# EFFECTS OF INTERNAL AUDIT SYSTEM ON FINANCIAL PERFORMANCE OF SACCOS IN MERU COUNTY, KENYA

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A Thesis Submitted to the School of Business and Economics in Partial Fulfillment of the Requirement for the Conferment of Degree of Masters of Science in Finance and Investments of Kenya Methodist University

# DECLARATION AND RECOMMENDATION

# **Declaration**

I declare that this thesis is my original work and has not been presented in any other university.		
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# **DEDICATION**

I dedicate this study to my wife.	loy Kendi and children	Mitchell, Victor and Abigail.
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# LIST OF ABBREVIATIONS

ANOVA Analysis of Variance

KUSCCO Kenya Union of Savings and Credit Cooperatives Ltd

NACOSTI National Commission for Science Technology and Innovation

SACCO Savings and Credit Cooperative Society

SASRA Societies Regulatory Authority

SPSS Statistical Package for Social Sciences

#### **ABSTRACT**

In today's business world, the major interest is to enhance accountability, profitability and enjoy competitive advantage. As a way of achieving this, SACCOs employ internal auditing, to enable them monitor the monetary activities to enhance financial performance. Despite the fact that the majority of SACCOs (around 70%) have implemented either an in-house or outsourced audit system, their financial performance remains below expectations, with instances of fraud, poor fund management, and inadequate budget development and utilization. Given these circumstances, the purpose of this research was to examine how the internal audit system affects the financial performance of SACCOs in Meru County. The study concentrated on four primary goals: evaluating the influence of compliance, risk assessment, control function, and monitoring on the financial performance of SACCOs in Meru County. The study's theoretical foundation was built on the agency, legitimacy, and capture theories. To accomplish the research objectives, a descriptive research design was employed, targeting 42 SACCOs that had operated in Meru County for a minimum of ten years. The study adopted a census approach, including all 42 eligible SACCOs in the study. The respondents consisted of the chief executive officers of the respective SACCOs, totaling 42 participants. Data collection involved the use of a structured questionnaire, which was pre-tested in four SACCOs from Tharaka-Nithi County, selected purposively. The collected data were accurately coded based on the responses to various items. In the analysis of data, this study employed SPSS (Version 24) and utilized descriptive and inferential statistics. Multiple linear regression models were used to investigate the connections between the dependent and independent variables. The study's findings uncovered a noteworthy correlation between compliance and the financial performance of SACCOs in Meru County, rejecting the hypothesis that the compliance slope is zero (b = 0). Similarly, a noteworthy relationship was observed between risk assessment and financial performance, rejecting the hypothesis that the risk assessment slope is zero (b = 0). However, no noteworthy impact on financial performance was found for control function and monitoring. The study concluded that compliance plays a vital role in ensuring SACCOs adhere to regulations and guidelines, thereby fostering transparency, accountability, and good governance. Furthermore, effective risk assessment can assist SACCOs in reducing operating costs, enhancing efficiency, and improving financial performance. The study recommends that SACCO management strive for full compliance with relevant regulations to enhance accountability and financial performance. Additionally, implementing robust risk assessment policies is advised to mitigate risks, reduce operational costs, and boost financial performance. Finally, the study suggests expanding the research to encompass other financial institutions to explore potential variations in the correlations between the internal audit system and financial performance.

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background of the Study

In nowadays business world, the major interest is to enhance accountability, profitability and enjoy competitive advantage (Grant, 2022). Therefore, SACCOs are not exempted as they are created to enhance regular saving and borrowing wisely. The modern business world faces innumerable challenges stemming from system orientation. In the quest to foster competitive advantage for higher profitability, financial institutions are increasing their focus on accountability. Savings and Credit Co-operative Societies (SACCOs) have been at the forefront of seeking competitive advantage through enhanced accountability (Olweny, 2019). These are member-owned financial institutions that aim to provide affordable financial services to their members. Members pool their resources together, and the society uses the funds to provide loans and other financial services to members at affordable rates. SACCOs are formed for various reasons, including mobilizing savings, providing credit, and improving the social welfare of members (Dary & Grashuis, 2021). In Kenya, SACCOs are increasingly becoming popular among low and middle-income earners as a source of financial assistance. According to the Ministry of Industry, Trade and Cooperatives, there were over 14,000 registered cooperative societies in Kenya by the end of 2020 (Kenya Union of Savings and Credit Cooperatives Ltd [KUSCCO], 2023). However, these financial entities face various challenges, including poor internal audit systems, which may affect their financial performance.

#### **1.1.1 SACCOs**

Cooperative societies are globally renowned as member-owned organizations that operate on the principles of cooperation and mutual assistance to achieve common economic, social, and cultural goals. They originated in the 19th century in Europe and have since spread worldwide. Cooperative societies and SACCOs are prevalent across the globe, with an estimated 1 billion members and 3 million cooperatives operating in various sectors, such as agriculture, finance, and housing (International Cooperative Alliance [ICA], 2020). These organizations play an important role in promoting the promotion of long-term growth and progress and reducing poverty by providing members with access to essential services such as credit, insurance, healthcare, education, and housing. Cooperatives also contribute to job creation, wealth distribution, and community development, making them a critical tool for achieving the United Nations Sustainable Development Goals (SDGs).

In recent years, there has been a renewed focus on cooperatives as a model for promoting inclusive and sustainable development. The United Nations has declared 2022 as the International Year of Cooperatives to raise awareness of the role that cooperatives can play in achieving the SDGs and to promote their development (United Nations [UN], 2021). In the financial sector, SACCOs have emerged as an alternative to traditional banks, providing affordable credit and other financial services to their members. SACCOs have been particularly successful in countries such as Kenya, where they account for a significant share of the financial sector and have played a crucial role in promoting financial inclusion and access to credit (Ministry of Industry, Trade, and Cooperatives, 2021). Overall, the global outlook on cooperative societies and SACCOs is positive, with increasing recognition of their potential to promote sustainable development, reduce poverty, and address economic and social challenges.

From an African continental perspective, SACCOs are successful entities. The first SACCO Society was introduced in Africa by Father John Mcnulty in Ghana in 1959. Cooperatives have played a significant role in Africa's development, with a long history that dates back to the colonial period. They emerged as a response to exploitative practices by colonial powers. In many African countries, cooperative societies were initially formed to address the challenges of poverty and economic inequality, and to promote rural development. Over the years, cooperative societies and SACCOs have evolved to become important players in the financial sector, providing access to credit, savings, and other financial services to millions of Africans. In recent years, the African Union has recognized the potential of cooperatives to promote economic growth and development and has called for their promotion and support.

SACCOs were first established in Kenya in the 1960s to mobilize savings and provide credit to their members. Over the years, SACCOs have expanded their operations to include other financial services, such as insurance and investment (Kabaiku, 2018). SACCOs operate in various sectors, including agriculture, transport, education, and health. Membership in SACCOs is open to individuals, groups, and organizations. Members of a SACCO are expected to pool their resources together, and the society uses the funds to provide loans and other financial services to members at affordable rates. Members are also expected to participate in the management of the SACCO by electing a board of directors to oversee the operations of the society. One of the advantages of SACCOs in Kenya is that they provide financial services to low-income earners who may not have access to mainstream financial institutions. SACCOs in Kenya provide loans to their members at affordable rates, making it easier for them to access credit. SACCOs also provide a platform for members to save their money and earn interest on their savings.

SACCOs in Kenya are regulated by the SACCO Societies Regulatory Authority (SASRA). SASRA is responsible for licensing, supervising, and regulating SACCOs in Kenya. SASRA's mandate is to ensure that SACCOs operate in compliance with the law and best practices. The growth of SACCOs in Kenya has been driven by various factors, including the need for affordable financial services, the desire for financial inclusion, and the government's support for SACCOs. The government has provided various incentives for SACCOs, including tax breaks, training, and financial support. Despite these, SACCOs in Kenya face various challenges, including poor governance, inadequate capitalization, and limited access to funding (Kahindi, 2020). Poor governance is a major challenge for SACCOs in Kenya, as it can lead to mismanagement of funds and fraud. Inadequate capitalization is also a challenge for SACCOs, as it limits their ability to provide financial services to their members. Limited access to funding is a challenge for SACCOSs as it restricts their ability to expand their operations and provide more financial services to their members. To address these challenges, SACCOs in Kenya have taken various measures, including improving their governance structures, increasing their capitalization, and seeking alternative sources of funding (Kahindi, 2020). SACCOs in Kenya have also embraced technology to improve their operations, such as the use of mobile banking and online platforms to provide financial services to their members.

Meru County in Kenya has a vibrant cooperative sector, with over 500 registered cooperatives that operate in various sectors, such as agriculture, transport, and finance (Towo, 2023). SACCOs are also prevalent in the county, with over 100 registered SACCOs that serve as a source of affordable credit for their members. The county government has recognized the potential of cooperatives to spur economic growth and has implemented various initiatives to support their development, such as the establishment of a cooperative development fund (County Government of Meru, 2021). In

Meru County, SACCOs play an important role in providing financial services to low and middle-income earners, who may not have access to mainstream financial institutions. Some of the prominent SACCOs in the county include Solutions SACCO, YETU SACCO, Capital SACCO, Centenary SACCO and Times U SACCO. Despite the important role played by SACCOs in Meru County, they face various challenges, including poor internal audit systems.

#### 1.1.2 Financial Performance

Kenya is home to over 14,000 cooperative societies, with over 10 million members and a total asset base of over Kshs 1 trillion. According to a report by Financial Sector Regulations (2020), the total assets for all SACCOs taking deposits experienced an 11.8% growth in 2019 to Kshs 555.9 billion. Further, there was a growth of 3.2% in the first half of 2020. In recent years, the financial performance of SACCOs in Kenya has been impressive, with many reporting strong growth in their loan portfolios, deposits, and profits. However, gross loans accounted for 73.9% of the total assets, meaning that despite the impressive growth, profitability is weak (Financial Sector Regulations, 2020). According to a recent report by the SACCOs Regulatory Authority (SASRA), the sector recorded an overall growth rate of 8.6% in total assets in 2020, despite the challenges posed by the COVID-19 pandemic (SACCOs Regulatory Authority [SASRA], 2022). One key indicator of financial performance in the SACCOs sector is the loan portfolio. In 2020, the total loan portfolio for the sector grew by 9.4%, reaching Kshs 491.7 billion (SASRA, 2022). This growth was driven by an increase in demand for credit, particularly among small and medium-sized enterprises (SMEs). SACCOs also reported a decrease in non-performing loans (NPLs) from 11.7% in 2019 to 10.2% in 2020, indicating an improvement in loan quality (SASRA, 2022).

Deposits are another important indicator of financial performance in the SACCOs sector. In 2020, total deposits grew by 7.8% to Kshs 631.9 billion, driven by increased mobilization efforts by SACCOs (SASRA, 2022). The growth in deposits is also an indication of the growing trust that members have in the sector, as more people opt to save with SACCOs instead of traditional banks. In terms of profitability, SACCOs in Kenya have also been performing well, though relatively weaker than banks. In 2020, the sector recorded a total profit of Kshs 22.6 billion, a 10.2% increase from the previous year (SASRA, 2022). This growth was largely driven by interest income, which accounted for 83.7% of total income. The increase in profitability is a reflection of the sector's focus on sound financial management, prudent lending practices, and effective risk management. However, most SACCOs are yet to optimize these processes.

# 1.1.3 Internal Audit Systems

Internal audit is an integral part of an organization's overall governance and risk management framework, playing a vital role in safeguarding financial performance. It involves systematically reviewing and evaluating an organization's operations, controls, and financial processes to ensure compliance, efficiency, and effectiveness (Chepngeno, 2017). In the context of Savings and Credit Cooperative Societies (SACCOs) in Meru County, Kenya, the internal audit system is crucial for maintaining financial performance.

The internal audit system helps SACCOs identify and mitigate risks that could affect their financial performance. Through regular audits, internal auditors assess the adequacy and effectiveness of internal controls, ensuring the accuracy, reliability, and compliance of financial transactions with relevant laws and regulations. By proactively identifying risks such as fraud, misappropriation, or operational inefficiencies, SACCOs can take timely corrective actions, minimizing financial losses and optimizing performance.

Moreover, internal audits enhance transparency and accountability within SACCOs. Conducting independent and objective assessments, internal auditors provide unbiased evaluations of financial processes and controls (Oussii & Taktak, 2018). This fosters trust among stakeholders, including members, regulators, and investors, which is essential for the sustained growth and stability of SACCOs. Additionally, the internal audit system ensures compliance with regulatory requirements, avoiding penalties and reputational damage.

Furthermore, the internal audit system contributes to improving internal processes and operational efficiency. Auditors offer valuable insights and recommendations for process enhancements, risk mitigation strategies, and cost-saving measures. By implementing these suggestions, SACCOs can streamline their operations, reduce wastage, and optimize resource allocation, ultimately leading to improved financial performance.

Quality internal audit systems are crucial for the financial performance of SACCOs worldwide. They help SACCOs identify and manage risks, improve operational efficiency, and ensure compliance with regulations and best practices (Abiodun, 2020). Effective internal audits enable SACCOs to identify risks, develop risk management strategies, improve operational efficiency, ensure compliance, and detect and prevent fraud, contributing to enhanced financial performance.

It is important to note that the SACCOs sector in Kenya still faces some challenges. One of the main challenges is the high cost of funds, which limits the ability of SACCOs to offer affordable loans to their members. The sector also faces regulatory challenges, with some SACCOs failing to comply with SASRA regulations, leading to the closure of some institutions. Internal audit systems are essential for SACCOs because they help to identify areas of weaknesses in the organization's operations, including fraud and other financial irregularities. A robust internal audit

system can help to prevent financial losses and improve the financial performance of the SACCOs. However, many SACCOs in Meru County face challenges in setting up effective internal audit systems, including limited resources, lack of skilled personnel, and inadequate training.

#### 1.2 Statement of the Problem

Internal auditing has become a must practice in today's business. This is not enough since some of the systems are not able to give the expected results. SACCOs too are part of these businesses and have embraced the systems as a way of enhancing performance. Data from SACCO supervision annual report indicate that 10% of SACCOs had qualified audit reports in the year 2020 (SASRA, 2022). The main reasons behind the negative reports were fraud, poor fund management and poor budget development and utilization.

Effective internal audits help SACCOs to identify and manage risks, improve their operational efficiency, and ensure compliance with regulations and best practices (Abiodun, 2020). By ensuring compliance with regulations and best practices, SACCOs can avoid penalties, enhance their reputation, and improve their financial performance (Kiyieka & Muturi, 2018). Studies have been conducted on the relationship between financial performance of SACCOs and various other variables like internal control systems, corporate governance, internal audit systems among others and concluded that, even if the systems are considered appropriate but are not standardized then they might not yield the expected results (Magara, 2013; Chelangat, 2014; Wairimu, 2014). They further concluded that not one system that fits all the organization therefore emphasized on clear understanding of individual organizations before adopting a system. This is determined by factors

such as compliance, risk assessment, control activities, monitoring, communication, user competency and available resources to support the system.

Despite the presence of internal auditors who review the organization's internal control systems, some SACCOs experience liquidity problems and loss of funds through non-performing loans (Towo, 2023). For instance, in Meru County, some well-established SACCOs, like Ntiminyakiru SACCO collapsed due to fraud and fund loss (Olweny, 2019). There is a need to assess whether SACCOs are using quality internal audit systems to enhance their financial performance.

Therefore, this study sought to address the issue of unsatisfactory financial performance in SACCOs despite the introduction of internal audit system and try to evaluate effect of internal audit system on financial performance of SACCOs in Meru County.

# 1.3 General Objective

To examine the effect of internal audit system on financial performance of SACCOs in Meru County, Kenya

# 1.4 Specific Objectives

- To investigate how compliance affects the financial performance of SACCOs in Meru
   County.
- ii. To evaluate the effect of risk assessment on the financial performance of SACCOs in Meru County.
- To determine the influence of the control function on the financial performance of SACCOs in Meru County.

iv. To establish the effect of monitoring on the financial performance of SACCOs in MeruCounty.

# 1.5 Research Hypothesis

H01: There is no statistically significant effect of compliance on the financial performance of SACCOs in Meru County.

H02: There is no statistically significant effect of risk assessment on the financial performance of SACCOs in Meru County.

H03: There is no statistically significant effect of the control function on the financial performance of SACCOs in Meru County.

H04: There is no statistically significant effect of monitoring on the financial performance of SACCOs in Meru County.

## 1.6 Significance of the Study

The findings of this research could provide valuable insights to SACCO management, members, and regulators regarding the importance of implementing high-quality audit systems to reduce operational costs and mitigate risks. The results could also assist policymakers in understanding the role of effective audit systems in the financial performance of SACCOs. The recommendations derived from this study could help SACCO management enhance their internal audit systems, leading to improvements in compliance, risk assessment strategies, control function, and monitoring. Additionally, this research could serve as a point of reference for future scholars interested in this subject.

#### 1.7 Scope of Study

To examine the effect of the internal audit system on the financial performance of SACCOs in Meru County, this study was conducted in 42 SACCOs that have been operational for at least ten years. The selection of these 42 SACCOs was intentional, as they had been in existence long enough to experience the effects of the internal audit system on financial performance. Data was collected through questionnaires distributed to the chief executive officers of the 42 selected SACCOs.

The primary focus of SACCOs is on savings and credit activities, also known as BOSA (back office service activity). Additionally, some SACCOs are authorized to provide basic banking services, referred to as FOSA (front office service activity). Therefore, DT SACCOs (deposit-taking SACCOs) offer both BOSA and FOSA services, while NON DT SACCOs are only licensed to offer BOSA services. This study considered both DT SACCOs and NON DT SACCOs since they both engage in BOSA services, which is the primary function of a SACCO.

For purposes of this study, internal audit system was measured using four parameters namely, compliance, risk assessment, control function, and monitoring. The choice of the four variables was derived from the specific objectives of internal audit which include; minimize risks, ensure accuracy of records, promote efficiency, and encourage adherence to policies, rules, regulations and laws (Abiodun, 2020). Consequently, the four parameters chosen could objectively measure the extent to which a SACCO minimizes its risks, keeps accurate records, promotes efficiency in its operations, and adheres to policies, rules, regulations and laws.

#### 1.8 Limitations of the Study

The main limitation of this study was that monitoring techniques on internal audit system used by various SACCOs might be different hence the study could find a challenge in establishing a common ground of analyzing them. The study intended to minimize this challenge by ensuring that the data collection tool comprehensively addressed the four indicators identified to measure the quality of internal audit systems.

Another constraint of the study is that the assessment of the four independent variables relied on self-reporting, which may introduce subjectivity. To address this limitation, the respondents were reassured that the data collected would be used solely for academic purposes. Thus, there was a high chance that the scores given in respect to the four independent variables were objectively arrived at.

## 1.9 Assumptions of the Study

The study assumed that the SACCOs in Meru County embraced audit processes. Further, it was assumed that the four parameters of internal audit considered in this study were the core indicators of quality internal audit system. It was also assumed that the respondents could provide honest and adequate information, sufficient for analysis.

#### 1.10 Operational Definition of Terms

#### **Control Function**

This entails the obligation of safeguarding the organizational assets by offering other onuses that will augment the efficacy and efficiency of the operations of the company (Modibbo, 2015).

# Compliance

Compliance refers to all actions that assist a SACCO to observe with applicable laws and rules (Mathew, 2020).

## **Financial Performance**

This is the process of measuring the results of a firm's operations in monetary terms (Onyango, 2019).

# **Monitoring**

This is the process through which management ensures that an organization is in line with the laid down procedures to ensure that it is able to achieve its targeted goals (Costello & Wittenberg-Moerman, 2011).

#### **Risk Assessment**

Risk assessment involves a dynamic and interactive process for identifying and analyzing risks to achieve the company's objectives (Stewart & Subramaniam, 2010).

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter provides an overview of the literature and theories that support the themes and objectives derived from the research question. It is divided into sections focusing on compliance, risk assessment, control function, and monitoring. Additionally, the chapter presents a summary of the literature review, theoretical framework, and conceptual framework.

#### 2.2 Theoretical Review

This part examines the theories that underpin the research and explains their relevance to the research.

## 2.2.1 Agency Theory

Agency theory offers a valuable framework for understanding the relationship between SACCOs and their internal audit systems. According to agency theory, there is a potential conflict of interest between the principals (members) and the agents (management) of an organization (Gibbons, 1998). The agents are hired by the principals to manage the organization's resources, but they may prioritize their own interests over those of the principals, leading to agency costs (Gibbons, 1998). In the context of SACCOs, agency costs can arise if the management fails to implement an effective internal audit system, resulting in financial mismanagement, fraud, and other detrimental issues that impact the SACCO's financial performance (Gibbons, 1998). In such cases, the members bear the costs through lower investment returns or potential loss of savings.

An effective internal audit system serves to mitigate agency costs by providing a mechanism for monitoring and controlling management actions. Through the internal audit function, the SACCO can evaluate the effectiveness of its financial management processes, identify weaknesses, and recommend improvements (Gibbons, 1998). This ensures that the management acts in the best interests of the members and the organization as a whole.

Moreover, an effective internal audit system contributes to improved financial performance by detecting and preventing financial mismanagement, fraud, and other issues that may adversely affect the SACCO's financial health (Gibbons, 1998). This helps reduce the risk of financial losses and enhances profitability, ultimately benefiting the members through higher investment returns. Hence, the control function and monitoring play a vital role in ensuring that the SACCO management acts in the best interest of the members.

#### 2.2.2 Legitimacy Theory

The legitimacy theory is a concept in accounting and management that explains how organizations strive to maintain a positive image and reputation in the eyes of their stakeholders. This theory suggests that organizations seek to establish and maintain legitimacy by ensuring that their actions and decisions are consistent with societal norms and values. The legitimacy theory posits that organizations must demonstrate their social responsibility to their stakeholders to maintain legitimacy, which, in turn, enhances their long-term survival and financial performance. Subsequently, SACCO compliance with the set regulations improves their image by increasing trust among members. Compliance activities help SACCOs mitigate risks and safeguard the interests of members and stakeholders, fostering confidence and improving financial performance (Mathew, 2020).

In the context of SACCOs in Meru County, Kenya, the legitimacy theory is highly relevant. These SACCOs must operate in a manner that is consistent with the expectations of their members, regulators, and other stakeholders to maintain their legitimacy. In this regard, the adoption of an internal audit system is critical to ensuring that SACCOs operate in a manner that is consistent with the expectations of their stakeholders. By implementing an internal audit system, SACCOs can demonstrate their commitment to transparency, accountability, and good governance, which are critical components of legitimacy. The internal audit system is an essential tool that SACCOs can use to identify and mitigate risks that could impact their financial performance negatively. The internal audit system provides an objective and independent assessment of the SACCO's operations, including its financial systems and processes. Conducting independent and objective assessments, internal auditors provide unbiased evaluations of financial processes and controls (Oussii & Taktak, 2018).

The internal audit system is crucial for SACCOs because it helps to establish and maintain the trust of their stakeholders. It involves systematically reviewing and evaluating an organization's operations, controls, and financial processes to ensure compliance, efficiency, and effectiveness (Chepngeno, 2017). SACCO members, regulators, and other stakeholders expect SACCOs to operate in a transparent and accountable manner, and the internal audit system helps to ensure that this expectation is met. When SACCOs have a robust internal audit system in place, they can demonstrate to their stakeholders that they are committed to good governance, which enhances their legitimacy.

Another way that the legitimacy theory relates to the topic is through the concept of social responsibility. SACCOs must operate in a manner that is consistent with the social responsibility expectations of their stakeholders. This means that SACCOs must not only be financially

successful but also must demonstrate their commitment to the social well-being of their members and the wider community.

By adopting an internal audit system, SACCOs can demonstrate their commitment to social responsibility. The internal audit system helps SACCOs to identify areas where they can improve their operations, such as by reducing their environmental impact or promoting social and economic development in their communities. SACCOs that are seen as socially responsible are more likely to maintain their legitimacy and enhance their financial outcome.

## 2.2.3 Capture Theory

The Capture Theory is a concept in political science that explains how interest groups or individuals in a position of power can influence policy decisions to benefit their own interests rather than the public interest (Spiller, 1996). In this case, the interest group or individuals in a position of power would be the SACCO managers or board members who may have the incentive to manipulate financial information to benefit them at the expense of the SACCO and its members (Spiller, 1996).

The Capture Theory posits that interest groups or individuals can influence policy decisions by controlling the decision-making process. In the context of SACCOs, this can be achieved by controlling the internal audit system. If SACCO managers or board members can control the internal audit system, they can manipulate financial information to make the SACCO's financial performance appear better than it actually is. This can benefit them by attracting more members and investments, which can increase their power and influence in the SACCO. However, this can be detrimental to the SACCO and its members in the long run if the actual financial performance does not match the reported performance.

To prevent capture of the internal audit system, SACCOs need to implement strong governance mechanisms that promote transparency and accountability. This can be achieved through the establishment of an independent audit committee that oversees the internal audit system. The audit committee should comprise of independent members who are not SACCO managers or board members. This can ensure that the internal audit system is independent and free from manipulation (Hutchinson & Zain, 2009). Additionally, SACCOs need to establish effective internal control systems that can detect and prevent fraud or manipulation of financial information (Hutchinson & Zain, 2009). This objective can be accomplished by enacting and enforcing protocols that guarantee precise recording of all financial transactions and establish safeguards to prevent unauthorized access or manipulation of financial data.

# 2.3 Empirical Review

This section looks at the empirical review where the research looks at past literature that is related to the topic under study.

## 2.3.1 Compliance and Financial Performance of SACCOs

Compliance plays a vital role in the financial industry as it ensures that SACCOs adhere to guidelines and regulations, promoting transparency, accountability, and good governance. However, compliance activities can have both positive and negative effects on SACCOs' financial outcomes. While compliance activities protect SACCOs from legal and reputational risks, enhancing credibility and financial stability, they can also increase operational costs and administrative burdens, potentially impacting profitability and growth. Therefore, SACCOs must find a balance between compliance and financial performance, recognizing the importance of both for long-term success. Compliance activities help SACCOs mitigate risks and safeguard the

interests of members and stakeholders, fostering confidence and improving financial performance (Mathew, 2020). Studies have shown that effective internal control procedures significantly and positively impact SACCOs' financial performance, emphasizing the need for their implementation and monitoring (Wanjala & Riitho, 2020; Mungai et al., 2021). These internal control systems reduce incidences of fraud and enhance financial performance. Similarly, compliance activities improve transparency and accountability, earning the trust and confidence of members and stakeholders. By demonstrating ethical behavior and responsible governance, SACCOs build strong relationships that benefit the organization and its mission. However, compliance activities can also have drawbacks. They can be costly, time-consuming, and divert resources from crucial activities like marketing and product development. Excessive compliance can lead to bureaucracy, slow decision-making, and hinder innovation and growth opportunities. It is essential for SACCOs to strike a balance and avoid excessive compliance that may negatively impact financial performance (Wamukota et al., 2022). While compliance is necessary, SACCOs should also focus on cost optimization, risk management, and revenue generation to remain competitive and financially sustainable. The relationship between compliance activities and financial performance is complex and influenced by various factors, such as organization size, complexity, regulatory environment, and compliance risk. Generally, SACCOs with effective compliance programs and a culture of compliance tend to perform better financially. Effective compliance programs identify and mitigate risks, prevent losses, and improve transparency and accountability, boosting confidence and financial performance. Compliance can also differentiate SACCOs in a crowded market, attracting and retaining risk-averse members who value transparency and accountability. SACCOs that invest in compliance gain a competitive advantage and strengthen their position in the market.

#### 2.3.2 Risk Assessment and Financial Performance of SACCOs

Risk assessment policy holds significant importance in the financial management of SACCOs. It provides a structured approach for identifying, evaluating, and managing risks that could impact the financial performance of SACCOs. The effectiveness of risk assessment policy relies on its ability to promptly and effectively identify and mitigate risks. This response explores the relationship between risk assessment policy and SACCOs' financial performance.

One primary way in which risk assessment policy influences SACCOs' financial performance is through the identification and mitigation of credit risk. Credit risk refers to the potential loss arising from a borrower's failure to repay a loan (Aduda & Obondy, 2021). Efficient risk assessment policies enable SACCOs to promptly and accurately identify and assess credit risks. According to Aduda and Obondy (2021), effective credit risk management positively impacts financial performance by minimizing bad debts or loans. This enables SACCOs to mitigate the risk of default by establishing appropriate loan terms, conditions, and diversifying their loan portfolios. Consequently, SACCOs minimize their exposure to credit risk and enhance their financial performance.

Another significant way in which risk assessment policy affects SACCOs' financial performance is by identifying and mitigating operational risks. Operational risks encompass risks related to daily SACCO operations, such as fraud, errors, and system failures. Well-developed risk assessment policies assist SACCOs in identifying and evaluating operational risks, enabling them to implement suitable controls for risk mitigation. This, in turn, reduces operating costs, improves operational efficiency, and enhances financial performance (Omondi & Kibera, 2021).

Additionally, risk assessment policy contributes to the financial performance of SACCOs by identifying and mitigating market risks. Effective risk assessment policies aid SACCOs in identifying and assessing market risks, facilitating the implementation of appropriate hedging strategies for risk mitigation. By reducing their exposure to market risks, SACCOs can improve their financial performance (Akinsomi et al., 2019).

Finally, risk assessment policy impacts SACCOs' financial performance by bolstering their reputation and instilling investor confidence. SACCOs with well-established risk assessment policies are more likely to attract and retain members, as well as attract external investments. This, in turn, enhances the SACCOs' financial performance by increasing revenue streams and reducing the cost of capital (Muathe & Kombo, 2019). Overall, effective risk assessment policies play a crucial role in SACCOs' financial management. They help in identifying and mitigating credit, operational, and market risks while enhancing reputation and investor confidence. SACCOs with robust risk assessment policies are more likely to achieve improved financial performance.

## 2.3.3 Control Function and Financial Performance of SACCOs

The control function plays a crucial role in SACCOs by managing risks and ensuring efficient and effective operations. One significant impact of control activities on SACCOs' financial performance is the prevention of fraud and misappropriation of funds. Control measures like segregation of duties, access controls, and regular audits help prevent fraudulent activities by employees or members, leading to substantial cost savings and improved financial performance for the SACCO (Marita, 2016).

Another important way in which control activities affect SACCOs' financial performance is by ensuring compliance with legal and regulatory requirements. Control activities such as risk assessment, monitoring of internal controls, and regular reporting help SACCOs maintain compliance, safeguarding their financial performance (Miriti & Kobia, 2019). Additionally, control activities contribute to operational efficiency. Monitoring performance, benchmarking, and optimizing processes enable SACCOs to identify inefficiencies and areas for improvement, resulting in significant cost savings, increased productivity, and enhanced financial performance (Kagiri, 2023).

Loan management is a key area where control activities mitigate financial risks for SACCOs. As loan management is critical for SACCOs' financial sustainability, effective control activities in this area significantly impact their financial performance. Activities like credit risk assessment, loan appraisal, and loan monitoring help minimize delinquencies and defaults, leading to a healthier loan portfolio and improved financial performance (Towo, 2023). Similarly, control activities influence financial performance in SACCOs' investment management. Well-defined investment policies, risk management strategies, and due diligence ensure prudent investments and effective risk management, resulting in improved returns and enhanced financial performance for the SACCO (Munene & Ng'ang'a, 2020).

Furthermore, control activities play a vital role in the overall governance of SACCOs. Effective governance, achieved through control activities such as internal and external audits and board oversight, promotes transparency and accountability, leading to improved financial performance (Onyango, 2019). Effective control activities not only reduce financial risks but also enhance efficiency and governance in SACCOs, contributing to improved financial performance. SACCOs that prioritize strong control activities are more likely to achieve financial stability and growth, ensuring effective service to their members. Control activities are an integral part of SACCOs' financial management, impacting financial performance by preventing fraud, ensuring

compliance, improving operational efficiency, and enhancing governance. SACCOs that implement effective control activities are more likely to achieve better financial performance.

## 2.3.4 Monitoring and Financial Performance of SACCOs

Monitoring plays a crucial role in the financial performance of Savings and Credit Cooperative Societies (SACCOs). Effective monitoring enables SACCOs to identify risks, ensure compliance with regulations and policies, and make informed decisions. In this response, we will explore the relationship between monitoring and financial performance in SACCOs. One significant area where monitoring impacts financial performance is in loan management. SACCOs heavily rely on loan management for financial sustainability, and effective monitoring helps minimize loan delinquencies and defaults, leading to a healthier loan portfolio and improved financial performance. Monitoring enables early identification of potential defaulters, allowing appropriate action to avoid losses (Abuga & Bwisa, 2019).

Additionally, monitoring ensures SACCOs' compliance with regulations and policies, which is vital for their financial sustainability. By identifying areas of non-compliance, monitoring enables SACCOs to take corrective action and prevent any negative impact on financial performance (Githaiga, 2019). Effective monitoring also facilitates informed decision-making by analysing the vast amount of data collected and generated by SACCOs. It helps identify areas for cost reduction and efficiency improvement, thereby enhancing financial performance. Moreover, monitoring plays a significant role in effective risk management. It enables SACCOs to identify potential risks and take appropriate measures to mitigate them. For example, monitoring helps identify trends in loan delinquencies, allowing corrective action to reduce credit risk (Kagema & Otieno, 2019).

Furthermore, monitoring contributes to improving overall governance in SACCOs. By identifying weaknesses in governance structures and processes, effective monitoring enables SACCOs to implement corrective actions. This enhances transparency, accountability, and member confidence, leading to improved financial performance (Githaiga, 2019). Additionally, monitoring plays a crucial role in detecting and addressing fraud and corruption, which can significantly undermine financial performance. It helps identify anomalies in financial transactions and enables corrective action to prevent further losses (Mukira et al., 2022).

Moreover, monitoring enhances the quality of financial reporting, a critical aspect of financial performance. By ensuring accurate and compliant financial reports, monitoring increases the credibility of the SACCO and improves member confidence (Bett and Memba, 2017). Furthermore, monitoring helps SACCOs identify opportunities for revenue generation. By identifying areas for expansion and diversification, monitoring enables SACCOs to increase profitability and enhance financial performance (Odhiambo, 2016).

In summary, monitoring plays a critical role in the financial performance of SACCOs by reducing financial risks, ensuring compliance, informing decision-making, managing risks effectively, improving governance, detecting fraud and corruption, enhancing financial reporting, and identifying revenue opportunities. SACCOs that prioritize strong monitoring practices are more likely to achieve financial stability, growth, and effective member service.

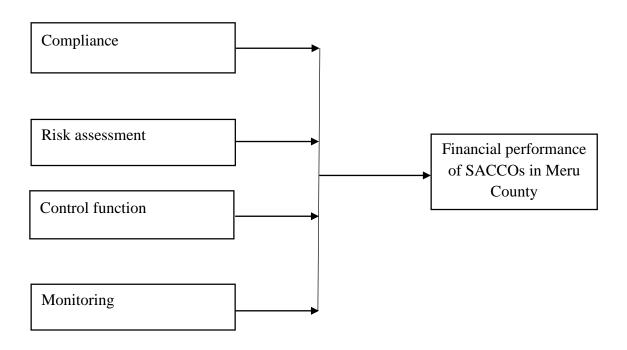
## 2.4 Conceptual Framework

The provided conceptual framework illustrates the connection between the dependent variable, which is financial performance, and the independent variables on the left side. These independent

variables consist of compliance activities, risk assessment, control activities, and monitoring activities.

Figure 2.1

Conceptual Framework



**Independent Variables** 

**Dependent Variable** 

# 2.4.1 Compliance

Compliance is an essential part of the financial industry. Compliance ensures that SACCOs follow the set guidelines and regulations, thus promoting transparency, accountability, and good governance. Compliance leads to enhanced accountability, improved transparency, early fraud detection, good governance, mitigation of legal risks and increased stakeholder's confidence. Subsequently, compliance is paramount in financial performance.

#### 2.4.2 Risk Assessment

Risk assessment is a critical component of internal auditing that helps identify, evaluate, and prioritize potential risks facing an organization (Stewart & Subramaniam, 2010). Risk assessment can help internal auditors identify and evaluate the risks that may impact the financial performance of the SACCOs. Once the risks have been identified, the next step is to evaluate the likelihood and impact of each risk. This helps internal auditors prioritize the risks and focus their efforts on those that pose the greatest threat to the financial performance of the SACCOs. In evaluating the likelihood of a risk, internal auditors may consider factors such as the frequency of occurrence, the historical trends, and the probability of the risk materializing (Stewart & Subramaniam, 2010). In assessing the impact of a risk, internal auditors may consider the potential financial, operational, or reputational damage that may result from the risk materializing. Based on the risk assessment, internal auditors can develop a risk management strategy that outlines the measures that the SACCO can take to mitigate, avoid, transfer, or accept the risks. The risk management strategy should be aligned with the SACCO's overall objectives and risk appetite.

### 2.4.3 Control Function

Control function is a crucial component of the internal audit system and plays a significant role in enhancing the financial performance of SACCOs (Modibbo, 2015). Control activities in SACCOs include regular audits, segregation of duties, regular reports, effective loan appraisal, effective board oversight, and due diligence. By implementing effective control activities, SACCOs can minimize risks, reduce financial losses, and enhance financial performance. These activities help

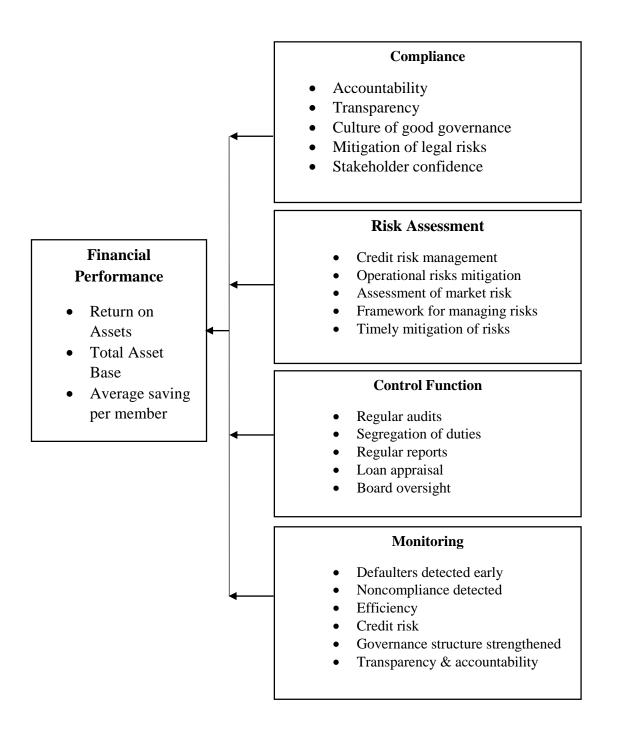
ensure that SACCOs comply with legal and regulatory requirements, minimize the risk of fraud or errors, and improve the accuracy of financial reporting. Ultimately, control activities help SACCOs achieve their objectives and enhance their financial performance (Modibbo, 2015).

## 2.4.4 Monitoring

An effective internal control system is indicated by a concrete valuation of quality and reliable financial reports (Costello & Wittenberg-Moerman, 2011). Effective monitoring leads to early detection of defaulters, reduction of credit risk, enhanced governance structure, enhanced transparency and accountability and ultimately increased efficiency. A strong internal control system is an indication of operational efficiency in the firm, which is key contributor of good financial performance.

Figure 2.2

Operational Framework



**Dependent variable** 

**Independent variables** 

## 2.5 Research Gap

From the literature reviewed, several researchers point out a significant association between internal audit and financial performance. However, little research has been done on the effect of internal audit system on financial performance of SACCOs, both locally and globally. Moreover, the researchers focused on the dimensions of internal auditors such as internal audit qualifications, internal audit roles, reporting structure and records accessibility. This study focused on the objectives of internal audit and thus utilized compliance, risk assessment, control function, and monitoring as the parameters for internal audit system. Hence, this study sought to fill this gap by investigating the effects of internal audit system on financial performance of SACCOS in Meru County, Kenya.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter outlines the approach and structure of the investigation. It emphasizes the study's design, study site, intended participants, methods of sampling and determining sample size, tools for data collection and their administration, as well as the instruments' credibility and consistency. Moreover, it delves into the examination and interpretation of the gathered data.

## 3.2 Research Design

According to Mccusker and Gunaydin (2015), a research design encompasses a comprehensive plan outlining procedures and approaches to gather data for a thorough evaluation. It involves identifying data, selecting tools and techniques for data collection, administering the tools, and organizing and analyzing the collected data. Mills (2018) assert that research design helps address the who, what, when, where, and how questions associated with a particular study. For this inquiry, a research design focused on providing detailed information was employed. As stated by Kothari (2004) the primary objective of descriptive research is to depict the current state of affairs. The choice of this research design was based on its suitability for capturing the population's perception in relation to the research questions (Ponto, 2017). Therefore, the descriptive design was deemed appropriate for examining the effect of the internal audit system on the financial performance of SACCOs in Meru County. Consequently, the study described the effect of compliance, risk

assessment, control function, and monitoring on financial performance of SACCOs in Meru County.

## 3.3 Location of the Study

Bell (2014) defines location of the study as the place where data needed in a study would be collected. This study was located in Meru County. Meru County is located in Kenya, in the eastern region of the country. It covers an area of approximately 6,325 square kilometers and has a population of over 1.4 million people, according to the 2019 national census. The County is bordered by Tharaka-Nithi County to the south, Isiolo County to the north, Kitui County to the west, and Laikipia County to the northwest. The county is predominantly inhabited by the Meru people, who are known for their rich cultural heritage, including music, dance, and traditional customs. The County's economy is largely driven by agriculture, with tea, coffee, and horticulture being the main cash crops grown in the region. Based on Singleton et al. (1993) perspective, an optimal environment for research is characterized by its relevance to the researcher's interests, ease of accessibility, and the potential to establish an immediate connection. The County is chosen since the researcher is familiar with the study area. Specifically, the researcher is a cooperative officer in the County where his daily duties involves visiting the SACCOs to ensure they are compliant with the set regulations. Besides, Meru County is chosen because it harbors many businesses, corporates and institutions that transact in large volume of money. These entities operate financial transactions that are greatly saved in the SACCOs. Apart from that, the location of a central bank in the area signifies that the money circulation in the region is significantly high.

## 3.4 Target Population

The study comprised 42 SACCOs in Meru County that were in operation for a minimum of ten years. The deliberate selection of the 42 SACCOs was based on their long-standing presence, ensuring they had sufficient time to observe the influence of the internal audit system on financial performance. The respondents comprised the chief executive officers of the respective SACCOs. Hence total respondents for the study were 42 respondents. The CEOs of the SACCOs are chosen as respondents since they are responsible for presenting financial reports to the SACCO boards. Besides, SACCOs being financial institutions, the CEOs are well versed with the internal audit systems and the financial performance of their institutions.

### 3.5 Sampling Design

The research conducted encompassed a complete enumeration of all forty-two SACCOs that have been operational in Meru County over the past decade (Kothari, 2004).

### 3.6 Data Collection Instruments and Procedure

Structured questionnaires were employed as the method of data collection. These questionnaires play a vital role in gathering information from a large population, as affirmed by (Kombo & Tromp, 2009). Orodho (2014) supports this notion by stating that questionnaires are the most commonly utilized research instruments for obtaining essential data about the population under investigation. In this study, a questionnaire was specifically designed to gather information regarding the effect of the internal audit system on the financial performance of SACCOs in Meru County. The questionnaire consists of six sections. Section A includes three items related to the respondents' demographic information. Section B comprises eight items pertaining to compliance

(independent variable one), while section C contains eight items on risk assessment (independent variable two). Additionally, section D encompasses eight items concerning control activities (independent variable three), and section E involves eight items concerning monitoring activities (independent variable four). In addition, section F has fifteen items on financial performance (dependent variable). The questionnaire will be administered to the CEO of the respective SACCOs.

### 3.7 Pre-testing

Performing a preliminary test holds significant importance in research since it contributes to the verification and dependability of research tools like questionnaires. In this particular investigation, a preliminary test was conducted on four SACCOs situated in Tharaka-Nithi County, amounting to 10% of the total target population. According to Mugenda and Mugenda (2003), the pre-test sample size should range between 1% and 10% of the intended study population. The selection of the pre-test sample was accomplished through purposive sampling.

Tharaka – Nithi County was chosen for the pilot study because it shares similarities with Meru County in terms of culture, socio-economic activities, and proximity. The SACCOs in Tharaka – Nithi County might face same scenarios in terms of quality internal audit systems and financial performance, which made them an appropriate pre-test sample for this study. The pre-test helped eliminate researcher bias and ambiguities in the questionnaire. By conducting a pre-test, the researcher identified issues with the questionnaire and refined it before distributing it to the study's target population. Pre-testing also helped to reduce or eliminate the shortcomings of the questionnaire, ensuring that it is clear, concise, and easy to understand.

### 3.7.1 Validity of the Research Instruments

Validity of research instruments is critical in ensuring that the data collected is reliable and credible (Robson, 2011). Content validity is an essential aspect of validity that ensures that the research instrument used in the study adequately measured the construct under investigation. The determination of content validity relies on the extent to which the research instruments align with the study's objectives. In this instance, the questionnaire specifically concentrated on examining the impact of internal audit systems on SACCO financial performance. As a result, the research instrument included pertinent items that effectively captured the crucial aspects of the internal audit system and SACCO financial performance. To ensure content validity, various items that try to measure elements of internal audit system were included. Each of the four elements had seven parameters to effectively measure the internal audit system component. This will ensure that the research instruments captured different aspects of internal audit system.

# 3.7.2 Reliability of the Research Instruments

Reliability pertains to the degree to which a questionnaire, observation, test, or any measurement method consistently yields comparable outcomes when repeated experiments are conducted (Orodho, 2009). For this study, internal consistency reliability was employed; this evaluates the degree to which the items on the test or instruments are effectively measuring the identical concept (Yin, 2013). According to Lewandowski (2011), Cronbach's alpha is especially valuable for interval-level measurements with multi-item scales. It requires a single administration and offers a numerical assessment of the internal consistency of a scale. A higher value of Cronbach's alpha coefficient, approaching 1, indicates stronger internal consistency reliability. Typically, a Cronbach's alpha of 0.8 is considered good, a range of 0.7 is acceptable, and below 0.6 is considered poor (Kothari, 2004). Hence, in the pilot study, the Cronbach's alpha coefficient was

computed for each of the study variables. The Cronbach's alpha coefficient for the seven compliance items was found to be .863. for the seven risk management items was .827, for the seven control activities items was .786, and for the seven monitoring activities items was .886. Therefore, it was determined that the items in the study demonstrated satisfactory internal consistency.

## 3.8 Data Analysis and Presentation

The examination of the data involved arranging and organizing the collected information to uncover patterns, relationships, and trends present within it. To ensure accuracy in data analysis, proper coding techniques were employed. The data analysis was conducted using SPSS version 24. For summarizing the data and presenting the results in a meaningful and comprehensible manner, descriptive statistics were utilized. This included frequencies, percentages, and means. Additionally, inferential statistics were employed in the study to test hypotheses and make predictions based on the collected data. The study used a significance level of .05 to assess the hypotheses, a p-value below .05 was deemed as statistically significant in this context. To determine the components of the internal audit system that had a noteworthy correlation with the financial performance of SACCOs in Meru County, a multiple linear regression model was utilized. Before conducting the multiple linear regression, tests were performed to assess the fulfillment of assumptions such as normality, linearity, multicollinearity, and homoscedasticity to ensure that none of these assumptions were violated.

The mathematical representation of the study's Multiple Linear regression model was as follows:

$$Y = \beta_0 + \beta_1 C + \beta_2 R + \beta_3 K + \beta_4 M + e$$

Where:

Y is the financial performance of SACCOs

 $\beta_0$  is the intercept

 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$  are the regression coefficient for the contribution of each independent variable (Compliance, Risk assessment, Control function, Monitoring) to the financial performance of

SACCOs.

e is the residual of the regression equation

### 3.9 Ethical Issues

The researcher obtained an introduction letter from Kenya Methodist University and obtained a research permit from the National Commission for Science, Technology, and Innovation, as well as the Cooperative department at the County office. Additionally, the researcher got permission from the CEOs of the relevant SACCOs. The participants were then provided with self-administered questionnaires.

The participants were kindly asked to voluntarily provide the necessary information to facilitate the successful completion of the study. They were given assurance that information provided was to be handled with the highest level of confidentiality, kept anonymous, and utilized solely for educational purposes.

### **CHAPTER FOUR**

### **RESULTS AND DISCUSSIONS**

#### 4.1 Introduction

This chapter showcases the findings derived from the data analysis. The data analysis aligns with the specific objectives of the study, exploring patterns, interpreting them, and drawing meaningful conclusions. Furthermore, a comprehensive discussion is presented, highlighting the comparison between the current findings and those of other relevant studies conducted in similar areas.

## **4.1.1 Response Rate**

The collection of data used in research was carried out through the utilization of questionnaires. 42 questionnaires were given to the selected participants. Table 4.1 displays the completion of 41 questionnaires, representing 97.6% of the total, which is considered acceptable as stated by Mugenda and Mugenda (2003) as a return rate above 50% is deemed satisfactory. The high response rate can be attributed to the researcher's position as a cooperative officer in the County, establishing a strong rapport with the respondents. The information retrieved was then examined by the help of the statistical software package SPSS Version 24, with findings arranged and showcased in tables and charts.

Response Rate

**Table 4.1** 

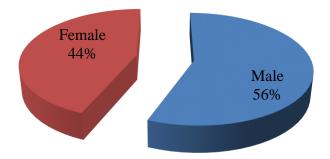
No. Distributed	No. Completed	Percentage Completed
42	41	97.6%

# 4.2 Demographic Information

Gaining insight into the demographic details of the participants, such as their gender, level of education, and work experience at the SACCO, was crucial. This was motivated by the objective of seeking perspectives on the impact of the internal audit system on the financial performance of SACCOs in Meru County from participants with diverse demographic backgrounds. The findings presented in the Figure 4.1, it was observed that 56% of the participants were male, whereas 44% were female. These findings suggest that the study achieved a balanced and nearly equal representation of both genders.

Figure 4.1

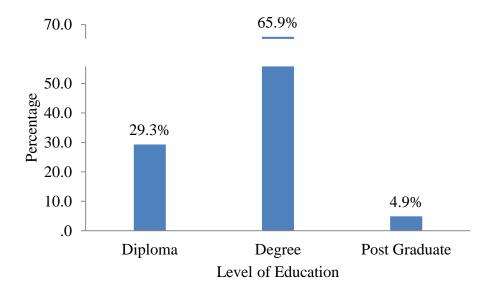
Distribution of Respondents by Gender



The participants were requested to indicate their highest level of educational attainment. As illustrated in Figure 4.2, 65.9% possessed a bachelor's degree, 29.3% held a diploma, and 4.9% held a postgraduate degree. These findings suggest that all the participants possessed educational qualifications that were adequate for providing responses to the inquiries regarding the effect of the internal audit system on the financial performance of SACCOs in Meru County. Over two-thirds of the participants possessed a minimum of an undergraduate degree, while the remaining individuals had a diploma qualification. This was advantageous for the study since all respondents, based on their educational background, were able to effectively comprehend the questionnaire items.

Figure 4.2

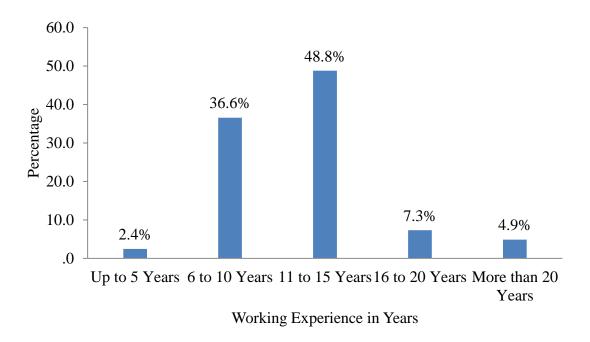
Distribution of Respondents by Level of Education



The third item within the demographic section of the questionnaire aimed to gather information on the respondents' work experience at their respective SACCOs. The findings presented in Figure 4.3 demonstrate that 48.8% of the participants had accumulated a working experience of 11 to 15 years, while 36.6% had 6 to 10 years of experience. Additionally, 7.3% possessed a working experience of 16 to 20 years. Furthermore, 4.9% had more than 10 years of experience, while 2.4% had worked at their respective SACCOs for less than 6 years. These results indicate that the respondents had been employed at their respective SACCOs for a considerable period; this enabled them to offer dependable answers regarding the influence of the internal audit system on the financial performance of SACCOs in Meru County. It is worth mentioning that fewer than 5% of the participants worked for less than six years.

Figure 4.3

Distribution of Respondents by Length of Working Experience



# 4.3 Descriptive Analysis of Study Variables

The aim of the research was to examine the impact of the internal audit system on the financial performance of SACCOs in Meru County. Specifically, the study sought to investigate the association between compliance, risk assessment, control function, monitoring, and the financial performance of SACCOs in Meru County. A comprehensive descriptive analysis of the four independent variables and the dependent variable is presented.

# 4.3.1 Compliance and Financial Performance of SACCOs in Meru County

The primary goal of objective one was to examine how compliance affects the financial results of SACCOs in Meru County. The assessment of compliance was conducted through item four of the

questionnaire, which encompassed seven parameters. Specifically, the inquiry was whether their SACCO's compliance with relevant regulations had improved transparency, accountability, and stakeholders' trust and confidence. As depicted in Table 4.2, 58.6% of the respondents reported that their SACCO's compliance had indeed enhanced transparency and accountability, with 29.3% agreeing and a similar proportion strongly agreeing. Conversely, 24.4% held a different perspective, with 14.6% strongly disagreeing and 9.8% disagreeing. Approximately 17.1% of the respondents remained unsure and provided a neutral response. These findings suggest that, to a large extent, SACCOs' compliance with regulations facilitated transparency and accountability, while less than a quarter of the respondents had an opposing view. These results align with Mathew (2020) findings, which emphasized that compliance plays a crucial role in promoting transparency, accountability, and good governance within SACCOs, subsequently leading to increased confidence and improved financial performance.

Regarding item 4 (ii), participants were asked whether SACCOs' compliance with relevant regulations had helped mitigate risks and safeguard the interests of members and stakeholders. Approximately 61.0% of the participants indicated that their SACCO's compliance had successfully mitigated risks, with 56.1% agreeing and 4.9% strongly agreeing. Conversely, 24.4% expressed a differing opinion, with 14.6% disagreeing and 9.8% strongly disagreeing. A small proportion (14.6%) remained uncertain and provided a neutral response. These results suggest that, to a large extent, SACCOs' compliance with regulations effectively reduced risks and protected the interests of members and stakeholders. This finding supports Aduda and Obondy (2021) assertion that effective compliance programs contribute to risk identification and mitigation, fostering confidence in the organization and enhancing its financial performance.

Item 4 (iii) aimed to determine whether SACCOs' compliance with regulations had helped prevent losses through the early identification of fraud and theft. A big number of the participants (58.6%) noted that compliance with the applicable regulations had indeed prevented losses through timely fraud and theft detection, with 48.8% agreeing and 9.8% strongly agreeing. Conversely, approximately a quarter of the respondents (24.4%) held a contrary view, with 17.1% disagreeing and 7.3% strongly disagreeing. Additionally, around 17.1% of the respondents remained uncertain and gave a neutral response. These results indicate that, to a large extent, SACCOs' compliance had successfully prevented losses by promptly identifying fraud and theft. These findings are consistent with Wanjala and Riitho (2020) research, which highlighted the positive impact of compliance on fraud mitigation in deposit-taking SACCOs. Compliance measures enable SACCOs to identify potential defaulters early and take appropriate action to avoid losses.

With respect to item 4 (IV), participants were asked whether SACCOs' compliance with regulations had contributed to the inculcation of a culture of good governance. More than half of the respondents (58.5%) affirmed that their SACCO had indeed fostered a culture of good governance through compliance with existing regulations, with 51.2% agreeing and 7.3% strongly agreeing. However, 24.4% expressed a differing opinion, with 19.5% disagreeing and 4.9% strongly disagreeing. Less than a fifth of the respondents (17.1%) remained unsure and provided a neutral response. These Results indicate that a large proportion (58.5%) of the respondents believed that SACCOs' compliance with regulations had contributed to the cultivation of a culture of good governance. This finding is in line with Onyango (2019) study, which suggested that compliance plays a crucial role in promoting good governance practices and improving the financial result of SACCOs. Compliant SACCOs are more likely to attract and retain members by providing effective services.

Item 4 (v) explored whether SACCOs' compliance with regulations had helped protect them from legal and reputational risks, thus enhancing their credibility. A majority (53.7%) of the respondents affirmed that their SACCOs were indeed shielded from legal and reputational risks due to compliance with laid-down regulations, with 43.9% agreeing and 9.8% strongly agreeing. However, 24.4% expressed a differing view, with 22.0% disagreeing and 2.4% strongly disagreeing. Approximately a fifth (22.0%) of the respondents remained uncertain and provided a neutral response. These findings indicate that SACCOs' compliance with regulations significantly enhanced their credibility. More than half of the respondents supported this opinion. The results align with Wanjala and Riitho (2020) findings, suggesting that compliance can safeguard SACCOs from legal and reputational risks, thereby enhancing their credibility and financial stability.

Regarding item 4 (vi), respondents were asked whether SACCOs' compliance with regulations had led to increased stakeholder confidence. Approximately 56.1% of the participants confirmed that their SACCOs had experienced increased stakeholder confidence as a result of compliance with regulations, with 43.9% agreeing and 12.2% strongly agreeing. On the other hand, 24.4% held a contrary view, with 17.1% strongly disagreeing and 7.3% disagreeing. Close to a fifth (19.5%) of the respondents remained unsure and provided a neutral response. These results suggest that, to a large extent, SACCOs' compliance with regulations had indeed generated increased stakeholder confidence. Fewer than 25% of the participants held a divergent viewpoint. These findings support Aduda and Obondy (2021) claim that effective compliance programs can lead to heightened confidence in the organization and improved financial performance.

Lastly, item 4 (vii) aimed to determine whether SACCOs' compliance with regulations had facilitated risk identification and management. A majority (58.6%) of the respondents confirmed that compliance with relevant regulations had indeed enhanced risk identification and

management, with 41.5% agreeing and 17.1% strongly agreeing. Conversely, 24.4% expressed a different viewpoint, with 19.5% strongly disagreeing and 4.9% disagreeing. Around 17.1% of the respondents remained uncertain and provided a neutral response. These findings indicate that, to a large extent, SACCOs' compliance with regulations significantly improved risk identification and management. More than half of the respondents supported this opinion. The results are consistent with Muathe and Kombo (2019) study, which emphasized the positive impact of compliance on attracting and retaining risk-averse members who value transparency and accountability.

Given the strong correlations among the answers provided for the seven items, the researcher chose to utilize a summated scale approach in evaluating compliance. The responses from the seven items were combined to create a "compliance scale." The Cronbach's coefficient alpha for the seven compliance items was .863, indicating good internal consistency. The range of the compliance scale was 7 to 35.

**Table 4.2** 

**Compliance Activities** 

Compliance Activities		SD		D	D N		A		SA	
Item on Compliance Activity	F	%	F	%	F	%	F	%	F	%
My SACCO compliance with the relevant regulations has improved transparency and accountability, which has increased the trust and confidence of stakeholders	6	14.6	4	9.8	7	17.1	12	29.3	12	29.3
My SACCO compliance with the relevant regulations has mitigated risks and protected the interests of members and stakeholders	4	9.8	6	14.6	6	14.6	23	56.1	2	4.9
My SACCO compliance with the relevant regulations has helped to prevent losses through early identification of fraud and theft	3	7.3	7	17.1	7	17.1	20	48.8	4	9.8
My SACCO compliance with the relevant regulations has helped in inculcating a culture of good governance	2	4.9	8	19.5	7	17.1	21	51.2	3	7.3
My SACCO compliance with the relevant regulations has helped protect the SACCO from legal and reputational risks, thus enhancing its credibility	1	2.4	9	22.0	9	22.0	18	43.9	4	9.8
My SACCO compliance with the relevant regulations has led to increased confidence by stakeholders	7	17.1	3	7.3	8	19.5	18	43.9	5	12.2
My SACCO compliance with the relevant regulations has helped in risk identification and management	8	19.5	2	4.9	7	17.1	17	41.5	7	17.1

The participants were requested to express their views regarding the impact of compliance on enhancing SACCO performance. As depicted in Table 4.3, 63.4% of the respondents rated the effectiveness of compliance as above average, 26.8% provided an average rating, and 9.8%

believed that compliance was highly effective, resulting in an excellent rating. These findings indicate that, according to the respondents' opinions, compliance plays a significant role in enhancing SACCO performance. More than two-thirds of the participants assigned either an above-average or excellent rating to compliance.

Table 4.3

Respondents Opinion on the Effectiveness of Compliance Activities

Rating	Frequency	Percent
Excellent	4	9.8
Above Average	26	63.4
Average	11	26.8
Total	41	100.0

## 4.3.2 Risk Assessment and Financial Performance of SACCOs in Meru County

The second aim of the study focused on investigating the influence of risk assessment on the financial performance of SACCOs in Meru County. Risk assessment was evaluated using seven parameters gathered from item six of the questionnaire. Regarding item 6 (i), participants were requested to evaluate whether the implementation of efficient credit risk management in their SACCOs had enhanced financial performance by minimizing bad debts. As depicted in Table 4.4, 41.5% of the participants agreed that improved financial performance resulted from effective credit risk management, with 22.0% strongly agreeing and 19.5% agreeing. Conversely, 22.0% held a different opinion, and 36.6% provided a neutral response. These results suggest that the financial result of the SACCOs experienced a moderate improvement due to the implementation of effective credit risk management. Approximately two fifths of the respondents supported this view, aligning

with the findings of Aduda and Obondy (2021) who suggested that effective risk assessment policies contribute to the timely identification and assessment of credit risks, ultimately improving financial performance by minimizing bad debts.

Item 6 (ii) focused on whether SACCOs identified and mitigated operational risks, leading to improved financial performance by reducing operational costs and enhancing efficiency. Approximately 43.9% of the respondents confirmed that their SACCOs experienced enhanced financial performance due to the identification and mitigation of operational risks. Within this group, 24.4% agreed and 19.5% strongly agreed. Conversely, 22.0% held a differing opinion, and 34.1% were unsure. These results indicate that, to a moderate extent, SACCOs successfully identified and mitigated operational risks, resulting in improved financial performance by reducing operational costs and enhancing efficiency. This finding aligns with the research of Omondi and Kibera (2021) who emphasized that effective risk assessment contributes to reduced operating costs, improved efficiency, and enhanced financial performance.

Regarding item 6 (iii), respondents were asked whether their SACCO had an effective risk assessment policy that enhanced reputation and increased investor confidence. The majority of the participants (41.5%) indicated that their SACCO had an effective risk assessment policy that improved financial performance. Among them, 22.0% agreed, and 19.5% strongly agreed. However, 22.0% held a different opinion, and 36.6% were unsure. These results suggest that, to a moderate extent, the SACCOs possessed an effective risk assessment policy that enhanced their reputation and increased investor confidence. This finding supports the research conducted by Muathe and Kombo (2019) who stated that effective risk assessment policies assist SACCOs in identifying and mitigating credit, operational, and market risks while improving their reputation and increasing investor confidence.

Item 6 (iv) assessed whether SACCOs regularly identified and assessed market risks, resulting in reduced exposure to such risks. The majority of the respondents (41.5%) acknowledged that their SACCOs had reduced exposure to market risks through regular identification and assessment. Among them, 24.4% agreed, and 17.1% strongly agreed. However, 22.0% held a differing opinion, and 36.6% were unsure. These findings indicate that, to a moderate extent, the SACCOs consistently identified and assessed market risks, thereby reducing their exposure. These results are consistent with the research conducted by Akinsomi et al. (2019) which highlighted that effective risk assessment policies enable SACCOs to identify and assess market risks, leading to the implementation of appropriate hedging strategies and subsequent improvement in financial performance.

Item 6 (v) explored whether risk assessment policy was an important aspect of financial management in the respondents' SACCOs. More than two fifths of the participants (43.9%) emphasized the significance of risk assessment policy in the financial management of their SACCOs. Among them, 24.4% agreed, and 19.5% strongly agreed. Conversely, 22.0% held a differing opinion, and 34.1% were unsure. These results suggest that, to a moderate extent, risk assessment policy helped in the financial management of the SACCOs. Close to half of the respondents supported this view, which is consistent with the findings of (Omondi & Kibera, 2021) who highlighted the importance of risk assessment policy in SACCOs' financial management.

Item 6 (vi) aimed to determine whether the SACCOs had effective risk assessment policies that provided a framework for identifying, assessing, and managing risks. Nearly two fifths of the respondents (39.1%) confirmed that their SACCOs had effective risk assessment policies that facilitated the identification, assessment, and management of risks. Among them, 22.0% strongly agreed, and 17.1% agreed. However, 22.0% held a differing opinion, and 39.0% were unsure.

These findings indicate that, to a moderate extent, the SACCOs had effective risk assessment policies in place, offering a framework for identifying, assessing, and managing risks. These results align with the research conducted by Mathew (2020) who stated that risk assessment enables internal auditors to develop strategies for risk management, including measures to mitigate, avoid, transfer, or accept risks.

In relation to item 6 (vii), respondents were asked whether their SACCOs identified and mitigated risks in a timely and effective manner. The majority of the participants (41.5%) acknowledged that their SACCOs effectively identified and mitigated risks, with 22.0% agreeing, and 19.5% strongly agreeing. However, a small proportion (12.2%) held a differing opinion, and 36.6% were unsure. These findings suggest that, to a moderate extent, the SACCOs successfully identified and mitigated risks. More than two fifths of the respondents supported this view, which is consistent with the findings of (Muathe & Kombo, 2019) who revealed that effective risk assessment policies assist SACCOs in identifying and mitigating credit risks while enhancing their reputation and increasing investor confidence.

Considering the great associations among the answers retrieved from the seven items, the researcher opted to create a single aggregate measure for assessing risk management. The responses from the seven items were aggregated to form the "risk management scale." The internal consistency of the seven risk management items was good, as indicated by a Cronbach's alpha coefficient of .827. The risk management scale ranged from 7 to 35.

**Table 4.4** 

Risk Management

Risk Management	Ş	SD		D		N		A		SA
Item on Risk Management	F	%	F	%	F	%	F	%	F	%
In our SACCO, effective credit risk management has improved financial performance by minimizing bad debts/loans	0	0.0	9	22.0	15	36.6	8	19.5	9	22.0
My SACCO identifies and mitigates operational risks which has led to reduced operation costs and enhanced efficiency, resulting in improved financial performance	0	0.0	9	22.0	14	34.1	10	24.4	8	19.5
My SACCO has effective risk assessment policy that has led to enhanced reputation and increased investor confidence	0	0.0	9	22.0	15	36.6	9	22.0	8	19.5
My SACCO regularly identifies and assesses market risk, consequently reducing its exposure to market risk	0	0.0	9	22.0	15	36.6	10	24.4	7	17.1
In our SACCO, risk assessment policy is an important aspect of financial management	0	0.0	9	22.0	14	34.1	10	24.4	8	19.5
My SACCO has an effective risk assessment policy that provides a framework for identifying, assessing, and managing risks	0	0.0	9	22.0	16	39.0	7	17.1	9	22.0
My SACCO identifies and mitigates risks in a timely and effective manner	4	9.8	5	12.2	15	36.6	9	22.0	8	19.5

The participants were requested to provide their views on the effectiveness of risk assessment in improving SACCO performance. Table 4.5 demonstrates that 63.4% of the participants assessed the effectiveness of risk assessment as being higher than the average level, 19.5% rated it as average, and 17.1% considered risk assessment to be highly effective in enhancing SACCO

performance, giving it an excellent rating. These findings indicate that, according to the participants, risk assessment had a great influence on SACCO performance. More than four fifths of the respondents either rated it above average or excellent.

Table 4.5

Respondents Opinion on the Effectiveness of the Risk Assessment Strategy

Rating	Frequency	Percent
Excellent	7	17.1
Above Average	26	63.4
Average	8	19.5
Total	41	100.0

## 4.3.3 Control Function and Financial Performance of SACCOs in Meru County

The participants were asked to provide their opinions on the effectiveness of control activities in enhancing SACCO performance. Table 4.6 displays that 83.0% of the respondents affirmed that their SACCO had effective access controls that deterred fraud and misappropriation of funds, with 53.7% agreeing and 29.3% strongly agreeing. A small proportion of respondents (17.1%) remained unsure. These results indicate that the SACCOs had efficient access controls in place to prevent fraudulent activities. No participants held various views. This was in line with the findings of Wanjala and Riitho (2020) who argued that robust internal control systems significantly and positively impact fraud prevention in deposit-taking SACCOs.

Regarding item 8 (ii), over nine-tenths of the respondents (92.7%) confirmed that their SACCO conducted regular audits that prevented fraud and misappropriation of funds by employees, with 61.0% agreeing and 31.7% strongly agreeing. Only a small proportion of respondents (7.3%) were

unsure. These results indicate that the SACCOs consistently carried out audits to curb fraudulent activities. Nearly all respondents supported this view. This is consistent with the findings of (Marita, 2016) who argued that control activities such as regular audits can help prevent fraud and misuse of funds by SACCO employees, leading to reduced operational costs and improved financial performance.

In relation to item 8 (iii), slightly more than three-quarters of the respondents (75.6%) stated that their SACCO implemented effective segregation of duties to prevent employee fraud, with 48.8% agreeing and 26.8% strongly agreeing. Approximately a quarter of the respondents (24.4%) were unsure. These results suggest that the SACCOs practiced effective segregation of duties. No respondents held a differing opinion. These findings align with the research of (Marita, 2016) who emphasized the importance of segregation of duties in preventing fraud and misuse of funds by SACCO employees.

Item 8 (iv) investigated whether the SACCOs generated regular reports to comply with legal and regulatory requirements. Almost four-fifths of the respondents (79.8%) confirmed that their SACCO produced regular reports in line with legal and regulatory requirements, while a small proportion (19.5%) remained unsure. These results indicate that the SACCOs consistently generated reports in compliance with legal and regulatory standards. Almost all respondents supported this view. This is consistent with the assertion of Miriti and Kobia (2019) that highlighted that control activities such as regular reporting help ensure SACCO compliance with legal and regulatory requirements.

Regarding item 8 (v), the respondents were asked whether their SACCOs employed effective loan appraisal and monitoring processes to minimize loan defaults. A significant majority of the

respondents (75.6%) affirmed that their SACCOs had effective loan appraisal systems to mitigate loan defaults, with 39.0% agreeing and 36.6% strongly agreeing. Approximately a quarter of the respondents (24.4%) were unsure. These results suggest that the SACCOs had robust loan appraisal systems to reduce loan defaults. No respondents held a differing opinion. These findings are consistent with the research of Towo (2023) who demonstrated that SACCOs heavily rely on loan management for financial sustainability, and effective control activities in this area can significantly impact their financial performance by minimizing loan delinquencies and defaults.

Item 8 (vi) inquired whether the SACCOs conducted effective due diligence in making prudent investments. A large majority of the respondents (80.5%) affirmed that their SACCOs practiced due diligence, leading to prudent investment decisions, with 51.2% agreeing and 29.3% strongly agreeing. A small proportion of respondents (19.5%) were unsure. These results indicate that the SACCOs conducted due diligence, resulting in wise investment decisions. More than four-fifths of the respondents supported this view. This aligns with the findings of Munene and Ng'ang'a (2020) who indicated that control activities help ensure that investments are made with prudence and risks are effectively managed. As a result, effective investment management can lead to improved returns and enhanced financial performance of the SACCO.

Item 8 (vii) explored whether the SACCOs had effective board oversight to reinforce good governance practices. Over four-fifths of the respondents (82.9%) confirmed that their SACCO had effective board oversight, promoting good governance practices, with 46.3% agreeing and 36.6% strongly agreeing. A small proportion of respondents (17.1%) remained unsure. These results imply that the SACCOs had strong board oversight that fostered good governance practices. No respondents held a differing opinion. These findings are consistent with the research of Onyango (2019) who asserted that control activities such as internal audits, external audits, and

board oversight help promote good governance practices and improve the financial performance of the SACCO. Effective control activities can reduce financial risks, enhance efficiency, and strengthen governance, ultimately leading to improved financial performance. SACCOs that invest in robust control activities are more likely to achieve financial stability and growth while effectively serving their members.

Due to the strong associations observed among the responses to the seven items, the researcher made the decision to employ a composite score approach. The responses from the seven items were summed to create a "control activities scale." The Cronbach's coefficient Alpha for the seven items related to control activities was .786, indicating good internal consistency. The range of the control activities scale was 7 to 35.

Table 4.6

Control Activities

	N		A		,	SA
Item on Control Activity	F	%	F	%	F	%
My SACCO has effective access controls that has assisted prevention of fraud and misappropriation of funds by employees	7	17.1	22	53.7	12	29.3
My SACCO carries out regular audits that has assisted prevention of fraud and misappropriation of funds by employees	3	7.3	25	61.0	13	31.7
My SACCO practices effective segregation of duties that has assisted prevention of fraud by employees	10	24.4	20	48.8	11	26.8
My SACCO generates regular reports that has helped to ensure its compliant with legal and regulatory requirements	8	19.5	22	53.7	11	26.8
My SACCO employs effective loan appraisal and loan monitoring that has minimized loan defaults	10	24.4	16	39.0	15	36.6
My SACCO carries out due diligence that has ensured investments made are prudent	8	19.5	21	51.2	12	29.3
In my SACCO, there is effective board oversight has helped promote good governance practices	7	17.1	19	46.3	15	36.6

The participants were requested to provide their views on the effectiveness of control activities in improving SACCO performance. As illustrated in Table 4.7, 43.9% of the respondents rated the effectiveness of control activities as above average, while 41.5% gave an average rating. Additionally, 14.6% of the participants regarded control activities as highly effective in enhancing SACCO performance, giving them an excellent rating. These findings indicate that, according to the respondents, control activities have an outstanding positive impact on SACCO outcome. More

than half of the respondents either rated control activities above average or considered them excellent.

Table 4.7

Respondents Opinion on the Effectiveness of Control Activities

Rating	Frequency	Percent
Excellent	6	14.6
Above Average	18	43.9
Average	17	41.5
Total	41	100.0

## 4.3.4 Monitoring and Financial Performance of SACCOs in Meru County

The fourth objective of the research aimed to analyse how monitoring affects the financial outcome of SACCOs in Meru County. The study examined monitoring activities based on seven parameters in item ten of the questionnaire. Respondents were asked if their SACCOs conducted effective monitoring that helped identify potential defaulters early and take appropriate action to prevent losses. According to Table 4.8, approximately 73.2% of the respondents indicated that their SACCOs had effective monitoring systems for early detection of potential defaulters. About 22.0% were unsure, providing a neutral response, while 4.9% expressed a different opinion. These results suggest that SACCOs implemented effective monitoring, enabling early identification of potential defaulters and appropriate action to prevent losses. This finding aligns with Abuga and Bwisa (2019) discovery that monitoring aids SACCOs in identifying potential defaulters and taking necessary action.

Regarding item 10 (ii), respondents were asked if their SACCOs carried out effective monitoring that aided in identifying areas of non-compliance and taking corrective action. Around 82.9% of the respondents asserted that their SACCOs had effective monitoring, with 46.3% strongly agreeing and 36.6% agreeing. Only 17.1% were unsure, providing a neutral response. All participants had the same view. These results indicate that SACCOs effectively monitored non-compliance areas and took corrective action. This finding supports Githaiga (2019) argument that monitoring helps SACCOs identify non-compliance areas and take corrective action before any negative impact on financial performance occurs.

Concerning item 10 (iii), respondents were asked if their SACCOs carried out effective monitoring that aided in identifying areas to reduce costs and improve efficiency. More than three quarters (78.0%) of the respondents confirmed that their SACCOs had effective monitoring systems that identified cost reduction areas, with 51.2% strongly agreeing and 26.8% agreeing. Approximately 22.0% were unsure, providing a neutral response. These results indicate that SACCOs had an effective monitoring system for identifying areas to cut costs and enhance efficiency. Nearly four fifths of the respondents shared this opinion, which is consistent with the findings of Omondi and Kibera (2021) that monitoring helps SACCOs curb operational costs, improve efficiency, and enhance financial performance.

Regarding item 10 (iv), respondents were asked if their SACCOs carried out effective monitoring that aided in identifying trends in loan delinquencies and taking corrective action. Around 68.3% of the respondents affirmed that their SACCOs had effective monitoring systems for identifying delinquency trends, with 39.0% agreeing and 29.3% strongly agreeing. Approximately 29.3% were unsure, providing a neutral response, while 2.4% held a divergent opinion. These results indicate that SACCOs had effective monitoring systems for identifying trends in loan

delinquencies and taking appropriate action. Fewer than 5% of the participants expressed a dissenting viewpoint. These findings align with Towo (2023) conclusion that SACCOs with effective monitoring systems are likely to minimize loan delinquencies and defaults, resulting in a healthier loan portfolio and improved financial performance.

Concerning item 10 (v), respondents were asked if their SACCOs carried out effective monitoring that helped identify weaknesses in processes and took corrective action. Around 71.7% of the respondents affirmed that their SACCOs had effective monitoring systems for identifying faulty processes, with 39.0% agreeing and 31.7% strongly agreeing. Approximately 29.3% were unsure, providing a neutral response. These results suggest that SACCOs conducted effective monitoring, enabling the identification of faulty processes and the implementation of corrective action. These findings are consistent with Githaiga (2019) affirmation that effective monitoring helps SACCOs identify weaknesses in governance structures and processes, leading to corrective action, improved transparency, accountability, member confidence, and ultimately, enhanced financial performance.

Regarding item 10 (vi), respondents were asked if their SACCOs carried out effective monitoring that enhanced transparency and accountability. More than half (58.6%) of the respondents affirmed that their SACCOs had effective monitoring systems, with 36.6% strongly agreeing and 22.0% agreeing. Approximately 41.5% were unsure, providing a neutral response. These results indicate that SACCOs had effective monitoring systems that reinforced transparency and accountability. These findings align with Mathew (2020) discovery that effective monitoring is highly correlated with transparency, accountability, and good governance.

Concerning item 10 (vii), respondents were asked if their SACCOs had effective monitoring that aided the identification of anomalies in financial statements and took corrective action. The majority (80.5%) of the respondents attested that their SACCOs had effective monitoring systems, with 43.9% strongly agreeing and 36.6% agreeing. Approximately 19.5% were unsure, providing a neutral response. These results imply that SACCOs had effective monitoring systems that facilitated the detection of anomalies in financial statements and the implementation of corrective action. This finding aligns with Mukira et al. (2022) assertion that monitoring helps enhance the quality of financial reporting, which is crucial for financial performance.

To analyse the monitoring activities, the researcher reviewed the high correlations among the responses from the seven items. Consequently, a summated scale called the "monitoring activities scale" was created by summing the responses from the seven items. The Cronbach's coefficient Alpha for the monitoring activities items was .886, indicating good internal consistency. The monitoring activities scale ranged from 7 to 35.

Table 4.8

Monitoring Activities

_	D		D N		A		SA	
Item on Monitoring Activity	F	%	F	%	F	%	F	%
My SACCO carries out effective monitoring that has helped identify potential defaulters early and take appropriate action to avoid losses	2	4.9	9	22.0	13	31.7	17	41.5
My SACCO carries out effective monitoring that has helped to identify areas of non-compliance and take corrective action	0	0.0	7	17.1	15	36.6	19	46.3
My SACCO carries out effective monitoring that has helped identify areas to reduce costs and increase efficiency	0	0.0	9	22.0	11	26.8	21	51.2
My SACCO carries out effective monitoring that has helped to identify trends in loan delinquencies and take corrective action	1	2.4	12	29.3	16	39.0	12	29.3
My SACCO carries out effective monitoring that has helped identify areas of weakness in processes and take corrective action	0	0.0	12	29.3	16	39.0	13	31.7
My SACCO carries out effective monitoring that has helped improve transparency and accountability	0	0.0	17	41.5	9	22.0	15	36.6
My SACCO carries out effective monitoring that has helped identify anomalies in financial transactions and take corrective action	0	0.0	8	19.5	15	36.6	18	43.9

The participants were requested to express their views regarding the impact of monitoring activities on improving SACCO performance. As depicted in Table 4.9, 51.2% of the respondents evaluated the effectiveness of monitoring activities as higher than the norm, while 24.4% provided an average rating, and an additional 24.4% stated that monitoring activities greatly enhanced SACCO performance, giving an outstanding rating. These findings indicate that, according to the

participants, monitoring activities had a substantial positive effect on SACCO performance. Over three-quarters of the respondents either rated it above average or excellent.

Table 4.9

Respondents Opinion on the Effectiveness of Monitoring Activities

Rating	Frequency	Percent
Excellent	10	24.4
Above Average	21	51.2
Average	10	24.4
Total	41	100.0

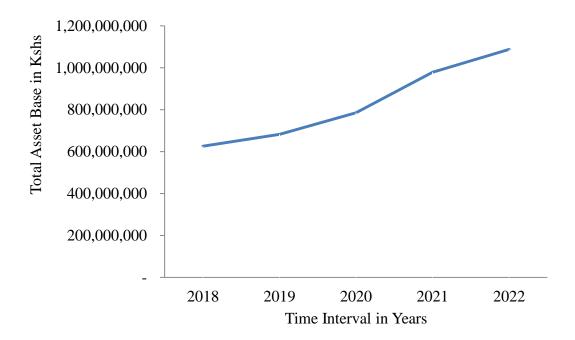
### 4.3.5 Financial Performance of SACCOs in Meru County

The study focused on financial performance as the dependent variable. To assess financial outcomes, three parameters were utilized: return on assets, total asset base, and average savings per member. This section provides a descriptive analysis specifically for total asset base and average savings per member. Return on assets, on the other hand, was employed for inferential analysis, particularly for regression and correlation analysis.

As illustrated in Figure 4.4, the SACCOs in Meru County witnessed a consistent increase in their asset base over the five-year period, rising from 625.927 million shillings in 2018 to 1.088 billion shillings in 2022. This finding indicates that, on average, the asset base of the SACCOs in Meru County almost doubled during the examined period. These results highlight the substantial and consistent growth experienced by the SACCOs in Meru County in terms of their asset base over the five-year duration. Consequently, their financial performance exhibited an upward trend.

Figure 4.4

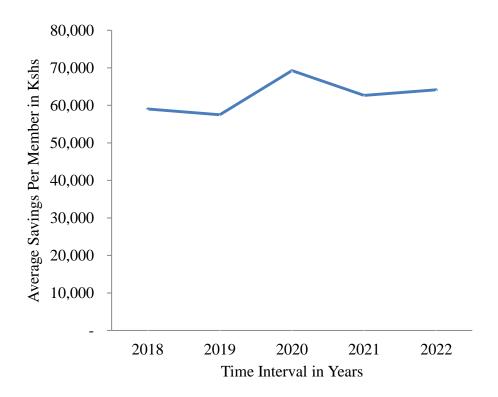
Asset Base Trend analysis for SACCOs in Meru County (2018 to 2022)



Results showcased in Figure 4.5 show that the average savings per member for SACCOs in Meru County had a wavelike trend between the years 2018 and 2022. In the year 2018, the average saving per member was 59, 028 and dropped to 57, 513 in the year 2019. The saving per member later grew to 69, 246 in the year 2020. However, the saving per member dropped to 62, 655 in the year 2021. Again, the saving per member rose to 64, 146 in the year 2022. A possible explanation of the wavelike trend is the fact that new members joining a SACCO usually have little savings since most members grow their savings in a gradual manner. Subsequently, when the addition of members is high, the effect is that saving per member will drop since it is based on total savings divide by total number of members. However, as the new members grow their savings, the saving per member rises. The cycle recurs when a substantial number of members join a SACCO.

Figure 4.5

Savings per Member Trend analysis for SACCOs in Meru County (2018 to 2022)



#### **4.4 Preliminary Analysis**

An initial examination was carried out to confirm the assumptions that no violations were upheld during the normality, linearity, multicollinearity, and homoscedasticity. This was necessary to meet the requirements for performing a regression analysis, which would be used for the hypothesis test.

### 4.4.1 Test of Normality

After conducting a Shapiro-Wilk's test (with a P-value > .05) and visually analyzing the histograms, normal Q-Q graphs, and box plots, it was noted that the financial performance data followed an approximately normal distribution. The data displayed a skewness of .088 (S.E = .333)

and a kurtosis of .497 (S.E = .656).

# **Descriptive Test of Normality**

In terms of skewness and kurtosis, the data exhibits a minor departure from perfect symmetry, but it does not deviate significantly from a normal distribution. The Z-values for skewness and kurtosis are .264 and .757 respectively, falling within the range of -1.96 to 1.96 (as shown in Table 4.10). These Z-scores are obtained by dividing the skewness and kurtosis statistics by their respective standard errors. Thus, the financial performance data can be regarded as approximately normally distributed in relation to skewness and kurtosis.

Table 4.10

Financial Performance Test of Normality: Descriptive statistics

			Statistic	Std. Error
Financial Performance	Mean		.2004	.01098
	95% Confidence Interval for Mean	Lower Bound	.1783	
		Upper Bound	.2225	
	5% Trimmed Mean		.2000	
	Median		.2000	
	Variance		.006	
	Std. Deviation		.042	
	Minimum		.01	
	Maximum		.30	
	Range		.29	
	Interquartile Range		.07	
	Skewness		.088	.333
	Kurtosis		.497	.656

# **Shapiro-Wilk Test of Normality**

The null hypothesis of the Shapiro-Wilk test assumes that the data follows a normal distribution. As shown in table 4.11, the obtained p-value is greater than .05, indicating that we fail to reject the null hypothesis. Therefore, based on the Shapiro-Wilk test, the financial performance data can be considered approximately normally distributed.

Table 4.11

Tests of Normality

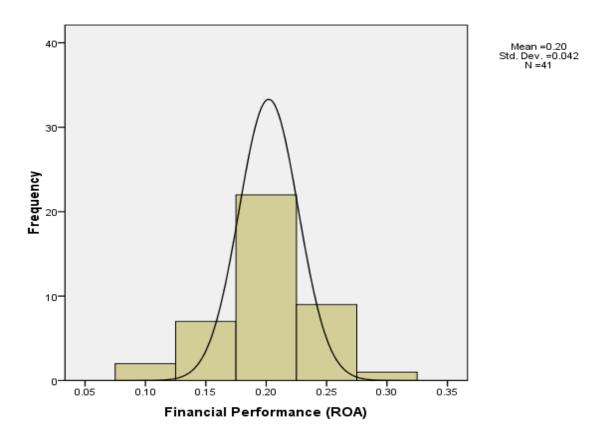
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		k
	Statistic	df	Sig.	Statistic	df	Sig.
Financial Performance	.090	41	.200*	.985	41	.759

### **Distribution of Financial Performance Scores: Histogram**

Based on the findings presented in Figure 4.6, it can be inferred that the financial performance data exhibits an approximately normal distribution. This conclusion is drawn from observing that the majority of scores are concentrated around the center, with lower frequencies towards both extremes. Therefore, in relation to the distribution depicted in the histogram, the financial performance data can be considered approximately normally distributed.

Figure 4.6

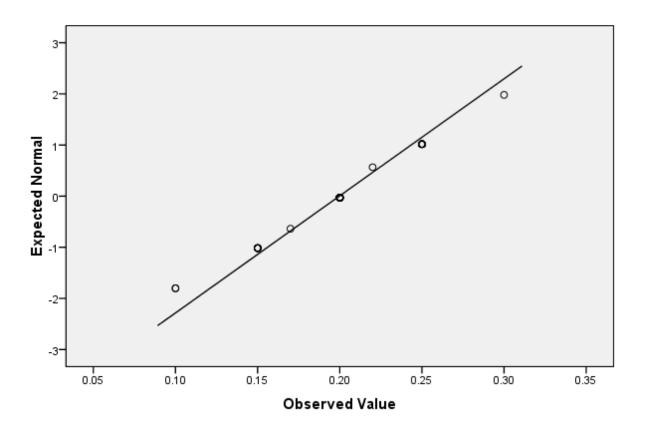
Financial Performance Scores Histogram



# **Q – Q Plot for Financial Performance Scores**

Results in Figure 4.7 shows that the dots in the normal Q-Q plot was along a line indicating that the data on financial performance in approximately normally distributed. Consequently, in respect to the dots displayed in the normal Q-Q plot, the data is approximately normally distributed.

Figure 4.7  $Financial\ Performance\ Scores\ Normal\ Q-Q\ Plot$ 

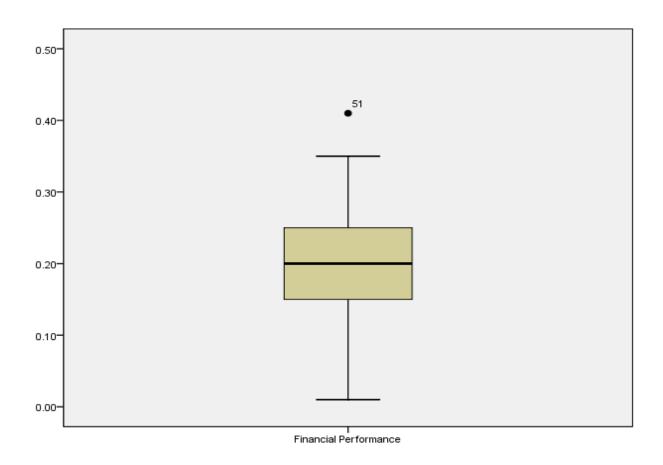


# **Box Plots for Financial Performance Scores**

The box plots are approximately symmetrical indicating the data on financial performance is approximately normally distributed (Figure 4.8). Hence, in terms of the box plots, the financial performance data is approximately normally distributed.

Figure 4.8

Financial Performance scores Normal Box Plot



### **4.4.2** Linearity Tests

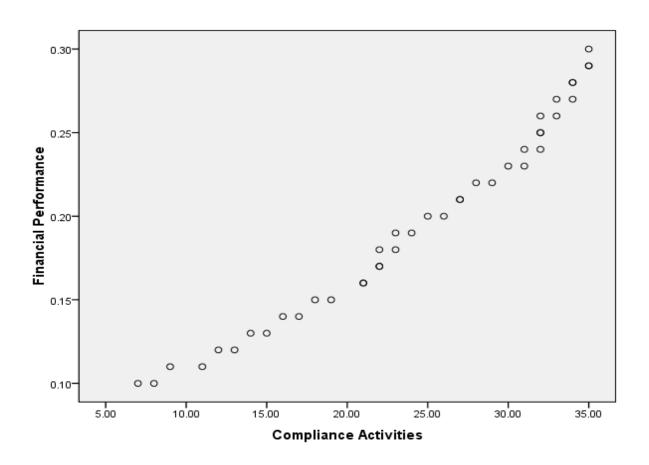
Scatter plots were utilized to identify any potential issues of non-linearity between financial performance and each of the four independent variables.

# **Scatter Plot Financial Performance and Compliance**

Visual inspection of Figure 4.9 suggests that the linearity assumption is met since, a substantial quantity of data points align to create a linear pattern. Hence, in regard to the relationship between financial performance and compliance, linearity assumption was met.

Figure 4.9

Scatter Plot for Financial Performance and Compliance



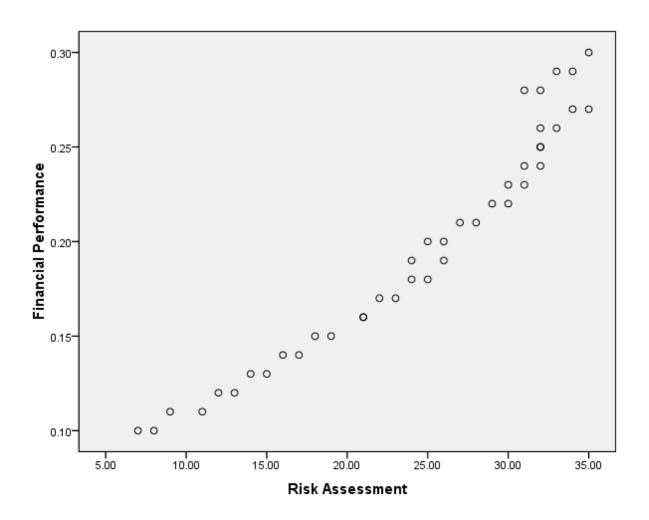
## Scatter Plot Financial Performance and Risk Assessment

Upon visual examination of Figure 4.10, it can be inferred that the assumption of linearity is satisfied as there is a notable presence of data points forming a straight line. Therefore, concerning

the connection between financial performance and risk assessment, the assumption of linearity holds true.

Figure 4.10

Scatter Plot for Financial Performance and Risk Assessment

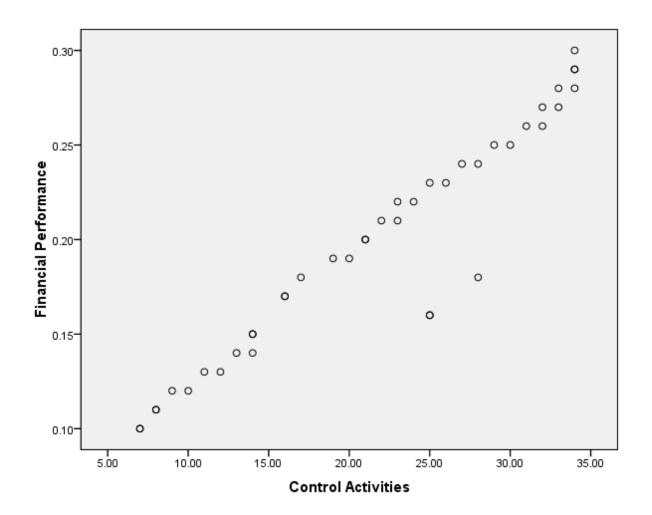


### **Scatter Plot Financial Performance and Control Activities**

Visual inspection of Figure 4.11 suggests that the linearity assumption is met since, a considerable number of dots form a straight line. Hence, in regard to the relationship between financial performance and control activities, linearity assumption was met.

Figure 4.11

Scatter Plot for Financial Performance and Control Activities

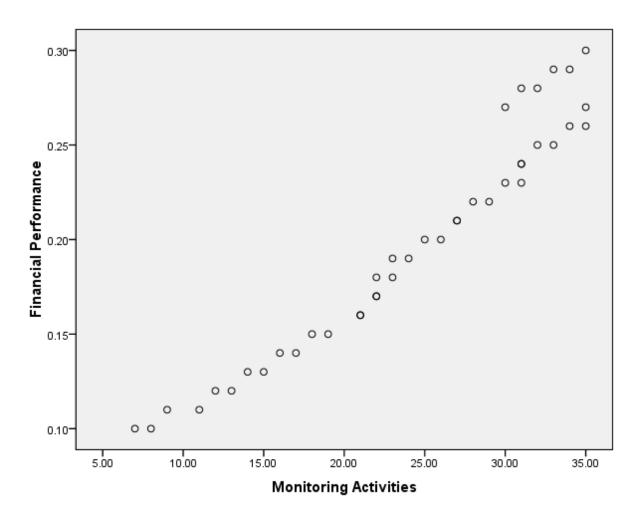


# **Scatter Plot Financial Performance and Monitoring Activities**

Visual inspection of Figure 4.12 suggests that the linearity assumption is met since, a considerable number of dots form a straight line. Hence, in regard to the relationship between financial performance and monitoring activities, linearity assumption was met.

Scatter Plot for Financial Performance and Monitoring Activities

**Figure 4.12** 



### 4.4.3 Multicollinearity Tests

To assess whether there was multicollinearity, VIF and condition index were employed. A regression analysis was performed for each of the four predictor variables in relation to the remaining three predictor variables. The tests conducted for multicollinearity revealed the presence of a minimal level of multicollinearity. (Results can be found in Table 4.12 to Table 4.19).

#### **Compliance Activities Collinearity Statistics (Variance Inflation Factor)**

Results in Table 4.12 indicate a very low level of Collinearity (VIF < 3.0). Furthermore, when examining the variance inflation factor (VIF) resulting from regressing compliance activities against the remaining three predictors, no indications of multicollinearity problems was observed.

Table 4.12

Compliance Activities Collinearity Statistics (Variance Inflation Factor)

		Collinearity Statistics	
Model		Tolerance	VIF
1	Risk Assessment	.900	1.111
	Control Activities	.991	1.009
	Monitoring Activities	.905	1.105

# **Compliance Activities Collinearity Diagnostics (Conditional Index)**

Results presented in Table 4.13 show the absence of collinearity concerns, as the condition index was < 3.0. Therefore, based on the condition index resulting from regressing compliance activities in relation the remaining three predictors, proving no multicollinearity issues.

Table 4.13

Compliance Activities Collinearity Diagnostics (Conditional Index)

			Variance Proportions			
Dimension	Eigenvalue	Condition Index	Constant	Risk Assessment	Control Activities	Monitoring Activities
1	2.092	1.000	.09	.09	.07	.07
2	.863	1.557	.01	.02	.52	.41
3	.650	1.794	.20	.13	.38	.45
4	.395	2.300	.69	.75	.04	.07

# **Risk Assessment Collinearity Statistics (Variance Inflation Factor)**

Results in Table 4.14 indicate a very low level of Collinearity (VIF < 3.0). Following that, concerning the VIF resulting from regressing risk assessment against the remaining three predictors, no indications of multicollinearity problems were found.

Table 4.14

Risk Assessment Collinearity Statistics (Variance Inflation Factor)

		Collinearity Statistics		
Model		Tolerance	VIF	
1	Compliance	.953	1.050	
	Control Activities	.974	1.027	
	Monitoring Activities	.930	1.075	

### Risk Assessment Collinearity Diagnostics (Conditional Index)

The results presented in Table 4.15 demonstrate that there were no signs of collinearity since the condition index was < 3.0. Consequently, based on the condition index in relation to the remaining three predictors, when assessing risk assessment, there is no evidence of multicollinearity problems.

Table 4.15

Risk Assessment Collinearity Diagnostics (Conditional Index)

			Variance Proportions			
Dimension	Eigenvalue	Condition Index	(Constant)	Compliance	Control Activities	Monitoring Activities
1	2.001	1.000	.11	.09	.07	.11
2	.848	1.536	.00	.27	.74	.01
3	.634	1.777	.12	.62	.19	.31
4	.518	1.966	.77	.01	.01	.58

### **Control Activities Collinearity Statistics (Variance Inflation Factor)**

Results in Table 4.16 indicate a very low level of Collinearity (VIF < 3.0). Following that, concerning the VIF resulting from regressing control activities in relation to the remaining three predictors, no indications of multicollinearity problems were observed.

Table 4.16

Control Activities Collinearity Statistics (Variance Inflation Factor)

		Collinearity	Statistics
Model		Tolerance	VIF
1	Compliance	.902	1.109
	Risk Assessment	.875	1.143
	Monitoring Activities	.814	1.229

### **Control Activities Collinearity Diagnostics (Conditional Index)**

The findings presented in Table 4.17 suggest that there were no indications of collinearity since the condition index was < 3.0. Consequently, based on the condition index resulting from regressing control activities in relation to the remaining three predictors, there is no indication of any problems related to multicollinearity.

Table 4.17

Control Activities Collinearity Diagnostics (Conditional Index)

			Variance Proportions			
Dimension	Eigenvalue	Condition Index	(Constant)	Compliance	Risk assessment	Monitoring Activities
1	2.312	1.000	.07	.06	.07	.07
2	.768	1.735	.07	.84	.11	.00
3	.525	2.098	.45	.01	.75	.03
4	.395	2.420	.41	.09	.07	.89

**Monitoring Activities Collinearity Statistics (Variance Inflation Factor)** 

Results in Table 4.18 indicate a small level of Collinearity (VIF < 3.0). Following that, concerning the VIF resulting from regressing control activities in relation to the remaining three predictors, no indications of multicollinearity problems were observed.

Table 4.18

Monitoring Activities Collinearity Statistics (Variance Inflation Factor)

		Collinearity Statistics		
Model		Tolerance	VIF	
1	Compliance	.844	1.185	
	Risk Assessment	.878	1.139	
	Control Activities	.953	1.050	

**Monitoring Activities Collinearity Diagnostics (Conditional Index)** 

Results displayed in Table 4.19 suggest that there were no indications of collinearity since the condition index was < 3.0. Consequently, based on the condition index resulting from regressing control activities in relation to the remaining three predictors, there is no indication of any problems related to multicollinearity.

Table 4.19

Monitoring Activities Collinearity Diagnostics (Conditional Index)

			Variance Proportions			
Dimension	Eigenvalue	Condition Index	(Constant)	Compliance	Risk Assessment	Control Activities
1	2.324	1.000	.07	.07	.07	.06
2	.752	1.758	.02	.02	.13	.86
3	.527	2.099	.36	.80	.03	.00
4	.397	2.420	.55	.11	.77	.08

#### **4.4.4 Heteroscedasticity Test**

To assess the adherence of the data to the assumption of homoscedasticity, a test for heteroscedasticity was carried out. No evidence of heteroscedasticity was found. Would indicate compliance with the homoscedasticity assumption. For the heteroscedasticity test, the standardized predicted values were graphed in relation to the standardized residuals for both financial performance and also for every independent predictor. The resulting graph was then interpreted.

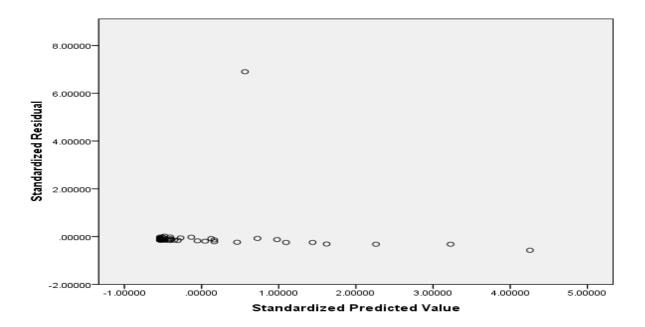
#### **Heteroscedasticity test for Compliance Activities**

Upon visually examining the graph depicting financial performance and compliance activities, it can be concluded that there is no evidence of heteroscedasticity since the data points form a

rectangular pattern (Figure 4.13). Consequently, the relationship between financial performance and compliance activities adheres to the assumption of homoscedasticity.

Figure 4.13

Heteroscedasticity test for Financial Performance and Compliance Activities

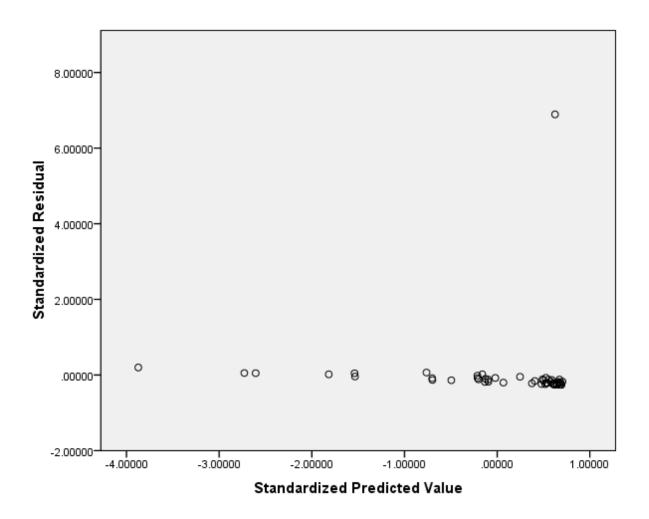


### **Heteroscedasticity test for Risk Assessment**

After visually examining the graph representing financial performance and risk assessment, it can be determined that there is no indication of heteroscedasticity as the data points exhibit a rectangular pattern (Figure 4.14). Therefore, the association among financial result and risk assessment remains consistent with the assumption of homoscedasticity.

Figure 4.14

Heteroscedasticity test for Financial Performance and Risk Assessment



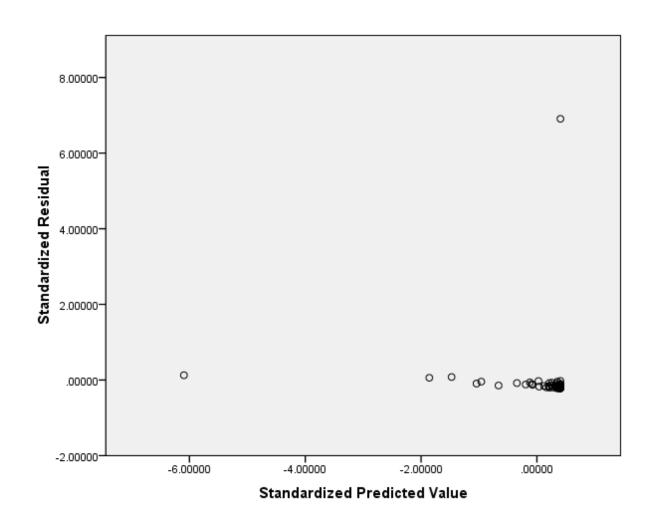
# **Heteroscedasticity test for Control Activities**

Upon visually examining the graph depicting financial performance and compliance activities, it can be concluded that there is no evidence of heteroscedasticity since the data points form a

rectangular pattern (Figure 4.15). Consequently, the relationship between financial performance and compliance activities adheres to the assumption of homoscedasticity.

Figure 4.15

Heteroscedasticity test for Financial Performance and Control Activities

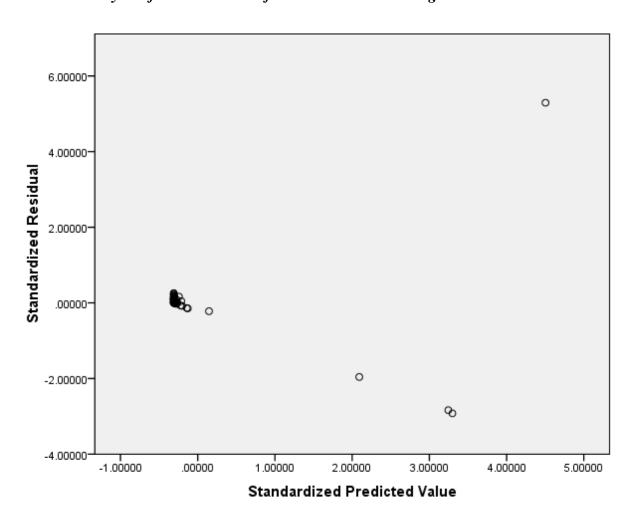


### **Heteroscedasticity test for Monitoring Activities**

After visually examining the graph representing financial performance and risk assessment, it can be determined that there is no indication of heteroscedasticity as the data points exhibit a rectangular pattern (Figure 4.16). Therefore, the correlation among financial outcome and risk assessment remains consistent with the assumption of homoscedasticity.

Figure 4.16

Heteroscedasticity test for Financial Performance and Monitoring Activities



#### 4.5 Hypothesis Testing

To identify the predictor variable that exhibits an important association with the financial performance of SACCOs in Meru County, a multivariate regression analysis was employed. The dependent variable (ROA) was continuous; and the independent variables had been transformed into continuous variables. Before conducting the multiple linear regressions, simple linear regressions were conducted to assess the association between each independent variable and the dependent variable was examined through correlation analysis. The ANOVA statistics and model summary were used to assess the overall relationship between the independent variables and the dependent variable.

#### 4.5.1 Compliance and Financial Performance: Hypothesis Testing

The aim of the research was to ascertain the significance of compliance on financial performance. A simple linear regression analysis was performed to investigate whether compliance acted as a meaningful predictor of financial performance. The detailed results can be observed in Tables 4.20, 4.21, 4.22, and 4.23.

#### **Model Summary for Compliance**

The value in the R column, r = .865, signifies a robust relationship between compliance and financial performance. The  $R^2$  column represents the proportion of the dependent variable (Financial performance) that can be accounted for by the model. The findings reveal that 74.2% of the variance in financial performance can be attributed to compliance.

Table 4.20

Model Summary for Compliance Activities

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.865	.748	.742	9.364

# **ANOVA for Compliance Activities**

The ANOVA table examines the significance of the model in predicting the outcome variable (Financial performance). The findings suggest that the model is a significant predictor F(1, 39) = 116.0, p < .001. Consequently, the null hypothesis, which assumes no relationship between compliance and financial performance, was rejected. As a result, the research hypothesis, which posits a statistically significant relationship between compliance and financial performance, was supported.

Table 4.21

ANOVA for Compliance Activities

Mode	el	Sum of Squares	df	Mean Square	F	P - Value
1	Regression	10173.5	1	10173.5	116.0	.000
	Residual	3419.4	39	87.7		
	Total	13593.0	40			

### **Regression Coefficients for Compliance Activities**

The table displaying the coefficients provides insights into how each individual predictor variable contributes to the model. Given that the p-value is < .001, the conclusion made is that compliance makes a significant contribution to the model. The correlation between compliance and financial performance can be represented by a statistical equation, as described below.

$$Y = b_0 + b_1 X$$

Where,

Y represents financial performance

and X represents compliance activities

Replacing the coefficients with the correct values, a predictive model is arrived at,

Financial Performance = -8.633 + (1.986 \* compliance activities)

Consequently, the regression results revealed that the model accounted for 74.2% of the variability and demonstrated statistical significance, F(1, 39) = 116.0, p < .001. Subsequently, it was confirmed that compliance activities served as significant predictors of financial performance (b1 = 1.986, p < .001).

Table 4.22

Association between Financial Performance and Compliance Activities

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	P - Value
1 (Constant)	-8.633	4.572		-1.888	.066
Compliance Activities	1.986	.184	.865	10.772	.000

## **Compliance Activities and Financial Performance Correlation Analysis**

A Pearson's correlation analysis was conducted to investigate the association between compliance activities and financial performance. The findings demonstrate a strong positive association between compliance activities and financial performance, as indicated by Pearson's r (41) = .865, p < .001 (Results can be found in Table 4.23).

Table 4.23

Compliance Activities and Financial Performance Correlations Analysis

		Return on Assets (ROA)	Compliance Activities
Return on Assets (ROA)	Pearson Correlation	1	.865**
	P – Value		.000
	N	41	41
Compliance Activities	Pearson Correlation	.865**	1
	P – Value	.000	
	N	41	41

## 4.5.2 Risk Assessment and Financial Performance: Hypothesis Testing

The objective of the study was to determine whether risk assessment had a significant impact on financial performance. A simple linear regression analysis was conducted to examine whether risk assessment served as a significant predictor of financial performance. The findings can be found in Tables 4.24, 4.25, 4.26, and 4.27.

#### **Model Summary for Risk Assessment**

The value in the R column, r = .856, signifies a robust association between risk assessment and financial performance. The  $R^2$  column represents the proportion of the dependent variable (Financial performance) that can be accounted for by the model. The result reveals that 72.7% of the variance in financial performance can be accounted by risk assessment.

Table 4.24

Model Summary for Risk Assessment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.856	.733	.727	9.639

#### **ANOVA for Risk Assessment**

The ANOVA table examines the significance of the model in predicting the outcome variable (Financial performance). The findings reveal that the model is a significant predictor F(1, 39) = 107.3, p < .001. Consequently, the null hypothesis, which assumes no relationship between risk assessment and financial performance, was rejected. As a result, the research hypothesis, which posits a statistically significant relationship between risk assessment and financial performance, was supported.

Table 4.25

ANOVA for Risk Assessment

Mode	el	Sum of Squares	df	Mean Square	F	P - Value
1	Regression	9969.7	1	9969.7	107.3	.000
	Residual	3623.3	39	92.9		
	Total	13593.0	40			

### **Regression Coefficients for Risk Assessment**

The table displaying the coefficients provides insights into the contribution of each individual predictor variable to the model. Given that the p-value is < .001, the conclusion made is that risk assessment brought a significant contribution to the model. The association between risk assessment and financial performance can be represented by a statistical equation, as described below.  $Y = b_0 + b_1 X$ 

Where,

Y represents financial performance

and X represents risk assessment

Replacing the coefficients with the correct values, a predictive model is arrived at,

Financial Performance = -12.869 + (2.149 \* risk assessment)

Consequently, the regression results revealed that the model accounted for 72.7% of the variability and demonstrated statistical significance, F(1, 39) = 107.3, p < .001. Subsequently, it was confirmed that compliance activities served as significant predictors of financial performance (b1 = 2.149, p < .001).

Table 4.26

Association between Financial Performance and Risk Assessment

		Unstandardized Coefficients		Standardized Coefficients		
Mode	el	В	Std. Error	Beta	t	P - Value
1	(Constant)	-12.869	5.138		-2.504	.057
	Risk Assessment	2.149	.207	.856	10.359	.000

# Risk Assessment and Financial Performance Correlation Analysis

A Pearson product-moment association was conducted to assess the correlation between risk assessment and financial outcomes. These findings indicate a high positive correlation between risk assessment and financial performance, Pearson's r(41) = .856, p < .001 (Results displayed in Table 4.27).

Table 4.27

Risk Assessment and Financial Performance Correlations Analysis

		Return on Assets	
		(ROA)	Risk Assessment
Return on Assets (ROA)	Pearson Correlation	1	.856**
	P - Value		.000
	N	41	41
Risk Assessment	Pearson Correlation	.856**	1
	P - Value	.000	
	N	41	41

# 4.5.3 Control Function and Financial Performance: Hypothesis Testing

The aim of the research was to establish whether control activities had a significant influence on financial performance. A simple linear regression analysis was performed to investigate whether control activities acted as a meaningful predictor of financial performance. The detailed results can be found in Tables 4.28, 4.29, 4.30, and 4.31.

#### **Model Summary for Control Activities**

The value in the R column, r = .363, suggests a weak correlation between control activities and financial performance. The  $R^2$  column represents the proportion of the dependent variable (Financial performance) that can be accounted for by the model. The findings reveal that 10.9% of the variance in financial performance can be accounted by control activities.

Table 4.28

Model Summary for Control Activities

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.363	.132	.109	17.397

#### **ANOVA for Control Activities**

The ANOVA table examines the importance of the model in predicting the dependent variable (Financial performance). The findings reveal the model is a significant predictor F(1, 39) = 5.9, p = .020. Consequently, the null hypothesis, which assumes no association among control activities and financial performance, was rejected. As a result, supporting the research hypothesis.

Table 4.29

ANOVA for Control Activities

Mode	el	Sum of Squares	df	Mean Square	F	P - Value
1	Regression	1789.4	1	1789.4	5.9	.020
	Residual	11803.5	39	302.7		
	Total	13593.0	40			

### **Regression Coefficients for Control Activities**

The table displaying the coefficients provides insights into the contribution of each individual predictor variable to the model. Given that the p-value is < .05, the conclusion made is that control

activities have a significant contribution to the model. The association between control activities and financial performance can be expressed in a statistical equation, as outlined below.

$$Y = b_0 + b_1 X$$

Where,

Y represents financial performance

and X represents control activities

Replacing the coefficients with the correct values, a predictive model is arrived at,

Financial Performance = -25.450 + (2.198 \* control activities)

Consequently, the regression results revealed that the model accounted for 10.9% of the variability and demonstrated statistical significance, F(1, 39) = 5.9, p = .020. Subsequently, it was confirmed that compliance activities served as significant predictors of financial performance (b1 = 2.198, p = .020).

Table 4.30

Association between Financial Performance and Control Activities

		Unstandardized Coefficients		Standardized Coefficients		
Mode	el	В	Std. Error	Beta	T	P - Value
1	(Constant)	-25.450	26.245		970	.338
	Control Activities	2.198	.904	.363	2.432	.020

### **Control Activities and Financial Performance Correlation Analysis**

A Pearson product-moment correlation was done to evaluate the relationship between control activities and financial performance. These findings indicate a low positive association between control activities and financial performance, Pearson's r(41) = .363, p = .020 (Results showed in Table 4.31).

Table 4.31

Control Activities and Financial Performance Correlations Analysis

		Return on Assets (ROA)	Control Activities
Return on Assets (ROA)	Pearson Correlation	1	.363*
	P - Value		.020
	N	41	41
Control Activities	Pearson Correlation	.363*	1
	P - Value	.020	
	N	41	41

### 4.5.4 Monitoring and Financial Performance: Hypothesis Testing

The objective of the study was to determine whether monitoring had a significant impact on financial performance. A simple linear regression analysis was conducted to examine whether monitoring activities served as a significant predictor of financial performance. The findings can be found in Tables 4.32, 4.33, 4.34, and 4.35.

#### **Model Summary for Monitoring Activities**

The value in the R column, r = .656, suggests a moderate association between control activities and financial performance. The  $R^2$  column represents the proportion of the dependent variable (Financial performance) that can be accounted for by the model. The findings reveal that 41.5% of the variance in financial performance can be accounted by monitoring activities.

Table 4.32

Model Summary for Monitoring Activities

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.656ª	.430	.415	14.096

### **ANOVA for Monitoring Activities**

The ANOVA table examines the significance of the model in predicting the dependent variable (Financial performance). The findings reveal that the model is a significant predictor F (1, 39) = 29.4, p < .001. Consequently, the null hypothesis, which assumes no relationship between monitoring activities and financial performance, was rejected. As a result, the research hypothesis, which posits a statistically significant relationship between monitoring activities and financial performance, was supported.

Table 4.33

ANOVA for Monitoring Activities

Mode	el	Sum of Squares	df	Mean Square	F	P - Value
1	Regression	5843.9	1	5843.9	29.4	.000ª
	Residual	7749.0	39	198.7		
	Total	13593.0	40			

## **Regression Coefficients for Monitoring Activities**

The table displaying the coefficients provides insights into the contribution of each individual predictor variable to the model. Given that the p-value is < .001, concluding that monitoring activities significantly contribute to the model. The association between control activities and financial performance can be expressed in a statistical equation, as outlined below.

$$Y = b_0 + b_1 X$$

Where,

Y represents financial performance

and X represents monitoring activities

Replacing the coefficients with the correct values, a predictive model is arrived at,

Financial Performance = -35.700 + (2.555 \* monitoring activities)

Consequently, the regression results revealed that the model accounted for 10.9% of the variability and demonstrated statistical significance, F(1, 39) = 29.4, p < .001. Subsequently, it was confirmed

that monitoring activities served as significant predictors of financial performance (b1 = 2.555, p < .001).

Table 4.34

Association between Financial Performance and Monitoring Activities

		Unstandardized Coefficients		Standardized Coefficients		
Mode	1	В	Std. Error	Beta	T	P - Value
1	(Constant)	-35.700	13.771		-2.592	.063
	Monitoring Activities	2.555	.471	.656	5.423	.000

## **Monitoring and Financial Performance Correlation Analysis**

A statistical examination known as Pearson product-moment correlation analysis was performed to explore the connection between monitoring activities and financial performance. The findings demonstrate a moderate positive correlation between monitoring activities and financial performance, as indicated by Pearson's r (41) = .656, p < .001 (Results presented in Table 4.35).

Table 4.35

Monitoring Activities and Financial Performance Correlations Analysis

		Return on Assets (ROA)	Monitoring Activities
Return on Assets (ROA)	Pearson Correlation	1	.656**
	P - Value		.000
	N	41	41
Monitoring Activities	Pearson Correlation	.656**	1
	P - Value	.000	
	N	41	41

## **Model Summary for the Combined Model**

The multiple correlation coefficient (R) for the association between the group of independent variables and the dependent variable is .916, indicating a strong association. The coefficient of determination ( $R^2$ ) informs us about the proportion of variance in the dependent variable accounted by the four predictors. In this case, it signifies that 82.1% of the variance in the financial performance of SACCOs in Meru County can be attributed to the elements of the internal audit system, namely compliance activities, risk assessment, control activities, and monitoring activities. The adjusted  $R^2$ , which accounts for multiple predictors, provides a slightly lower value.

Table 4.36

Model Summary for the Combined Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.916ª	.839	.821	7.801

## **ANOVA for the Combined Model**

The p-value of the F statistic (46.8) for the overall regression association is <.001, which is less than the predetermined significance level of .05. Therefore, we reject the null hypothesis, which states that there is no relationship between the independent variables and the dependent variable (R2 = 0). This leads us to support the research hypothesis, indicating a statistically significant relationship between the set of independent variables and the dependent variable.

Table 4.37

ANOVA for Combined Model

Mod	el	Sum of Squares	df	Mean Square	F	P - Value
1	Regression	11402.3	4	2850.6	46.8	.000ª
	Residual	2190.7	36	60.9		
	Total	13593.0	40			

### 4.5.5 Internal Audit System Elements and Financial Performance of SACCOs

The study incorporated compliance activities, risk assessment, control activities, and monitoring activities as variables. Table 4.38 presents the results of the multiple regressions, highlighting the significance of each predictor variable.

Table 4.38

Factors Significantly Associated with Financial Performance of SACCOs

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	P - Value
1 (Constant)	-25.710	12.314		-2.09	.054
Compliance	1.105	.293	.481	3.77	.001
Risk Assessment	1.154	.265	.460	4.349	.000
Control Function	.297	.462	.049	.643	.524
Monitoring	.065	.410	.017	.159	.875

## 4.5.5.1 Compliance

Regarding the predictor variable compliance, the t statistical probability (0.001) for the b coefficient is less than the significance level of 0.05. Consequently, the null hypothesis that the slope related to compliance activities is zero (b = 0) was rejected. Thus, it can be deduced that there exists a statistically significant association between compliance activities and the financial performance of SACCOs in Meru County. The regression coefficients indicate a positive association between compliance activities and financial performance of SACCOs. These results correspond well with the descriptive statistics computed earlier in this study; which demonstrated

that adherence to regulatory requirements by SACCOs promoted transparency, accountability, risk mitigation, and member protection, leading to improved financial performance.

These findings are in line with recent research findings cited earlier in the reviewed literature. Mathew (2020) positively associated effective compliance programs with financial performance. He correlated effective compliance activities with transparency, accountability, and good governance. Wanjala and Riitho (2020) explained that compliance activities can protect SACCOs from legal and reputational risks, thus enhancing their credibility and financial stability. Wamukota et al. (2022) observed that SACCOs that have effective compliance programs and a culture of compliance are more likely to have better financial performance than those that do not. Similarly, Aduda and Obondy (2021) established that effective compliance programs can help to identify and mitigate risks, which can lead to increased confidence in the organization and better financial performance. Moreover, Omondi and Kibera (2021) posited that SACCOs that invest in compliance can gain a competitive advantage. Akinsomi et al. (2019) argued that compliance can be a differentiator for SACCOs; particularly in a crowded market where consumers are looking for organizations they can trust. Furthermore, Muathe and Kombo (2019) asserted that compliance can help SACCOs to attract and retain members, particularly those who are risk-averse and value transparency and accountability.

### 4.5.5.2 Risk Assessment

Regarding the predictor variable risk assessment, the t statistical probability (less than 0.001) for the b coefficient is smaller than the significance level of 0.05. Consequently, the null hypothesis that the slope associated with risk assessment is zero (b = 0) was rejected. Thus, it can be concluded that there exists a statistically significant relationship between risk assessment and the financial performance of SACCOs in Meru County. The regression coefficients indicate a positive

relationship between risk assessment and financial performance of SACCOs. Earlier in this study, descriptive statistics revealed that SACCOs with robust risk assessment policies were able to identify and mitigate operational and market risks, resulting in improved financial performance.

These findings are consistent with reviewed literature on effect of risk assessment on financial performance. Aduda and Obondy (2021) affirmed that effective risk assessment policies can help SACCOs to identify and assess credit risk in a timely and effective manner. Consequently, SACCOs can improve their financial performance by minimizing bad debts. Akinsomi et al. (2019) revealed that effective risk assessment policies can help SACCOs to identify and assess market risk and to implement appropriate hedging strategies to mitigate this risk. Consequently, this can help SACCOs to reduce their exposure to market risk and to improve their financial performance. Besides, Omondi and Kibera (2021) posited that monitoring can help SACCOs to reduce their operating costs, improve their efficiency, and enhance their financial performance.

#### 4.5.5.3 Control Function

This study found no significant evidence of a relationship between control function and financial performance of SACCOs in Meru County. The p-value, being greater than 0.05, led to the inability to reject the null hypothesis, which states that there is no significant association between control activities and financial performance of SACCOs in Meru County.

## 4.5.5.4 Monitoring

This study found no significant evidence of an association between monitoring and financial performance of SACCOs in Meru County. The p-value, being greater than 0.05, led to the inability to reject the null hypothesis, which states that there is no significant relationship between monitoring activities and financial performance of SACCOs in Meru County.

#### **CHAPTER FIVE**

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### 5.1 Introduction

The main objective of the study was to investigate how the internal audit system influences the financial performance of SACCOs in Meru County. This chapter provides a summary of the findings in section 5.2, draws conclusions from the findings in section 5.3, and presents relevant recommendations in section 5.4.

## **5.2 Summary of the Study**

The study aimed to explore the impact of the internal audit system, specifically compliance, risk assessment, control function, and monitoring, on the financial performance of SACCOs in Meru County.

## 5.2.1 Compliance and Financial Performance of SACCOs in Meru County

The study investigated the relationship between compliance and financial performance. The findings demonstrated that adherence to regulatory requirements by SACCOs promoted transparency, accountability, risk mitigation, and member protection, leading to improved financial performance. The study also revealed a strong positive correlation between compliance and financial performance, as supported by Pearson's r (41) = .865, p < .001. Multiple linear regression analysis further confirmed a statistically significant association between compliance and financial performance. The null hypothesis stating that the compliance slope is zero (b = 0) was rejected.

## 5.2.2 Risk Assessment and Financial Performance of SACCOs in Meru County

The study examined the impact of risk assessment on financial performance. The findings showed that effective management of credit risks positively influenced the financial performance of SACCOs. SACCOs with robust risk assessment policies were able to identify and mitigate operational and market risks, resulting in improved financial performance. A strong positive correlation was observed between risk assessment and financial performance, as evidenced by Pearson's r (41) = .856, p < .001. The null hypothesis that the risk assessment slope is zero (b = 0) was rejected.

## 5.2.3 Control Function and Financial Performance of SACCOs in Meru County

The study explored the impact of the control function on financial performance. The findings indicated that SACCOs with effective control measures, such as access controls, regular audits, and proper segregation of duties, demonstrated good governance practices. Although a weak positive correlation was found between the control function and financial performance (Pearson's r(41) = .363, p = .020), no significant relationship was detected between the control function and financial performance.

### 5.2.4 Monitoring and Financial Performance of SACCOs in Meru County

The study evaluated the impact of monitoring on financial performance. Effective monitoring practices enabled early detection of potential issues and aided in cost-cutting, efficiency enhancement, and risk identification. However, the study did not find a significant relationship between monitoring and financial performance in SACCOs of Meru County.

#### **5.3 Conclusions**

The study concluded that compliance and risk assessment had a significant association with the financial performance of SACCOs in Meru County. Subsequently, it was concluded that internal audit system had a significant effect on financial the performance of SACCOs in Meru County.

## 5.3.1 Compliance

Compliance with regulations plays a crucial role in promoting transparency, accountability, and good governance within SACCOs. Effective compliance measures aid in risk identification and mitigation, prevent losses, and enhance stakeholders' confidence, ultimately leading to improved financial performance.

#### **5.3.2 Risk Assessment**

Effective risk assessment policies enable SACCOs to reduce operating costs, improve efficiency, and enhance financial performance. SACCOs with robust risk assessment practices are more likely to increase revenue streams and reduce the cost of capital, thus improving efficiency and financial performance.

#### **5.4 Recommendations**

Based on the significant associations found between compliance, risk assessment, and financial performance, the following recommendations are suggested:

- 1. SACCO management should prioritize compliance with relevant regulations to enhance accountability and financial performance.
- 2. Effective risk assessment policies should be implemented to mitigate risks, reduce operational costs, and improve financial performance.

- 3. SACCOs should enhance internal control systems to reduce incidences of fraud and enhance financial performance.
- 4. SACCOs should mitigate the risk of default by establishing appropriate loan terms, conditions, and diversifying their loan portfolios.

#### **5.4.1 Recommendations for Further Research**

Given the research's focus on SACCOs in Meru County, it is recommended to expand the research to include other financial institutions. This broader scope would provide a more comprehensive evaluation of the association among the internal audit system and financial performance, allowing for potential variations in the findings.

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  - ekkesyP2CJtbM12j8h-KEbXETsotCeZBEpADeAbfRla32k5wLQ4b0I1m2MpTy~FZppgKt0e2Pr1FG1xBvEtPa 4XSlRahU3yRvYdHBOwXM9yN2D8Rq4NoqL-
  - tEoYn1YO00C~dbc2d9EMbftkeuvPF0Y2LkY9VwL3Ot4AT0rC5DBFfscZdMLil1LP-JQUwCLfGnMdZo91XzY3QxbCgoaF61bKMJncHJzfIOGXSK18Zvhr0bP38z1tyuwmWae8xgKF9yv6GLraiFlqYXr~G-K01n3f6~UJ5IM8F4ZLTpUIJ5QQ\_\_&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

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**APPENDIX 1: LETTER OF INTRODUCTION** 

Dear Sir/Madam,

**RE: PERMISSION TO CARRY OUT RESEARCH** 

I am a student undertaking a course in Masters of Science in Finance and Investments at Kenya

Methodist University. I am required to submit, as part of my research work assessment, a research

thesis on "Effect of internal audit system on Financial Performance of SACCOs in Meru County,

Kenya". To achieve this, you have been selected to participate in the study. I kindly request you

to give your responses to the questions herein. This information will be used purely for academic

purpose and your name will not be mentioned in the report. Findings of the study, shall upon

request, be availed to you.

Your assistance and cooperation will be highly appreciated.

Thank you in advance.

Yours faithfully,

JAMES KAIMENYI KIAMBI

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## **APPENDIX 2: INFORMED CONSENT FORM**

Dear respondent,

The researcher is a student undertaking a course in Masters of Science in Finance and Investments at Kenya Methodist University, carrying out a research on "Effect of internal audit system on Financial Performance of SACCOs in Meru County, Kenya". For this study I will request you to give me some time as you will be asked some questions. I will maintain your privacy and confidentiality about your information. Your name will not be written on any of the materials, and only the researcher will have access to your information. The research will not benefit you personally. Your participation is totally voluntary, and you may change your mind and withdraw at any time before and during the study. We will not pay or give any facilities for this participation. If you want to take part to participate in this research, please sign the form below.

Participant:		
Code of Participant	Signature	Date
Researcher:		
Name of Researcher	Signature	Date

# APPENDIX 3: QUESTIONNAIRE FOR THE CHIEF EXECUTIVE OFFICER

Instruction: Please tick against your most appropriate answer and fill the spaces provided.

# **SECTION A: Demographic Information**

1. Gender					
a. Male [ ]					
b. Female [ ]					
2. Highest level of education	?				
a. Diploma		[ ]			
b. Degree		[ ]			
c. Post Graduate		[ ]			
3. How Many years have you	3. How Many years have you worked in the SACCO?				
a. Up to 5 years	[ ]				
b. 6 - 10 years	[ ]				
c. 11 - 15 years	[ ]				
d. 16 - 20 years	[ ]				
e. Above 20 years	[ ]				

## **SECTION B: COMPLIANCE ACTIVITIES**

4. Indicate the level of agreement or disagreement in respect to the statement provided below.

 $(Where; SA = Strongly \ agree, A = Agree, N = Neutral \ D = Disagree, SD = Strongly \ disagree)$ 

S/N	Compliance Activity Item	SD	D	N	A	SA
1	My SACCO compliance with the relevant regulations has improved transparency and accountability, which has increased the trust and confidence of stakeholders					
2	My SACCO compliance with the relevant regulations has mitigated risks and protected the interests of members and stakeholders					
3	My SACCO compliance with the relevant regulations has helped to prevent losses through early identification of fraud and theft					
4	My SACCO compliance with the relevant regulations has helped in inculcating a culture of good governance					
5	My SACCO compliance with the relevant regulations has helped protect the SACCO from legal and reputational risks, thus enhancing its credibility					
6	My SACCO compliance with the relevant regulations has led to increased confidence by stakeholders					
7	My SACCO compliance with the relevant regulations has helped in risk identification and management					

5. How would you rate the effectiveness of compliance activities in your SACCO?

a)	Excellent	(	)
b)	Above average	(	)
c)	Average	(	)
d)	Below average	(	)
e)	Negligible	(	)

## **SECTION C: RISK ASSESSMENT**

6. Indicate the level of agreement or disagreement in respect to the statement provided below.

(Where;  $SA = Strongly \ agree, \ A = Agree, \ N = Neutral \ D = Disagree, \ SD = Strongly \ disagree$ )

S/N	Risk Assessment Item	SD	D	N	A	SA
1	In our SACCO, effective credit risk management has improved financial performance by minimizing bad debts/loans					
2	My SACCO effectively identifies and mitigates operational risks which has led to reduced operation costs and enhanced efficiency, resulting in improved financial performance					
3	My SACCO has effective risk assessment policy that has led to enhanced reputation and increased investor confidence					
4	My SACCO regularly identifies and assesses market risk, consequently reducing its exposure to market risk					
5	In our SACCO, risk assessment policy is an important aspect of financial management					
6	My SACCO has an effective risk assessment policy that provides a framework for identifying, assessing, and managing risks					
7	My SACCO identifies and mitigates risks in a timely and effective manner					

7. How would you rate the effectiveness of the risk assessment in your SA	ACCO?
---	-------

a)	Excellent	(	)
b)	Above average	(	)
c)	Average	(	)
d)	Below average	(	)
e)	Negligible	(	)

## **SECTION D: CONTROL ACTIVITIES**

8. Indicate the level of agreement or disagreement in respect to the statement provided below.

(Where;  $SA = Strongly \ agree, \ A = Agree, \ N = Neutral \ D = Disagree, \ SD = Strongly \ disagree$ )

S/N	Control Activity Item	SD	D	N	A	SA
1	My SACCO has effective access controls that has assisted prevention of fraud and misappropriation of funds by employees					
2	My SACCO carries out regular audits that has assisted prevention of fraud and misappropriation of funds by employees					
3	My SACCO practices effective segregation of duties that has assisted prevention of fraud and misappropriation of funds by employees					
4	My SACCO generates regular reports that has helped to ensure its compliant with legal and regulatory requirements					
5	My SACCO employs effective loan appraisal and loan monitoring that has minimized loan defaults					
6	My SACCO carries out due diligence that has ensured investments made are prudent					
7	In my SACCO, there is effective board oversight has helped promote good governance practices					

9	How would	you rate th	e effectiveness	of the control	activities in	your SACCO?
<i>-</i> •	110W Would	you rute th	c criccu veness	of the control	uctivities iii	your brices.

a)	Excellent	(	)
b)	Above average	(	)
c)	Average	(	)

d) Below average ( )

e) Negligible ( )

# **SECTION E: MONITORING ACTIVITIES**

10. Indicate the level of agreement or disagreement in respect to the statement provided below.

(Where;  $SA = Strongly \ agree, \ A = Agree, \ N = Neutral \ D = Disagree, \ SD = Strongly \ disagree$ )

S/N	Monitoring Activity Item	SD	D	N	Α	SA
1	My SACCO carries out effective monitoring that has helped identify potential defaulters early and take appropriate action to avoid losses					
2	My SACCO carries out effective monitoring that has helped to identify areas of non-compliance and take corrective action before any negative impact					
3	My SACCO carries out effective monitoring that has helped identify areas to reduce costs and increase efficiency					
4	My SACCO carries out effective monitoring that has helped to identify trends in loan delinquencies and take corrective action to reduce credit risk					
5	My SACCO carries out effective monitoring that has helped identify areas of weakness in governance structures and processes and take corrective action					
6	My SACCO carries out effective monitoring that has helped improve transparency and accountability, which has enhanced its reputation					
7	My SACCO carries out effective monitoring that has helped identify anomalies in financial transactions and take corrective action					

11. How would	d you rate the	e effectiveness	of the i	monitoring	activities in	ı your S <i>i</i>	ACCO?

a)	Excellent	(	)
b)	Above average	(	)
c)	Average	(	)
d)	Below average	(	)
e)	Negligible	(	)

## **SECTION F: FINANCIAL PERFORMANCE**

12. Please provide the following financial performance indicators for your SACCO for the past five years.

	Return on Assets (ROA)	Total Asset Base (Fixed and current)	Average Saving per member
2022			
2021			
2019			
2018			
2017			

Thank you.

**APPENDIX 4: SACCOs IN MERU COUNTY (operational for a minimum of 10 years)** 

S/N	SACCO NAME
1	CAPITAL SACCO
2	CENTENARY SACCO
3	GOLDEN PILLAR SACCO
4	SOLUTION SACCO
5	YETU SACCO
6	TIMES U SACCO
7	SMART CHAMPION SACCO
8	NEXUS SACCO
9	DHABITI SACCO
10	JAMII YETU SACCO
11	NYAMBENE ARIMI SACCO
12	KEMU SACCO
13	METRA SACCO
14	NEW SEASON SACCO
15	WORLD VIEW SACCO
16	NTETHIO SACCO
17	MEMA SACCO
18	IMETHA WASCO SACCO
19	MENYA SACCO
20	DELIGENCE SACCO
21	MENANY SACCO
22	WANANCHI SACCO
23	DEXTERITY SACCO
24	NEW HORIZON SACCO
25	MENOFAS SACCO
26	AKIRIANG'ONDU SACCO
27	LAARE CATHOLIC WAUMINI SACCO
28	NYAMBENE SACCO
29	NYAMENA SACCO
30	TIGANIA WOMEN SACCO
31	TVT SACCO
32	MUST SACCO
33	TIGANIA WEST SACCO
34	MEKINA SACCO
35	BASTOBAS SACCO
36 37	PRUDENCE SACCO CIOMUJOGIA SACCO
38	HERO SACCO
36 39	NYONYI CIESTA SACCO
39 40	KAGUMONI SACCO
40	AIRLIFT SACCO
42	BIDII WENDANI SACCO
<u>+</u> 4	DIDII WENDANI SACCO

## **APPENDIX 5: RESEARCH PERMIT**

