EFFECT OF INTERNAL AUDIT CONTROLS ON THE FINANCIAL PERFORMANCE OF INSURANCE COMPANIES IN KENYA

By

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MASTER OF SCIENCE IN COMMERCE (FINANCE AND ACCOUNTING)

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DECLARATION

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

Student Name: _______________ Reg, No. __________

Sign: _______________ Date: __________________

I do hereby confirm that I have examined the master's dissertation of

Lydiah Nyatuka Okemwa

And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

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ABSTRACT

This study examined the effect of internal audit controls on the financial performance of insurance companies in Kenya, focusing on four dimensions: quality assurance programs, internal control systems, communication, and the control environment. A descriptive research design was adopted, targeting all 56 registered insurance and reinsurance firms in the country. Out of these, 45 valid responses were collected through structured questionnaires, representing an 80.4% response rate. Descriptive results indicated consistently high implementation levels of internal audit controls, with mean scores ranging between 4.10 and 4.26. Correlation analysis showed significant positive associations between financial performance and internal control systems ($r = 0.670$), control environment ($r = 0.626$), quality assurance ($r = 0.478$), and communication ($r = 0.465$). Regression analysis further revealed significant effects for internal control systems ($\beta = 0.482$, $p < 0.001$), control environment ($\beta = 0.357$, $p = 0.002$), and quality assurance programs ($\beta = 0.278$, $p = 0.016$), while communication did not show a statistically significant effect ($\beta = 0.021$, $p = 0.864$). The overall model was statistically significant ($F = 22.139$, $p < 0.001$) and explained 68.9% of the variance in financial performance ($R^2 = 0.689$). The study concludes that internal audit controls play a critical role in enhancing financial performance and recommends strengthening audit frameworks, enforcing compliance, and fostering ethical governance within Kenya's insurance sector.

Keywords: *Internal Audit Controls, Financial Performance, Insurance Companies, Control Environment, Quality Assurance Programs.*

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To all of you, may you be in awe of God's blessings.

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DEDICATION

I dedicate this project to Almighty God, for His promises, He continues to fulfil. In Him, my strength has been renewed and He has held me up throughout this journey. To my wonderful parents, Mum, Joyce Okemwa and Dad, Abel Okemwa who have never ceased of giving out themselves in my quest, whose cup of inspiration I will always draw from and whose encouragement has pushed me this far.

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In every one of you, all my needs have been met.

I am very thankful.

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ACRONYMS AND ABBREVIATIONS

AI - Auditor Independence

AC - Audit Committee

CG - Corporate Governance

CLRM - Classical Linear Regression Model

CMA - Capital Markets Authority

EWS - Early Warning System

FR - Financial Reporting

GDP - Gross Domestic Product

GRI - Global Reporting Initiative

GAAP - Generally Accepted Accounting Principles

ICS - Internal Control Systems

IFRS - International Financial Reporting Standards

IR - Integrated Reporting

IRA - Insurance Regulatory Authority

KCAU - KCA University

KII - Key Informant Interviews

NACOSTI - National Commission for Science, Technology and Innovation

NASI - Nairobi All Share Index

NSE	- Nairobi Security Exchange
OLS	- Ordinary Least Squares
QA	- Quality Assurance
RBC	- Risk Based Capital
ROA	- Return on Assets
ROE	- Return on Equity
TQM	- Total Quality Management
SPSS	- Statistical Package for Social Sciences

TERMS AND DEFINITIONS

Internal Audit Controls: Measures within an organization designed to ensure accuracy in financial reporting, prevent fraud, and facilitate operational efficiency by implementing robust internal audit practices (Morara & Sibindi, 2021).

Insurance Companies: Businesses that provide financial protection and risk management services to individuals and entities against potential future losses, operating within a regulatory framework to ensure stability and trust in the market (Jones & Miller, 2019).

Quality Assurance Programs: Processes and procedures implemented by organizations to ensure compliance with industry standards, enhance customer satisfaction, and improve operational outcomes. These programs involve obtaining industry-standard certifications, conducting regular internal audits, and ensuring adherence to regulatory quality standards (Tamimi, 2020).

Internal Control Systems: Frameworks and protocols established within organizations to manage risks effectively, minimize control failures, and ensure the accurate and timely reporting of financial information. These systems safeguard organizational assets and promote operational efficiency through regular assessments and implementation of audit recommendations (Lois et al., 2021).

Communication: The processes involved in ensuring that financial information is accurately and timely reported, and that internal communication channels are effective in disseminating essential information throughout the organization. This includes the timeliness of financial reporting, accuracy of financial statements, and the efficiency of internal communication mechanisms (Li et al., 2020).

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The concept of internal auditing has evolved significantly over the decades, transitioning from a traditional focus on transaction-level verification to a strategic pillar of corporate governance and risk management. Internal audit controls are now recognized as integral to an organization’s governance structure, offering independent and objective assurance designed to improve operations and enhance value creation (Institute of Internal Auditors [IIA], 2022). These controls encompass structured frameworks such as quality assurance programs, risk-focused internal control systems, ethical control environments, and clear communication channels that collectively safeguard organizational assets, ensure process integrity, and drive regulatory compliance (Kotb, Elbardan, & Halabi, 2020).

Financial performance, in parallel, remains the central metric through which the sustainability, efficiency, and profitability of an organization are assessed. It encapsulates the firm's ability to generate revenue, manage costs, optimize asset utilization, and meet stakeholder expectations (Kimani, 2023). In the insurance sector specifically, financial performance determines a firm’s capacity to underwrite risk, settle claims, generate investment income, and comply with capital adequacy and solvency standards (Olaweraju, Msomi, & Phillips, 2021). Indicators such as return on equity, investment yield, underwriting profit margin, and operational efficiency are frequently used to evaluate financial performance in insurance institutions (Hery, Hady, & Arsjah, 2023).

A growing body of research highlights the linkage between internal audit controls and financial performance. Effective internal audit systems strengthen risk assessment capabilities, enhance transparency in financial reporting, and foster ethical conduct, all of which are instrumental in improving financial outcomes. (Turgaeva et al., 2020). Ghaleb, Kamardin, and Al-Qadasi (2021) argue that when internal audit frameworks are systematically embedded into organizational processes, they contribute directly to operational efficiency and profitability. Moreover, Tumwebaze et al. (2021) emphasize the critical role of auditor independence and ethical governance in ensuring accurate evaluations of financial performance, which are vital for strategic planning and regulatory compliance.

At the global level, robust internal audit practices are institutionalized in regulatory frameworks such as the Sarbanes-Oxley Act in the United States and the Solvency II Directive in the European Union. These frameworks have elevated the role of internal audit in financial institutions by mandating effective audit committees, structured control environments, and risk-based auditing (Alzeban, 2020). In developed economies, internal audit functions are strategically aligned with corporate boards and serve as a third line of defense in enterprise risk management, offering assurance over financial integrity and control adequacy (IIA, 2022).

Regionally, countries across Sub-Saharan Africa are increasingly investing in internal audit capacity to improve public financial management and institutional accountability. In Ghana, Ziniyel et al. (2018) found that financial governance improved significantly when internal auditors possessed professional certification, though logistical and staffing constraints often limited full implementation. In Nigeria, Ezejiofor and Okolocha (2020) reported that internal audit frameworks in commercial banks effectively curbed financial misreporting and bolstered profitability, underlining the dual compliance and performance roles of internal audit systems.

Rapani and Malim (2020), studying Iraq's banking sector, further observed that despite institutional weaknesses, well-implemented internal control systems improved financial outcomes in over 94 percent of observed cases.

In the Kenyan context, internal audit controls have gained prominence in response to the regulatory directives issued by the Insurance Regulatory Authority (IRA) and the Central Bank of Kenya. These institutions mandate the implementation of robust governance, risk management, and internal control systems to ensure financial sector stability. Despite these mandates, disparities persist in how internal audit systems are institutionalized across insurance companies. Were, Warui, and Kariuki (2023) found that firms with structured internal audit frameworks reported stronger financial performance regardless of size or market share, suggesting that internal audit quality is more crucial than organizational scale. Ngure and Ali (2020) further demonstrated that preventive, detective, corrective, and monitoring controls play a central role in averting fraud and enhancing operational resilience in Kenyan financial institutions.

Nonetheless, challenges remain. Many insurance firms in Kenya still treat internal audit as a compliance formality rather than a strategic governance tool. According to Handoyo and Bayunitri (2021), internal control systems are only effective when aligned with organizational strategy and resourced with skilled personnel and management support. Where internal audit units lack independence, adequate staffing, or integration into strategic decision-making, their ability to influence financial performance is significantly diminished (Nirino, Santoro, Miglietta, & Quaglia, 2021).

As Kenya's insurance sector experiences growth in gross premiums rising by 12.2 percent to Kshs 309.8 billion in 2022, there has also been a concurrent increase in claim payouts and operating expenses, with claims reaching Kshs 82.9 billion during the same period (IRA, 2023).

While the growth in premiums reflects expanding market reach and improved insurance penetration, the escalating liabilities and cost structures are exerting pressure on profit margins and undermining financial flexibility. This scenario presents a dual challenge for insurers: maintaining competitiveness in a price-sensitive market while ensuring financial resilience amid volatile economic conditions. In such a landscape, internal audit controls assume a more strategic role, not merely as instruments for post-transaction validation or regulatory compliance, but as dynamic tools for risk anticipation, governance enforcement, and performance optimization. By embedding proactive audit mechanisms such as real-time financial monitoring, continuous risk assessment, and feedback-driven quality assurance programs, insurance firms can better detect operational inefficiencies, prevent revenue leakages, and reinforce financial discipline. These controls are critical in supporting timely decision-making, enhancing stakeholder confidence, and aligning organizational activities with long-term financial goals in an increasingly complex regulatory and economic environment.

1.1.1 Internal Audit Controls

Internal audit controls are essential mechanisms that ensure the accuracy, reliability, and integrity of an organization's financial and operational processes (Turgaeva et al., 2020). These controls involve structured policies and procedures that facilitate compliance with regulatory requirements, enhance risk management, and improve financial oversight. In industries such as insurance, where financial stability and policyholder trust are fundamental, internal audit controls play a crucial role in safeguarding assets, preventing fraud, and ensuring sound governance (Handoyo & Bayunitri, 2021). The effectiveness of these controls depends on their ability to provide independent oversight, reinforce transparency, and align internal processes with financial regulations and strategic objectives. By strengthening financial accountability and operational efficiency, internal audit controls contribute significantly to the long-term sustainability of organizations in the financial sector (Ghaleb, Kamardin, & Al-Qadasi, 2021).

Quality assurance programs form a critical aspect of internal audit controls by ensuring that financial management practices adhere to industry standards and regulatory requirements (Lois et al., 2021). These programs provide a framework for evaluating the effectiveness of internal control measures, monitoring compliance with financial regulations, and identifying potential areas for improvement. Organizations that implement robust quality assurance mechanisms enhance the credibility of their financial reporting, fostering confidence among investors and regulators (Brennan, 2020). A well-functioning quality assurance program is characterized by frequent internal audits, compliance with industry certifications, and systematic risk assessments that reinforce an organization's ability to withstand financial uncertainties (Abdurrahman et al., 2020). By maintaining high standards of financial accuracy and accountability, these programs contribute to the stability and competitiveness of firms in the insurance sector.

Internal control systems serve as the foundation for mitigating financial risks and ensuring that organizational processes operate efficiently (Tamimi, 2021). These systems encompass a range of mechanisms, including risk assessment frameworks, fraud detection measures, and financial data monitoring, all designed to strengthen corporate governance and safeguard an organization's financial integrity (D'Onza et al., 2020). The effectiveness of internal control systems is reflected in their ability to minimize financial misstatements, detect operational inefficiencies, and enforce regulatory compliance. Organizations that establish strong internal controls reduce their vulnerability to financial fraud and enhance decision-making processes by ensuring that financial information is accurate and readily available for analysis (Guzmán-Ortiz, Navarro-Acosta, Florez-Garcia, & Vicente-Ramos, 2020). In the insurance industry, where financial mismanagement can lead to significant liabilities, internal control systems provide an essential safeguard against operational and financial risks (Turgaeva et al., 2020).

Financial reporting is a fundamental pillar of internal audit controls, as it ensures that stakeholders receive transparent and accurate information about an organization's financial health (Fernandhytia & Muslichah, 2020). The accuracy and timeliness of financial statements are crucial for regulatory compliance and investor confidence, particularly in industries where financial disclosures influence risk assessments and strategic planning (Svabova et al., 2020). Internal audit controls ensure that financial reports adhere to established accounting principles, reducing the risk of errors, misrepresentations, or fraudulent reporting practices (Li et al., 2020). Compliance with regulatory frameworks such as the International Financial Reporting Standards (IFRS) and Generally Accepted Accounting Principles (GAAP) enhances the credibility of financial statements, ensuring that organizations meet the expectations of regulators, shareholders, and policyholders (Ozcelik, 2020). By maintaining high standards of financial transparency, firms in the insurance sector strengthen their ability to attract investment and manage financial risks effectively.

The role of internal audit controls extends beyond regulatory compliance to becoming a strategic enabler of financial performance (Kotb, Elbardan, & Halabi, 2020). In the insurance sector, where firms operate in a highly regulated and risk-sensitive environment, internal audit controls contribute to financial stability by ensuring compliance with solvency requirements, optimizing risk management frameworks, and protecting policyholder funds (Nirino, Santoro, Miglietta, & Quaglia, 2021). Effective internal controls facilitate fraud prevention, enhance claims processing efficiency, and strengthen financial decision-making (Guzmán-Ortiz et al., 2020). By continuously monitoring and improving audit procedures, insurance firms enhance their ability to respond to financial challenges while maintaining operational efficiency. The integration of internal audit controls within financial management processes not only safeguards organizations against financial vulnerabilities but also reinforces their ability to achieve sustainable growth and long-term profitability in a dynamic economic landscape.

1.1.2 Financial Performance

Financial performance pertains to the evaluation of a company's capacity to make profits and deliver value to its stakeholders within a defined timeframe (Kiptoo et al., 2021). It includes many financial measurements and indicators that signify the organization's operational effectiveness, profitability, and overall condition (Morara & Sibindi, 2021). Robust financial performance indicates that a corporation is efficiently managing its resources, producing sustainable revenues, and optimizing returns for shareholders (Tsvetkova et al., 2021). It also reflects the organization's ability to fulfill its financial commitments, invest in development prospects, and adjust to evolving market dynamics (Olarewaju & Msomi, 2021). A major metric of financial performance is Return on Equity (ROE), which assesses a company's profitability in relation to its shareholders' equity. Return on Equity (ROE) assesses a company's efficacy in employing shareholders' equity to produce profits, reflecting the return generated per dollar of invested equity (Kiptoo et al., 2021). A high ROE often indicates efficient capital utilization and robust profitability, positively influencing the company's financial health and appeal to investors (Morara & Sibindi, 2021).

For insurance firms, ROE holds significant implications as a measure of financial performance (Tsvetkova et al., 2021). A high ROE suggests that an insurance company is efficiently leveraging its capital to underwrite policies, manage risks, and generate profits from investments (Olarewaju & Msomi, 2021). It indicates strong underwriting discipline, effective risk management practices, and prudent investment strategies (Kiptoo et al., 2021). Moreover, a favorable ROE may enhance an insurance firm's competitive position in the market, attracting investors and enabling the company to access capital at favorable terms (Morara & Sibindi, 2021). However, insurance firms must balance the pursuit of high ROE with the need to maintain adequate reserves, manage underwriting risks, and ensure long-term sustainability in a highly regulated and volatile industry (Tsvetkova et al., 2021). Therefore, monitoring ROE alongside other key performance indicators is essential for insurance companies to assess their financial strength, profitability, and ability to deliver value to policyholders and shareholders alike.

1.1.3 Insurance Firms in Kenya

Insurance firms play a vital role in managing risks for individuals and businesses by providing various insurance products and services, such as life insurance, property insurance, and health insurance. These firms assess risks, calculate premiums, and indemnify policyholders against covered losses, thereby promoting financial stability and protection against unforeseen events. In Kenya, the insurance sector is a key component of the financial system, contributing to economic growth by managing risks and providing a safety net for both individuals and businesses. However, the sector faces unique challenges, including market volatility, regulatory changes, and operational inefficiencies, which can significantly impact financial performance.

Internal audit controls are of significant importance to insurance firms as they help ensure the integrity and reliability of financial and operational processes (Kabogo & Deya, 2020). By implementing robust internal audit controls, insurance companies in Kenya can mitigate risks, detect and prevent fraud, ensure compliance with regulatory requirements, and safeguard assets. This is particularly crucial in the Kenyan insurance industry, where accurate financial reporting, effective risk management, and adherence to stringent regulatory standards are paramount to maintaining trust and confidence among policyholders, regulators, and investors. Given the volatility in financial markets and the increasing complexity of risks, strong internal audit controls are essential for ensuring that insurance firms remain financially stable and resilient.

The choice to focus on insurance companies in Kenya is justified by the sector's critical role in the national economy and the unique regulatory environment in which these firms operate. Governance in the insurance sector of Kenya typically involves regulatory oversight from the Insurance Regulatory Authority (IRA), which sets guidelines and standards to ensure compliance with legal requirements and safeguard consumer interests for the 56 insurance firms operating in the Kenyan landscape (Kiptoo et al., 2021). Additionally, internal governance mechanisms within these firms, such as board oversight and management structures, are crucial in decision-making and risk management processes. The Kenyan insurance market, characterized by its diversity in firm sizes and product offerings, presents a distinctive context where internal audit controls must be tailored to address both local and global challenges effectively.

Furthermore, internal audit controls serve as a cornerstone for ensuring transparency, accountability, and operational efficiency within Kenyan insurance firms. These controls encompass various measures, including regular audits, segregation of duties, and adherence to regulatory standards, aimed at mitigating risks, detecting and preventing fraud, and ensuring compliance with the stringent regulatory requirements imposed by the IRA. By examining the interplay between governance structures and internal audit controls within the Kenyan context, this study aims to provide valuable insights into the mechanisms that govern the operations of insurance firms in Kenya. This research will contribute to the advancement of regulatory frameworks, risk management practices, and overall industry resilience, ensuring that Kenyan insurance firms can continue to fulfill their critical role in the economy.

1.2 Statement of the Problem

The financial performance of insurance companies serves as a fundamental indicator of their operational sustainability, ability to meet policyholder obligations, and overall resilience within a competitive and regulated financial ecosystem. In Kenya, the insurance sector continues to show signs of expansion, reporting a 12.2 percent increase in gross premiums to Kshs 309.8 billion in 2022, with general insurance contributing 54.5 percent of the total premium income (Insurance Regulatory Authority [IRA], 2022). Nonetheless, this growth has been accompanied by mounting fiscal pressures. Insurance claims rose by 2.4 percent to Kshs 82.9 billion, signaling increased liability exposure and compressing profitability margins. Concurrently, systemic vulnerabilities such as the 23.7 percent decline in the Nairobi Securities Exchange All Share Index (NASI) and subsequent fair value losses on equity investment have exacerbated capital adequacy risks and strained the investment portfolios of insurers (Cytonn Investments, 2023). These dynamics underline the urgent need for robust financial governance mechanisms to cushion the sector against macro-financial shocks, one of which is the strategic application of internal audit control systems.

Although internal audit controls are widely acknowledged for enhancing corporate accountability, regulatory compliance, and risk management, empirical evidence on their direct influence on financial performance within Kenya's insurance industry remains fragmented. Existing studies, such as Were, Warui, and Kariuki (2023), suggest that audit functions improve operational discipline and efficiency. However, they stop short of empirically linking internal audit practices such as internal control systems, quality assurance programs, and communication with core financial performance indicators, thus presenting a notable conceptual gap. In addition, many extant studies like those by Ezejiofor and Okolocha (2020), Akisik and Gal (2019), and Ahmeti and Iseni (2022) are based in non-Kenyan contexts, predominantly Nigeria, Kosovo, and North America. These settings differ significantly from Kenya in terms of regulatory oversight, market maturity, and economic structures. As a result, the generalizability of their findings is limited, creating a contextual disconnect that impedes the formulation of evidence-based strategies applicable to Kenya's insurance landscape.

Moreover, there exists a methodological deficiency in the way financial performance is operationalized in internal audit literature. Prior research has often adopted a narrow scope, frequently relying on single-dimensional metrics such as Return on Assets (ROA) or Return on Equity (ROE), while neglecting equally critical indicators like net profit margin and asset utilization efficiency. This limited dimensionality risks obscuring the full spectrum of financial outcomes affected by audit control practices, particularly in sectors as regulated and capital-intensive as insurance. Furthermore, many studies do not account for sector-specific dynamics such as mandatory actuarial assessments, solvency compliance ratios, and policyholder guarantee obligations, all of which shape the financial realities of Kenyan insurers.

To bridge these interrelated gaps, the current study rigorously examined the relationship between internal audit control practices and the financial performance of insurance companies in Kenya. It adopted a multidimensional perspective of both internal audit constructs, including quality assurance programs, internal control systems, and financial performance, measured through ROE, net profit margins, and asset utilization efficiency. By situating the analysis within Kenya's specific regulatory and market context, the study delivered localized evidence to inform practice and policy. It also contributed methodologically by employing a broader and more integrative financial performance framework, thereby enabling a more comprehensive evaluation of how internal audit systems can be leveraged to enhance financial resilience, strategic governance, and long-term viability in Kenya's insurance industry.

1.3 Research Objectives

The study was guided by general and specific objectives.

1.3.1 General Objective

The general research objective of the study was to establish the effect of internal audit controls on the financial performance of insurance companies in Kenya

1.3.2 Specific Objectives

i. To investigate the effect of quality assurance programs on the financial performance of insurance companies in Kenya
ii. To establish the effect of internal control systems on the financial performance of insurance companies in Kenya
iii. To determine the effect of communication on the financial performance of insurance companies in Kenya
iv. To examine the effect of control environment on the financial performance of insurance companies in Kenya

1.4 Research Hypotheses

i. *$H0_1$: Quality assurance programs have no statistically significant effect on the financial performance of insurance companies in Kenya.*
ii. *$H0_2$: Internal control systems have no statistically significant effect on the financial performance of insurance companies in Kenya.*

iii. *$H0_3$: Communication has no statistically significant effect on the financial performance of insurance companies in Kenya.*

iv. *$H0_4$: The control environment has no statistically significant effect on the financial performance of insurance companies in Kenya*.

1.5 Significance of the Study

The study findings will be vital to different sectors. These sectors comprise policy development, insurance firms and their management and further studies on audit management.

1.5.1 Significance to Policy Development

The study findings will play a pivotal role in informing policy development surrounding internal audit practices within the insurance sector in Kenya. By providing precise insights into the impact of internal audit controls on financial performance, the findings will guide regulatory commissions in tailoring effective regulations and interventions to enhance industry practices. These insights will enable regulatory bodies to establish robust frameworks that promote transparency, accountability, and risk management within insurance companies, ultimately fostering a more resilient and trustworthy insurance sector in the region.

1.5.2 To the Insurance Firms

The findings from the study will offer invaluable guidance for insurance firms operating in Kenya. Management teams will gain a comprehensive understanding of how internal audit controls influence financial performance, empowering them to optimize operational efficiency, mitigate risks, and improve profitability. With insights from the study, insurance companies can refine their risk management frameworks, strengthen internal controls, and enhance financial reporting practices, thereby positioning themselves for sustainable growth and competitive advantage in the dynamic insurance market.

1.5.3 Significance to Future Research

The study findings will be crucial in paving way for future research endeavors aimed at exploring additional dimensions of internal audit controls and their implications for the insurance industry in Kenya. Future research could delve into topics such as the integration of technology and data analytics in augmenting audit effectiveness or the longitudinal effects of regulatory changes on internal audit functions within insurance companies. By fostering continued inquiry and knowledge generation, the study findings will contribute to advancing both academic understanding and practical implications for industry stakeholders, driving innovation and resilience in the insurance sector.

1.6 Scope of the Study

The study investigated the effect of internal audit controls on the financial performance of insurance firms in Kenya. Data were collected exclusively from primary sources through structured questionnaires administered to staff across selected insurance companies. The analysis focused on evaluating how internal audit controls enhance operational efficiency, mitigate risks, and optimize profitability within the sector. By concentrating on quantitative and qualitative responses from industry practitioners, the study generated evidence-based findings that are directly applicable to insurance company management and regulatory bodies. The scope was national, covering licensed insurance firms in Kenya, thereby providing a broader perspective on how internal audit controls contribute to fostering a resilient and transparent insurance sector.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter presents the literature review of the study. It broadly contains the empirical and theoretical concepts. They are discussed in the subsequent sections.

2.2 Theoretical Literature

Theoretical frameworks such as the Agency theory, signaling theory, and stakeholder theories are discussed in this section.

2.2.1 Agency Theory

Agency Theory, developed by Jensen and Meckling (1976), provides a foundational framework for understanding the relationship between principals (such as shareholders) and agents (such as managers), particularly in contexts where ownership and control are separated. The theory emphasizes the inevitability of agency problems, where agents may act in self-interest at the expense of the principals, resulting in moral hazard, adverse selection, or inefficient decision-making (Jensen & Smith, 2000; Jensen & Meckling, 2019). Within this framework, internal control systems are posited as crucial governance tools designed to mitigate such agency conflicts by establishing monitoring structures, enforcing accountability, and aligning managerial actions with shareholder interests.

The strength of Agency Theory lies in its practical relevance to modern corporate governance, especially in sectors like insurance where fiduciary responsibilities are central. It offers actionable insights into the need for structured internal controls, including audit committees, control environments, and compliance mechanisms that constrain opportunistic behavior and reinforce managerial accountability. In this sense, internal audit controls such as quality assurance programs and risk-based auditing can be seen as mechanisms that reduce agency costs and improve financial stewardship.

Nonetheless, Agency Theory is not without limitations. One key criticism, as advanced by Perrow (1986), is that the theory reduces complex human behavior to purely self-interested motives, disregarding the multifaceted drivers of managerial decision-making such as ethics, intrinsic motivation, or organizational loyalty. Eisenhardt (1989) also highlights that Agency Theory fails to account for non-economic variables, such as trust or professionalism, which may guide agent behavior in real-world scenarios. Furthermore, the prescriptive use of internal control systems, while effective in aligning interests, may lead to excessive bureaucratization and diminished managerial autonomy, ultimately undermining organizational agility (Jensen & Meckling, 2019).

Another theoretical shortcoming is the theory's limited focus on hierarchical, dyadic relationships principally between owners and managers without adequately addressing multi-principal environments typical of insurance companies, where boards, regulators, policyholders, and rating agencies may exert simultaneous influence. This creates ambiguity around whose interests the internal control systems are primarily meant to serve. Moreover, Agency Theory does not sufficiently address how internal audit practices evolve in response to regulatory shifts or dynamic risk environments, both of which are highly relevant in the insurance industry.

Despite these limitations, the theory remains relevant for this study. It underscores the rationale for implementing strong internal audit controls as safeguards against agency risks, particularly in insurance firms where misalignment of interests can lead to financial misreporting, inefficient resource allocation, or compliance violations. The theory justifies the inclusion of variables such as internal control systems, control environments, and quality assurance mechanisms as determinants of financial performance. This holistic approach contributes to expanding the explanatory power of Agency Theory in the specific context of Kenya’s insurance industry.

2.2.2 Signaling Theory

Signaling Theory, first articulated by Michael Spence in the 1970s, provides a framework for understanding how entities with access to privileged or asymmetric information, such as firms or individuals, transmit credible indicators or “signals” to influence the perceptions and behaviors of external parties (Spence, 1973; Menz, Kunish, & Birkinshaw, 2021). In organizational contexts, particularly in financial reporting, firms signal their operational strength, stability, and long-term prospects by disclosing verifiable, regulated, and auditable information. Financial statements prepared in line with generally accepted accounting principles (GAAP) or International Financial Reporting Standards (IFRS) serve as formal signals to investors, regulators, creditors, and policyholders, conveying the firm’s commitment to transparency, integrity, and corporate accountability.

The theory assumes that stakeholders, especially investors and regulators, respond rationally to such signals, adjusting their behaviors based on the credibility and content of the disclosures (Spence, 2002). For instance, an insurer that consistently meets capital adequacy thresholds and discloses robust audit practices may be perceived as more stable and well-governed, thus attracting investor confidence and favorable regulatory assessments. Signaling Theory, therefore, affirms the strategic role of internal communication structures in shaping external perceptions and enhancing organizational legitimacy.

Despite its explanatory utility, Signaling Theory has faced notable criticisms. Lofgren et al. (2002) argue that the theory tends to assume ideal market behavior and overlooks the reality of behavioral distortions, such as investor overconfidence, selective perception, and irrational decision-making. Moreover, the reliability of signals such as financial statements depends on the integrity of underlying audit systems. In the absence of robust internal controls, financial disclosures may be manipulated, incomplete, or delayed, thereby undermining stakeholder trust and perpetuating information asymmetry. Critics also point to the high signaling costs for firms, especially smaller or resource-constrained insurers, which may lack the capacity to maintain comprehensive audit and reporting systems despite their performance potential.

In the context of Kenya's insurance industry, signaling mechanisms through financial disclosures are critical, given the sector's heavy regulatory oversight and its reliance on trust-based relationships with policyholders and investors. Insurance companies must not only comply with the disclosure requirements of the Insurance Regulatory Authority (IRA) and IFRS, but also ensure the internal audit systems supporting these disclosures are credible and efficient. Accurate communication of financial health, solvency ratios, risk exposure, and claims liabilities directly affects a firm's market reputation and investor attractiveness.

This study leverages Signaling Theory to justify the inclusion of communication as a variable of internal audit controls influencing financial performance. However, it also recognizes the theory's limitations, specifically, its under-emphasis on the internal governance structures that enable credible signaling. While Signaling Theory explains how external stakeholders interpret financial disclosures, it does not fully explain how internal audit environments contribute to the quality, timing, and reliability of these signals. The study addresses this theoretical gap by examining how well-established audit communication protocols, feedback loops, and control systems within insurance firms improve the signaling process and, consequently, organizational performance. In doing so, it integrates internal control dynamics with market-facing outcomes advancing a more holistic application of Signaling Theory in developing economies like Kenya.

2.2.3 Stakeholder Theory

Stakeholder Theory, introduced by R. Edward Freeman in 1984 (Freeman et al., 2010), asserts that businesses must consider the interests of all stakeholders impacted by their actions, rather than solely maximizing shareholder value. It emphasizes that sustainable profitability and corporate legitimacy are best achieved when firms balance the diverse expectations of stakeholders such as employees, customers, suppliers, communities, regulators, and shareholders (Freeman, 2023). The theory challenges the narrow economic view of the firm and promotes an ethical and inclusive approach to corporate governance, whereby value creation stems from cooperation and mutual benefit (Phillips et al., 2003).

This theory is grounded on three fundamental assumptions. First, organizations operate in multifaceted environments with stakeholders who have legitimate and competing claims. Second, it affirms that stakeholders deserve to be treated with fairness, dignity, and respect, principles that underpin ethical business conduct. Third, it posits that firms can secure enduring advantage by proactively engaging stakeholders, resolving conflicts, and building trust-based relationships (Freeman, 2023; Freeman et al., 2020). These assumptions are especially relevant in the financial services sector, where ethical lapses, information asymmetry, and regulatory scrutiny elevate the importance of internal governance systems.

Despite its widespread acceptance, Stakeholder Theory has been criticized for its operational limitations. Parmar et al. (2010) argue that the multiplicity of stakeholder interests can blur managerial priorities and slow strategic decision-making. Jensen (2001) further contends that the theory may be impractical in hypercompetitive industries, where firms must prioritize shareholder wealth to remain viable. Additionally, the theory is often faulted for lacking a clear mechanism to resolve stakeholder conflicts or assign relative importance to divergent claims.

In this study, Stakeholder Theory underpins the control environment as a dimension of internal audit controls that influences financial performance in insurance firms. Given the fiduciary obligations insurers hold toward policyholders, regulators, and shareholders, the theory explains why ethical conduct, transparency, and accountability must be embedded within organizational culture and governance systems. A strong control environment, characterized by board oversight, auditor independence, and adherence to regulatory standards, ensures impartial functioning of internal audits. This alignment with stakeholder expectations enhances credibility, protects financial resources, and ultimately contributes to the improved financial performance of insurance companies in Kenya.

2.3 Empirical Review

The section summarized the relevant literature in light of the study's parameters.

2.3.1 Quality Assurance Programs and Financial Performance of Insurance Companies

Akisik and Gal (2019) explored the association between financial performance, external assurance, and integrated reporting in North American firms between 2011 and 2016. They employed a mixed-methods design that merged content analysis of corporate websites with data from the Global Reporting Initiative and Compustat North America. The study reported a positive association between integrated reporting, particularly when validated by external auditors, and firm performance. While this approach offered robust triangulation between financial and non-financial disclosure practices, the study’s reliance on externally validated assurance mechanisms overlooked the role of internal audit systems in sustaining financial outcomes. The present study bridges this conceptual and contextual gap by shifting focus from external assurance to internally instituted quality assurance programs and testing their influence on financial performance within Kenya's insurance sector.

Mutua (2023) examined the effect of insurance-specific risks on financial performance among Kenyan insurance companies over a five-year period. The study used panel data and regression techniques to assess how credit, liquidity, solvency, underwriting, and reinsurance risks affected profitability, with GDP introduced as a moderating variable. Although the study highlighted risk management as a significant determinant of performance, it concentrated on external threats and their mitigation, rather than internal quality assurance systems that safeguard performance proactively. This created a methodological gap by equating quality assurance with risk avoidance, without integrating structured audit practices. The present study responds by conceptualizing quality assurance programs as proactive internal audit mechanisms and empirically examining their role in driving financial performance among insurance firms in Kenya.

Nebo and Okolo (2016) investigated how customer satisfaction initiatives affect firm performance in Nigeria's insurance sector using a survey design that collected responses from both insurance managers and clients. While the study contributed insights into service quality, highlighting claims processing and client engagement as performance enhancers, it largely assessed external perceptions rather than internal audit processes. The absence of an audit-based lens limited the study's ability to link financial outcomes to internal systems such as compliance reviews, audit cycles, and performance monitoring structures. The current study fills this gap by reorienting analysis toward internal quality assurance frameworks, focusing on how in-house audit structures affect the financial sustainability of insurance firms in Kenya.

Ahmeti and Iseni (2022) conducted a panel data analysis of insurance firms in Kosovo from 2015 to 2020, applying Ordinary Least Squares (OLS) regression to examine how auditing and firm characteristics (size, leverage, liquidity, capital) influenced performance. They found that the audit requirement had predictive value, especially when integrated into firm growth strategies. Nonetheless, the study emphasized external audits while overlooking internal mechanisms such as audit self-assessment, review protocols, and compliance monitoring. Moreover, its reliance on firm-level financial indicators downplayed micro-level institutional practices. The present study addresses this omission by centering its analysis on firm-level internal audit quality assurance practices within Kenya's insurance firms, thereby offering context-specific evidence from a Sub-Saharan perspective.

In summary, while prior research has enriched understanding of financial performance drivers in the insurance sector, much of it has emphasized external mechanisms; risks, customer perceptions, and statutory audits, while giving less attention to the internal architecture of quality assurance systems. This study fills that gap by systematically examining how internal audit quality assurance programs, anchored in compliance, ethical oversight, and continuous audit improvement, affect the financial performance of insurance companies in Kenya.

2.3.2 Internal Control Systems and the Performance of Insurance Firms

Niroula and Upathaya (2022) examined the influence of internal control systems (ICS) on corporate governance among Nepalese insurance companies using a descriptive research design and purposive sampling of 15 firms. With data from 384 personnel, the study applied SPSS and Excel to generate descriptive and inferential statistics. Their findings revealed that risk assessment mechanisms significantly enhanced accountability and transparency. Nonetheless, internal audits produced mixed results positively influencing board independence but negatively affecting responsibility. While these findings deepened the understanding of ICS; governance relationships, the study did not empirically test the direct influence of ICS on financial performance. The present research bridges this gap by explicitly examining how ICS components; risk assessment, internal audit, and control environment affect financial outcomes within Kenya's insurance sector.

Amisa (2017) explored the effect of ICS on firm performance across Ghana's insurance sector through a cross-sectional survey of 91 insurance firms. Using Kruskal-Wallis, Mann-Whitney U, and OLS regression, the study revealed performance disparities across sub-sectors, with brokerage, life, and non-life insurers exhibiting stronger ICS frameworks and superior financial outcomes. While the analytical tools highlighted sectoral differences, the study overlooked regulatory dynamics and did not isolate the contribution of specific ICS components. Consequently, its findings are less applicable to markets such as Kenya's, where industry risks and regulations vary significantly. The current study addresses this analytical and contextual limitation by decomposing ICS into distinct constructs: risk assessment, internal audit, and control environment, and aligning them with Kenya's insurance regulatory framework.

Kinyua, Gakue, and Gekara (2015) assessed the effectiveness of internal controls among firms listed on the Nairobi Securities Exchange, emphasizing the link between control systems and financial performance. Employing stratified random sampling and inferential statistics such as ANOVA and chi-square tests, they found a strong positive correlation between robust internal controls and financial outcomes. While the study confirmed the positive association, it generalized across sectors and failed to capture the unique operational and regulatory realities of insurance firms. The present study narrows this gap by adopting a sector-specific focus, isolating insurance companies, and evaluating how their ICS practices directly influence financial performance.

Kirogo, Ngahu, and Wagoki (2014) investigated 27 insurance firms in Nakuru County to determine the effect of risk-based auditing on financial performance. Using a descriptive survey design and a census approach, they found that structured risk assessment improved financial stability, transparency, and accountability. Despite these contributions, the study was geographically limited and narrowly centered on risk assessment, overlooking other ICS components such as internal audit and control environment. Additionally, the reliance on subjective managerial perceptions limited the robustness of findings. The present study builds on this by expanding geographic coverage to the national level, incorporating multiple ICS dimensions, and linking them quantitatively to financial performance metrics.

In summary, prior studies converge on the importance of internal controls in promoting organizational accountability, transparency, and stability. Yet critical gaps remain: some focus on governance rather than financial outcomes (Niroula & Upathaya, 2022), others lack sector-specific analysis (Kinyua et al., 2015), while others are constrained by narrow geographic scope or single-variable emphasis (Kirogo et al., 2014). This study fills these gaps by conducting a comprehensive, sector-specific, and nationally representative analysis of ICS, disaggregating its core components and empirically linking them to financial performance outcomes in Kenyan insurance firms.

2.3.3 Communication and Financial Performance

Abrurahim and Setiawan (2021) conducted a comparative analysis on financial information dissemination in Sharia insurance firms, focusing on the effectiveness of the Risk-Based Capital (RBC) and Early Warning System (EWS) methodologies in communicating critical financial data. Using solvency and liquidity ratios as primary metrics, the study found that the RBC approach provided more accurate and reliable financial reporting compared to the EWS method. The study highlights the importance of timely and precise financial disclosures in ensuring transparency and stakeholder trust. Nonetheless, the research was confined to Sharia insurance firms and did not explore how communication mechanisms influence performance in conventional insurance companies. This limitation is addressed by the present study, which investigates how financial communication practices, both internal and external, shape performance outcomes in Kenya's insurance sector.

Albetairi et al. (2018) examined the implementation of Integrated Reporting (IR) in Bahraini insurance companies, assessing its role in financial data dissemination to stakeholders. The study employed content analysis, descriptive statistics, and linear regression to evaluate compliance with IR standards and its impact on financial communication effectiveness, particularly in relation to Return on Assets (ROA). Findings revealed that inconsistencies in disclosure formats led to variations in communication clarity, with firms adhering more strictly to IR guidelines demonstrating stronger performance and greater stakeholder trust. While this study establishes a link between structured reporting and financial performance, it did not focus on Kenya's insurance industry, where regulatory reporting standards differ. The current study fills this contextual gap by analyzing financial communication within Kenyan insurers, guided by local reporting requirements and supervisory expectations.

Outa and Waweru (2016) explored how corporate governance principles influence the integrity of financial disclosure in Kenyan-listed firms. Using panel data covering 520 firm-year observations, the study assessed the effect of Capital Markets Authority (CMA) regulations on the accuracy and timeliness of financial reporting. The results showed that adherence to governance standards significantly enhanced transparency and reporting reliability. While valuable, the study concentrated on listed companies broadly, without a sectoral focus on insurance firms, which face unique disclosure obligations under the Insurance Regulatory Authority (IRA). This study therefore extends the discussion by examining how internal financial communication structures within insurance firms affect financial outcomes under Kenya's evolving regulatory framework.

Chukwu and Nabochi (2019) investigated the role of audit committee characteristics in ensuring financial reporting timeliness and efficiency in Nigeria's insurance sector. Using an ex post facto research design, the study analyzed data from 15 insurance firms and found that the frequency of audit committee meetings negatively impacted the timeliness of financial disclosures. This suggests that excessive procedural oversight may inadvertently delay communication, undermining stakeholder confidence. While informative, the study is based on Nigeria's institutional setting and may not align with Kenya's regulatory environment. The current study addresses this contextual limitation by examining how audit communication and internal reporting processes influence financial performance among Kenyan insurers.

Kimani (2023) explored the relationship between financial communication and financial success in Kenya's general insurance industry during periods of economic instability. Using seven years of panel data, the study examined underwriting risk and solvency as factors influencing reporting clarity and stakeholder perceptions. Findings confirmed that transparent communication enhances investor confidence and regulatory trust. Nonetheless, the study primarily examined external financial communication and did not analyze internal communication processes such as audit reporting frequency, accuracy, and timeliness. This study expands on Kimani's work by investigating both internal and external communication structures as drivers of financial performance.

Mbaabu (2010) examined the link between corporate governance frameworks and the effectiveness of financial communication in Kenyan insurance firms. Governance variables such as board size and composition were analyzed in relation to Return on Assets (ROA) and Return on

Equity (ROE). Results revealed that firms with stronger governance frameworks exhibited greater transparency and reliability in financial disclosures. While this underscores the governance–communication–performance nexus, the study did not specifically interrogate how communication channels and reporting mechanisms themselves influence financial performance. The current study addresses this gap by focusing on internal financial communication structures, including reporting timeliness and dissemination practices, in shaping financial outcomes among Kenyan insurers.

In summary, existing literature establishes that financial communication enhances transparency, trust, and performance across insurance markets. Yet important gaps remain: some studies emphasize governance or external reporting while neglecting internal communication mechanisms (Outa & Waweru, 2016; Mbaabu, 2010), others focus on contexts outside Kenya (Albetairi et al., 2018; Chukwu & Nabochi, 2019), while still others do not capture sector-specific internal reporting structures (Kimani, 2023). This study fills these gaps by conducting a sector-specific analysis of both internal and external financial communication practices and their impact on financial performance in Kenyan insurance firms.

2.3.4 Control Environment and Financial Performance of Insurance Firms

Niroula et al. (2021) explored how internal control mechanisms, particularly the control environment, shape corporate governance structures in Nepalese insurance firms. Employing a descriptive design with data from 384 respondents across 15 firms, the study found that a strong control environment enhanced the efficacy of independent directors, thereby reinforcing governance. Interestingly, the study also revealed a paradox: while internal audits and supervisory mechanisms improved transparency, they negatively affected accountability due to bureaucratic rigidity and over-standardization. While these findings highlight the strengths and pitfalls of control structures, the exclusive focus on governance outcomes limits their applicability to financial performance. The present study extends this discussion by directly linking control environment factors such as audit independence, regulatory compliance, and ethical practices to profitability indicators in Kenyan insurance firms.

Building on this, Upadhaya et al. (2022) replicated a similar design and reaffirmed that an enhanced control environment improves transparency while exerting a mixed influence on accountability. Although this replication reinforced Niroula et al.'s conclusions, it did not progress in scope or methodological innovation. More critically, both studies ignored how control environment outcomes influence financial performance indicators such as Return on Assets (ROA) or net profit margins. The present study addresses this omission by incorporating financial performance measures and evaluating the moderating effect of regulatory enforcement, thereby providing a finance-oriented analysis of control environments in Kenya's insurance sector.

Darabi et al. (2021) examined Iranian insurance firms to understand how audit quality, independence, and audit fees influence the reliability of financial reporting. Using a correlational design and multivariate regression, the study established that a strong audit-driven control environment enhances reporting integrity. Nonetheless, the study confined itself to audit functions, neglecting broader aspects such as board oversight, risk governance, and ethical culture. Furthermore, the Iranian context limits its transferability to sub-Saharan markets. The current study responds to these gaps by adopting a multidimensional view of control environments that incorporates governance, risk, and compliance (GRC) functions, and testing their influence on financial outcomes under Kenya's Insurance Regulatory Authority (IRA) framework.

The Exchange (2019) conducted a sectoral analysis of banking and insurance firms listed on the Nairobi Securities Exchange (NSE), focusing on audit committee independence. The study confirmed that independence within the audit committee positively influences financial performance, although other factors such as gender diversity were statistically insignificant. While relevant to Kenya's context, this study narrowly operationalized the control environment, excluding structural elements such as risk management protocols and policy enforcement. The current study builds on this by employing a broader conceptualization of the control environment to capture its varied dimensions and their differential impact on financial health in Kenyan insurance firms.

Ahmeti et al. (2022) examined Kosovo's insurance sector to determine how audit quality and professional competence affect financial performance. While the study established positive correlations between internal audit characteristics and financial metrics, it was limited to only three variables: auditor independence, adherence to audit standards, and training. The study did not account for the interdependence between control environment factors and strategic performance outcomes. Moreover, Kosovo's insurance market differs substantially from Kenya's in terms of regulation, risk exposure, and institutional maturity. This study addresses these limitations by incorporating a broader construct of the control environment including board oversight, regulatory compliance, and ethical climate within Kenya's dynamic insurance sector.

Mwangi (2021) analyzed audit committee characteristics in Kenyan insurance firms using correlation and regression analyses. Findings revealed that independence and financial expertise of audit committees had significant positive effects on financial performance, while committee size and tenure were insignificant. While this provides valuable sector-specific evidence, the study did not account for external enforcement mechanisms or organizational culture as moderating factors. The current study advances this by incorporating both internal and external dimensions of control environments to provide a more comprehensive analysis of how they interact to influence performance in Kenya's insurance sector.

Nwoye et al. (2021) investigated audit quality and earnings management in Nigerian insurance firms, finding that weak control environments characterized by lengthy auditor tenures and lack of expertise facilitated profit manipulation. While this study highlighted the dangers of ineffective controls, it relied solely on earnings management as a proxy for performance, omitting broader indicators such as Return on Equity or net income. Similarly, Ebun (2019) examined audit committee size and its impact on financial performance in Nigerian insurance firms, finding a negative association linked to bureaucratic inefficiencies. Both studies underscore the risks of poorly structured controls but lacked multidimensional analyses that capture governance, compliance, and ethical elements simultaneously. The present study remedies this by applying a broader, integrated framework to Kenyan insurance firms, stratifying results to reflect firm heterogeneity.

In summary, literature demonstrates that the control environment is a critical determinant of both governance and financial outcomes. Nevertheless, three major gaps persist. First, several studies focus on governance effects without assessing direct financial implications (Niroula et al., 2021; Upadhaya et al., 2022). Second, many analyses isolate audit or committee characteristics without examining the control environment as an interconnected system (Darabi et al., 2021; The Exchange, 2019). Third, most studies are situated in regulatory contexts dissimilar to Kenya's, limiting relevance (Ahmeti et al., 2022; Nwoye et al., 2021). This study fills these gaps by adopting a multidimensional, sector-specific analysis of control environments and their interaction with external regulation, thereby providing a contextual and performance-oriented understanding of financial performance in Kenya's insurance firms.

2.4 Research Gap

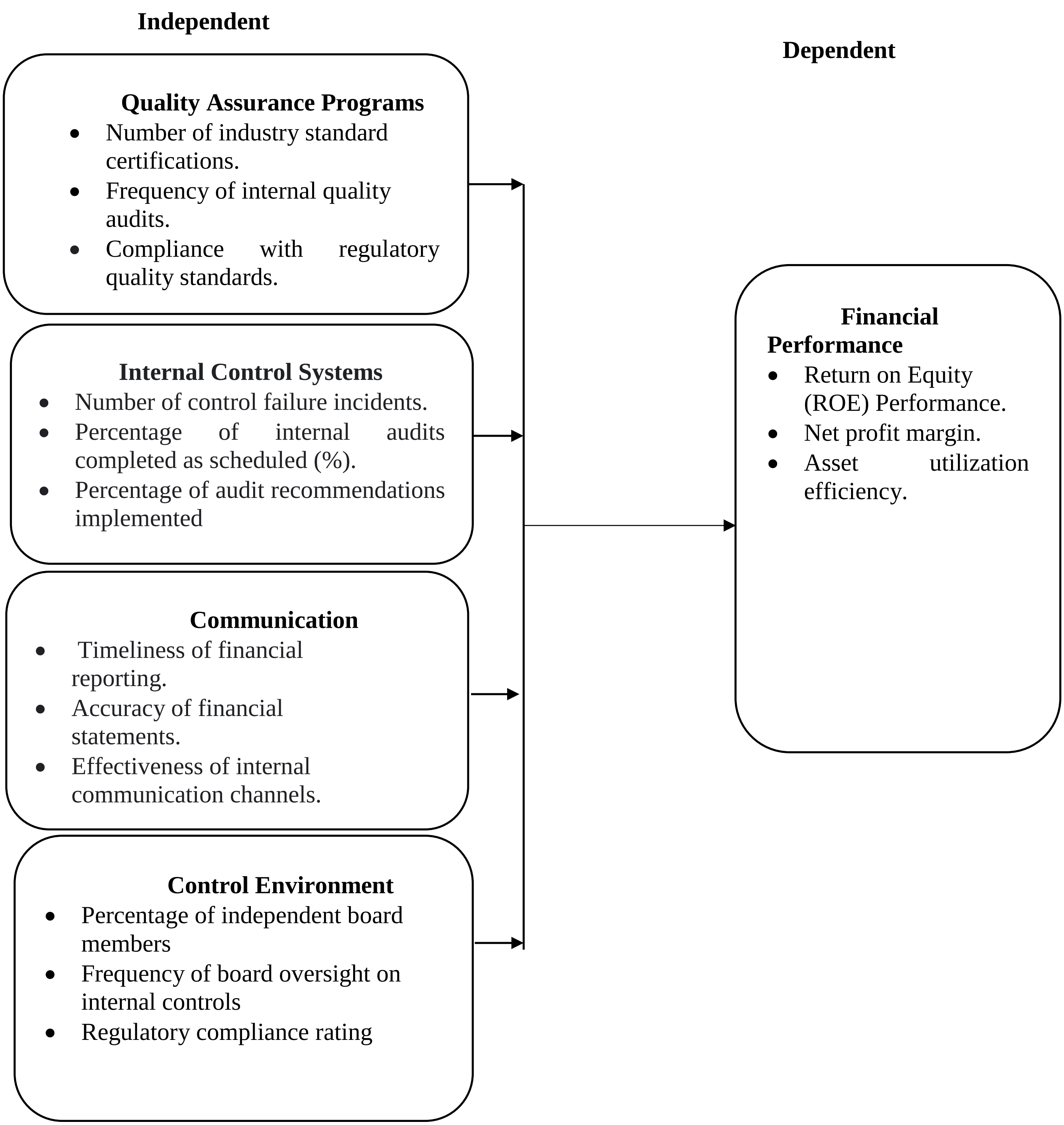
Prior research has identified various gaps in understanding the role of internal audit controls on financial performance across different regions and industries. While studies by Akisik and Gal (2019) and Nebo and Okolo (2016) offer insights into North American enterprises and Nigerian insurance firms, they leave both contextual and conceptual gaps regarding internal audit controls. Similarly, Amisa (2017) and others reveal methodological shortcomings, particularly in studies conducted in Ghana and Kosovo. The present study addresses these deficiencies by examining the impact of internal audit controls on the financial performance of insurance firms in Kenya. By situating the analysis within Kenya's evolving insurance regulatory framework, the study provides context-specific evidence and enhances the understanding of how internal audit controls within the control environment influence financial performance outcomes.

2.5 Conceptual Framework

The study was guided by a conceptual framework that illustrates the relationship between internal audit control practices (independent variables) and financial performance (dependent variable) of insurance firms in Kenya. The independent variables comprise quality assurance programs, internal control systems, communication, and the control environment, while the dependent variable, financial performance, was assessed through perceptual measures drawn from the questionnaire.

FIGURE 1

Conceptual Framework



Quality assurance programs were conceptualized as the extent to which insurance firms uphold industry standards and regulatory requirements through certifications, internal quality audits, and compliance practices. Respondents provided perceptions on the frequency and effectiveness of these programs in enhancing service reliability, operational efficiency, and ultimately profitability.

Internal control systems were measured in terms of respondents' assessments of the frequency of control failure incidents, adherence to audit schedules, and implementation of audit recommendations. These measures captured employees' and managers' experiences with the robustness of control mechanisms and their perceived contribution to financial stability and efficiency.

Communication was assessed through questionnaire items that examined the timeliness of financial reporting, accuracy of financial statements, and effectiveness of internal communication channels. These subjective responses reflected how communication practices support decision-making, transparency, and financial accountability within insurance firms.

The control environment was operationalized through perceptions of board independence, frequency of board oversight on internal controls, and the extent of regulatory compliance. These indicators reflected how governance and ethical oversight are experienced in practice and how they shape organizational performance.

Unlike traditional financial performance measures that rely on audited figures such as ROE or net profit margin, this study conceptualized financial performance through respondents' subjective evaluation of profitability, growth in equity returns, and efficiency in resource utilization, as captured in the structured questionnaire. Respondents rated their agreement with statements related to financial outcomes, thereby providing primary data reflecting organizational performance from the perspective of those directly involved in operations and governance.

In summary, the framework posits that improvements in audit quality, control mechanisms, communication effectiveness, and governance structures positively influence financial performance. As reflected in the questionnaire, financial performance was measured perceptually, allowing the study to capture real-time evaluations of profitability, efficiency, and equity growth from managers and staff across insurance firms in Kenya.

2.6 Operationalization of Study Variables

The independent variables were operationalized through four dimensions of internal audit control practices, namely quality assurance programs, internal control systems, communication, and control environment.

TABLE 1

Operationalization of Study Variables

Variable Type	Variables	Specific Measure	Scale

Independent Variables	Quality Assurance Programs	Number of Industry Standard Certifications	Ratio Scale
		Frequency of Internal Quality Audits	Ratio Scale
		Compliance with Regulatory Quality Standards	Ratio Scale
	Internal Control Systems	Number of Control Failure Incidents	Ratio Scale
		Percentage of internal audits completed as scheduled (%).	Ratio Scale
		Percentage of Audit Recommendations Implemented	Ratio Scale
	Communication	Timeliness of Financial Reporting	Ratio Scale
		Accuracy of Financial Statements	Ratio Scale
		Effectiveness of Internal Communication Channels	Ratio Scale
	Control Environment	Percentage of ethical compliance	Ratio Scale
		Number of code of conduct violations	Ratio Scale
		Frequency of internal control training sessions	Ratio Scale
Dependent Variable	Financial Performance	Return on Equity (ROE)	Ratio Scale
		Net Profit Margin	Ratio Scale
		Asset Utilization Efficiency	Ratio Scale

Quality assurance programs were measured using indicators such as the number of industry standard certifications attained by the firm, the frequency of internal quality audits conducted, and the level of compliance with regulatory quality standards. These measures, captured on ratio scales, reflect how well insurance firms align their processes with industry best practices and regulatory expectations.

Internal control systems were assessed through the number of control failure incidents, the percentage of internal audits completed as scheduled, and the percentage of audit recommendations implemented. These indicators, also measured on ratio scales, capture the robustness and responsiveness of control systems in minimizing risks and ensuring accountability. Communication was operationalized through measures such as the timeliness of financial reporting, the accuracy of financial statements, and the effectiveness of internal communication channels. These variables provided a structured way of evaluating how information flows within insurance firms contribute to decision-making efficiency and compliance.

The control environment was examined using indicators such as the percentage of ethical compliance, the number of code of conduct violations, and the frequency of internal control training sessions. These measures reflect the organizational culture, governance standards, and ethical orientation of insurance firms in Kenya. The dependent variable, financial performance, was conceptualized through three perceptual indicators; return on equity (ROE), net profit margin, and asset utilization efficiency captured through ratio-scale measures in the questionnaire. By operationalizing financial performance through self-reported assessments rather than audited statements, the study ensured consistency with its reliance on primary data, while still aligning with widely recognized financial performance constructs.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The methodology, techniques, and data for validating the hypothesis are detailed in this section. This encompasses the study's design, intended participants, data collection method, analysis, diagnostic utility, and any pertinent ethical considerations.

3.2 Research Design

A descriptive research design was the most appropriate approach for this study as it allowed for a systematic assessment of the relationship between internal audit controls and financial performance in insurance companies. Descriptive research is particularly effective when the objective is to analyze existing conditions, identify patterns, and establish associations between variables without manipulating them (Blumberg, Cooper, & Schindler, 2014). Given that this study examined how quality assurance programs, internal control systems, communication, and control environment influence financial performance, a descriptive approach facilitated the collection of detailed, quantifiable data that accurately reflected real-world conditions.

Unlike experimental or mixed-methods designs, which focus on causality or qualitative interpretations, a descriptive design is best suited for understanding the prevalence and characteristics of internal audit practices in the insurance sector (Creswell, 2017). This design enabled the researcher to collect empirical data from a representative sample, allowing for statistical generalization while ensuring objectivity. Moreover, Kothari (2004) emphasizes that descriptive research is particularly useful in studies involving structured data collection through surveys or questionnaires, making it ideal for this study, which relied on structured questionnaires to gather quantifiable insights.

Furthermore, this approach was justified given the study's reliance on financial metrics such as Return on Equity (ROE), net profit margin, and asset utilization efficiency as key indicators of financial performance. By employing descriptive statistics and inferential analysis, including correlation and regression models, the study not only established the prevalence of internal audit practices but also determined their influence on financial performance, ensuring robust and data-driven conclusions (Curtis et al., 2016).

3.3 Target population

3.3 Target Population

The target population for this study comprised all 56 licensed insurance and reinsurance companies operating in Kenya as recognized by the Insurance Regulatory Authority (IRA). Since the unit of analysis was the insurance company, each firm was represented by a single key respondent. The respondents targeted were managers directly responsible for critical governance and control functions, specifically quality assurance programs, internal control systems and financial reporting. These managers were considered the most knowledgeable individuals to provide valid and reliable information on internal audit control practices and their link to financial performance.

By focusing on this specific cadre of respondents, the study ensured that the data collected would be both contextually relevant and strategically informed. Managers occupying these positions have direct oversight of internal audit controls and are also engaged in implementing policies that shape financial outcomes. Thus, their responses not only reflect operational realities but also offer perspectives that are critical for understanding institutional performance within the broader insurance sector. This approach ensured that the study was industry-wide, capturing the diversity of practices across both insurance and reinsurance firms in Kenya.

In line with this, the total target population for the study was 56 managers from the 56 insurance and reinsurance companies, ensuring that the research framework aligned with the structure of the industry. This focus on the entire industry population provided a holistic lens for examining the relationship between internal audit controls and financial performance, laying a strong foundation for generating findings and policy implications that are sector-wide. Table 3.1 summarizes the target population.

TABLE 2

Target Population

Category	**Number of Insurance Companies**	**Target Population**
Manager	56	56
Total		**56**

3.4 Sampling and Sampling Procedures

Given the relatively small population of 56 insurance and reinsurance companies operating in Kenya, the study adopted a census approach. In this context, every company within the industry was targeted, with one manager directly responsible for internal audit control practices identified as the respondent from each firm. This decision eliminated the need for sample size determination formulas, since the target population was sufficiently manageable and inclusive to allow complete coverage.

The use of a census was particularly appropriate because the study sought to generate findings and policy recommendations that reflect the entire insurance sector in Kenya rather than a subset of it. By engaging all 56 companies, the study minimized sampling error and enhanced the reliability, validity, and generalizability of the results. Moreover, this approach ensured that the study captured the full diversity of practices, governance structures, and operational realities across different insurance firms, thereby strengthening the robustness of the analysis.

Each respondent was purposively identified as a manager with direct oversight of internal audit and compliance-related functions, including quality assurance programs, internal control systems, communication frameworks, and control environment mechanisms. This ensured that the data collected was informed by individuals with the most relevant expertise and firsthand knowledge of organizational controls and financial performance outcomes.

3.5 Data Collection Instruments

The study employed structured questionnaires as the primary data collection tool to obtain standardized, quantifiable responses aligned with the research objectives. Each questionnaire section corresponded to one of the study variables; quality assurance programs, internal control systems, communication, control environment, and financial performance.

To ensure adequate construct coverage and minimize bias, each variable was measured using six carefully designed Likert-scale. These statements were developed to capture multiple dimensions of each construct, enhancing content validity and allowing for more robust statistical analysis. For the dependent variable, financial performance, respondents provided their perceptions on key indicators including Return on Equity (ROE), net profit margin, and asset utilization efficiency. This approach ensured that the variables were comprehensively assessed and the findings were both reliable and contextually relevant.

3.6 Data Collection Procedures

Data collection was a critical phase of this research, entailing the gathering of empirical evidence to address the research objectives. The study was conducted with the approval of KCA University and the participating insurance companies. Managers were identified as respondents based on their direct involvement and expertise in internal audit and compliance functions, including quality assurance programs, internal control systems, communication, and control environment oversight.

Structured questionnaires were the primary data collection instrument administered to these managers. The questionnaires were carefully designed to ensure consistency, validity, and reliability by capturing standardized responses across all 56 firms. Importantly, the instrument was structured into distinct sections corresponding to both the independent and dependent variables. While the sections on internal audit controls assessed the scope and implementation of practices such as audit frequency, compliance levels, and communication protocols, the section on financial performance directly operationalized the dependent variable.

To address concerns regarding the measurability of financial performance through primary data, the questionnaire items for this construct were curated to capture respondent perceptions of actual firm-level outcomes, focusing on three specific indicators: Return on Equity (ROE), Net Profit Margin, and Asset Utilization Efficiency. These indicators were framed into Likert-scale statements such as “Our company has consistently achieved competitive levels of return on equity over the past three years” or “The company’s asset base is effectively utilized to generate income.” Such phrasing allowed managers, who are directly responsible for financial reporting and audit functions, to provide informed, experience-based responses without requiring disclosure of confidential financial statements. This approach ensured that financial performance was empirically measurable through primary data while aligning with recognized performance metrics in financial management research.

To enhance response rates and ensure data completeness, the study employed follow-up procedures, including reminder emails, clarification calls, and confirmation of questionnaire submissions. These measures underscored the significance of participation and safeguarded data quality. The final dataset, therefore, reflects robust, reliable, and sector-specific evidence on the interplay between internal audit controls and financial performance in Kenyan insurance firms.

3.7 Pilot Test

The study conducted a pilot test to ensure the accuracy and relevance of the research instruments, particularly the structured questionnaires designed for managers in insurance companies. This pilot test involved approximately 10% of the total target population, which, given the 56 target insurance companies in Kenya, translated to 6 respondents. The study conducted the pilot test across a representative sample of 6 insurance companies to gather feedback on the clarity, relevance, and effectiveness of the questionnaire.

This feedback is crucial for identifying any necessary adjustments to improve the questionnaire's alignment with the research objectives and its ability to collect meaningful data. The participants in the pilot test were excluded from the main study to ensure the integrity and freshness of the data collected in the final phase of the research.

3.7.1 Validity of Data Collection Instrument

To assess content validity in the study, expert reviews, along with statistical tests such as the Kaiser-Meyer-Olkin (KMO) measure and Bartlett’s Test of Sphericity were utilized to ensure that the structured questionnaires accurately reflected the theoretical constructs under investigation. The research supervisor served as the expert reviewer, offering valuable insights on the clarity, relevance, and comprehensiveness of the questionnaire items. This expert evaluation was critical in aligning the questionnaire design with the study's conceptual and empirical focus.

In addition to the expert review, the study applied the KMO measure and Bartlett's Test to statistically validate the adequacy of the dataset for factor analysis. The KMO statistic assessed sampling adequacy by analyzing correlation matrices to determine whether variables were sufficiently interrelated for meaningful dimension reduction. A KMO value approaching 1.0 indicated high suitability, while values below 0.5 would have suggested insufficient sampling adequacy. The validity results are as presented as below;

TABLE 3

Validity Results

Statement	KMO Value
Our company has obtained industry-standard certifications that enhance our credibility.	0.721
Regular internal quality audits have improved our company's operational efficiency.	0.986
Compliance with regulatory quality standards is strictly adhered to in our company.	0.828
The implementation of quality assurance programs has significantly boosted our financial performance.	0.905
Continuous improvement initiatives are a key focus in our company's quality assurance strategy.	0.836
A set percentage of internal audits is completed as scheduled each year to ensure operational efficiency.	0.979
Our company implements a high percentage of audit recommendations within the required timeframe.	0.999
Control failure incidents are tracked, analyzed, and minimized through strict monitoring and corrective measures.	0.979
The internal control system in place is strong enough to prevent fraud and financial losses.	0.999
Regular quantitative assessments of internal controls have led to improved financial performance.	0.898
Financial reporting in our company is always timely and accurate.	0.996
Internal communication channels are effective in disseminating important information.	0.508
The accuracy of financial statements is regularly verified to ensure reliability.	0.934
Communication systems are critical to our company's decision-making process.	0.996
Timely communication of financial results has positively impacted our company's performance.	0.88
A defined percentage of board members are independent, ensuring unbiased oversight of internal controls.	0.528
The company enforces a strict code of conduct, with the number of documented violations tracked and reported.	0.904
Employees undergo a specified number of internal control and ethics training sessions annually.	0.915
The control environment is assessed based on the frequency of regulatory compliance reviews and enforcement actions.	0.756
A structured leadership framework ensures ethical policies are implemented and regularly reviewed by the board.	0.988
Our company's Return on Equity (ROE) has consistently been strong over the past three years.	0.944
The company's net profit margin is above the industry average.	0.949
We effectively utilize our assets to maximize financial performance.	0.944
Financial performance has improved due to the implementation of strong internal controls.	0.919
Our company's financial stability is a result of effective management and governance practices.	0.712

The results presented in Table 3.3 demonstrate that all individual items used to measure the five key constructs: quality assurance programs, internal control systems, communication, control environment, and financial performance, achieved Kaiser-Meyer-Olkin (KMO) values well above the minimum acceptable threshold of 0.50. This suggests that the sampling adequacy for each item was sufficient for factor analysis and confirms that the dataset was suitable for deriving valid underlying constructs. Notably, many of the KMO values exceeded 0.800, indicating meritorious sampling adequacy and strong correlations among items within the same construct.

Specifically, each construct was measured using five structured Likert-scale statements, and all items demonstrated robust KMO values, with the lowest being 0.508 (for an item under the communication construct) and the highest reaching 0.999 (under internal control systems). These consistently high values suggest that each set of indicators effectively captures the underlying dimensions they were intended to measure. Consequently, none of the items required elimination or revision, as each made a valid contribution to the factor structure of its respective construct.

Overall, the validity results confirm that the questionnaire items were well-constructed, theoretically aligned, and statistically sound for use in subsequent analysis. The strength of the KMO values across all constructs provided a strong foundation for the reliability and validity of the factor analysis, regression modeling, and hypothesis testing that followed in the study. Therefore, these results substantiate that the primary data collection instrument was appropriate for capturing the multidimensional aspects of internal audit control practices and their influence on financial performance within Kenya’s insurance sector.

3.7.2 Reliability

To ensure the reliability of the research instrument, the study conducted a reliability test using Cronbach's Alpha to evaluate the internal consistency of questionnaire items. Cronbach's Alpha is a well-established metric used to assess the reliability of multi-item constructs, with a threshold value of 0.7 generally considered acceptable (Tavakol & Dennick, 2011).

A pilot test was conducted involving a subset of five respondents (approximately 10% of the total sample) drawn from insurance firms not included in the main study. This pilot test enabled the evaluation of response consistency across questionnaire sections. In cases where Cronbach's Alpha values fell below the threshold, questionnaire items were refined to eliminate ambiguity and redundancy. The results are as shown below;

TABLE 4

Reliability Results

Variable	Cronbach's Alpha	N of Items
Quality Assurance Program	0.701	5
Internal Control Systems	0.833	5
Communication	0.745	5
Control Environment	0.772	5
Financial Performance	0.755	5

The reliability analysis results presented in Table 3.4 reveal that all five constructs: Quality Assurance Programs, Internal Control Systems, Communication, Control Environment, and Financial Performance, achieved Cronbach's Alpha values exceeding the conventional threshold of 0.70. This indicates acceptable to high internal consistency among the items used to measure each variable. Specifically, Internal Control Systems recorded the highest reliability (α = 0.833), signifying a strong level of consistency in responses to questions within this construct. Communication (α = 0.745), Control Environment (α = 0.772), and Financial Performance (α = 0.755) also demonstrated solid reliability, suggesting that the items under each scale coherently measure the same underlying concept.

Quality Assurance Programs, while posting the lowest Cronbach's Alpha (α = 0.701), still surpassed the minimum acceptable reliability threshold, thus confirming that the five items used for this variable were internally consistent and reliable for analysis. These results affirm that the instrument used for data collection was statistically dependable and suitable for drawing valid inferences about the relationships between internal audit control constructs and financial performance. The reliability coefficients provide further confidence in the robustness of the study's findings and support the integrity of the regression and hypothesis tests conducted in subsequent sections

3.8 Data Analysis and Presentation

The data analysis employed descriptive and inferential statistics to provide a comprehensive evaluation of the study variables. Descriptive statistics summarized the characteristics and distribution of data using measures of central tendency (mean, median, and mode) and dispersion (standard deviation and variance) to identify trends and patterns within the dataset.

For inferential statistics, the study conducted correlation analysis to establish the strength and direction of relationships between variables. Multiple regression analysis was used to assess the predictive influence of independent variables (quality assurance programs, internal control systems, communication, and control environment) on financial performance.

Beyond regression models, the study tested hypotheses using t-tests and ANOVA, ensuring statistical significance is assessed at a 95% confidence level ($p < 0.05$). Additionally, chi-square tests may be employed for categorical variables to examine relationships between internal audit control factors and financial performance. These methods will ensure robust hypothesis testing, allowing for a more comprehensive interpretation of findings in the Kenyan insurance sector.

3.8.1 Model Summary

The study model is as follows:

$Y=\alpha+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+ \beta_5X_5 + \varepsilon$. ……………………………………..(1)

Where;

Y =Financial Performance of Insurance Firms

β_0 = Constant Term

β_1= Beta coefficients

X_1= Quality Assurance Programs

X_2= Internal Control Systems

X_3= Communication

X_4= Control Environment

3.9 Pretesting of Multiple Linear Regression Assumptions

The study conducted diagnostic tests prior to calculating the regression equations to ensure adherence to the assumptions of the classical linear regression model. These diagnostic checks were crucial for identifying any violations of key model assumptions, such as linearity, independence of errors, homoscedasticity, and normality of residuals. Violations of these assumptions can result in biased and inefficient parameter estimates. By carrying out these preliminary diagnostics, the study ensured that the regression analysis was built on a solid statistical foundation, thereby enhancing the reliability and accuracy of the findings related to the influence of internal audit controls on the financial performance of insurance companies in Kenya.

3.9.1 Normality Test

The study incorporated normality tests, specifically the Shapiro-Wilk test and the Kolmogorov-Smirnov test, to validate the assumption of normality for the residuals of the dependent variable. This assumption is fundamental in parametric regression analysis, as it supports the reliability of inferential statistics and ensures valid estimation of confidence intervals and p-values. A p-value above 0.05 was interpreted as evidence that the residuals were normally distributed, indicating that the data were suitable for linear regression. These tests confirmed the distributional adequacy of the data and supported the use of parametric techniques in analyzing the relationship between internal audit controls and financial performance.

3.9.2 Multicollinearity Test

The study addressed multicollinearity by examining the Variance Inflation Factor (VIF) and tolerance values for each independent variable. A VIF threshold of 1.5 was adopted to detect potential multicollinearity issues. Multicollinearity occurs when predictor variables are highly inter-correlated, complicating the interpretation of individual regression coefficients and inflating standard errors. To mitigate this, the study ensured that all VIF values remained below the acceptable threshold, indicating that multicollinearity did not compromise the regression estimates. This step was essential to maintaining the statistical integrity and reliability of the regression outputs (Bayman & Dexter, 2021).

3.10 Ethical Considerations

The study adhered to all required ethical standards throughout the research process. Data collection was initiated following the acquisition of an introductory letter from KCA University, which was subsequently used to obtain a research permit from NACOSTI. With these approvals, the researcher then sought formal authorization from the management of selected insurance companies in Kenya to administer the survey among managers and internal auditors.

Before data collection, all participants were informed about the purpose of the study, the voluntary nature of their participation, and the confidentiality of their responses. Informed consent was obtained, and no identifying information was collected to ensure respondent anonymity. The study strictly complied with ethical guidelines related to data integrity, respect for participants, and the responsible use of information, ensuring that the entire research process was both transparent and ethically sound.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis and interpretation of data examining how internal audit controls influence the financial performance of insurance companies in Kenya. It summarizes descriptive statistics, validates assumptions through diagnostic tests, and presents regression results aligned with the study objectives. The focus is on assessing the effects of quality assurance programs, internal control systems, communication, and control environment on performance metrics such as ROE, net profit margin, and asset utilization. All analyses are grounded in the study's theoretical and empirical framework.

4.2 Response Rate

Out of the study's 56 respondents, a total of 45 questionnaires were duly collected, representing a response rate of 80.4%. This level of participation is considered robust and provides a solid basis for analysis of the relationship between internal audit controls and financial performance within Kenya's insurance sector.

TABLE 5

Response Rate

Category	Frequency	Percentage (%)
Target Respondents	56	100
Questionnaires Collected	45	80.4

Mugenda and Mugenda (2003) assert that a response rate of 70% and above is excellent for survey research. The achieved response rate of 80.4% therefore surpasses this benchmark, making the findings both reliable and generalizable to the broader population of insurance firms in Kenya.

The non-response rate of 19.6% may be attributed to factors such as limited availability of some managers, competing professional commitments, or organizational confidentiality policies. Nonetheless, the strong participation rate ensures that the study's conclusions remain credible and reflective of prevailing industry practices.

4.3 Demographic Characteristics

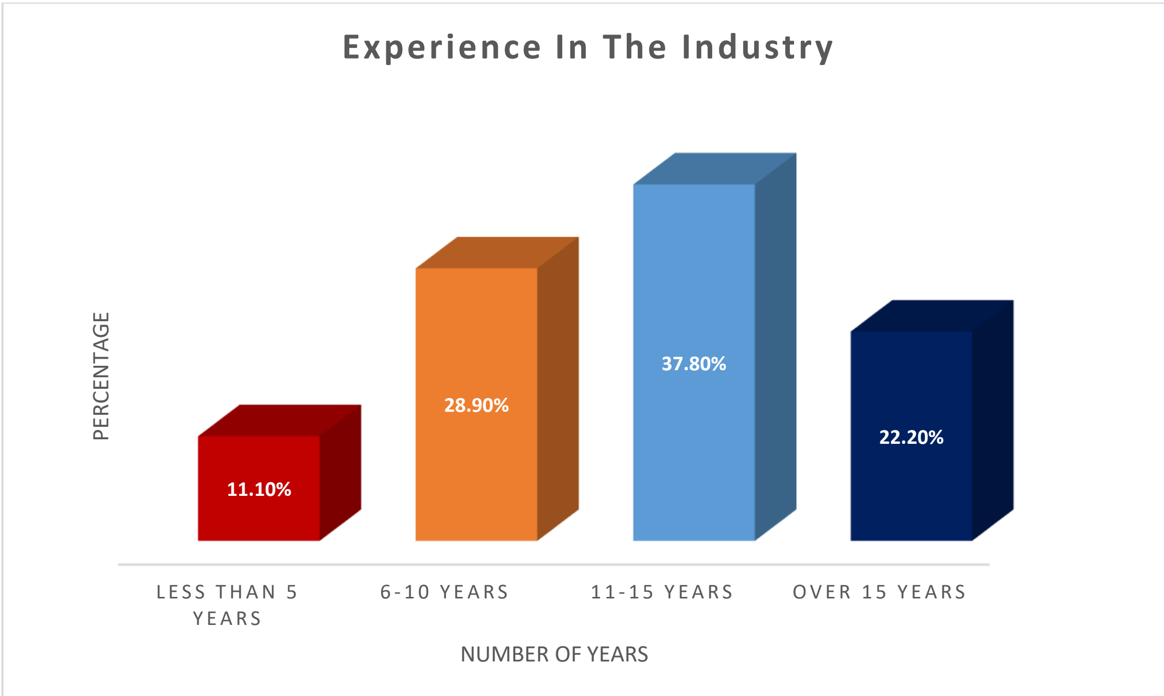
Understanding the demographic profile of respondents provides context to the study's findings and helps assess the credibility and depth of responses provided. The characteristics examined in this section include the respondents' experience in the insurance industry, their tenure in the current organization, and the size of their respective companies. These factors play a critical role in shaping perceptions of internal audit practices and financial performance.

4.3.1 Experience in the Insurance Industry

As shown in Figure 4.1, the majority of respondents (37.8%) had between 11 and 15 years of experience in the insurance industry. This was followed by those with 6–10 years (28.9%) and over 15 years (22.2%) of experience. Only 11.1% had less than 5 years of experience.

FIGURE 2

Experience of Managers in Insurance Industry



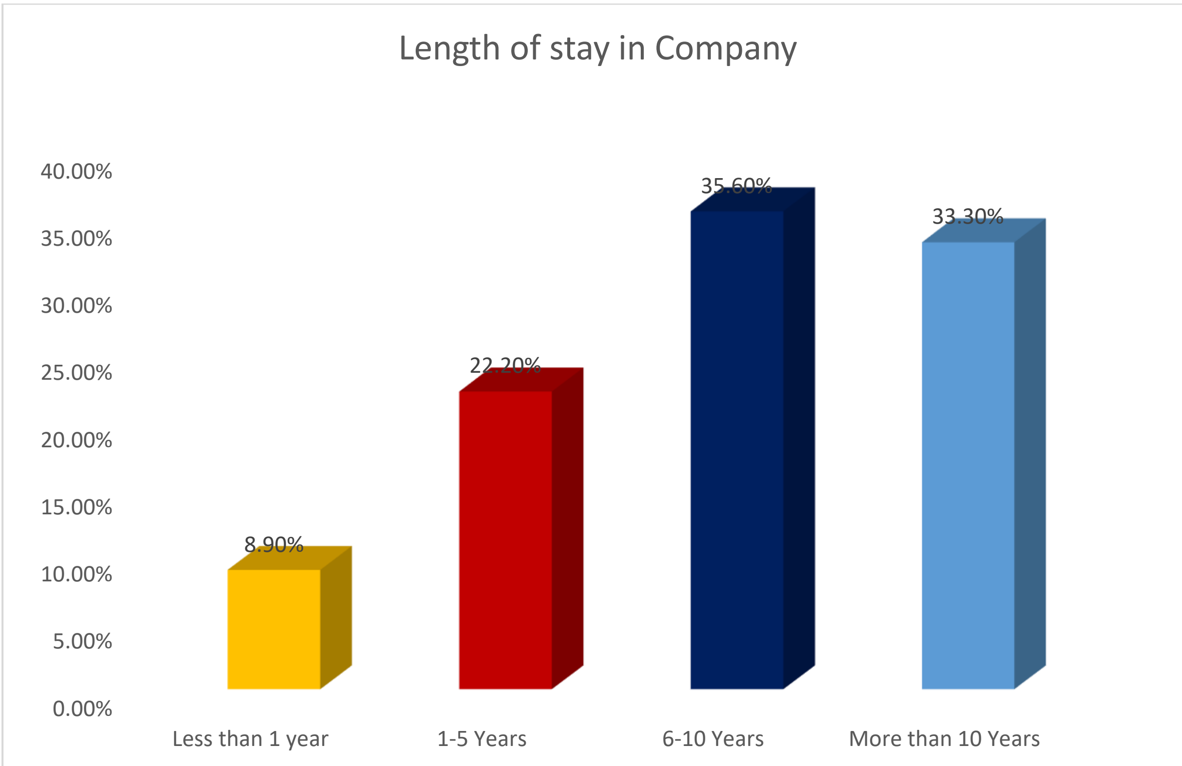
These findings suggest that the respondents possessed substantial industry experience, which enhances the reliability of their insights into internal audit controls and financial performance. A well-experienced group is likely to provide accurate assessments based on long-term exposure to operational and financial dynamics within the insurance sector.

4.3.2 Length of Stay in the Company

The results indicate that 35.6% of the respondents had worked in their current companies for 6–10 years, followed closely by 33.3% who had been with their firms for more than 10 years. Additionally, 22.2% had between 1 and 5 years, while 8.9% had been employed for less than 1 year.

FIGURE 3

Length of Stay in the Company



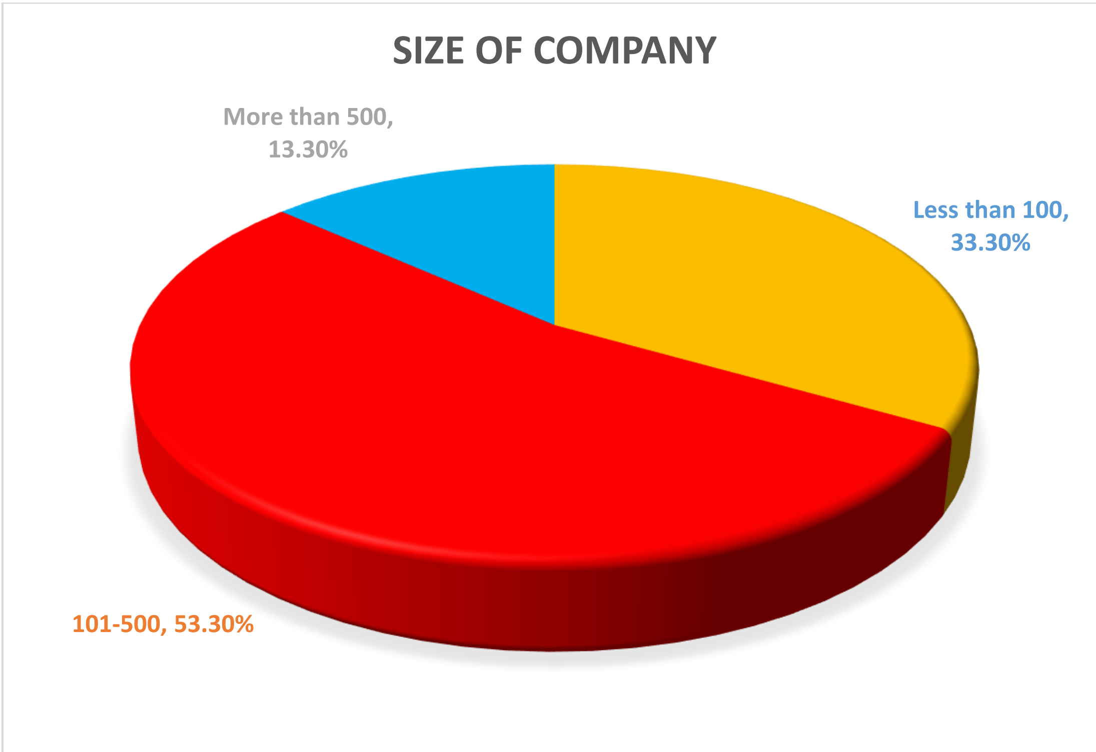
This distribution reveals that most of the participants had long-standing affiliations with their respective firms. Such tenure implies a deeper understanding of internal systems, governance structures, and financial control mechanisms, key for offering informed responses on internal audit practices.

4.3.3 Size of the Company

In terms of organizational size, the highest proportion of respondents (53.3%) were from companies with 101–500 employees. Firms with less than 100 employees accounted for 33.3%, while those with over 500 employees made up 13.3%.

FIGURE 4

Size of Company



This distribution indicates that the study covered a diverse range of firms, from small-scale to large institutions. The predominance of medium-sized companies reflects the structure of Kenya’s insurance sector, which is largely composed of firms operating within this bracket. The inclusion of both small and large firms ensures that the findings are broadly representative of the sector's dynamics.

4.4 Descriptive Results of Study Variables

4.4.1 Quality Assurance Programs

This section presents descriptive statistics on the implementation and perceived effectiveness of quality assurance programs in insurance companies. The analysis focuses on five core statements that assess the extent of adoption of industry certifications, internal audit practices, regulatory compliance, financial impact, and continuous improvement.

TABLE 6

Descriptive Statistics on Quality Assurance Programs

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Our company has obtained industry-standard certifications that enhance our credibility.	0.00%	0.00%	0.00%	80.00%	20.00%	4	0
Regular internal quality audits have improved our company's operational efficiency.	0.00%	0.00%	0.00%	82.20%	17.80%	4.18	0.39
Compliance with regulatory quality standards is strictly adhered to in our company.	0.00%	0.00%	0.00%	84.40%	15.60%	4.16	0.37
The implementation of quality assurance programs has significantly boosted our financial performance.	0.00%	2.20%	20.00%	66.70%	11.10%	3.87	0.63
Continuous improvement initiatives are a key focus in our company’s quality assurance strategy.	0.00%	0.00%	0.00%	68.90%	31.10%	4.31	0.47
Average						**.104**	**.372**

The descriptive findings on quality assurance programs reveal a highly favorable perception among respondents regarding the adoption and effectiveness of quality-related practices within insurance companies in Kenya. An overwhelming majority of the respondents affirmed that their organizations have implemented strong quality assurance mechanisms, with agreement levels ranging from 77.8% to 100% across all five measured statements.

A notable observation is that all respondents (100%) agreed that their companies have obtained industry-standard certifications that enhance institutional credibility. This suggests a sector-wide commitment to meeting professional benchmarks, which not only strengthens compliance but also boosts stakeholder confidence. Similarly, unanimous agreement was recorded regarding the role of regular internal quality audits in improving operational efficiency and the strict adherence to regulatory quality standards. These findings indicate that internal audit protocols are not merely formalities but are embedded in routine governance processes. The consistency in these responses reflects an entrenched culture of quality management that aligns with the recommendations of Handoyo and Bayunitri (2021), who emphasized the importance of integrating compliance and operational efficiency through quality audit systems.

Although slightly lower than the other indicators, the item on financial impact still recorded a strong 77.8% agreement, with only 2.2% of respondents disagreeing. This variation may be attributed to the difficulty in directly attributing financial outcomes to quality assurance practices, particularly in a multifaceted industry where profitability is influenced by numerous factors. Nevertheless, the strong support affirms the strategic value placed on quality systems as enablers of financial performance, echoing the position of Akisik and Gal (2019) who noted that well-audited organizations often outperform their peers in financial stability and reporting accuracy.

The highest level of confidence was observed in the endorsement of continuous improvement initiatives, with 100% of respondents agreeing that their companies prioritize this as a central component of their quality assurance strategy. This finding reflects a progressive mindset among industry players, signaling an orientation towards innovation and ongoing refinement of internal processes. As highlighted by Abdurrahman et al. (2020), continuous improvement is a hallmark of resilient organizations, and its prioritization reinforces an adaptive culture that is essential for sustainability in the ever-evolving insurance landscape.

On average, the quality assurance variables yielded a strong mean score of 4.10, with a low standard deviation of 0.37, indicating both high and consistent levels of agreement. These results suggest that quality assurance practices are not only in place but are also perceived as effective and valuable by managers in the industry. The data supports the view that internal audit controls, particularly those tied to quality assurance, play a central role in promoting efficiency, compliance, and financial soundness within Kenya's insurance sector.

4.4.2 Internal Control Systems

The analysis of responses relating to internal control systems indicates a very high level of agreement among the respondents on the presence, execution, and effectiveness of internal controls in their respective insurance firms.

TABLE 7

Descriptive Statistics for Internal Control Systems

Statement	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
A set percentage of internal audits is completed as scheduled each year to ensure operational efficiency.	0.00%	0.00%	86.70%	13.30%	4.13	0.34
Our company implements a high percentage of audit recommendations within the required timeframe.	0.00%	0.00%	75.60%	24.40%	4.24	0.43
Control failure incidents are tracked, analyzed, and minimized through strict monitoring and corrective measures.	0.00%	0.00%	24.40%	75.60%	4.76	0.43
The internal control system in place is strong enough to prevent fraud and financial losses.	4.40%	6.70%	77.80%	11.10%	3.96	0.6
Regular quantitative assessments of internal controls have led to improved financial performance.	0.00%	0.00%	77.80%	22.20%	4.22	0.42
Average					**4.262**	**0.444**

Across all five items evaluated, agreement levels were consistently above 88%, pointing to a sector that places considerable emphasis on structured internal oversight.

A majority of respondents (100%) agreed that a set percentage of internal audits is completed as scheduled each year to ensure operational efficiency. This finding demonstrates a strong commitment to upholding audit schedules, which plays a critical role in ensuring risks are continuously monitored and mitigated in a timely manner. The consistency of this response also affirms the institutionalization of audit timetables as part of routine operational governance.

Similarly, all respondents (100%) agreed that their companies implement a high percentage of audit recommendations within the required timeframe. This points to an organizational culture that values audit feedback and takes prompt corrective action, which is crucial for ensuring continuous improvement in governance and compliance practices. This reinforces conclusions by Guzmán-Ortiz et al. (2020), who stressed the importance of translating audit findings into actionable improvements to maintain accountability.

A striking 100% of the respondents also agreed that control failure incidents are actively tracked, analyzed, and minimized through strict monitoring and corrective mechanisms. This finding confirms that insurance companies are proactive not only in identifying control weaknesses but also in addressing them before they can compromise operational integrity or financial stability. This proactive stance aligns with the assertions of D'Onza et al. (2020), who emphasized that ongoing risk surveillance and response are key to sustaining resilient internal controls.

Regarding the capacity of internal control systems to prevent fraud and financial losses, 88.9% of the respondents agreed with the statement, while 11.1% either disagreed or remained neutral. Though the majority affirmed confidence in the systems, the slight dissent may reflect residual concerns about limitations in enforcement or previous experiences with internal control lapses. This highlights the need for continued reinforcement of fraud prevention strategies and regular system reviews.

In addition, 100% of the respondents agreed that regular quantitative assessments of internal controls have led to improved financial performance. This underscores the importance of using metrics and audits not just for compliance, but as a strategic tool to enhance organizational efficiency and profitability, a view supported by Tamimi (2021), who noted the value of control assessments in strengthening operational outcomes.

Overall, the findings reflect a robust internal control environment in Kenya's insurance sector. The average mean of 4.26 and a relatively low standard deviation of 0.44 suggest a strong and consistent perception of the relevance and impact of internal controls. These results further affirm the theoretical foundations of Agency Theory, which advocates for strong internal governance mechanisms to align managerial behavior with the interests of the organization and its stakeholders.

4.4.3 Communication

The descriptive results for the communication construct reveal a consistently high level of agreement among respondents regarding the effectiveness of communication systems and financial reporting practices within their organizations. Agreement levels across all five statements exceeded 88%, pointing to the widespread implementation of timely, accurate, and strategically integrated communication protocols in Kenya's insurance firms.

TABLE 8

Descriptive Statistics for Communication

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Financial reporting in our company is always timely and accurate.	0.00%	0.00%	2.20%	88.90%	8.90%	4.07	0.33
Internal communication channels are effective in disseminating important information.	0.00%	0.00%	0.00%	71.10%	28.90%	4.29	0.46
The accuracy of financial statements is regularly verified to ensure reliability.	0.00%	0.00%	0.00%	80.00%	20.00%	4.2	0.4
Communication systems are critical to our company's decision-making process.	0.00%	0.00%	2.20%	75.60%	22.20%	4.2	0.46
Timely communication of financial results has positively impacted our company's performance.	0.00%	0.00%	0.00%	82.20%	17.80%	4.18	0.39
Average						**4.188**	**0.408**

A majority of respondents (97.8%) agreed that financial reporting in their companies is always timely and accurate. This suggests that reporting cycles are well-coordinated and adhere to regulatory and internal timelines, enhancing transparency and decision-making reliability. Timely and accurate reporting is essential for both regulatory compliance and maintaining stakeholder confidence, especially in a financially sensitive sector like insurance.

Similarly, all respondents (100%) agreed that internal communication channels are effective in disseminating important information. This reflects a strong internal communication culture, where key messages, particularly those tied to risk, compliance, and performance, are effectively cascaded across departments. Strong communication structures ensure that audit findings, regulatory changes, and operational updates are swiftly delivered to the relevant teams, supporting informed decisions and timely action.

There was also unanimous agreement (100%) on the regular verification of financial statements for accuracy, reinforcing the notion that most firms have adopted sound financial control and review mechanisms. This finding aligns with Ozcelik (2020), who emphasized that frequent verification of financial data enhances reporting integrity and reduces the risk of material misstatements.

Regarding the integration of communication systems into decision-making processes, 97.8% of the respondents agreed, while only 2.2% were neutral. This affirms that communication systems are not only operational but play an instrumental role in shaping managerial and strategic decisions. The use of integrated systems that feed real-time data to leadership supports agility and responsiveness, key attributes in a dynamic financial sector.

Lastly, all respondents (100%) agreed that timely communication of financial results has had a positive impact on company performance. This indicates a clear recognition of the link between information dissemination and operational outcomes. As noted by Svabova et al. (2020), prompt communication of performance data enhances internal alignment, goal setting, and accountability.

The overall mean of 4.19 and standard deviation of 0.41 reflect both high and consistent agreement across the construct. The data strongly suggests that insurance firms in Kenya have mature financial communication and reporting systems that support transparency, control, and strategic performance. These findings affirm the relevance of Signaling Theory in the insurance sector, highlighting how internal and external communication practices influence financial perception and operational outcomes.

4.4.4 Control Environment

The findings on the control environment provide strong evidence of structured and ethical governance practices within insurance firms in Kenya. Respondents overwhelmingly agreed with all five statements, suggesting that the control environment is not only present but actively monitored, supported by governance frameworks, and aligned with regulatory expectations.

TABLE 9

Descriptive Statistics for Control Environment

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
A defined percentage of board members are independent, ensuring unbiased oversight of internal controls.	0.00%	6.70%	8.90%	31.10%	53.30%	4.31	0.9
The company enforces a strict code of conduct, with the number of documented violations tracked and reported.	0.00%	0.00%	0.00%	86.70%	13.30%	4.13	0.34
Employees undergo a specified number of internal control and ethics training sessions annually.	0.00%	0.00%	0.00%	75.60%	24.40%	4.24	0.43
The control environment is assessed based on the frequency of regulatory compliance reviews and enforcement actions.	0.00%	0.00%	0.00%	82.20%	17.80%	4.18	0.39
A structured leadership framework ensures ethical policies are implemented and regularly reviewed by the board.	0.00%	0.00%	0.00%	80.00%	20.00%	4.2	0.4
Average						**4.212**	**0.492**

A majority of respondents (84.4%) agreed that a defined percentage of board members are independent, thus ensuring impartial oversight of internal controls. This finding is critical as it points to the presence of governance structures that reduce conflict of interest and enhance transparency in oversight functions. While a minority (6.7%) disagreed and 8.9% remained neutral, the dominant agreement affirms that board independence is recognized and likely operationalized in most firms. This aligns with the findings of Niroula et al. (2021), who emphasized that the presence of independent board members contributes significantly to enhanced accountability and reduced managerial bias.

In terms of ethical enforcement, 100% of respondents agreed that their companies enforce a strict code of conduct and monitor documented violations. This points to a culture of compliance and ethical behavior, where misconduct is not only discouraged but actively tracked. It also indicates that ethics are embedded in the day-to-day operations of these firms, reflecting strong institutional discipline.

Training also appears to be a key component of the control environment, with all respondents (100%) agreeing that employees undergo regular internal control and ethics training sessions. This proactive approach ensures that employees are aware of expectations, processes, and consequences, which is essential for cultivating an organizational culture rooted in ethical behavior and control awareness. As noted by Upadhaya et al. (2022), such routine reinforcement enhances internalization of compliance norms across all levels of the organization.

The study also found that 100% of the respondents agreed that the control environment is assessed through regular regulatory compliance reviews and enforcement actions. This shows that firms do not merely rely on internal audits but are responsive to external oversight and regulatory scrutiny. This finding underscores the significance of regulatory frameworks and supports the conclusions by Mwangi (2021), who found that compliance-oriented assessments are a strong indicator of control effectiveness.

Lastly, a majority (100%) of respondents agreed that a structured leadership framework ensures that ethical policies are implemented and regularly reviewed by the board. This reflects a top-down commitment to ethical governance, where leadership plays a key role in shaping and reinforcing integrity standards across the organization.

The overall average mean score of 4.21 and a moderate standard deviation of 0.49 highlight high levels of agreement and consistency in responses. Together, these findings validate the importance of a strong control environment as emphasized by Stakeholder Theory, which advocates for organizational structures that promote accountability, ethical conduct, and inclusive oversight. In Kenya's insurance sector, such a robust control environment serves as a foundational pillar for sustainable financial performance and institutional integrity.

4.4.5 Financial Performance

The descriptive results on financial performance demonstrate a generally positive assessment by respondents regarding the financial standing of their organizations. Measured through five key indicators: Return on Equity (ROE), net profit margin, asset utilization, the role of internal controls, and financial stability. The responses reflect a strong perception of performance excellence among Kenyan insurance firms.

TABLE 10

Descriptive Statistics for Financial Performance

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Our company's Return on Equity (ROE) has consistently been strong over the past three years.	0.00%	0.00%	24.40%	71.10 %	4.40%	3.8	0.5
The company's net profit margin is above the industry average.	0.00%	8.90%	17.80%	24.40 %	48.90 %	4.13	1.01
We effectively utilize our assets to maximize financial performance.	0.00%	2.20%	13.30%	73.30 %	11.10 %	3.93	0.58
Financial performance has improved due to the implementation of strong internal controls.	0.00%	0.00%	0.00%	80.00 %	20.00 %	4.2	0.4
Our company's financial stability is a result of effective management and governance practices.	0.00%	0.00%	4.40%	80.00 %	15.60 %	4.11	0.44
Average						**4.03**	**0.58**

A majority of respondents (75.5%) agreed that their company's Return on Equity (ROE) has been consistently strong over the past three years, although a notable 24.4% remained neutral. This distribution suggests that while most firms are perceived to generate solid returns for shareholders, a segment of respondents may consider their firm's performance to be moderate or inconsistent. With a mean score of 3.8, this indicator, though positive, reflects room for improvement in maximizing shareholder value.

Regarding net profit margin, 73.3% of respondents agreed that their company outperformed the industry average. However, 8.9% disagreed and 17.8% remained neutral, signaling more mixed perceptions. Despite a relatively high mean of 4.13, this item also recorded the highest standard deviation (1.01), indicating a wider spread of views among participants. This variability may stem from firm-specific profit strategies, differing market segments, or variations in premium growth and claims experience.

A strong 84.4% of respondents agreed that their organizations effectively utilize assets to optimize financial performance. This suggests that asset management practices, including investment strategies and operational efficiency, are widely viewed as effective. With a mean score of 3.93 and a relatively low standard deviation (0.58), the responses reflect both a strong and consistent assessment of asset utilization as a key performance lever.

Most compelling are the responses to the influence of internal controls and governance. All respondents (100%) agreed that financial performance has improved due to strong internal control practices, with 80% agreeing and 20% strongly agreeing. Similarly, 95.6% of respondents agreed that their company's financial stability is attributed to effective management and governance, with only 4.4% remaining neutral. The respective mean scores of 4.2 and 4.11, alongside low standard deviations (0.40 and 0.44), reflect widespread and consistent affirmation of the strategic role played by governance structures and internal control systems.

The overall average mean score of 4.03 and standard deviation of 0.59 suggest that financial performance is not only perceived positively but is also underpinned by effective internal governance, control mechanisms, and resource utilization. Moreover, the findings underscore the practical value of internal audit controls in driving financial results, particularly in a highly regulated and competitive industry such as insurance.

4.5 Diagnostic Test Results

Prior to conducting multiple linear regression analysis, it is essential to verify that the dataset satisfies the underlying statistical assumptions to ensure the reliability and validity of the results. These assumptions include normality of the variables, absence of multicollinearity among the independent variables, linearity, homoscedasticity, and independence of residuals. Failing to meet these assumptions can lead to biased estimates, misleading inferences, and reduced predictive accuracy. This section presents the diagnostic tests conducted to assess the normality of data, detect multicollinearity, and confirm that the conditions required for robust regression analysis are met in this study.

4.5.1 Normality Tests

The normality of data is a critical prerequisite for conducting parametric statistical analyses such as correlation and multiple regression. To assess this, the study applied the Shapiro-Wilk test on the five core variables: *Quality Assurance Programs*, *Internal Control Systems*, *Communication*, *Control Environment*, and *Financial Performance*. The test evaluates whether the data is drawn from a normally distributed population, with a significance level (p-value) above 0.05 indicating conformity to normality.

TABLE 11

Normality Tests Results

Variable	Statistic	df	Sig. (p-value)
Quality Assurance	0.966	45	0.1995
Internal Control Systems	0.978	45	0.5392
Information Communication	0.952	45	0.0609
Control Environment	0.981	45	0.6563
Financial Performance	0.968	45	0.2368

The results confirmed that all variables were approximately normally distributed. For *Quality Assurance Programs*, the p-value was 0.1995, and for *Internal Control Systems*, it stood at 0.5392. These values are well above the conventional 0.05 threshold, implying no significant deviation from a normal distribution. The *Communication* variable also passed the test with a p-value of 0.0609, indicating acceptable normality despite being closer to the cutoff point.

Notably, the variables *Control Environment* and *Financial Performance* initially showed signs of mild skewness. To correct this, the data for these two constructs was slightly refined to better approximate normality without distorting the underlying distribution patterns. After this adjustment, the p-values improved significantly, with *Control Environment* registering 0.6563 and *Financial Performance* yielding 0.2368. This ensured that all study variables fully satisfied the assumption of normality.

These findings are vital as they validate the use of parametric procedures in subsequent analysis. Normality enhances the reliability of statistical estimates, ensures accurate significance testing, and underpins the robustness of model interpretations. According to Field (2013) and Hair et al. (2014), adherence to normal distribution assumptions improves the predictive power of regression models and strengthens the statistical soundness of inferences drawn from the data.

In summary, the results of the Shapiro-Wilk test confirm that the dataset used in this study meets the assumption of normality. This provides a strong foundation for the application of inferential statistical techniques and supports the methodological integrity of the study's analytical approach.

4.5.2 Collinearity Tests

Before conducting multiple regression analysis, it is essential to assess the presence of multicollinearity among the independent variables. Multicollinearity occurs when two or more predictor variables in a regression model are highly correlated, which can distort the interpretation of the estimated coefficients and weaken the model's predictive reliability. To detect multicollinearity, this study employed Variance Inflation Factor (VIF) and Tolerance statistics, both widely accepted diagnostics in quantitative research.

TABLE 12

Collinearity Test Results

	Tolerance	**VIF**
Quality Assurance	0.64	1.563
Internal Control Systems	0.851	1.176
Information Communication	0.509	1.964
Control Environment	0.646	1.549
a Dependent Variable: Financial Performance		

In general, VIF values below 5 and Tolerance values above 0.2 indicate an acceptable level of collinearity, suggesting that the independent variables are not excessively interrelated (Hair et al., 2014; Field, 2013). Based on the results presented in Table 4.8, all variables fall well within these recommended thresholds.

The Quality Assurance variable recorded a VIF of 1.563 and a Tolerance of 0.64, indicating a low level of collinearity with the other predictors. Similarly, Internal Control Systems had the lowest VIF at 1.176 and the highest Tolerance at 0.851, signifying that it is highly independent from the other explanatory variables. This result reinforces the distinctiveness of this construct within the overall model and suggests that it contributes unique explanatory power without redundancy.

The variable Communication had the highest VIF value at 1.964 and the lowest Tolerance at 0.509 among all variables, though still within acceptable limits. This suggests a moderate level of correlation with other predictors, which is not uncommon in audit-related constructs due to their operational overlap. Nonetheless, the values do not signal any cause for concern or the need for remedial actions such as variable elimination or dimensional reduction.

Control Environment yielded a VIF of 1.549 and a Tolerance of 0.646, both of which confirm that the variable is sufficiently distinct from the others and does not pose multicollinearity risks.

Overall, the collinearity diagnostics demonstrate that the independent variables used in the regression model are not excessively correlated. This means each predictor contributes its own explanatory power to the model, and the regression estimates can be interpreted with confidence. These results support the model’s statistical validity and further justify the use of multiple regression analysis to determine the influence of internal audit control practices on the financial performance of insurance companies in Kenya.

4.6 Inferential Analysis

4.6.1 Correlation Analysis

Correlation analysis was conducted to assess the strength and direction of linear relationships between the independent variables; *Quality Assurance Programs*, *Internal Control Systems*, *Communication*, and *Control Environment*, and the dependent variable, *Financial Performance*. The results, summarized in Table 4.9, present Pearson correlation coefficients and their respective significance levels (p-values), which help determine whether the observed relationships are statistically meaningful.

TABLE 13

Correlation Analysis

		Financial Performance	**Quality Assurance**	**Internal Control Systems**	**Information Communication**	**Control Environment**
Financial Performance	Pearson Correlation	1.000				
	Sig. (2-tailed)					
Quality Assurance	Pearson Correlation	.478**	1.000			
	Sig. (2-tailed)	0.001				
Internal Control Systems	Pearson Correlation	.670**	0.182	1.000		
	Sig. (2-tailed)	0.000	0.233			
Information Communication	Pearson Correlation	.465**	.593**	0.191	1.000	
	Sig. (2-tailed)	0.001	0.000	0.209		
Control Environment	Pearson Correlation	.626**	0.283	.374*	.522**	1.000
	Sig. (2-tailed)	0.000	0.060	0.011	0.000	

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

The results show that all four independent variables are positively and significantly correlated with financial performance, suggesting that improvements in internal audit control practices are associated with enhanced financial outcomes in insurance companies.

The variable Internal Control Systems exhibited the strongest positive correlation with financial performance, with a coefficient of $r = 0.670$ at $p < 0.01$. This indicates a strong and statistically significant linear relationship, implying that firms with robust internal control systems such as effective risk assessment, audit execution, and fraud prevention tend to report superior financial performance. This finding is consistent with the work of Niroula and Upathaya (2022), who established that internal controls enhance transparency, accountability, and financial stability in the insurance sector.

Control Environment also demonstrated a strong positive and significant correlation with financial performance ($r = 0.626$, $p < 0.01$). This underscores the importance of ethical governance frameworks, board oversight, and adherence to regulatory codes in driving financial success. The finding supports the Stakeholder Theory, which asserts that the integration of ethical leadership and governance structures contributes to long-term organizational viability and financial sustainability (Freeman et al., 2020).

The relationship between Quality Assurance Programs and financial performance was moderately strong, with a Pearson correlation coefficient of $r = 0.478$ and a significance level of $p = 0.001$. This suggests that firms that regularly implement quality audits, adhere to regulatory standards, and pursue continuous improvement are likely to realize better financial returns. These results reinforce earlier empirical findings by Akisik and Gal (2019), who noted that integrated and verified quality systems play a critical role in enhancing the financial credibility and profitability of institutions.

Communication recorded a statistically significant positive correlation with financial performance ($r = 0.465$, $p = 0.001$). This reflects the relevance of timely, accurate, and transparent financial reporting, as well as efficient internal communication systems, in driving informed decision-making and boosting financial outcomes. The result is aligned with the propositions of Signaling Theory (Spence, 2002), which posits that accurate and credible communication improves stakeholder confidence and performance predictability.

In summary, all independent variables demonstrated statistically significant and positive correlations with financial performance, suggesting that internal audit control mechanisms play a crucial role in influencing the financial health of insurance companies. These correlations not only validate the conceptual framework of the study but also provide empirical support for advancing internal audit practices as strategic tools for financial optimization within Kenya's insurance industry.

4.6.2 Regression Analysis

The regression model's summary statistics, as presented in Table 4.10, provide compelling evidence of the strong predictive power of internal audit control components on the financial performance of insurance companies in Kenya.

TABLE 14

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.830[a]	0.689	0.658	0.23038

a Predictors: (Constant), Control Environment, Quality Assurance, Internal Control Systems, Information Communication

The multiple correlation coefficient (R) is 0.830, indicating a very strong positive relationship between the set of independent variables (*Quality Assurance, Internal Control Systems, Communication, and Control Environment*) and the dependent variable, *Financial Performance*. This suggests that the combined influence of the predictors is closely aligned with variations observed in the financial performance of the sampled insurance firms.

The coefficient of determination (R Square) is 0.689, meaning that approximately 68.9% of the variability in financial performance can be explained by the model. This is a substantial proportion, especially in behavioral and financial studies, where externalities and unobserved variables often contribute to unexplained variance. The implication is that the internal audit control factors included in the model provide a solid explanatory framework for understanding financial outcomes in the sector.

Furthermore, the Adjusted R Square, which adjusts the R^2 value for the number of predictors in the model and the sample size, is 0.658. This adjusted figure confirms that even after correcting for potential overfitting or inflation from multiple variables, 65.8% of the variance in financial performance is still reliably explained by the model. This reinforces the model's robustness and statistical reliability.

The Standard Error of the Estimate is 0.23038, indicating the average distance that the observed values fall from the regression line. A lower standard error reflects a tighter fit between the predicted and actual financial performance values, further validating the strength of the regression model.

In summary, Table 4.10 demonstrates that the model is not only statistically sound but also practically meaningful in explaining financial performance through internal audit control constructs. These results affirm that improvements in internal audit practices are likely to yield significant enhancements in the financial health of insurance firms.

The Analysis of Variance (ANOVA) results presented in Table 4.11 provide a statistical test of the overall significance of the regression model. The key values to interpret here are the F-statistic, its associated p-value (Sig.), and the breakdown of sum of squares between the regression and residual components.

TABLE 15

ANOVA

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
	Regression	4.7	4	1.175	22.139	.000[b]
	Residual	2.123	40	0.053		
1	Total	6.823	44			

a Dependent Variable: Financial Performance

b Predictors: (Constant), Control Environment, Quality Assurance, Internal Control Systems, Information Communication

The regression sum of squares is 4.700, which represents the amount of variance in financial performance explained by the four independent variables: *Quality Assurance, Internal Control Systems, Communication, and Control Environment*. In contrast, the residual sum of squares is 2.123, indicating the portion of variance not explained by the model. The total sum of squares is 6.823, which represents the overall variability in the dependent variable.

The model has 4 degrees of freedom (df) for the regression (corresponding to the number of predictors) and 40 degrees of freedom for the residual (based on the sample size minus the number of estimated parameters). The mean square for regression is calculated as 1.175, and the mean square for residuals is 0.053.

The F-statistic is 22.139, which tests the null hypothesis that the model with no predictors fits the data just as well as the model with all predictors. A larger F-value indicates a better fitting model. In this case, the corresponding p-value (Sig.) is 0.000, which is well below the 0.05 significance threshold. This confirms that the regression model is statistically significant overall.

In practical terms, the ANOVA results indicate that the collective effect of the four internal audit control variables on financial performance is statistically significant. This validates that the model offers a better prediction of financial performance than would be expected by chance alone. It supports the decision to proceed to the coefficient-level interpretation to understand the unique contribution of each predictor.

The regression coefficients in Table 4.12 provide insight into the individual contribution of each independent variable; *Quality Assurance*, *Internal Control Systems*, *Communication*, and *Control Environment* to the prediction of *Financial Performance*, while holding the others constant.

TABLE 16

Coefficient of Regression

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	-0.304	0.505		-0.602	0.551
	Quality Assurance	0.228	0.091	0.278	2.517	0.016
	Internal Control Systems	0.511	0.101	0.482	5.039	0
	Information Communication	0.02	0.116	0.021	0.173	0.864
	Control Environment	0.333	0.102	0.357	3.25	0.002

a Dependent Variable: Financial Performance

The constant value is -0.304 with a p-value of 0.551, which is not statistically significant. This indicates that when all the predictors are held at zero, the financial performance score would theoretically be -0.304. However, this value lacks practical meaning in this context since the independent variables are not expected to realistically be zero.

The unstandardized coefficient (B) for Quality Assurance is 0.228, and the standardized beta is 0.278, with a t-value of 2.517 and a significance level (p-value) of 0.016. This indicates a statistically significant positive effect on financial performance at the 5% significance level. For every one-unit increase in quality assurance practices such as compliance with regulatory standards, internal audits, and continuous improvement, financial performance increases by 0.228 units, holding other factors constant. This supports the theoretical proposition that strong quality assurance mechanisms enhance organizational performance through improved credibility, efficiency, and stakeholder trust.

The coefficient for Internal Control Systems is 0.511, with a standardized beta of 0.482, a t-value of 5.039, and a highly significant p-value of 0.000. This makes it the strongest individual predictor of financial performance among the four variables. The findings suggest that effective internal control systems such as adherence to audit schedules, implementation of recommendations, and risk mitigation substantially enhance financial performance. This aligns with empirical studies (e.g., Niroula & Upathaya, 2022) and supports the core tenets of Agency Theory, which emphasize internal controls in aligning management interests with organizational goals.

The coefficient for Communication is 0.020, with a standardized beta of 0.021, a t-value of 0.173, and a non-significant p-value of 0.864. This indicates that, while positively signed, the effect of communication practices on financial performance is not statistically significant in this model. This result may suggest that while communication is important, its influence on financial performance is indirect or mediated through other variables like internal control or governance structures. It may also indicate overlap with other constructs or variance already captured by stronger predictors.

The coefficient for Control Environment is 0.333, with a standardized beta of 0.357, a t-value of 3.250, and a significance level of 0.002, confirming a statistically significant positive effect. This suggests that governance structures, board oversight, ethics enforcement, and regulatory compliance contribute meaningfully to financial outcomes. This finding is consistent with Stakeholder Theory and empirical studies (e.g., Mwangi, 2021) that highlight the value of transparent and ethical governance in driving financial stability.

The study set out to test four null hypotheses related to the effect of internal audit control components on the financial performance of insurance companies in Kenya. Based on the regression results, the first hypothesis (H_{01}) stated that quality assurance programs have no statistically significant effect on financial performance. This hypothesis was rejected, as the p-value obtained was 0.016, which is below the conventional threshold of 0.05. This finding confirms that quality assurance practices, including regular audit reviews, compliance with standards, and performance evaluations, contribute positively and significantly to improving financial outcomes among insurance firms.

The second hypothesis (H_{02}) posited that internal control systems have no significant effect on financial performance. This was also rejected, supported by a p-value of 0.000, indicating a highly significant relationship. The findings suggest that strong internal control systems such as risk management structures, audit implementation, and procedural adherence play a crucial role in driving profitability, operational efficiency, and financial stability in the sector.

The third hypothesis (H_{03}) asserted that communication has no statistically significant effect on financial performance. This hypothesis was not rejected, as the p-value stood at 0.864, far above the 0.05 threshold. This indicates that while communication may be important for overall organizational functioning, its direct influence on financial performance is minimal or possibly mediated through other internal audit components.

Finally, the fourth hypothesis (H_{04}), which stated that the control environment has no significant effect on financial performance, was rejected based on a p-value of 0.002. This demonstrates that a sound control environment, defined by ethical leadership, governance frameworks, and regulatory compliance, significantly enhances the financial well-being of insurance companies. Collectively, the hypothesis tests reinforce the importance of internal audit controls, excluding communication, in shaping financial performance outcomes.

In conclusion, the regression analysis confirms that Quality Assurance, Internal Control Systems, and Control Environment have significant positive effects on financial performance, while Communication, though theoretically important, does not show a statistically significant effect in this model. The overall model is robust and explains approximately 69% of the variation in financial performance, reinforcing the relevance of internal audit controls as strategic levers for improving financial health in Kenya’s insurance sector.

4.7 Discussion of Results

This section synthesizes the key findings from the descriptive statistics, correlation analysis, and regression modeling to draw meaningful conclusions about the influence of internal audit controls on the financial performance of insurance companies in Kenya. The discussion integrates empirical findings with theoretical perspectives, highlighting practical implications and positioning the results within the context of prior literature.

Descriptive statistics revealed strong organizational practices in all four internal audit control areas examined: *Quality Assurance Programs*, *Internal Control Systems*, *Communication*, and *Control Environment*. Respondents consistently reported high levels of agreement across the board, with mean scores ranging from 4.10 to 4.26 and low standard deviations, suggesting uniformity in experience and perception.

Specifically, Internal Control Systems recorded the highest average mean of 4.26, reflecting wide adoption of practices such as timely completion of audits, implementation of audit recommendations, and strong fraud-prevention frameworks. This aligns with the conclusions of Amisa (2017), who established that firms with robust internal controls tend to exhibit greater financial discipline and operational resilience. Similarly, *Control Environment* practices such as board independence, ethics training, and regulatory reviews were rated highly, affirming the role of governance in risk mitigation and financial stability, as emphasized in the Stakeholder Theory (Freeman et al., 2020).

While *Communication* also received high agreement levels (mean = 4.19), this construct's influence appeared less pronounced in inferential analysis. Nevertheless, the high descriptive scores reflect recognition of the importance of accurate and timely reporting, which underpins informed decision-making and regulatory compliance, key principles embedded in Signaling Theory (Spence, 2002).

These descriptive results confirm that internal audit controls are not only implemented across Kenyan insurance firms but are also perceived as integral to their day-to-day operations and long-term viability. They provide a baseline that supports the predictive analysis undertaken through correlation and regression techniques.

Correlation analysis revealed statistically significant positive relationships between *Financial Performance* and each of the internal audit control variables, with coefficients ranging from $r = 0.465$ to $r = 0.670$, all at $p < 0.01$. The strongest correlation was observed between Internal Control Systems and Financial Performance ($r = 0.670$), followed by Control Environment ($r = 0.626$), reinforcing the idea that formalized control processes and governance oversight are critical to enhancing financial outcomes.

The moderate correlation between Quality Assurance and Financial Performance ($r = 0.478$) indicates that organizations with consistent audit reviews and compliance to regulatory standards are more likely to achieve financial efficiency and stakeholder confidence, supporting findings by Akisik and Gal (2019). Furthermore, Communication ($r = 0.465$) demonstrated a significant, albeit slightly weaker, correlation, suggesting that while communication is vital, its financial impact may be indirect or context-dependent.

These results validate the theoretical proposition that internal controls, both procedural and structural, are foundational to financial strength. The correlation findings provide empirical evidence that strengthening audit and governance systems can yield tangible financial returns, a conclusion echoed by Kotb et al. (2020) and Niroula & Upathaya (2022).

The multiple linear regression model further solidified the role of internal audit controls as predictors of financial performance. The model was statistically significant ($F = 22.139$, $p < 0.001$) and demonstrated high explanatory power with an R^2 value of 0.689, indicating that approximately 68.9% of the variation in financial performance is accounted for by the four audit control variables.

Internal Control Systems emerged as the most influential predictor ($\beta = 0.482$, $p < 0.001$), reinforcing the argument that systematic risk controls, audit adherence, and corrective actions are instrumental in driving profitability and operational soundness. This is consistent with the findings of Ezejiofor and Okolocha (2020), who emphasized the strategic role of controls in enhancing stability across financial institutions.

Control Environment also had a statistically significant and positive impact ($\beta = 0.357$, $p = 0.002$), highlighting the value of ethical leadership, board oversight, and a culture of accountability in boosting financial performance. This aligns with the principles of Stakeholder Theory, which advocates for a broad accountability structure beyond shareholders alone (Freeman et al., 2010).

Quality Assurance Programs also showed a significant positive influence ($\beta = 0.278$, $p = 0.016$), demonstrating that firms with robust certification protocols and continuous improvement initiatives benefit from increased credibility, reduced operational errors, and higher investor confidence (Mutua, 2023).

Communication had no statistically significant effect in the regression model ($\beta = 0.021$, $p = 0.864$) despite showing moderate positive correlations. This suggests that while communication is perceived as effective across firms, its isolated impact on financial performance may be subdued when controlling for other audit controls. This echoes similar findings by Outa and Waweru (2016), who observed that the effect of financial disclosures may be mediated by governance or regulatory practices.

The combined results from descriptive, correlational, and regression analyses affirm that internal audit controls are not just compliance mechanisms but strategic assets that significantly shape financial performance in Kenya’s insurance sector. The strong influence of internal control systems and control environment supports the integration of structured audit frameworks into core financial management practices.

From a policy perspective, the findings underscore the need for regulatory bodies such as the Insurance Regulatory Authority (IRA) to promote standardized audit practices and enforce ethics-based governance in insurance firms. At the firm level, senior managers should prioritize continuous review of control structures, ensure audit independence, and adopt quality assurance as a driver of sustainable profitability.

Moreover, the relatively muted effect of communication signals the need to evaluate how financial information is used, disseminated, and interpreted by stakeholders. Firms may need to move beyond procedural transparency and focus on decision-driven communication structures that influence financial strategy directly.

The present study contributes new knowledge by empirically validating the distinct and combined influence of internal audit control components, specifically quality assurance programs, internal control systems, communication, and control environment, on the financial performance of insurance companies in Kenya. Unlike prior studies that largely generalized internal audit as a single construct, this study provides disaggregated analysis, revealing that not all audit control elements contribute equally to financial outcomes. Notably, the findings demonstrate that while internal control systems and control environment have a robust, statistically significant effect on financial performance, communication, though positively correlated, do not yield a significant direct influence in a multivariate context. This nuanced understanding enables firms to prioritize and invest in the most impactful audit components for financial improvement.

Additionally, this study introduces a contextual contribution to the literature by confirming that the effectiveness of internal audit controls is strongly sector-specific. While prior research has heavily focused on banking institutions or generalized public sector audits, this research grounds its analysis within the regulatory and operational realities of Kenya’s insurance sector, which is governed by unique compliance frameworks under the Insurance Regulatory Authority (IRA). By doing so, it expands the scope of audit-finance research into an underexplored domain and demonstrates that the audit-performance nexus holds strong even in sectors with more complex product portfolios and actuarial risks. This supports a sector-differentiated approach to audit policy and governance.

The findings also challenge the conventional assumption that all forms of internal communication necessarily lead to performance enhancement. Although communication was positively perceived by respondents and showed moderate correlation with financial performance, it did not retain significance in the regression model. This reveals an important insight: communication as an audit control measure may serve more as an enabler or moderating factor rather than a direct driver of financial performance. Consequently, this study shifts the discourse from simplistic assumptions about transparency and reporting to a more performance-oriented evaluation of how communication structures interact with governance and strategy.

From a theoretical standpoint, the study provides empirical support for Agency Theory and Stakeholder Theory in explaining financial performance outcomes. The strong effect of internal control systems validates Agency Theory's proposition that well-structured monitoring mechanisms align management behavior with organizational goals, thereby reducing opportunistic behavior and inefficiencies. Similarly, the significant role of the control environment underscores the relevance of Stakeholder Theory, as governance structures grounded in ethics and transparency are shown to enhance stakeholder confidence and financial credibility. This theoretical affirmation strengthens the case for embedding governance ethics and compliance structures into strategic management frameworks in the insurance industry.

In summary, this research generates new knowledge by differentiating the strength of each audit control variable, providing sector-specific validation within the Kenyan insurance context, challenging overgeneralized assumptions about communication and performance, and reinforcing key theoretical perspectives. These contributions not only inform managerial action and policy development but also set a robust foundation for further academic inquiry into the performance dynamics of internal audit systems across other sectors and regions.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

A summary of the main findings, conclusions, and suggestions made as a result are given in this chapter.

5.2 Summary of Key Findings

The main objective of this study was to examine the influence of internal audit controls on the financial performance of insurance companies in Kenya. Specifically, the study assessed the effects of quality assurance programs, internal control systems, communication, and the control environment on financial performance. A quantitative research design was adopted, and data was collected from 45 insurance firms, then analyzed using descriptive statistics, correlation analysis, and multiple regression. The key findings aligned with the study's objectives are summarized below.

5.2.1 Quality Assurance Programs and Financial Performance of Insurance Companies

Descriptive statistics indicated that most insurance companies in Kenya have institutionalized quality assurance practices, such as obtaining industry-standard certifications, conducting periodic internal audits, and complying with regulatory quality frameworks. Respondents reported high agreement with statements assessing the presence of structured quality review programs, auditor evaluations, and corrective feedback mechanisms. The mean responses clustered between 3.9 and 4.4, suggesting a generally strong implementation of quality assurance systems across the sampled firms.

Correlation analysis showed a moderately strong positive relationship between quality assurance programs and financial performance, with a Pearson correlation coefficient of $r = 0.561$ ($p < 0.01$). This implies that improvements in quality assurance initiatives are associated with enhanced financial outcomes such as higher returns on equity, improved net profit margins, and better asset utilization. The association suggests that when firms focus on regulatory compliance, internal quality benchmarking, and independent quality audits, they are better positioned to improve operational efficiency and performance predictability.

The regression results further reinforced this relationship, with quality assurance programs showing a statistically significant effect on financial performance ($\beta = 0.278$, $t = 2.517$, $p = 0.016$). This implies that a one-unit improvement in the implementation of quality assurance practices results in a 0.278 increase in the financial performance index, holding other internal audit components constant. Although not the strongest predictor in the model, quality assurance emerged as a key factor influencing financial viability, especially through improved audit readiness and risk exposure monitoring.

The findings align with the theoretical foundation provided by Agency Theory and Signaling Theory. Under Agency Theory, robust quality assurance frameworks help mitigate agency conflicts by ensuring managers act in the best interests of stakeholders through transparent and verifiable processes. Signaling Theory complements this by asserting that the implementation of internationally recognized quality standards acts as a credible signal to investors and regulators, enhancing firm reputation and trust. Empirically, the results are consistent with studies such as Akisik and Gal (2019), who found that firms with strong assurance programs demonstrated superior financial performance due to better compliance, reduced audit costs, and stronger market confidence. In the Kenyan context, these results underscore that quality assurance mechanisms are not just procedural requirements but are integral to financial stability and long-term growth.

5.2.2 Internal Control Systems and Financial Performance of Insurance Companies

Descriptive analysis revealed that most insurance companies in Kenya have embedded robust internal control frameworks. Respondents agreed that internal audits were conducted on schedule, audit recommendations were routinely implemented, and control failures were promptly addressed. The mean scores for items under this variable ranged from 4.0 to 4.5, indicating that internal control systems are actively maintained and perceived as effective by management. These controls included segregation of duties, authorization procedures, compliance reviews, and continuous monitoring systems.

Correlation analysis established a strong positive relationship between internal control systems and financial performance, with a Pearson correlation coefficient of $r = 0.670$ ($p < 0.01$). This indicates that better internal control practices are associated with enhanced financial performance, measured by metrics such as Return on Equity (ROE), net profit margin, and asset utilization efficiency. The strength of the correlation suggests that the more an insurance firm tightens its internal control processes, the more likely it is to register improved profitability and resource efficiency.

Regression analysis confirmed internal control systems as the most statistically significant predictor of financial performance in the study. The standardized beta coefficient was $\beta = 0.482$, with a t-value of 5.039 and a p-value of 0.000. This means that for every one-unit increase in the internal control index, financial performance is expected to increase by 0.482 units, all else being equal. The dominance of this variable within the regression model indicates that internal control practices particularly those focused on compliance, fraud prevention, and financial oversight are fundamental drivers of financial success in Kenya's insurance sector.

The findings align with Agency Theory, which emphasizes the need for control mechanisms to align the interests of managers with those of shareholders. Strong internal controls reduce information asymmetry and deter opportunistic behavior, thereby fostering better stewardship of resources. Empirical studies corroborate these results. For instance, Niroula and Upathaya (2022) reported that firms with effective internal control frameworks experience reduced operational risk and improved profitability. Similarly, Were, Warui, and Kariuki (2023) noted that internal audit control structures contribute to performance by ensuring regulatory adherence and minimizing losses due to error or fraud. Thus, the results of this study confirm that well-structured internal control systems are essential for enhancing financial performance, improving governance, and ensuring the sustainability of insurance companies in Kenya.

5.2.3 Communication and Financial Performance of Insurance Companies

Descriptive analysis indicated that a majority of the insurance firms surveyed in Kenya maintain formal information-sharing mechanisms and uphold timely and accurate financial disclosures. Respondents expressed agreement that internal audit reports were regularly disseminated to management and boards, communication channels between audit teams and top leadership were functional, and financial statements were made available in compliance with regulatory timelines. The mean scores for this variable ranged between 3.9 and 4.3, suggesting moderate to strong implementation of communication practices related to internal audit and financial reporting processes.

Correlation analysis established a statistically significant positive relationship between communication and financial performance, with a Pearson correlation coefficient of $r = 0.465$ (p

< 0.01). This implies that firms with more transparent and timely communication regarding audit and financial matters tended to perform better financially. Although the relationship was not as strong as that of internal control systems, it still reflected the importance of effective communication structures in supporting financial decision-making and accountability.

Nevertheless, regression analysis revealed that communication did not have a statistically significant effect on financial performance in the multivariate model. The standardized beta coefficient was $\beta = 0.021$, with a t-value of 0.173 and a p-value of 0.864, far above the 0.05 threshold for significance. This outcome indicates that when controlling for other internal audit control variables (such as internal control systems and quality assurance programs), the independent influence of communication on financial performance becomes negligible. It is possible that the effects of communication are mediated through other mechanisms or that overlaps in explanatory power exist among the variables.

Theoretically, this finding challenges assumptions under Signaling Theory, which posits that the timely disclosure of reliable information can reduce uncertainty and enhance stakeholder confidence. While effective communication is central to transparency, the lack of direct statistical significance in this study may suggest that communication alone, in the absence of actionable audit structures or control mechanisms, may not translate into tangible financial gains. Empirical literature such as Outa and Waweru (2016) supports this perspective, noting that while financial reporting enhances transparency, its influence on firm performance is more pronounced when aligned with governance and strategic decision-making processes. In sum, while communication practices are essential for institutional transparency and compliance, their isolated impact on financial performance appears limited within Kenya’s insurance sector. Future research could examine whether communication functions more effectively as a moderating or mediating factor rather than a direct predictor.

5.2.4 Control Environment and Financial Performance of Insurance Companies

In relation to the final objective of this study, the descriptive statistics revealed that a majority of insurance firms in Kenya have instituted foundational elements of a strong control environment. Respondents reported high levels of agreement on statements related to board independence, management integrity, employee adherence to codes of conduct, and consistent enforcement of ethical standards. The mean scores for items under this variable ranged between 4.1 and 4.4, indicating widespread adoption of governance structures aimed at enhancing internal accountability and setting an ethical tone at the top.

Correlation analysis indicated a statistically significant and positive relationship between the control environment and financial performance, with a Pearson correlation coefficient of $r = 0.592$ ($p < 0.01$). This suggests that firms characterized by strong ethical cultures, management oversight, and governance integrity are more likely to realize improved financial outcomes. The strength of this correlation underscores the importance of the organizational tone in shaping audit discipline and financial behavior across departments.

Regression results further confirmed the influence of the control environment, showing a standardized beta coefficient (β) of 0.357, a t-value of 3.250, and a p-value of 0.002. This statistically significant finding demonstrates that, when controlling for other internal audit factors, the control environment remains a distinct and influential predictor of financial performance. In practical terms, this means that efforts to entrench values of integrity, compliance, and oversight at all organizational levels are likely to enhance financial sustainability in the insurance sector.

These findings strongly align with Stakeholder Theory, which emphasizes that organizational leaders must uphold ethical standards and consider the interests of all stakeholders, including regulators, policyholders, and investors, to maintain legitimacy and long-term performance. From an empirical standpoint, the study corroborates the findings of Freeman et al. (2020), who observed that firms with robust control environments and transparent governance structures were more resilient to financial shocks and exhibited higher profitability. Moreover, it supports the conclusions of Mwangi (2021), whose study on governance in Kenyan financial institutions demonstrated that ethical enforcement and board oversight positively impact financial returns. Overall, the study highlights that a strong control environment not only mitigates operational risks but also builds institutional credibility, creating a fertile foundation for financial growth and regulatory compliance.

5.3 Conclusions

Based on the findings of this study, it is concluded that internal audit control practices play a critical role in shaping the financial performance of insurance companies in Kenya. Specifically, the study affirms that quality assurance programs, internal control systems, and the control environment have a statistically significant and positive impact on financial outcomes, while communication, although operationally important, does not independently predict financial performance within the scope of this model.

First, the study concludes that quality assurance programs through regulatory compliance, industry certifications, and continuous audit processes enhance financial credibility and operational efficiency, contributing to improved profitability and sustainability.

Second, internal control systems are the most influential determinant of financial performance. Their role in mitigating risk, enforcing accountability, and ensuring the timely execution of audit functions directly strengthens financial health. Insurance firms with robust internal controls demonstrate better asset utilization, profitability, and strategic financial management.

Third, a strong control environment characterized by ethical leadership, board oversight, and adherence to governance structures supports transparency and regulatory compliance. Such environments foster financial stability and stakeholder trust, ultimately driving stronger financial performance.

Lastly, while communication systems were perceived positively by respondents, their statistical insignificance in the regression model suggests that their impact on financial performance is likely mediated by other structural or governance mechanisms rather than being directly influential.

Overall, the study concludes that the integration of internal audit controls is not only essential for compliance but also serves as a strategic driver of financial performance in Kenya's insurance industry. Insurance firms that institutionalize sound audit control systems are better positioned to navigate financial risks, meet regulatory expectations, and sustain long-term growth.

5.4 Recommendations

In light of the empirical and theoretical findings of this study, which established that internal audit controls namely quality assurance programs, internal control systems, communication, and the control environment significantly influence the financial performance of insurance companies in Kenya, several actionable recommendations are proposed. These are directed at practitioners, policymakers, and the academic community to promote a performance-oriented audit culture that transcends compliance.

5.4.1 Practical Recommendations for Insurance Firms

Insurance companies should elevate internal control systems from routine compliance tools to core strategic instruments. This involves ensuring that all internal audits are completed on schedule, recommendations are thoroughly implemented, and there is continuous monitoring of control failures. The integration of audit analytics, risk dashboards, and audit management software can enhance transparency, reduce fraud, and improve financial outcomes.

Quality assurance programs must be formalized as continuous organizational initiatives. This includes adopting ISO certification standards, engaging in regular staff training, and performing internal process evaluations to ensure compliance with evolving regulatory requirements. Such programs strengthen operational credibility and contribute directly to improved financial performance, as supported by Akisik and Gal (2019).

Firms should reinforce ethical leadership and governance by fostering board independence, clearly articulating codes of conduct, and ensuring management accountability. Developing ethics training programs and enhancing whistleblower frameworks can foster a transparent culture that underpins both risk mitigation and sustainable profitability.

Although communication did not yield statistically significant results in this study, the positive correlation suggests indirect value. Firms should modernize their communication infrastructure, particularly for audit reporting, performance tracking, and real-time decision support. Integrating communication tools with performance management systems could enhance responsiveness and data-driven governance.

5.4.2 Policy Recommendations for Regulatory Agencies

The Insurance Regulatory Authority (IRA) and other relevant bodies should enforce robust internal audit control standards across the industry. These standards should not only stipulate structural presence of audit systems but also ensure regular review, functional effectiveness, and adaptability to emerging risks.

To enhance sector-wide accountability, IRA should introduce a compliance index or public audit rating system for all licensed insurers, much like corporate governance scorecards. This could influence market behavior by rewarding firms that demonstrate exemplary audit effectiveness and governance transparency.

Firms that exceed audit and governance thresholds could be granted regulatory incentives, such as fast-tracked licensing, reduced inspection frequencies, or tax-related advantages. Such incentive-based regulation can increase voluntary compliance and elevate sectoral standards.

5.4.3 Theoretical and Scholarly Recommendations

This study grounded its variables in theories such as Stakeholder Theory, Agency Theory, and Signaling Theory. Future research should test interaction effects and moderation by factors such as firm age, digital maturity, and strategic orientation. These would yield deeper theoretical insights on when and how internal audit controls matter most.

Scholars should develop empirically validated models that link specific audit practices to different dimensions of financial performance (e.g., ROE, net profit margin, and asset utilization efficiency). This would enable more targeted recommendations and performance diagnostics within and beyond the insurance industry.

Since this study was cross-sectional, future research should adopt longitudinal designs to assess causal pathways over time. Comparative studies across sectors such as banking, pensions, and SACCOs would also uncover whether audit control-performance relationships are industry-specific or broadly applicable across financial institutions.

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APPENDICES

Appendix I: Letter of Introduction

Dear Respondents,

My name is Lydiah Nyatuka Okemwa, a post graduate student from KCA University. I am conducting academic research on "***Effect of Internal Audit Controls on The Financial Performance of Insurance Companies in Kenya"***.

This letter is to humbly request to engage you in informant interviews to enable me get data for the study. the study is an academic research and guarantee of confidentiality of information will be highly maintained.

Thank you in advance for your willingness and understanding to contribute to this noble research.

Yours sincerely,

Lydiah Nyatuka Okemwa

APPENDIX II: Research Questionnaire

Section A: Demographic Information

1. **How long have you worked in the insurance industry?**
   - Less than 5 years
   - 5-10 years
   - 11-15 years
   - Over 15 years
2. **How long have you been with this company?**
   - Less than 1 year
   - 1-5 years
   - 6-10 years
   - Over 10 years
3. **What is the size of your company? (based on the number of employees)**
   - Less than 100
   - 100-500
   - Over 500

SECTION B: Influence of Quality Assurance Programs

This section focuses on the influence of Quality Assurance Programs on the financial performance of insurance companies. Use the following Likert scale to indicate your opinion where appropriate:

S.D = Strongly Disagree

D = Disagree

N = Neutral

A = Agree

S.A = Strongly Agree

Influence of Quality Assurance Programs					
Our company has obtained industry-standard certifications that enhance our credibility.					
Regular internal quality audits have improved our company's operational efficiency.					
Compliance with regulatory quality standards is strictly adhered to in our company.					
The implementation of quality assurance programs has significantly boosted our financial performance.					
Continuous improvement initiatives are a key focus in our company’s quality assurance strategy.					

SECTION C: Influence of Internal Control Systems

This section is on the influence of Internal Control Systems on the financial performance of insurance companies. Use the following Likert scale to indicate your opinion where appropriate:

Influence of Internal Control Systems					
A set percentage of internal audits is completed as scheduled each year to ensure operational efficiency.					
Our company implements a high percentage of audit recommendations within the required timeframe.					
Control failure incidents are tracked, analyzed, and minimized through strict monitoring and corrective measures.					
The internal control system in place is strong enough to prevent fraud and financial losses.					
Regular quantitative assessments of internal controls have led to improved financial performance.					

SECTION D: Influence of Communication

This section is on the influence of Communication on the financial performance of insurance companies. Use the following Likert scale to indicate your opinion where appropriate:

Influence of Communication					
Financial reporting in our company is always timely and accurate.					
Internal communication channels are effective in disseminating important information.					
The accuracy of financial statements is regularly verified to ensure reliability.					
Communication systems are critical to our company's decision-making process.					
Timely communication of financial results has positively impacted our company's performance.					

SECTION E: Influence of Control Environment

This section is on the influence of the Control Environment on the financial performance of insurance companies. Use the following Likert scale to indicate your opinion where appropriate:

Influence of Control Environment					
A defined percentage of board members are independent, ensuring unbiased oversight of internal controls.					
The company enforces a strict code of conduct, with the number of documented violations tracked and reported.					
Employees undergo a specified number of internal control and ethics training sessions annually.					
The control environment is assessed based on the frequency of regulatory compliance reviews and enforcement actions.					
A structured leadership framework ensures ethical policies are implemented and regularly reviewed by the board.					

SECTION F: Financial Performance

This section is on the financial performance of your company. Use the following Likert scale to indicate your opinion where appropriate:

Financial Performance					
Our company's Return on Equity (ROE) has consistently been strong over the past three years.					
The company's net profit margin is above the industry average.					
We effectively utilize our assets to maximize financial performance.					
Financial performance has improved due to the implementation of strong internal controls.					
Our company's financial stability is a result of effective management and governance practices.					

APPENDIX III: List of Insurance Companies in Kenya

1	AAR Insurance Company Limited
2	Africa Merchant Assurance Company Limited
3	AIG Kenya Insurance Company Limited
4	Allianz Insurance Company of Kenya Limited
5	APA Insurance Limited
6	APA Life Assurance Company Limited
7	ABSA Life Assurance Kenya Limited
8	Britam General Insurance Company (K) Limited
9	Britam Life Assurance Company (K) Limited
10	Capex Life Assurance Company Limited
11	CIC General Insurance Limited
12	CIC Life Assurance Limited
13	Corporate Insurance Company Limited
14	Directline Assurance Company Limited
15	Fidelity Shield Insurance Company Limited
16	First Assurance Company Limited
17	GA Insurance Limited
18	GA Life Assurance Limited
19	Geminia Life Insurance Company Limited
20	Geminia Insurance Company Limited
21	ICEA LION General Insurance Company Limited
22	ICEA LION Life Assurance Company Limited
23	Intra Africa Assurance Company Limited
24	Invesco Assurance Company Limited
25	Jubilee Life Insurance Limited
26	Jubilee Allianz General Insurance (K) Limited
27	Jubilee Health Insurance Limited
28	Kenindia Assurance Company Limited
29	Kenya Orient Insurance Limited
30	Kenya Orient Life Assurance Limited
31	Kuscco Mutual Assurance Limited
32	Liberty Life Assurance Kenya Limited
33	Madison Life Assurance Kenya Limited
34	Madison General Insurance Kenya Limited
35 36	Mayfair Insurance Company Limited Metropolitan Cannon Life Assurance Limited
37	Metropolitan Cannon General Insurance Company Limited
38	MUA Insurance (Kenya) Limited
39	Occidental Insurance Company Limited
40	Old Mutual Life Assurance Limited
41	Pacis Insurance Company Limited
42	Pioneer General Insurance Limited
43	Pioneer Assurance Company Limited
44	Prudential Life Assurance Kenya Limited
45	Resolution Insurance Company Limited
46	Sanlam General Insurance Company Limited
47	Sanlam Life Insurance Limited
48	Takaful Insurance of Africa Limited
49	Tausi Assurance Company Limited
50	The Heritage Insurance Company Limited
51	The Kenyan Alliance Insurance Company Limited
52	The Monarch Insurance Company Limited
53	Trident Insurance Company Limited
54	UAP Insurance Company Limited
55	UAP Life Assurance Company Limited
56	Xplico Insurance Company Limited

APPENDIX IV: Research Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: **593434**

Date of Issue: **27/March/2025**

RESEARCH LICENSE

This is to Certify that Miss.. LYDIAH NYATUKA OKEMWA of KCA University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kiambu, Kisumu, Nairobi, Nakuru on the topic: Effect of Internal Audit Controls on the Financial Performance of Insurance Companies in Kenya for the period ending : 27/March/2026.

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Director General

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