations. To achieve this, departmental line managers of state corporations should oversee their accountants' adherence to accounting rules and specifications to guarantee correct application and conformity with accounting standards and principles.

5.5 Limitations

The core data for the study came from a questionnaire that was filled out by respondents and was solely based on their thoughts. As a result, the study was restricted to the accuracy of the data collected from the relevant respondents. Furthermore, the respondents' attitudes and perceptions may have influenced the data collection; as a result, it is impossible to quantify the results. Again, the study only focused on commercial state corporations hence drawing inferences on non-commercial state entities could be a challenge.

5.6 Areas for Further Research

The study aimed to assess the effect of financial internal control practices on audit opinions among commercial state corporations in Kenya. The study suggests that similar research ought to be carried out but with a focus on non-commercial state corporations to determine whether they conform to financial internal control practices and whether upholding such practices has a correlation with the audit opinions they receive. Additionally, another study could be done on the effect of financial internal control practices on quality financial reporting among commercial state corporations in Kenya.

REFERENCES

- Abdillah, M. R., Mardijuwono, A. W., & Habiburrochman, H. (2019). The effect of company characteristics and auditor characteristics to audit report lag. *Asian Journal of Accounting Research*, 4(1), 129-144. <https://doi.org/10.1108/AJAR-05-2019-0042>
- Abiodun, E. A. (2020). Internal control procedures and firm's performance. *International Journal of Scientific & Technology Research*, 9(2), 6407-6415.
- Ahmed, S. O., & Nganga, P. (2019). Internal control practices and financial performance of county governments in the coastal region of Kenya. *International Journal of Current Aspects*, 3, 28-41. DOI: 10.35942/ijcab.v3iV.59
- Bhaskar, L. S., Schroeder, J. H., & Shepardson, M. L. (2019). Integration of internal control and financial statement audits: Are two audits better than one? *The Accounting Review*, 94(2), 53-81.
- Brown, R. G. (2020). Changing audit objectives and techniques. In *The Evolution of Audit Thought and Practice* (pp. 1-8). Routledge.
- Chalmers, K., Hay, D., & Khlif, H. (2019). Internal control in accounting research: A review. *Journal of Accounting Literature*, 42(1), 80-103.
- Chen, J., Ding, R., Hou, W., & Johan, S. (2016). Do financial analysts perform a monitoring role in China? Evidence from modified audit opinions. *Abacus*, 52(3), 473-500.
- Gebrayel, E., Jarrar, H., Salloum, C., & Lefebvre, Q. (2018). Effective association between audit committees and the internal audit function and its impact on financial reporting quality: Empirical evidence from Omani listed firms. *International Journal of Auditing*, 22(2), 197-213.
- Gontara, H., Khelil, I., & Khlif, H. (2023). The association between internal control quality and audit report lag in the French setting: The moderating effect of family directors. *Journal of Family Business Management*, 13(2), 261-271.
- Handoyo, B. R. M., & Bayunitri, B. I. (2021). The influence of internal audit and internal control toward fraud prevention. *International Journal of Financial, Accounting, and Management*, 3(1), 45-64.

- Hasan, S., Kassim, A. A. M., & Hamid, M. A. A. (2020). The impact of audit quality, audit committee and financial reporting quality: evidence from Malaysia. *International Journal of Economics and Financial Issues*, 10(5), 272.
- Hassan, S. U. (2013). Financial Reporting Quality, Does Monitoring Characteristics Matter? An Empirical Analysis of Nigerian Manufacturing Sector. *The Business & Management Review*, 3(2), 147.
- Kelly, L. M., & Cordeiro, M. (2020). Three principles of pragmatism for research on organizational processes. *Methodological innovations*, 13(2), 2059799120937242.
- Khalmurzayevna, Y. S., Nuritdinovich, F. S., & Karimovich, S. S. (2023). Risk assessment of the internal control system and the application of auditing procedures in audit of environmental costs. *International Journal of Management and Economics Fundamental*, 3(05), 15-27.
- King, M., Setiyawati, H., & Mappanyuki, R. (2020). The effect of the implementation of government internal control towards auditor opinion using the application of government accounting standards as a moderation variable. *ICORE*, 5(1).
- Korir, L. K. (2022). *Effect of Internal Control Systems on Financial Performance of Commercial Bank Branches in Bomet and Kericho Counties, Kenya* (Doctoral Thesis, university of kabianga).
- Li, X. (2020). The effectiveness of internal control and innovation performance: An intermediary effect based on corporate social responsibility. *Plos one*, 15(6), e0234506.
- Li, Y., Li, X., Xiang, E., & Djajadikerta, H. G. (2020). Financial distress, internal control, and earnings management: Evidence from China. *Journal of Contemporary Accounting & Economics*, 16(3), 100210.
- Muhunyo, B. M., & Jagongo, A. O. (2018). Effect of internal control systems on financial performance of public institutions of higher learning in Nairobi City County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3 (2): 273, 87.

- Muthaher, O. (2019). Government Accounting Standard, Human Capacity, Internal Control System and Financial Supervision As A Quality Analysis Of Government Financial Statements. *Fokus Ekonomi: Jurnal Ilmiah Ekonomi*, 14(1), 186-200.
- Mwangi, J. K., & Muturi, W. (2018). Influence of Internal control mechanism on financial performance of supermarkets in kenya. *International Journal of Social Sciences and Information Technology*, 4(5), 272-288.
- Ndegwa, R. M., & Mungai, J. N. (2019). Influence of internal control system on financial management in ministry of finance, Kenya. *International Academic Journal of Economics and Finance*, 3(3), 266-278.
- Oussii, A. A., & Boulila Taktak, N. (2018). The impact of internal audit function characteristics on internal control quality. *Managerial Auditing Journal*, 33(5), 450-469.
- Pamungkas, B., Ibtida, R., & Avrian, C. (2018). Factors influencing audit opinion of the Indonesian municipal governments' financial statements. *Cogent Business & Management*, 5(1), 1540256.
- Schreiber, J. B. (2021). Issues and recommendations for exploratory factor analysis and principal component analysis. *Research in Social and Administrative Pharmacy*, 17(5), 1004-1011.
- Seeram, E. (2019). An overview of correlational research. *Radiologic technology*, 91(2), 176-179.
- Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, 9(1), 4-11.
- Sumaryati, A., Hasanatina, F. H., & Fanny, F. (2022, February). The Impact of Financial Performance and Audit Opinions: An Indonesian Case Study. In *2nd International Conference on Industry 4.0 and Artificial Intelligence (ICIAI 2021)* (pp. 122-126). Atlantis Press.
- Sutrisna, M., Nadirsyah, N., & Indayani, I. (2022). The effect of human resource competence, utilization of information technology, internal control systems, and application of government accounting standards on the quality of financial reporting (study on south aceh government SKPK). *International Journal of Business, Economics, and Social Development*, 3(3), 124-134.

- Tumwebaze, Z., Mukyala, V., Ssekiziyivu, B., Tirisa, C. B., & Tumwebonire, A. (2018). Corporate governance, internal audit function and accountability in statutory corporations. *Cogent Business & Management*, 5(1), 1527054.
- Viegas, C. V., Bond, A., Ribeiro, J. L. D., & Selig, P. M. (2013). A review of environmental monitoring and auditing in the context of risk: unveiling the extent of a confused relationship. *Journal of Cleaner production*, 47, 165-173.
- Wesley, O. (2023). The Effects of Internal Control Systems on the Financial Performance of Third Tier Licenced Commercial Banks in Kenya. *European Academic Journal-I*, 2(001).
- Ziniyel, D., Otoo, I. C., & Andzie, T. A. (2018). Effect of internal audit practices on financial management. *European Journal of Business, Economics and Accountancy*, 6(3), 39-48.



APPENDICES

APPENDIX I: INTRODUCTION LETTER

Strathmore University

Dear Sir/Madam,

DATA GATHERING

I am a Master student at Strathmore University. As a fulfilment for the master of commerce, I am required to submit a completed research project on “**EFFECT OF INTERNAL CONTROL PRACTICES ON AUDIT OPINIONS AMONG COMMERCIAL STATE CORPORATIONS IN KENYA**”. In order to help me accomplish my academic goals, I am asking for your assistance in participating in the data gathering exercise.

Thank you!



Yours,

KIPROP TOTONA



APPENDIX II: QUESTIONNAIRE

Please make sure the relevant item (closed-ended questions) is checked. Mark your selection by placing a TICK in the relevant boxes.

FIRST PART: PERSONAL INFORMATION

1. What is your Age? (i) 18 yrs to 25yre ☐ (ii) 26yrs to 35yrs ☐ (iii) 36yrs to 45yrs ☐ (iv) 46yr and 55yr ☐ (v) 56yrs and above ☐
2. Highest academic qualifications? (i) Certificate ☐ (ii) Diploma ☐ (iii) Degree ☐ (iv) Master ☐ PhD ☐
3. Duration as a public servant? (i) 1-5yrs ☐ (ii) 5-10yrs ☐ (iii) Over 10 years ☐

SECOND PART: EFFECT OF CONTROL ACTIVITIES ON AUDIT OPINIONS AMONG COMMERCIAL STATE CORPORATIONS IN KENYA

4. The items in the table below regards the effect of control activities on audit opinions among Kenya's state corporations. Kindly respond to each item on a 1-5 scale, with 1 denoting strongly disagree, 2 disagree, 3 not sure, 4 agree, and 5 strongly agree.

Items	1	2	3	4	5
The internal control activities provide effective verification mechanisms					
Duty segregation upheld to prevent frauds & error					
There is existence of independent checks and evaluations of internal control functions					
There is efficiency in the procedures available on internal controls					
Appropriate internal control structures are applied during evaluation					
Internal control systems conform to the required accounting rules					
Authorization and approvals are upheld within the institution					

THIRD PART: EFFECT OF MONITORING ON AUDIT OPINIONS AMONG COMMERCIAL STATE CORPORATIONS

5. The items in the table below regards the effect of monitoring on audit opinions among state corporations in Kenya. Kindly respond to each item on a 1-5 scale, with 1 denoting strongly disagree, 2 disagree, 3 not sure, 4 agree, and 5 strongly agree.

Items	1	2	3	4	5
Internal auditors frequently execute audits to enhance audit opinion formation					
Monitoring team routinely use internal mechanisms to ensure that staff follow the required accounting standards					
Monitoring mechanisms able to determine if procedures and rules are efficiently embraced by staff					
Evaluations usually consist of self-assessments of internal audit tools that aids in audit opinion formation					
Managers regularly review financial statements to aid audit opinion formation					

FOURTH PART: EFFECT OF RISK ASSESSMENT ON AUDIT OPINIONS AMONG COMMERCIAL STATE CORPORATIONS.

6. The items in the table below regards the effect of risk assessment on audit opinions among state corporations in Kenya. Kindly respond to each item on 1-5 scale, with 1 denoting strongly disagree, 2 disagree, 3 not sure, 4 agree, and 5 strongly agree.

Items	1	2	3	4	5
Risk assessment mechanisms for identifying threats are available					
The organization has effectively developed contingency risk plans to minimize vulnerability of financial malpractices					
Organizational internal control practices include risk assessment strategies to prevent financial mismanagement					
All projects initiated by the institution have adequate risk management plans					
The organization has put in place measures that identify potential financial risk exposures					
Measures that analyzes risks that may lead to fraudulent practices are adequate					

FIFTH PART: MODERATING EFFECT OF ACCOUNTING STANDARDS ON RELATIONSHIP BETWEEN INTERNAL CONTROL PRACTICES AND AUDIT OPINIONS

7. Items in the table below regards moderating effect of accounting standards on association between internal control practices and audit opinions. Kindly respond to each item on 1-5, with 1 denoting strongly disagree, 2 disagree, 3 not sure, 4 agree, and 5 strongly agree.

Items	1	2	3	4	5
The management ensures there is conformity to accounting principles as enshrined in the Public Sector Accounting Standards Board					
The organization ensures adherence to International Financial Reporting Standards					
The staff usually follow the generally accepted standards to enhance provision of unqualified opinion					
The organization routinely publishes and disseminates the accounting and financial standards to promote audit opinion formation					

SIXTH PART: THE AUDIT OPINIONS

8. The items in the table below regards the statements on audit opinions. Kindly respond to each item on a scale of 1 to 5.

Items	1	2	3	4	5
My organization often receive unqualified opinions					
Instances of qualified opinions have been witnessed					
Cases of disclaimer opinions are common at the organization					
In certain instances, OAG has ever expressed adverse opinions on financial reports					

END

THANK YOU

APPENDIX III: INTERVIEW GUIDE FOR EXTERNAL AUDITORS

1. In your opinion as the external auditor, what is your take regarding the available internal control activities put in place by the state corporations?.....

.....
.....
.....

2. As an auditor, what is your say about monitoring activities embraced by the state corporations as a financial internal control practice?.....

.....
.....
.....

3. Are you satisfied with the risk assessment activities embraced by the state corporations? If no, kindly explain.....

.....
.....
.....

4. As an audit expert, what are some of the accounting concerns you have ever come across among state corporations when discharging your duty?.....

.....
.....

.....5. As an auditor, under what circumstances have you ever formed modified or unmodified opinions?.....

.....
.....

End

APPENDIX IV: LIST OF COMMERCIAL STATE CORPORATIONS IN KENYA

1. Kenya Re	2. KPC
3. EPRA	4. KPA
5. AFC	6. KENAS
7. ACFC	8. KRC
9. CMA	10. KSLH
11. CSC	12. KSCL
13. CAK	14. KTB
15. KIRDI	16. KTDC
17. EPZA	18. KICC
19. GTI	20. NBK
21. JKF	22. NCPB
23. NMC	24. NHC
25. KAS	26. NOCK
27. KALRO	28. NWC&PC
29. ACFC	30. NKCC
31. KBC	32. NMC
33. KCAA	34. PCK
35. KETRACO	36. PBK
37. KIA	38. REA
39. KLB	40. SSRA
41. KNBS	42. SMEA
43. KNEB	44. SONI
45. KPRL	46. TKL

APPENDIX V: BUDGET

ACTIVITY	UNIT	UNIT COST (ksh)	TOTAL COST (ksh)
Stationery			
Ball pens	10	15	150
Files	5	60	300
Foolscaps	5 Reams	500	2500
Photocopy/printing	2000	5	10000
Internet	5000 per month	5000	30,000
Sub Total			42, 950
Other services			
Data collection	3 personnel	3*10000	30000
Data processing			25000
Sub Total			55,500
Grand Total			97, 450

APPENDIX VI: SU-ISERC LETTER



24th April 2024

Mr Totona Kiprop,
totona.kimaiwa@strathmore.edu

Dear Mr Totona,

RE: Effect of Financial Internal Control Practices on Audit Opinions among Commercial State Corporations in Kenya

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU-masters** research proposal. Your application reference number is **SU-ISERC2110/24**. The approval period is from **24th April 2024 to 23rd April 2025**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
- iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
- v. Clearance for the export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,

**Mr Ambrose Rachier,
Chairperson; SU-ISERC**



APPENDIX VII: NACOSTI CERTIFICATE

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 231880	Date of Issue: 03/April/2024
RESEARCH LICENSE	
	
This is to Certify that Mr.. Kiprop Kimaiwa Tona of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Baringo, Bomet, Bungoma, Busia, Elgeyo-Marakwet, Embu, Garissa, Homabay, Isiolo, Kajiado, Kakamega, Kericho, Kiambu, Kilifi, Kirinyaga, Kisii, Kisumu, Kitui, Kwale, Laikipia, Lamu, Machakos, Makueni, Mandera, Marsabit, Meru, Migori, Mombasa, Muranga, Nairobi, Nakuru, Nandi, Narok, Nyamira, Nyandarua, Nyeri, Samburu, Siaya, Taita-Taveta, Tanariver, Tharaka-Nithi, Transzoia, Turkana, Uasin-Gishu, Vihiga, Wajir, Westpokot on the topic: EFFECT OF FINANCIAL INTERNAL CONTROL PRACTICES ON AUDIT OPINIONS AMONG STATE CORPORATIONS IN KENYA for the period ending : 03/April/2025.	
License No: NACOSTI/P/24/34268	
231880	
Applicant Identification Number	Director General
	NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code
	
NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.	