

**FINANCIAL MANAGEMENT PRACTICES AND SUSTAINABILITY OF DEPOSIT-
TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KENYA**

BY

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**MASTER OF SCIENCE IN COMMERCE
(FINANCE AND ACCOUNTING)**

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23/06905

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE
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DECLARATION

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

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ABSTRACT

In Kenya, the financial sustainability of many deposit-taking Savings and Credit Cooperative Societies (SACCOs) remains a major concern, with some institutions, such as Ekeza SACCO, collapsing, and others struggling to meet capital adequacy requirements. These challenges threaten the sector's ability to contribute effectively to economic development. This study aimed to examine the effect of financial management practices on the sustainability of deposit-taking SACCOs in Kenya. Specifically, it investigated the influence of liquidity management, financial reporting, risk management, and investment decision-making on financial sustainability. The study adopted a causal research design, targeting all 176 licensed deposit-taking SACCOs in Kenya. Finance managers from each SACCO participated in a census survey. Primary data were collected using structured questionnaires, and analyzed using SPSS. Descriptive statistics and multiple regression analysis were employed, alongside diagnostic tests for normality, multicollinearity, and linearity. The results showed that all four financial management practices had a statistically significant and positive effect on sustainability ($p < 0.05$). Liquidity management had the strongest influence ($\beta = 0.732$), followed by financial reporting ($\beta = 0.512$), risk management ($\beta = 0.417$), and investment decision-making ($\beta = 0.366$). The study concluded that the financial sustainability of SACCOs depends on a coordinated approach to financial management. It recommended that SACCOs strengthen their financial practices by adopting integrated strategies that promote transparency, accountability, and risk awareness to enhance resilience and member trust.

Keywords: Financial Sustainability, SACCOs, Liquidity management, Financial Reporting, Risk Management, Investment Decision-Making

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DEDICATION

This project is dedicated to my beloved father, Benson Mutahi, whose unwavering encouragement, wisdom, and love shaped my today. Though he left this world before completion of my studies, his guidance and belief in my potential continue to inspire me every step of the way.

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ABBREVIATIONS

SACCOs	:	Saving and Credit Cooperatives
SDGs	:	Sustainable Development Goals
SASRA	:	SACCO Supervisor Authority
CCC	:	Cash Conversion Cycle
FMP	:	Financial Management Practice.
LIQUIDITY	:	Liquidity management.

DEFINITION AND OPERATIONAL DEFINITION OF TERMS

Financial Reporting: Financial reporting is the process of producing statements that disclose an organization's financial status to stakeholders, based on standardized accounting principles (IASB, 2020). Assessed through compliance with financial disclosure standards, the quality of financial reports, and regularity of reporting.

Risk Management: Risk management involves identifying, analyzing, and responding to risk factors that can affect an organization's capital and earnings (Hopkin, 2018). Evaluated based on the use of insurance, diversification, and hedging strategies.

Financial Sustainability: Financial sustainability is the ability of an organization to maintain financial health over the long term without compromising service delivery (Lewis, 2015). Determined using the self-sufficiency ratio, equity growth, and the revenue diversification index.

Investment Decision Making: Investment decision making is the process by which a firm decides on the allocation of resources into long-term assets for future growth (Brealey, Myers, & Allen, 2020). Measured through the firm's engagement in expansion, replacement, and renewal decisions.

Liquidity management: Liquidity management refers to the administration of current assets and current liabilities to ensure a firm can continue its operations and meet short-term obligations (Pandey, 2021). In this study, liquidity management is measured using indicators such as accounts receivable management, accounts payable management, and inventory management practices on an ordinal scale.

CHAPTER ONE

INTRODUCTION

1.1 Background to Study

Saving and Credit Cooperatives (SACCOs) are financial institutions that are established by members to provide loans and other financial services gathering the needs of the marginalized customers. It is a worldwide movement that seeks to bridge the gaps in financial intermediation created by commercial banks and other large financial institutions (Yitayaw, 2020). Most large financial institutions like commercial banks regards poor customers as risky borrowers with limited ownership of collateral like land title deeds or logbooks that are common lending requirements by these institutions (Lubega, 2021).

Globally, membership in SACCOs is estimated at 760 million people. This contributes to a total of 29%, 33% and 40% of the population in Argentina, Norway and the United States of America. The number of job opportunities created by SACCOs around the world is estimated at 100 million (Anakpo, Mishi, Tshabalala & Mushonga, 2024). Germany is first country in the rest of the world where the first SACCO was formed in 1849 followed by Canada in 1901. With time, this SACCO movement spread to the rest of countries in the world. In most advanced countries especially in Latin America, several examples exist demonstrating successful SACCOs for instance, the Bolivia SACCO that produces close to 60% of chicken in country (Rutanga, Barayandema & Mutarindwa, 2021). Regionally and especially in Africa, a SACCO was established in Ghana in 1959 with the main goal of supporting farmers to improve their economic positions. From Ghana, the SACCO movement then spread to Nigeria, Uganda and Tanzania (Messabia, Beauvoir & Kooli, 2023).

Locally in Kenya, the SACCO movement date back to 1908 with the formation of Lumbwa Cooperative (Maina, Kia & Kyalo, 2020). The similarities between these two categories of SACCOs are that both are involved in active mobilization of savings from their members so that they can get credit facilities. The main objective of SACCO movement is to improve the livelihood of members by mobilizing deposits or savings and giving out loan facilities (Ntoiti & Jagongo, 2021) and hence financial sustainability. However, as noted by Muga (2023), achieving these noble goals while balancing their contribution to social, environmental and social sustainability parameters has been a key challenge encountered by most deposit taking SACCOs in Kenya.

1.1.1 Financial Management Practices

Financial management practices (FMPs) refer to systematic processes and procedures used to manage an institution's financial resources efficiently and effectively to achieve its objectives (Dwangu & Mahlangu, 2021). In the context of deposit-taking Savings and Credit Cooperative Societies (DT-SACCOs), FMPs encompass the tools and decisions used to manage member deposits, extend credit, ensure regulatory compliance, and sustain financial health. FMPs in SACCOs differ from those in other sectors due to their dual role as financial intermediaries and member-owned cooperatives. As such, this study focuses on four key financial management practices relevant to DT-SACCO operations: liquidity management, financial reporting, risk management, and investment decision-making.

The selection is grounded in sector-specific financial operations and supported by emerging empirical literature (Kyenze & Aluoch, 2022). Liquidity Management in DT-SACCOs primarily involves managing customer deposits and loan disbursements. Unlike traditional firms concerned with inventory and trade receivables, SACCOs focus on maintaining sufficient liquid

assets to meet members' withdrawal demands while ensuring profitable loan portfolios (Simiyu, Achieng & Makoti, 2024). Financial Reporting in SACCOs ensures transparency and accountability to members and regulatory bodies such as the SACCO Societies Regulatory Authority (SASRA). Accurate and timely reporting supports decision-making by providing insights into income from interest, loan performance, expenses, and compliance with capital adequacy requirements (Revsine, Collins & Johnson, 2021).

Risk Management is essential in SACCOs due to exposure to credit, liquidity, and operational risks. Sound risk management involves prudent credit appraisal, regular loan monitoring, and diversification of investment to protect member deposits and ensure financial sustainability (Maina, Kiai & Kyalo, 2020). Investment Decision-Making relates to how SACCOs allocate surplus funds into viable ventures, such as treasury bills or real estate, to enhance returns without jeopardizing liquidity. Poor investment decisions may threaten long-term sustainability (Raut, 2020). By grounding financial management practices in the operational realities of DT-SACCOs, this study provides a more accurate and actionable analysis of their role in enhancing financial sustainability.

1.1.2 Financial Sustainability

Financial sustainability (FS) is the capacity to continue with operations and running without the possibility to curtail the operations of the firm. It has a long-term orientation and is strongly informed by the need to achieve sustainable development goals (SDGs). The foundation of any rigorous financial institution is financial sustainability (Barongo, 2021). It is reflected in the ability of the financial institution to shield up all its charges through interest. It is the ability of an institution to maintain, reinforce or endure services that are in line with the desires of the present generation without compromising future generations' ability to meet their needs (Mutiso, 2019).

There are three important pillars of financial sustainability of an institution: financial, economic and environmental sustainability. Economic sustainability regards profits generated by an institution which should be adequate to cover all the expenses (Waweru, 2018). The social pillar of sustainability regards the obligation of business to the society at large. The environmental pillar of sustainability on the other hand reflects the responsibility of the firms towards its surroundings (Riro, Gatheru & Mutiso, 2020).

1.1.3 Financial Management Practices and Sustainability

Financial sustainability has become a critical objective for institutions globally, especially within the financial sector, where mismanagement of resources can lead to operational collapse or erosion of public trust. With the increasing demand for accountability, transparency, and efficient use of resources, institutions are required to adopt robust financial management practices (FMPs) that ensure both short-term stability and long-term viability (Maina, Kiai & Kyalo, 2020). As economies shift towards achieving Sustainable Development Goals (SDGs), financial institutions are expected not only to be economically viable but also to uphold social and environmental responsibility, all of which require sound financial planning and execution.

The sustainability of financial institutions - particularly deposit-taking Savings and Credit Cooperative Societies (SACCOs) - is highly dependent on how well they manage their financial processes. In the context of SACCOs, sustainability involves the capacity to maintain liquidity, meet operational costs, grow membership value, and adapt to economic shocks over time. This requires strategic alignment between financial decision-making and sustainability goals. According to Dwangu and Mahlangu (2021), institutions that effectively implement financial management practices are more resilient, agile, and better positioned to remain viable in competitive and regulated environments.

Key financial management practices such as liquidity management, financial reporting, risk management, and investment decision making each play a unique role in fostering sustainability. Liquidity management ensures liquidity, enabling SACCOs to meet short-term obligations and avoid insolvency. Financial reporting promotes transparency and accountability, which are necessary for attracting external support and maintaining stakeholder confidence (Revsine, Collins & Johnson, 2021). Risk management ensures that financial institutions are adequately shielded from potential threats, preserving capital and operational integrity. Meanwhile, prudent investment decision making drives long-term growth and wealth creation, both of which are vital to sustainability.

When aligned strategically, these financial management practices form an integrated system that enables SACCOs to operate efficiently, satisfy regulatory requirements, and serve their members sustainably. Poor implementation of any of these practices can disrupt the balance and expose the institution to liquidity crises, declining member trust, and eventual collapse - risks that have affected SACCOs such as Ekeza in Kenya. Therefore, understanding the interplay between FMPs and sustainability is essential in ensuring that SACCOs can remain viable financial institutions contributing to Kenya's socio-economic development.

1.1.4 Deposit-Taking SACCOs in Kenya

Saving and Credit Cooperative (SACCO) is a financial institution that is formed by members to support savings and investments. In Kenya, these institutions are divided into deposit taking and the non-deposit taking institutions (Mutiso, 2019). This study will focus on the deposit taking SACCOs that are regulated by the SACCO Supervisor Authority (SASRA) in Kenya. The responsibility of SASRA in Kenya is to license, supervise and regulate the conduct of the deposit

taking SACCOs in the country. In Kenya, Vision 2030 regards SACCOs as key enablers of people to access to credit and other loan facilities (Yitayaw, 2021).

Deposit taking SACCOs plays two critical roles in the growth of the economy of the country: investment and financial intermediation. Financial intermediation entails promotion and encouragement of a thrift culture of savings among members creating more awareness on effective ways of asset creation (Riro, Gatheru & Mutiso, 2020). The investment role of SACCOs entails encouragement to members to develop formal businesses, advising them on purchase of securities in stock markets. It also involves payment of dividends to members from the surplus made at the end of the financial year. The deposit taking SACCOs in Kenya have been encountering challenges of slow growth in membership and dividends and some have been posting financial losses (Barongo, 2021). This implies that financial sustainability of the deposit taking SACCOs in Kenya is in limbo and hence the desire to conduct the proposed study.

1.2 Problem Statement

Deposit-taking Savings and Credit Cooperative Societies (SACCOs) play a pivotal role in promoting financial inclusion, mobilizing savings, and offering credit services to underserved populations in Kenya. Their sustainability is vital for socio-economic empowerment, particularly in low- and middle-income communities. However, the financial sustainability of many deposit-taking SACCOs in Kenya has come under scrutiny in recent years. A growing number of SACCOs are facing liquidity constraints, rising non-performing loans, declining equity growth, and an inability to meet capital adequacy requirements set by the Sacco Societies Regulatory Authority (SASRA). These financial challenges have contributed to the collapse or near-collapse of institutions such as Ekeza SACCO and others, eroding public confidence in the SACCO sector (Ntoiti & Jagongo, 2021).

Evidence suggests that these challenges are closely linked to weaknesses in financial management practices. Ineffective liquidity management, poor financial reporting quality, inadequate risk mitigation strategies, and suboptimal investment decisions undermine the ability of SACCOs to remain financially sustainable over the long term (Maina, Kiai & Kyalo, 2020). While financial management practices have been widely studied in relation to firm performance, much of the existing literature focuses on corporate or non-financial sectors such as manufacturing (Rahmah & Peter, 2024), NGOs (Waigwe & Ali, 2018), and faith-based organizations (Okonkwo et al., 2024). These contexts differ significantly from the regulatory, structural, and operational realities of SACCOs in Kenya.

Moreover, prior research often conflates financial performance with financial sustainability, failing to capture the broader, long-term capacity of institutions to continue operating without external support. There is a paucity of empirical research that directly examines how specific financial management practices - namely liquidity management, financial reporting, risk management, and investment decision-making - affect the financial sustainability of deposit-taking SACCOs in Kenya. This study therefore sought to fill this gap by investigating the extent to which financial management practices influence the financial sustainability of deposit-taking SACCOs. By doing so, it provides context-specific insights that are essential for improving SACCO governance, informing regulatory reforms, and enhancing institutional resilience within Kenya's cooperative financial sector.

1.3 Research Objectives

1.3.1 General Objective

The general objective of the study was to establish the effect of financial management practices on sustainability of deposit-taking SACCOs in Kenya.

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

- i. To establish the effect of liquidity management on financial sustainability of deposit-taking SACCOs in Kenya
- ii. To determine the effect of financial reporting on financial sustainability of deposit-taking SACCOs in Kenya
- iii. To determine the effect of risk management on financial sustainability of deposit-taking SACCOs in Kenya
- iv. To analyze the effect of investment decision making on financial sustainability of deposit-taking SACCOs in Kenya
- v. To assess the moderating effect of organizational characteristics on the relationship between financial management practices and financial sustainability.

1.4 Research Hypotheses

The study tested the following null hypotheses:

H₀₁: Liquidity management has no significant effect on the financial sustainability of deposit-taking SACCOs in Kenya.

H₀₂: Financial reporting practices have no significant effect on the financial sustainability of deposit-taking SACCOs in Kenya.

H₀₃: Risk management practices have no significant effect on the financial sustainability of deposit-taking SACCOs in Kenya.

H₀₄: Investment decision-making has no significant effect on the financial sustainability of deposit-taking SACCOs in Kenya.

H₀₅: Organizational characteristics have no moderating effect on the relationship between financial management practices and financial sustainability.

1.5 Significance of the Study

The findings of the study enables managers working deposit taking SACCOs in Kenya to put in place relevant strategies to enhance financial sustainability of their institutions. Managers working with these institutions have an opportunity to implement sound and effective financial management practices that are required for survival. The study guides policy makers working with SACCOs in Kenya to formulate and implement effective policies on financial management that in turn promotes sustainable financing of these institutions. Scholars carrying out related studies have an opportunity to review literature of this study. This in the long run increases the amount of knowledge and information available as far as financial management practices and sustainability are concerned.

1.6 Scope of the Study

This study determined the implications of financial management practices on the sustainability of deposit-taking SACCOs. The specific focus was on liquidity management, financial reporting, risk management, and investment decision-making as they relate to financial sustainability. These

variables were selected based on the literature reviewed in the background of the study. The study was conducted during the month of May 2025. Data were collected using structured questionnaires. The study covered all 176 deposit-taking SACCOs in Kenya. Given the instrumental role SACCOs play in the growth of the Kenyan economy, the financial stability of these institutions was recognized as crucial, thereby justifying the need for this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers the theories and past studies that are relevant to the present inquiry. The conceptual framework is also provided followed by operationalization of the study variables.

2.2 Theoretical Review

This study was underpinned by three key theories: Liquidity Preference Theory, Agency Theory, and Stewardship Theory. These theories collectively provide a framework for understanding how financial management practices - specifically liquidity management, financial reporting, risk mitigation, and investment decisions - contribute to the financial sustainability of deposit-taking SACCOs in Kenya.

2.2.1 Liquidity Preference Theory

The Liquidity Preference Theory was introduced by John Maynard Keynes in 1936 as part of his seminal work *The General Theory of Employment, Interest, and Money*. The theory argues that individuals and institutions prefer to hold their wealth in liquid forms (such as cash) rather than in long-term investments, primarily due to uncertainty about future interest rates and economic conditions. Keynes posited that interest is not simply the reward for saving but a premium paid for parting with liquidity. Hence, the interest rate is determined by the supply and demand for money. When individuals prefer to hold cash instead of investing, interest rates must rise to incentivize lending or investing (Keynes, 1936). This perspective challenged classical economics by emphasizing psychological motives for liquidity rather than purely rational economic optimization.

Liquidity Preference Theory is grounded on several assumptions. First, it assumes that economic agents are risk-averse and prefer cash or near-cash assets because of their ability to meet unexpected financial needs or exploit sudden opportunities. Second, the theory presumes the existence of three motives for holding money: the transaction motive (for day-to-day needs), the precautionary motive (for emergencies), and the speculative motive (to take advantage of future investment opportunities when rates change) (Keynes, 1936). Third, it assumes that interest rates adjust in response to changes in the supply and demand for money. These assumptions imply that money is not merely a medium of exchange but also a store of value that competes with investment assets, especially in uncertain economic environments (Mishkin, 2019).

Despite its influence, Liquidity Preference Theory has faced several criticisms. Critics argue that the theory overemphasizes psychological motives and underrepresents the structural and institutional factors influencing interest rates and liquidity decisions. For instance, monetarists such as Milton Friedman contended that the theory neglected the long-run relationship between money supply and price levels (Friedman, 1956). Others note that the theory does not adequately account for financial innovation, such as the rise of credit cards and digital banking, which have reduced reliance on cash. Furthermore, empirical research has shown that the speculative motive is often difficult to isolate and measure in real economies, making the theory difficult to test rigorously (Laidler, 1981). These critiques suggest that while the theory offers useful insights, it may not fully explain contemporary financial behavior.

In the context of this study, Liquidity Preference Theory provides a strong theoretical foundation for examining liquidity management in SACCOs. Since SACCOs accept member deposits and issue loans, they must strike a balance between maintaining sufficient cash reserves and investing in revenue-generating assets. The theory supports the idea that SACCOs may

prioritize short-term liquid assets to ensure operational continuity and compliance with regulatory liquidity ratios set by the Sacco Societies Regulatory Authority (SASRA). In times of financial uncertainty or economic downturns, the preference for liquidity becomes even more pronounced (Maina, Kiai, & Kyalo, 2020). By applying this theory, the study explores how liquidity practices influence the financial sustainability of SACCOs - a core variable of interest.

2.2.2 Agency Theory

Agency Theory was developed by Jensen and Meckling in 1976 to explain the relationship between principals (owners or shareholders) and agents (managers) in contexts where control is delegated (Jensen & Meckling, 1976). The theory posits that agents may act in their own interest rather than in the best interest of principals, especially when information asymmetry exists. In the context of Deposit-Taking SACCOs (DT-SACCOs), members are the principals, while the hired managers act as agents tasked with operational decisions. Because members often lack the expertise or time to monitor agents, the separation of control from ownership may lead to conflicts of interest. Financial management decisions—such as reporting practices or investment strategies - can become susceptible to agency problems if proper governance mechanisms are not in place to align interests.

Agency Theory rests on several core assumptions. Firstly, it assumes that both principals and agents are self-interested actors who seek to maximize their individual utility (Eisenhardt, 1989). Secondly, there is presumed information asymmetry between principals and agents, where agents usually hold more information. Thirdly, the theory assumes goal divergence, meaning agents may pursue actions that do not necessarily reflect the goals of the principals. In SACCOs, this divergence may manifest in poor investment choices, inadequate disclosure of financial information, or mismanagement of loans and deposits. Lastly, the theory assumes that monitoring

mechanisms and incentive structures (e.g., performance-based bonuses, reporting requirements, or board oversight) can reduce agency costs and align the interests of both parties. These assumptions inform the governance and accountability mechanisms within SACCOs.

While influential, Agency Theory has faced several criticisms. One major critique is its overly rational and economic view of human behavior, often ignoring social, psychological, and ethical considerations (Daily, Dalton & Cannella, 2003). It assumes that all agents are inherently opportunistic and that all conflicts can be resolved through financial incentives or oversight, which may not reflect real organizational dynamics. Furthermore, critics argue that the theory's focus on control mechanisms may lead to overly bureaucratic structures, stifling innovation and trust (Davis, Schoorman & Donaldson, 1997). In the SACCO environment, excessive control may inhibit the flexible, member-centric operations that define cooperative institutions. Additionally, the theory underemphasizes collective decision-making processes, which are more common in member-based organizations like SACCOs.

Agency Theory is highly relevant to this study, particularly in examining how financial management practices such as financial reporting and investment decision-making can mitigate agency problems in DT-SACCOs. The theory underscores the importance of transparency, accountability, and governance structures to ensure agents (managers) act in the best interest of principals (members). Effective financial reporting reduces information asymmetry, enhancing members' ability to monitor performance and reducing agency costs (Mustapha & Che-Ahmad, 2011). Similarly, structured investment decisions and risk management policies minimize the likelihood of self-serving managerial behaviors. The study draws on Agency Theory to assess whether SACCOs with stronger governance mechanisms exhibit better financial performance, indicating successful alignment between management decisions and members' financial interests.

2.2.3 Stewardship Theory

Stewardship Theory, originally developed by Donaldson and Davis (1991), provides a contrasting view to Agency Theory by positing that managers, when left on their own, act as stewards whose motives align with the objectives of the organization. Unlike Agency Theory - which assumes inherent conflict between owners and managers - Stewardship Theory suggests that organizational leaders prioritize long-term value, collective goals, and sustainable outcomes over personal gain. This is particularly relevant in cooperative financial institutions such as SACCOs, where the ethos of collective benefit and mutual responsibility is fundamental (Muthoni & Muturi, 2021).

The theory holds that stewards are motivated by intrinsic factors such as duty, reputation, job satisfaction, and a strong identification with the institution's mission (Davis et al., 1997). In this view, managers are trustworthy agents who aim to protect and grow member contributions, ensure institutional longevity, and enhance collective welfare rather than maximizing individual short-term gains. Consequently, organizational structures that emphasize empowerment, trust, and participative decision-making are more likely to yield optimal outcomes than those that rely on close monitoring and control (Ravasi & Schultz, 2006).

In SACCOs, where leadership is often drawn from among members and is accountable to the general assembly, the stewardship model resonates strongly. For example, elected board members and managers are expected to act in the best interest of the entire membership, ensuring that financial practices are transparent, ethical, and sustainable (Wasike & Wambua, 2019). The emphasis on fiduciary responsibility aligns with stewardship values, where sustainability is not only a financial concern but also a moral and social commitment.

Despite its relevance, Stewardship Theory has faced critiques. Critics argue that it is overly idealistic, assuming that all managers are inherently trustworthy and aligned with institutional goals, which may not always hold true especially in environments with weak governance or limited oversight mechanisms (Van Slyke, 2007). Moreover, in contexts where formal checks and balances are lacking, there is potential for moral hazard or mismanagement under the guise of stewardship. Empirical studies have shown mixed support, with some indicating that without adequate accountability, even stewards may succumb to opportunism (Dhir, 2015).

Nonetheless, empirical research affirms the applicability of Stewardship Theory in cooperative and nonprofit settings. For example, Kiiru and Ndung'u (2020) found that leadership styles rooted in stewardship principles significantly enhanced organizational sustainability in Kenyan SACCOs. Similarly, Wanjohi and Wambua (2021) reported that SACCOs that fostered high levels of trust and participative governance achieved better financial performance and member satisfaction than those that operated under rigid hierarchical models.

This study adopts Stewardship Theory to explore how governance attributes such as leadership trustworthiness, committee engagement, and decision transparency affect SACCO financial sustainability. Given the member-driven nature of SACCOs, stewardship-based leadership and governance practices are vital for building institutional resilience, minimizing financial mismanagement, and promoting sustainable service delivery. By embedding stewardship principles into financial reporting, investment decisions, and working capital management, SACCOs can secure both member trust and long-term viability. Thus, this theory will be used to underpin the role played by risk management as far as financial sustainability is concerned. Table 2.1 is a summary of the theories that were reviewed and their contribution to the study:

TABLE 1
Summary of Theories Reviewed

Theory name	Proponent	Key argument	Relevance to the proposed study
Liquidity Preference Theory	Keynes (1936)	Theory provides a strong theoretical foundation for examining liquidity management in SACCOs.	SACCOs may prioritize short-term liquid assets to ensure operational continuity and compliance with regulatory liquidity ratios set by the Sacco Societies Regulatory Authority (SASRA)
Agency Theory	Jensen and Meckling (1976)	Links the interaction between managers, shareholders and the board in achieving the objectives of the firm	It will support the variables of financial reporting and investment decision making
Stewardship Theory	Markowitz (1952)	Stewardship-based leadership and governance practices are vital for building institutional resilience, minimizing financial mismanagement, and promoting sustainable service delivery.	It will support the variable of risk management as it relates with financial sustainability

2.3 Empirical Review

The review of past empirical studies was as presented in the subsequent sections:

2.3.1 Liquidity Management and Financial Sustainability

Sharma and Tripathi (2024) evaluated the effect of liquidity management on sustainability growth of firm in India with profitability as a mediating variable. A total of 367 firms listed in India were covered in 2023. Information for analysis was obtained from secondary sources of the respective firms. Linear regression analysis guided the analysis and processing of the findings in this study. It was apparent after data processing that liquidity had a direct but insignificant effect on sustainability growth of enterprises. The effect of liquidity on long-term growth of an enterprise was also found to be indirect and negligible. The implication of the findings was that an enhancement in liquidity does not immediately result in higher sustainable growth of an enterprise. This study was however done in India while the proposed one will be conducted in Kenya among deposit taking SACCOs.

Nastiti, Atahau and Supramono (2019) determined the effect of liquidity on profitability and sustainable growth. The study covered listed manufacturing firms in Indonesia between 2010-2017. Panel data regression analysis covering fixed effect models were adopted in testing the link between the variables. Information was gathered from secondary sources over the said period. The analysis indicated that liquidity and profitability of the firms are significantly linked with each other. However, liquidity management and sustainable growth were not significantly linked with each other. The implication from the finding was that firms should effectively manage their liquidity to increase their profits and realize sustainable growth.

Hinaya and Ellili (2021) focused on non-financial firms in United Arab Emirates and evaluated the effect of liquidity management in sustainable performance. The study covered the period 2014-2019 and information was gathered from secondary sources. The empirical findings were that liquidity and sustainable performance are significantly related to each other. Specifically,

low account receivable and higher accounts payable turnover were seen to make a significant contribution towards the sustainable performance of the firm. The gap created by this study however that is its focus was on firms in UAE while the proposed study was conducted in Kenya.

Minyoso and Otuya (2023) conducted a study that determined the effect of liquidity management on financial distress of chartered public institutions of higher learning in Kenya. The study adopted systematic literature review where 55 journal articles were identified from which 11 were picked and included in the analysis. The period for review was 2013-2022 and panel data techniques aided the organization of data. The reviewed paper documented that poor management of the liquidity components had resulted in financial distress of the universities studied. However, the study focused on universities while the proposed study was deposit taking SACCOs in Kenya.

Minyoso and Musiega (2020) determined the effect of liquidity on financial sustainability of Kenyan Universities. A total of 13 universities were selected and included in the study and census was used. Liquidity theory was used to underpin the study. Information was gathered from secondary sources using a customized data gathering tool. The sources of information for analysis were obtained from the published financial statements of the respective universities. The techniques for data processing adopted included time series and panel data. From the gathered and analyzed information, the study pointed out that liquidity exerts a positive and significant effect on financial sustainability of Kenyan universities. The gap created by this study however is that it focused on universities while the present study was on deposit taking SACCOs in Kenya.

2.3.2 Financial Reporting and Financial Sustainability

Biehl, Bleibtreu and Stefani (2024) evaluated the real implication of financial reporting. It entailed systematic review of literature where 94 inquiries were critically reviewed. It was shown that high

quality financial reporting has a positive effect on efficiency in allocation of resources at firm level. Majority of the reviewed inquiries also pointed out the existence of such direct implication between the two variables. Akinadewo, Al-Amen, Dagunduro and Akinadewo (2023) did an assessment of financial reporting components and their implication on investment decisions among entities in Nigeria. Information in this study was gathered from firsthand sources guided by structured questionnaire. The analysis pointed out that financial reporting exerted significant implication on ability to make investment decisions.

Agutu and Githira (2023) evaluated the effect of sustainable reporting and the effect on monetary performance with emphasis on listed entities in Kenya. Data for this study was gathered from secondary sources from 2015 all through to 2021, this was done through content analysis. The processed data gave an indication of the existence of positive nexus between sustainability reporting and monetary performance. The implication of this result is that firms need to adopt sustainability since doing so would drive strategies of the enterprise.

2.3.3 Risk Management and Financial Sustainability

Opiyo (2018) conducted a review on risk management practices and their effect on financial sustainability of non-governmental entities in the County of Migori. The variables of interest in this study covered monitoring and evaluation, partnerships as well as transparency and accountability. From the 30 targeted NGOs, data was gathered from 22 of them and sampling was done through stratified method. After analysis, the study pointed out that the practices of managing risk have significant implications on financial sustainability.

Abiodun and Akpan (2022) conducted an analysis of enterprise risk management and its effect on sustainability of financial entities in the context of Nigeria. A total of 14 institutions were

covered on a period from 2008 all through to 2019. Both descriptive and inferential statistics were adopted in this study. Key observation after analysis indicated that risk management is a significant practice that can support sustainability from an organizational point of view. It also emerged that capitalization degree and the structure of the firm have direct bearing on the robustness of the risk management system of an organization.

Apaloo and Bright (2022) evaluated the effect of risk management practices on performance of small firms. Convenience sampling aided the selection of the study sample. Data in this study was collected from primary sources supported by structured questionnaire. It was shown that risk management practices were not highly adopted by the owners of the firms studied. The analysis indicated that risk management practices and performance have significant bearing on performance.

Chitta and Soni (2023) did an analysis of how financial risk management and performance were linked with each other. In this study, critical role played by proactive risk management on stability of the firm were highlighted. It noted that it is crucial for firms to embrace financial risk management procedures as doing so can contribute towards financial sustainability at a firm level.

Mbugua (2020) did an analysis of risk management and its effect on performance of real estate entrepreneurs in Kenyan context. The variables of interest in this study included technical risk, financial risk, market risk and operational risk management. From the 25 factors that were identified, delays in payment, poor market feasibility studies, bribery and corruption were the key risk factors. It was shown that technical skills, operational risk and operational risk management exerted significant implications on performance. It also emerged that political and market risk management did not significantly impact performance.

2.3.4 Investment Decision Making and Financial Sustainability

Fajaria (2017) did a review of how investment decision on firm value. Descriptive design was adopted. The study covered all the 61 listed firms, and a census was adopted. Descriptive and inferential statistics were adopted. The designs covered time series and cross-sections. The analysis indicated that investment decisions and ROA were significantly linked with each other. Pandiangan and Murwaningsari (2020) conducted a review of investment decision and the effect on tax management with specific focus on manufacturing listed entities in Indonesia. The study covered secondary data on the period 2014-2018. The analysis indicated that investment decisions significantly impact stax management.

Suteja, Gunardi, Alghifari, Susiadi, Yulianti and Lestari (2023) evaluated the implication of investment decisions on the value of the firm. The study covered non-financial listed entities in Indonesia. Secondary data was adopted covering between 2018-2020. The analysis pointed out the existence of negative nexus between investment decisions and firm value. Maranga (2022) evaluated the effect of investment decisions on financial performance of non-financial entities listed at NSE in Kenyan context. Renewal, replacement and expansion decisions were the variables of this study. Explanatory nonexperimental design was adopted in this study. The findings indicated the existence of a negative nexus between investment decisions and firm value.

Ringera and Muturi (2019) determined the effect of investment decisions on monetary performance in Kenya. The variables covered expansion, research and development as well as replacement decisions. In total, 14 microfinance entities in Kenyan context were covered. Inferential statistics covered correlation and regression. It was apparent after analysis that investment in research and development and expansion decisions have positive and significant implications for the performance of microfinance banks.

Kaur and Kaur (2019) evaluated how strategic investment decision affected the value of the firm covering firms in India. Out of the 581 firms that were covered, 217 were used as the sample. It was noted from analysis that strategic investment decision announcement had positive implication on value of an entity. Table 2 gives a summary of the empirical studies reviewed:

TABLE 2
Summary of Empirical Studies Reviewed

Author	Research Topic	Methodology	Key findings
Sharma and Tripathi (2024)	Determined the nexus between liquidity and sustainability growth at firm level in India.	Data was collected from secondary sources.	Liquidity has an indirect implication on growth at firm level.
Biehl, Bleibtreu and Stefani (2024)	The real implication of financial reporting was explored.	Systematic review of literature was adopted.	Financial reporting helps in effective allocation of resources.
Akinadewo, Al-Amen, Dagunduro and Akinadewo (2023)	The nexus between financial reporting components and investment decision making of SMEs in Nigerian context.	Questionnaires were adopted for data collection.	Financial reporting supports effective investment decision making.
Minyoso and Otuya (2023)	Liquidity and the implication on financial distress of chartered higher learning entities in Kenyan context.	Systematic review of literature was adopted.	Unsound management of liquidity can contribute towards financial distress.
Suteja, Gunardi, Alghifari, Susiadi, Yulianti and Lestari (2023)	The implication of investment decision and firm's value of listed entities in Indonesia	Panel data methodology was adopted during the period 2018-2020 covering 215 observations in total.	Investment decisions and firm value are negatively linked with each other.

Apaloo and Bright (2022)	Risk management practices and the implication on performance of SMEs.	Data was collected through questionnaire and SPSS guided the analysis.	Risk management practices had not been widely embraced by the study enterprises.
Abiodun and Akpan (2022)	Enterprise risk management and the implication on sustainability of financial entities in Nigerian context.	Fourteen Nigerian banks from 2008 to 2019 were covered.	Risk management plays an instrumental role from an organizational point of view.
Minyoso and Musiega (2020)	Liquidity and financial sustainability of Kenyan Universities.	Data was gathered from secondary sources and regression guided the analysis.	Liquidity and financial sustainability are positively related to each other.
Hinaya and Ellili (2021)	Focused on non-financial firms in United Arab Emirates and evaluated the effect of liquidity management in sustainable performance.	Secondary data was collected and analyzed.	Liquidity and sustainable performance are significantly linked with each other.

2.4 Conceptual Framework

According to Miles, Huberman, and Saldaña (2014), a conceptual framework is “a visual or written product that explains, either graphically or in narrative form, the main things to be studied - the key factors, concepts, or variables - and the presumed relationships among them. Figure 2.1 is the conceptual framework that guided the proposed study:

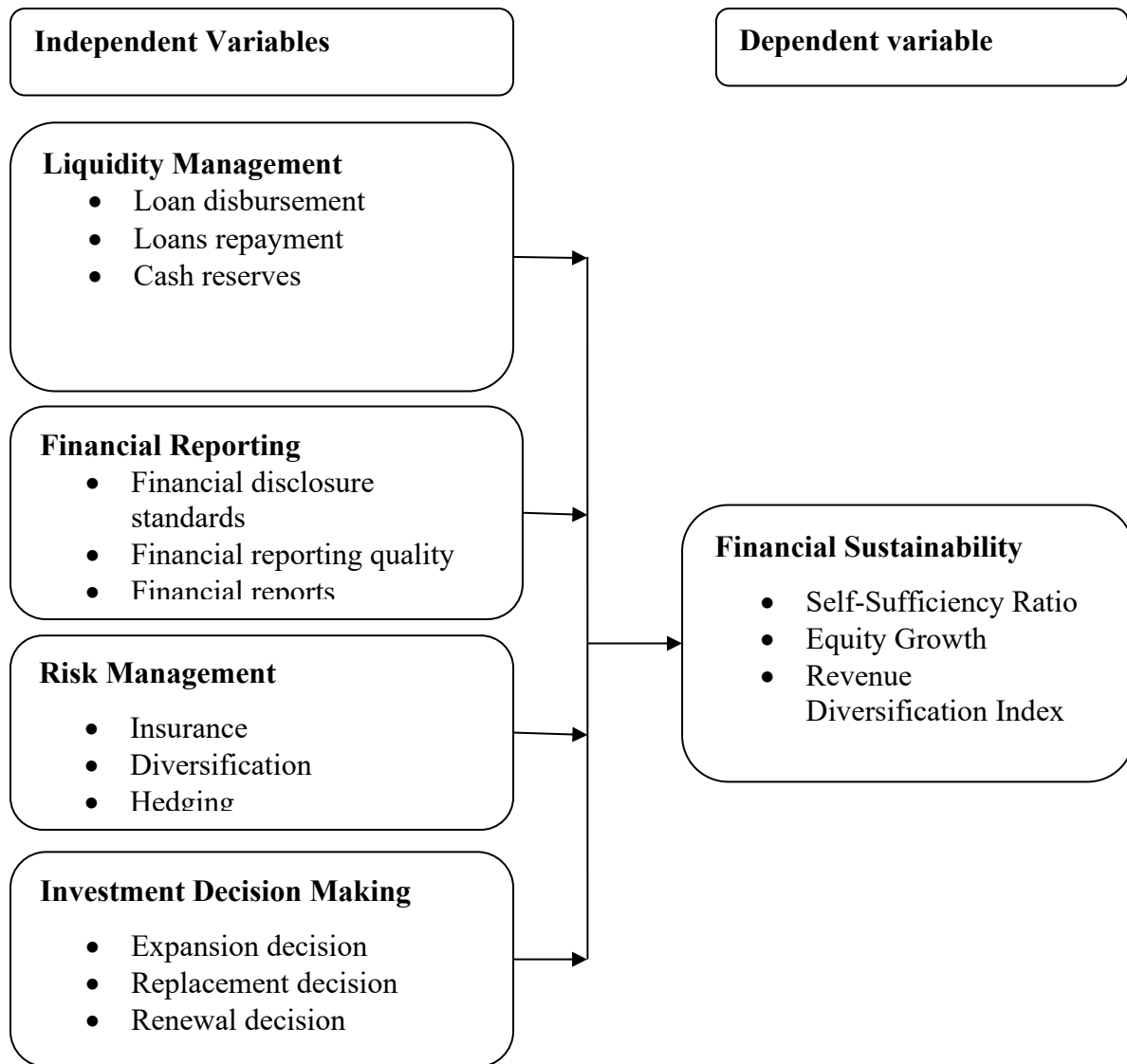


FIGURE 1

Conceptual Framework

Source: Author (2025)

2.5 Operationalization of Variables

Table 3 is a summary of operationalization of the study variables:

TABLE 3
Operationalization of Variables

Type of variable	Indicators	Scale of measurement
Independent management	• Accounts payable management	Ordinal scale
	• Accounts receivable management	
	• Inventory management	
Independent Reporting	• Financial disclosure standards	Ordinal scale
	• Financial reporting quality	
	• Financial reports	
Independent Management	• Insurance	Ordinal scale
	• Diversification	
	• Hedging	
Independent Decision Making	• Expansion decision	Ordinal scale
	• Replacement decision	
	• Renewal decision	
Dependent Sustainability	• Self-Sufficiency Ratio	Ordinal scale
	• Equity Growth	
	• Revenue Diversification Index	

Source: Author (2025)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter outlines the methodologies in terms of design, target population and sampling to be adopted. It also covers the research instrument, validity and reliability as well as data collection procedure and data analysis.

3.2 Research Design

This study adopted a causal research design, which is ideal for examining the cause-and-effect relationships between variables. Causal research design enables researchers to determine whether changes in independent variables bring about significant changes in the dependent variable (Walliman, 2021). As a form of quantitative inquiry, it allowed for the use of advanced inferential statistics to rigorously test hypotheses, establish causality, and quantify the strength and direction of relationships among constructs (Clark, Foster, Bryman, & Sloan, 2021). In this context, the design provided a structured framework that systematically guides the collection, analysis, and interpretation of data to support or refute proposed causal links.

For this study, the causal design was particularly appropriate in investigating whether financial sustainability was significantly influenced by financial management practices in deposit-taking SACCOs in Kenya. These practices included liquidity management, financial reporting, risk management, and investment decision-making. According to Huntington-Klein (2021), causal research is essential when the objective is not just to determine whether a relationship exists but to explore the underlying mechanism that explains how and why that relationship functions. In the Kenyan SACCO sector, where performance outcomes vary widely, understanding causality provides actionable insights that support evidence-based policy and management reforms. Fischer,

Boone, and Neumann (2023) further affirm that causal designs are crucial for studies aimed at developing explanatory models of organizational behavior or financial outcomes.

A major strength of the causal research design lies in its ability to use statistical methods - such as multiple regression analysis - to isolate and test the effect of each independent variable on the outcome of interest while controlling for other potentially confounding factors (Mensah & Adukpo, 2025). In this study, such methods helped identify how specific financial practices individually and jointly affect SACCOs' financial sustainability. This allows practitioners to focus on key drivers and avoid inefficient resource allocation.

Nevertheless, a limitation of relying solely on a quantitative causal approach is the risk of overlooking qualitative factors like organizational culture, leadership behavior, or informal regulatory pressures, which may also influence financial sustainability. To mitigate this limitation, the study incorporated several strategies. Control variables (such as SACCO size, age, membership base, and regulatory tier) were integrated into the regression models to account for organizational and contextual heterogeneity. Moreover, qualitative insights from key informant interviews with SACCO managers and regulators were incorporated to complement the quantitative data, offering deeper perspectives into the causal mechanisms behind the observed statistical relationships. Where data allowed, panel or time-series cross-sectional analysis was conducted to capture temporal variations, further strengthening causal inferences.

In summary, the adoption of a causal research design, complemented with qualitative elements and supported by control variables, aligns well with the objective of this study: to determine and explain how financial management practices causally influence the financial sustainability of deposit-taking SACCOs in Kenya.

3.3 Target Population

The target population refers to the specific group of individuals or units that share certain characteristics relevant to the research and from which data was gathered (Coe, Waring, Hedges, & Ashley, 2021). For this study, the target population comprised the 176 licensed and operational deposit-taking SACCOs in Kenya, as registered and listed by the Sacco Societies Regulatory Authority (SASRA, 2023). These SACCOs form the unit of analysis for the study, as they operate under a standardized regulatory framework and are central to Kenya's financial inclusion strategy. Each SACCO was represented by a single respondent who held a senior financial management role. Therefore, their responses are treated as representative of the SACCO's financial management practices and sustainability status.

3.4 Census

A census is a research strategy that involves collecting data from every member of the population rather than selecting a sample (Kothari, 2014). This approach was ideal when the population is relatively small and accessible, allowing the researcher to achieve comprehensive coverage and avoid sampling errors. In this study, a census of all the 176 licensed deposit-taking SACCOs in Kenya was conducted. Each SACCO, as listed by the Sacco Societies Regulatory Authority (SASRA, 2023), was represented by one finance manager, who is presumed to have the requisite knowledge of the SACCO's financial management practices and sustainability strategies. The use of a census was justified because the population size was manageable, and capturing data from all the SACCOs enhances the validity, reliability, and generalizability of the study findings.

3.5 Research Instrument

A research instrument is a tool used to systematically collect data from study participants. In this study, both primary and secondary data were used to comprehensively assess the effect of financial

management practices on the financial sustainability of deposit-taking SACCOs in Kenya. For primary data, a structured questionnaire comprising only close-ended items was utilized, consistent with the study's quantitative research design. The questionnaire items were derived from theoretical and empirical literature reviewed and were aligned with the variables outlined in the conceptual framework. According to Vu (2021), designing instruments based on prior validated studies enhances both validity and reliability, thereby improving the credibility of the findings.

The questionnaire was structured into six sections covering general information, financial sustainability, liquidity management, financial reporting, risk management, and investment decision making - labeled as Sections A, B, C, D, E, and F respectively. The design of the items on the questionnaire was guided by a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). This scale was appropriate for capturing the degree of agreement with statements relating to financial practices and sustainability, and it supported the quantitative method employed to explore the cause-effect relationship between the independent and dependent variables.

We designed the questionnaire using protocols used in published studies on how cooperative financial institutions handle their finances. To ensure consistency, the questions were adjusted and contextualized using the approaches from studies such as Waigwe & Ali (2018), Mustapha & Che-Ahmad (2011) and Mutuku & Njoroge (2021). These sources created a strong base for handling liquidity, preparing financial reports, controlling risks and making investment decisions. Citing these models increased the instrument's reliability and kept its content and construction consistent with accepted research methods.

In addition to the primary data, secondary data were collected to provide an objective measure of financial sustainability. These included audited financial reports, balance sheets,

income statements, and other performance documents obtained from the SACCOs or the Sacco Societies Regulatory Authority (SASRA). These records offered measurable insights into the financial health and trends over time. By integrating questionnaire responses with financial records, the study adopted a mixed-methods approach in terms of data sources (though still analyzed quantitatively). This triangulation enhanced the comprehensiveness of the research findings and supported a more holistic evaluation of the impact of financial management practices on SACCO sustainability.

3.6 Validity and Reliability of the Instrument

Validity refers to the degree to which a research instrument accurately measures what it is intended to measure (Adams & McGuire, 2022). In this study, content validity was prioritized to ensure that the questionnaire items effectively captured the core constructs under investigation, namely financial management practices and financial sustainability. To achieve this, the draft questionnaire underwent a rigorous expert review process. Two specialists in the field of finance and cooperative management were engaged to provide their professional assessment. Additionally, the research supervisor critically evaluated the questionnaire to ensure that it aligned with the research objectives and was conceptually sound.

During the review process, the experts assessed the questionnaire based on several key criteria. These included the relevance of each item to the underlying conceptual framework, the clarity of the wording to avoid ambiguity, the comprehensiveness of the items in covering all essential dimensions of each construct, and the appropriateness of the response scales used. Their feedback, along with suggestions from the supervisor, was systematically documented and used to revise and improve the instrument. Through this meticulous validation process, the study ensured

that the final version of the questionnaire demonstrated strong content validity and was suitable for use in field data collection.

Reliability, on the other hand, concerned the consistency and stability of the instrument in measuring constructs across different contexts and time periods. To assess reliability, a pilot study was conducted using respondents from five deposit-taking SACCOs in Nairobi County, selected for their accessibility and operational similarities to the main study population. These pilot respondents did not participate in the main study to eliminate bias due to repeated exposure to the questionnaire.

The reliability of the questionnaire was primarily measured using Cronbach's Alpha coefficient, which evaluated internal consistency. According to Sardana, Shekoohi, Cornett, and Kaye (2023), values of Cronbach's Alpha ≥ 0.7 indicate that the items in a scale reliably measure the same underlying construct. If alpha values fell below this threshold, the relevant sections of the questionnaire were revised for clarity, redundancy, or scale misalignment. In addition to Cronbach's Alpha, split-half reliability was considered to further assess the instrument's internal consistency. This technique involved dividing the questionnaire into two halves and examining the correlation between the scores from each half. A high correlation supported the internal reliability of the tool. While test-retest reliability would have provided insight into the instrument's stability over time, it was not feasible in this study due to resource and timeline constraints.

3.7 Data Collection Procedure

The data collection procedure for this study followed a structured approach designed to enhance both reach and response quality. Prior to the commencement of fieldwork, an official letter of introduction was obtained from KCA University. This letter served to authenticate the researcher's

identity and objectives, thereby increasing the credibility of the study and facilitating access to respondents within SACCOs.

To accommodate geographical diversity and respondent availability, a mixed-mode data collection strategy was employed. For SACCOs located within Nairobi County, paper-based questionnaires were administered using a drop-and-pick-later method. This approach was tailored to respect the busy schedules of SACCO staff while providing sufficient time to complete the questionnaires at their convenience. For SACCOs situated outside Nairobi, data were collected electronically through a structured Google Forms questionnaire. The use of digital tools in these regions ensured broader outreach and logistical efficiency.

To mitigate potential biases arising from the use of two different modes of administration, careful measures were implemented to maintain consistency. Both the paper-based and online questionnaires were identical in structure, wording, and response formatting. This standardization was aimed at minimizing variation in interpretation and ensuring that responses across formats were directly comparable. Furthermore, a pilot test was conducted for both versions to check for any discrepancies in understanding or response behavior, thereby reinforcing the reliability of the data.

Ethical considerations were rigorously observed throughout the data collection process. Informed consent was obtained from all participants prior to participation. Each respondent was provided with a clear explanation of the purpose of the study, the voluntary nature of their involvement, and the assurance of confidentiality regarding their responses. No incentives were offered, as participation was entirely voluntary and based on informed willingness. All data

collected were securely stored, anonymized to protect the identity of the respondents, and accessed only by authorized personnel directly involved in the study.

3.8 Data Processing and Analysis

Data analysis is the processing of data to generate information for report writing. In this study, the information from the field was keyed into excel before being exported into SPSS for analysis. Statistics on means and standard deviations were computed as key descriptive statistics and multiple regression was an inferential statistic. Below was the overall multiple regression model that guided the analysis of the findings in this study:

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

Where:

Y = Financial Sustainability

β_0 = constant

β_0, β_1 = beta coefficients

X₁ = Working Capital Management

X₂ = Financial Reporting

X₃ = Risk Management

X₄ = Investment Decision Making

ε = error term

Composite scores for each variable were computed by averaging the responses to the items under each construct. Reliability was tested using Cronbach's Alpha, with all scales meeting the threshold of 0.7 for acceptable internal consistency. Exploratory Factor Analysis (EFA) was conducted to validate the dimensionality of the measurement constructs. Factors were extracted using Principal Component Analysis with Varimax rotation. Items with factor loadings below 0.5

or cross-loadings were removed. Factor scores were generated and used as independent variables in the regression analysis.

The SPSS was used to run for regression analysis which in turn supported formulation of inferences and relevant deductions. This was done by interpreting the findings of p-values. The regression model was used to test the four hypotheses by examining the significance and direction of the coefficients for each financial management practice. Statistical significance at $p < 0.05$ determined whether to reject the null hypotheses, thereby assessing their effects on financial sustainability. Ghanad (2023) argues when the p-value is less than 0.05; an inference drawn is that a significant nexus exists between variables. The strength and direction of the relationship between variables of the study was determined through correlation analysis by interpreting the Pearson Correlation Coefficient.

According to Papageorgiou (2022), Pearson Correlation Coefficient above 0.5 indicates that the relationship between variables was strong. For regression model, the value of coefficient of determination R-squared was interpreted to show the model fitness.

The study also used secondary data, including financial statement audits, SACCO annual reports and information obtained from SASRA's records. Systematic secondary data analysis allowed us to identify financial sustainability measures such as the Self-Sufficiency Ratio, Equity Growth Rate and Revenue Diversification Index. To improve the accuracy of the results, primary data answers were cross-checked with these indicators. Combining the two data sources helped strengthen the study's conclusions by improving its methodological consistency and making the conclusions complete and more reliable.

3.9 Diagnostic Tests

To ensure the robustness and reliability of the regression model used in analyzing the effect of financial management practices on the financial sustainability of deposit-taking SACCOs in Kenya, several diagnostic tests were conducted. These included tests for multicollinearity, normality, linearity, homoscedasticity, and serial correlation.

3.9.1 Multicollinearity Test

Multicollinearity refers to a situation in which independent variables are highly correlated, which can distort the estimates of regression coefficients. To detect this, the Variance Inflation Factor (VIF) was computed. VIF values close to 1 indicate minimal multicollinearity, while values above 10 suggest a potential multicollinearity problem. According to Liamputtong (2019), VIF values within the range of 1 to 10 are generally acceptable and indicate no serious multicollinearity concerns. If multicollinearity was detected, the affected variables were dropped or combined as appropriate.

3.9.2 Normality Test

Normality refers to the distribution of data, which should ideally be normal to meet the assumptions of parametric tests. Skewness and Kurtosis statistics were computed to assess normality. As Bougie and Sekaran (2019) note, values within the threshold of ± 3 for both skewness and kurtosis are considered acceptable, indicating approximate normality. If the data violated this assumption, logarithmic transformation was applied to normalize the variables using SPSS.

3.9.3 Linearity Test

Linearity is a fundamental assumption in regression analysis, requiring a linear relationship between independent and dependent variables. Pearson correlation coefficients were used to

examine the direction and strength of these relationships. As Harris et al. (2019) explain, statistically significant correlations - either positive or negative - suggest linearity. If non-linearity was detected, log-transformation of the variables were employed to correct the violation.

3.9.4 Homoscedasticity Test

Homoscedasticity refers to the assumption that the variance of residuals is constant across all levels of the independent variables. To test for this, scatter plots of residuals versus predicted values were examined. A random and evenly spread pattern of residuals suggests that the homoscedasticity assumption holds. Alternatively, the Breusch-Pagan test may be conducted. If heteroscedasticity was observed, remedial measures such as transforming variables or using robust standard errors were considered to correct the distortion in standard error estimates (Wooldridge, 2016).

3.9.5 Serial Correlation Test

Serial correlation, or autocorrelation, occurs when residuals are correlated across observations, particularly in time-series or panel data. The Durbin-Watson statistic was computed to test for the presence of serial correlation. Values close to 2 suggest no serial correlation, whereas values significantly lower or higher than 2 indicate positive or negative autocorrelation, respectively. If serial correlation was detected, remedies such as generalized least squares (GLS) or adding lagged variables were explored (Gujarati & Porter, 2009).

3.10 Ethical Considerations

In conducting this research, ethical integrity was prioritized at all stages. Prior to data collection, approval was sought from KCA University through a formal letter of introduction indicating that the study was strictly for academic purposes. Informed consent was obtained from each participant through a detailed consent form explaining the study's purpose, procedures, potential risks and

benefits, confidentiality assurances, and the voluntary nature of participation, including the right to withdraw at any point without repercussions. The consent form also included contact information for the researchers and a university-appointed ethics representative in case participants had concerns. Consent was obtained in writing and stored securely.

Recruitment involved purposive sampling of finance managers from all 176 licensed deposit-taking SACCOs in Kenya. Initial contact was made via email, followed by phone calls. During recruitment, participants were provided with comprehensive information to help them make informed decisions before opting in.

To promote ethical rigor and transparency, the study adopted several bias mitigation strategies. Researcher bias was minimized through the use of standardized data collection tools (structured questionnaires) and a pilot study to refine the instrument. Response bias was addressed by ensuring anonymity and reassuring respondents that their answers would not be linked to them personally or to their institutions. The questionnaires were neutrally worded to avoid leading responses. Transparency was maintained throughout the study, including clear documentation of data management procedures. All data were stored securely: digital records in a password-protected Excel file, and physical questionnaires in a locked cabinet accessible only to the research team. After analysis, anonymized data were made available upon request for verification purposes, subject to ethical clearance. Findings were reported truthfully, without manipulation or suppression of results, ensuring academic honesty and a balanced presentation of outcomes.

The study also relied on secondary data such as SACCO annual financial reports, audit reports, and records from the SACCO Societies Regulatory Authority (SASRA). To ensure data quality, these secondary sources were evaluated based on their credibility, relevance, consistency,

and date of publication. Any limitations of secondary data - including potential outdatedness, incomplete data, or inconsistent formats - were clearly acknowledged and discussed in the final report. Where gaps in secondary data arose, primary data helped to triangulate and validate findings.

The well-being of participants was considered paramount. Should any respondent have experienced discomfort or stress during data collection, they were encouraged to pause or stop the interview. Participants were given access to support resources, including counseling services if necessary. All data were anonymized using participant codes, and any identifying information was removed from the reports. This approach ensured ethical handling and compliance with data protection standards throughout the research process.

The broader SACCO community in Kenya stood to benefit significantly from this research. By analyzing how financial management practices affected sustainability, the findings informed evidence-based improvements in SACCO operations. Recommendations from the study were positioned to support SACCO leaders and policymakers in strengthening financial reporting, improving risk management strategies, and making sound investment decisions. Engagement with SACCO stakeholders was undertaken during preliminary data collection to build trust and gain deeper insights.

To maximize the practical utility of the research, results were disseminated through academic publications, presentations at SACCO forums, and summary reports shared with key stakeholders, including SACCOs, SASRA, and the Ministry of Cooperatives. The dissemination strategy emphasized accessibility, using clear language and visual aids to ensure that both technical

and non-technical audiences could benefit from the findings. Ultimately, the study aimed to promote financial resilience and long-term stability across Kenya's SACCO landscape.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents the results of the study based on data collected from finance managers of licensed deposit-taking SACCOs in Kenya. The findings are structured according to the study objectives and include descriptive and inferential analyses. The chapter begins with the response rate, followed by the results of the pilot test for reliability and validity, and concludes with data analysis aligned to each research objective.

4.2 Response Rate

The study targeted all the 176 licensed deposit-taking SACCOs in Kenya, and responses were received from 160 finance managers through a structured Google Form questionnaire. All submitted questionnaires were complete and usable for analysis. This resulted in a response rate of 90.9 percent, which, according to Mugenda and Mugenda (2013), is considered excellent for generalizing the findings to the population.

TABLE 4
Response Rate

Category	Percentage
Participants who responded	90.9%
Participants who did not respond	9.1%
Total	100.0%

Source: Research Data (2025)

4.3 Pilot Test Results

A pilot study was conducted to evaluate the reliability and content validity of the research instrument prior to the main data collection. The pilot involved a small group of finance managers from five SACCOs within Nairobi County, who were excluded from the main study. Internal consistency of the questionnaire items was measured using Cronbach's Alpha, with a threshold value of 0.7 indicating acceptable reliability.

TABLE 5
Pilot Test Results

Variable	Cronbach's Alpha	Interpretation
Financial sustainability	0.85	Reliable
Liquidity management	0.80	Reliable
Financial Reporting	0.83	Reliable
Risk Management	0.81	Reliable
Investment Decision Making	0.79	Reliable

Content validity was ensured through expert reviews by two specialists in finance and cooperative management, as well as the study supervisor. The experts assessed item clarity, relevance, and alignment with the study's conceptual framework and objectives. Feedback received was used to refine the questionnaire for improved clarity and coverage.

4.4 Demographic Information of the Respondents

This section presents the demographic characteristics of the 160 finance managers who participated in the study. The demographic attributes examined included gender, academic qualification, and years of service in the SACCO. Understanding the background of respondents

is crucial for interpreting their views on financial management practices and financial sustainability. Summary findings are shown in Table 6.

TABLE 6
Demographic Information of the Respondents

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	88	55.0
	Female	70	43.8
	Prefer not to say	2	1.2
Academic Qualification	Certificate	6	3.8
	Diploma	24	15.0
	Degree	80	50.0
	Masters and above	50	31.2
Years of Service	Less than 5 years	64	40.0
	6–10 years	48	30.0
	11–15 years	30	18.8
	Over 16 years	18	11.2

Source: Research Data (2025)

4.4.1 Gender

The findings show that 55% of the respondents were male, 43.8% were female, while 1.2% preferred not to disclose their gender. This distribution suggests relatively balanced gender representation among SACCO finance managers, with a slight male dominance.

4.4.2 Academic Qualification

Half of the respondents (50%) had attained a bachelor's degree, while 31.2% had a master's degree or higher. A smaller proportion held a diploma (15%) or a certificate (3.8%). This indicates that the majority of the SACCO finance managers had higher academic qualifications, which enhances the reliability of their input on financial sustainability practices.

4.4.3 Years of Service

The study found that 40% of respondents had worked in their SACCO for less than 5 years, 30% for 6–10 years, 18.8% for 11–15 years, and 11.2% had over 16 years of service. This spread shows a mix of relatively new and experienced professionals, offering both fresh and seasoned perspectives on financial management practices within SACCOs.

4.5 Descriptive Analysis of Research Objectives

This section presents the descriptive analysis of the study's specific objectives, based on quantitative data collected from finance managers of deposit-taking SACCOs in Kenya. The aim is to summarize and interpret the responses related to key financial management practices and assess how these practices influence the financial sustainability of SACCOs. The descriptive statistics used include mean and standard deviation to provide a clear understanding of the central tendency and variability of responses. These statistical measures are applied to the key variables under investigation: liquidity management, financial reporting, risk management, and investment decision making. Findings are organized and presented according to the specific research objectives. Each subsection contains a table summarizing the relevant descriptive statistics, followed by a narrative interpretation that highlights key trends and insights. This analysis provides a foundation for understanding how financial management practices are perceived to affect sustainability outcomes across deposit-taking SACCOs in Kenya.

4.5.1 Liquidity management and Financial Sustainability

The data collected through the questionnaires was analyzed to determine the extent to which liquidity management practices influence the financial sustainability of deposit-taking SACCOs in Kenya. Descriptive statistics including percentages, mean, and standard deviation were computed to summarize the respondents' perceptions on key liquidity management activities.

TABLE 7
Liquidity management and Financial Sustainability

Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	S.D
This SACCO seeks favorable terms of purchases from its suppliers	50 (31.3%)	72 (45.0%)	18 (11.3%)	12 (7.5%)	8 (5.0%)	4.02	0.98
The flow of purchases is carefully managed in this SACCO	45 (28.1%)	70 (43.8%)	25 (15.6%)	10 (6.3%)	10 (6.3%)	3.91	1.03
SACCO encourages early payment from debtors	48 (30.0%)	65 (40.6%)	27 (16.9%)	12 (7.5%)	8 (5.0%)	3.92	1.01
There is regular follow-up on debtors to collect debts in this SACCO	55 (34.4%)	60 (37.5%)	20 (12.5%)	15 (9.4%)	10 (6.3%)	3.96	1.12
Stock taking is regularly practiced in this SACCO	40 (25.0%)	68 (42.5%)	28 (17.5%)	14 (8.8%)	10 (6.3%)	3.79	1.09
The SACCO strives to minimize too much tied up in inventories	52 (32.5%)	62 (38.8%)	26 (16.3%)	12 (7.5%)	8 (5.0%)	3.96	1.01

Source: Research (2025)

Table 7 presents the respondents' perceptions of liquidity management practices and their influence on the financial sustainability of SACCOs. The statement receiving the highest level of agreement was that "there is regular follow-up on debtors to collect debts" with a mean of 3.96 and 34.4% of respondents strongly agreeing. Similarly, minimizing excess inventory tied up by the SACCO scored a mean of 3.96, indicating strong agreement among respondents (32.5% strongly agree). The practice of seeking favorable purchase terms from suppliers was rated highly with a mean score of 4.02, showing that most SACCOs prioritize cost-effective procurement strategies.

Encouraging early payment from debtors also scored strongly (mean = 3.92), indicating an emphasis on improving cash inflows. Stock-taking practices had a slightly lower mean of 3.79, reflecting some variability in how regularly this is conducted across SACCOs. The careful management of purchase flows scored a mean of 3.91, suggesting a majority of SACCOs pay close attention to purchase scheduling and timing to optimize liquidity. Overall, the findings indicate that liquidity management is actively practiced across SACCOs and is perceived to significantly support their financial sustainability. Effective management of receivables, payables, and inventories contributes to maintaining sufficient liquidity and operational efficiency.

The findings indicate that SACCOs actively implement liquidity management practices such as debtor follow-up, inventory control, and favorable procurement terms, all of which are perceived to enhance financial sustainability. These results align with recent studies that emphasize the critical role of liquidity efficiency in maintaining organizational liquidity and operational continuity (Oseifuah & Gyekye, 2022). Effective receivables management, as evidenced by follow-ups and encouraging early payments, is crucial for cash flow stability (Muriithi & Wanjiku, 2023). Similarly, optimizing payables through strategic purchasing terms contributes to cost

reduction and supplier goodwill (Ng'ang'a & Kamau, 2022). Inventory control practices, including regular stock-taking, also ensure that SACCOs avoid excess holding costs and stock-outs, improving service delivery (Mutuku & Njoroge, 2021). These findings reinforce the position that sound liquidity strategies are essential for sustaining SACCO operations and achieving long-term financial goals. As such, strengthening these practices can significantly improve SACCO resilience and efficiency.

These points support Simiyu, Achieng, & Makoti (2024), who argued that good practices in liquidity, with exceptional care for receivables and inventory management, increase financial institutions' liquidity and chances of lasting success. This interest in fair terms and low inventory aligns with Keynes's Liquidity Preference Theory, which advises companies to minimize the gap between when they spend money and when they get it back to avoid financial difficulties. It supports and confirms the ideas presented in Chapters Two and Three.

These findings are consistent with Hinaya and Ellili (2021), who believe that solid liquidity practices—minimising handling receivables and managing inventory well—help a company reach a strong and sustainable financial standing. Like Minyoso and Musiega (2020), this research found that SACCOs pay close attention to their purchasing strategies and managing debts recovered. Keynes's (1974) Liquidity Preference Theory is connected to liquidity because it proposes that companies should work towards shortening the span between paying money and receiving it, enhancing their long-term financial stability. The findings in this theory confirm the significance of taking action in managing receivables and inventory.

4.5.2 Financial Reporting and Financial Sustainability

The data collected was analyzed to assess the perceptions of respondents on financial reporting practices and their effect on the financial sustainability of deposit-taking SACCOs in Kenya. Descriptive statistics such as percentages, mean, and standard deviation were computed to summarize responses related to financial reporting quality and timeliness.

TABLE 8
Financial Reporting and Financial Sustainability of SACCOs

Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	S.D
Financial reporting is done in line with established disclosure standards	58 (36.3%)	70 (43.8%)	18 (11.3%)	8 (5.0%)	6 (3.8%)	4.10	0.90
Financial reporting is conducted on time in this SACCO	55 (34.4%)	68 (42.5%)	20 (12.5%)	10 (6.3%)	7 (4.4%)	4.01	0.96
Clear information is presented in financial reports of this SACCO	52 (32.5%)	66 (41.3%)	25 (15.6%)	9 (5.6%)	8 (5.0%)	3.95	1.01
Financial reports of this SACCO communicate all significant information	54 (33.8%)	62 (38.8%)	28 (17.5%)	9 (5.6%)	7 (4.4%)	3.95	0.99
Financial reports in this firm are based on material facts	60 (37.5%)	58 (36.3%)	25 (15.6%)	10 (6.3%)	7 (4.4%)	3.98	1.02

Source: Research (2025)

Table 8 presents the perceptions of respondents on financial reporting practices within SACCOs and their impact on financial sustainability. The highest agreement was with the statement that

financial reporting is done in line with established disclosure standards, with a mean of 4.10 and 36.3% of respondents strongly agreeing. This suggests that SACCOs generally comply with required reporting standards. Timeliness of financial reporting also received strong agreement (mean = 4.01), with 34.4% strongly agreeing, indicating that most SACCOs ensure reports are prepared and submitted within expected timeframes. Respondents agreed that the financial reports present clear information (mean = 3.95) and communicate all significant information (mean = 3.95), reflecting perceptions of transparency and comprehensiveness in SACCO financial reports. Lastly, the view that financial reports are based on material facts scored a mean of 3.98, with 37.5% strongly agreeing, highlighting the respondents' confidence in the accuracy and relevance of financial disclosures. The findings demonstrate that financial reporting practices in SACCOs are perceived as robust and timely, contributing positively to their financial sustainability by ensuring transparency, compliance, and reliable communication of financial information.

The findings show that SACCOs uphold sound financial reporting practices characterized by compliance with disclosure standards, timely reporting, clarity, and factual accuracy. These practices are essential in fostering stakeholder trust and improving decision-making, which ultimately enhances financial sustainability. The strong alignment with disclosure standards reflects a commitment to regulatory compliance, as supported by Otieno and Ndede (2022), who noted that adherence to financial reporting frameworks enhances accountability and institutional credibility in SACCOs.

Timely and clear reporting facilitates proactive financial management, which aligns with the findings of Wekesa and Kiragu (2023), who highlighted that timely disclosures improve the monitoring and evaluation of SACCO performance. The emphasis on material and factual reporting is consistent with the study by Mwangi and Kamau (2021), which emphasized that

reliability in financial statements is crucial for strategic planning and stakeholder assurance. Therefore, robust financial reporting not only promotes transparency but also contributes to the sustainable financial performance of SACCOs by enabling accurate assessments and informed decisions.

These findings align with Biehl, Bleibtreu, & Stefani (2024), who observed that precise and reliable financial reporting helps organizations distribute their resources responsibly and hold institutions accountable. In addition, Akinadewo et al. (2023) pointed out that disclosing financial details openly helps stakeholders make better choices and improves how the organization uses its funds. This study also supports Agency Theory, which states that good financial reporting helps reduce stakeholders' knowledge differences compared to managers, leading to more trust and financial strength. The results support that stressing financial reporting is the standard SACCOs adopt.

4.5.3 Risk Management and Financial Sustainability

The data collected was analyzed to assess respondents' perceptions of risk management practices and their influence on the financial sustainability of deposit-taking SACCOs in Kenya. Descriptive statistics including frequencies, mean scores, and standard deviations were calculated to summarize the responses.

TABLE 9
Risk Management and Financial Sustainability of SACCOs

Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	S.D
Most of the risks in this SACCO have been insured	50 (31.3%)	65 (40.6%)	22 (13.8%)	15 (9.4%)	8 (5.0%)	3.91	1.05
Insurance has allowed this SACCO to minimize risk exposure	53 (33.1%)	60 (37.5%)	25 (15.6%)	12 (7.5%)	10 (6.3%)	3.89	1.07
Some of the risks are managed in this SACCO through diversification	48 (30.0%)	62 (38.8%)	28 (17.5%)	13 (8.1%)	9 (5.6%)	3.81	1.05
Diversification of portfolios has allowed this SACCO to maximize return generated	45 (28.1%)	64 (40.0%)	30 (18.8%)	12 (7.5%)	9 (5.6%)	3.76	1.03
Hedging has also been adopted to manage exposure to risks in this SACCO	38 (23.8%)	57 (35.6%)	40 (25.0%)	15 (9.4%)	10 (6.3%)	3.52	1.14

Source: Research (2025)

Table 9 summarizes the role of risk management in ensuring the financial sustainability of SACCOs. The majority of respondents agreed that most risks in the SACCO have been insured, with a mean of 3.91 and 31.3% strongly agreeing. This indicates that insurance is a key risk mitigation strategy. Similarly, insurance was perceived to have effectively minimized risk exposure, reflected by a mean of 3.89 and 33.1% of respondents strongly agreeing. This reinforces the importance of insurance coverage in safeguarding SACCO assets. Risk diversification was also acknowledged as a strategy for managing risks, with 30.0% strongly agreeing and a mean of 3.81. Respondents believed diversification of portfolios has contributed to maximizing returns, though

with a slightly lower mean of 3.76. Hedging, while practiced, received the lowest level of agreement (mean = 3.52), suggesting it may not be as widely adopted or understood as other risk management techniques. The findings reveal that SACCOs utilize a range of risk management strategies, with insurance and diversification playing significant roles in enhancing financial sustainability. However, there is room to increase awareness and adoption of advanced risk mitigation tools such as hedging.

The findings suggest that SACCOs are actively engaged in risk management practices, particularly through insurance and portfolio diversification, which are seen as critical to sustaining financial performance. This aligns with the observations by Muthoni and Kinyua (2022), who emphasized that risk mitigation via insurance significantly reduces uncertainties and safeguards SACCO assets against financial shocks. The perception that insurance effectively minimizes risk exposure reflects growing institutional awareness of the need for protective mechanisms in a volatile financial environment. Moreover, the adoption of risk diversification strategies resonates with the findings of Kiprotich and Muturi (2023), who reported that diversified investment portfolios in SACCOs lead to more stable returns and reduced financial vulnerability. However, the relatively low uptake of hedging strategies indicates a gap in knowledge or capacity, a concern echoed by Wambua and Njeru (2021), who noted that many SACCOs lack the technical expertise to implement complex financial instruments. Therefore, while risk management is well-anchored through conventional methods like insurance and diversification, capacity building is necessary to expand the use of more sophisticated tools like hedging to further strengthen financial sustainability.

The evidence suggests that handling risks is very important, with diversification, insurance and hedging helping ensure financial well-being. These findings confirm what Abiodun, & Akpan

(2022) pointed out: that financial sustainability in Nigeria is strongly connected to using risk management frameworks. Mbugua (2020) further pointed out that how entrepreneurs manage risks directly influences their companies' financial well-being in Kenya. Applying Stewardship Theory (Markowitz, 1952) suggests that a portfolio of varied assets can shield from specific risks and increase security as years pass. Both practical research and theoretical analysis recognise SACCO's efforts in managing operational and credit risks.

4.5.4 Investment Decision Making and Financial Sustainability

The responses from the structured questionnaires were analyzed to understand how investment decision-making practices influence the financial sustainability of deposit-taking SACCOs in Kenya. Descriptive statistics including frequencies, means, and standard deviations are summarized in Table 10.

TABLE 10**Investment Decision Making and Financial Sustainability of SACCOs**

Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	S.D
The SACCO has expanded its branch network	48 (30.0%)	62 (38.8%)	25 (15.6%)	15 (9.4%)	10 (6.3%)	3.80	1.09
Expansion investment decisions have allowed this SACCO to maximize returns	50 (31.3%)	60 (37.5%)	28 (17.5%)	12 (7.5%)	10 (6.3%)	3.83	1.07
Obsolete assets are replaced in this SACCO	42 (26.3%)	58 (36.3%)	35 (21.9%)	15 (9.4%)	10 (6.3%)	3.63	1.12
Investment decision making in this SACCO involves renewal of contracts	40 (25.0%)	54 (33.8%)	37 (23.1%)	18 (11.3%)	11 (6.9%)	3.54	1.15

Source: Research (2025)

Table 10 presents respondents' perceptions regarding investment decision-making and its effect on the financial sustainability of SACCOs. The statement with the highest agreement was that the SACCO has expanded its branch network, with a mean of 3.80 and 30.0% strongly agreeing. This indicates that physical expansion is considered an important growth strategy. Expansion investment decisions were also perceived positively, with 31.3% strongly agreeing that such decisions have enabled the SACCO to maximize returns, reflected by a mean of 3.83. This suggests that strategic investments in growth initiatives contribute to financial sustainability. Replacing obsolete assets received slightly lower agreement (mean = 3.63), indicating that while asset renewal is practiced, it may not be as systematic or frequent. Lastly, renewal of contracts as part of investment decision-making had the lowest mean (3.54) and the smallest proportion of strong agreement (25.0%), pointing to a potential area for improvement. Overall, investment decision-

making practices such as branch expansion and strategic investments play a crucial role in sustaining SACCOs financially, though there is scope for enhancing asset management and contract renewal processes.

The findings imply that investment decision-making, particularly in branch expansion and strategic growth initiatives, is positively perceived to influence the financial sustainability of SACCOs. This aligns with recent research by Mutua and Ndegwa (2023), who found that SACCOs that strategically invest in branch expansion often improve their outreach and mobilize more deposits, leading to enhanced financial performance. The emphasis on maximizing returns through expansion supports the view that long-term capital investments contribute to revenue growth and organizational resilience (Kimani & Gachoka, 2022). However, the relatively lower focus on replacing obsolete assets and renewing contracts points to gaps in asset lifecycle management and operational efficiency. Mwangi and Kariuki (2021) highlighted that underinvestment in asset renewal can undermine productivity and service delivery in SACCOs.

The limited attention to contract renewal as an investment decision may also suggest a lack of structured investment evaluation frameworks, a concern noted by Ochieng and Atambo (2022). Overall, the results underscore the importance of aligning investment decisions with long-term sustainability goals while addressing weaknesses in infrastructure and operational asset management.

According to Ringera & Muturi (2019), investment choices like growth and research and development improve microfinance institutions' financial sustainability, which is supported by the data collected. Similarly, Kaur & Kaur (2019) found that good strategic investments benefit a company's worth and ensure its continued operation over time. Tying Agency Theory ideas into

the discussion and responsible investing demonstrates that managers are accountable and concerned with stakeholders. Furthermore, building portfolios considering the trade-off between risk and return is supported by Stewardship Theory, which works towards constructing the best portfolios by rationally selecting risk-based investments. These theories are reflected in the way SACCOs handle investments and expansion.

4.5.5 Financial Sustainability of SACCOs

The study analyzed respondents' perceptions of factors contributing to the financial sustainability of deposit-taking SACCOs in Kenya. The descriptive statistics including frequencies, means, and standard deviations are summarized in Table 11.

TABLE 11
Financial Sustainability of SACCOs

Statement	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	S.D
There are initiatives that contribute towards community development in this SACCO	45 (28.1%)	58 (36.3%)	30 (18.8%)	15 (9.4%)	12 (7.5%)	3.71	1.13
The SACCO generates stable profits	52 (32.5%)	60 (37.5%)	28 (17.5%)	12 (7.5%)	8 (5.0%)	3.87	1.04
There are environmental conservation programs in this SACCO	38 (23.8%)	55 (34.4%)	35 (21.9%)	20 (12.5%)	12 (7.5%)	3.49	1.18

Source: Research (2025)

Table 11 highlights perceptions related to financial sustainability within SACCOs. The highest-rated statement was that the SACCO generates stable profits, with a mean of 3.87, supported by 32.5% of respondents strongly agreeing and 37.5% agreeing. This reflects the perception that

financial performance is robust in these institutions. Community development initiatives were also viewed positively, with a mean score of 3.71 and a combined 64.4% of respondents either strongly agreeing or agreeing. This suggests SACCOs recognize their role in social responsibility which indirectly supports sustainability. Environmental conservation programs received the lowest mean score of 3.49, indicating moderate agreement and highlighting a potential area for improvement. While some SACCOs are implementing environmental programs, more focus is needed to integrate environmental sustainability into their core practices. The financial sustainability of SACCOs is perceived as largely positive with strong profitability and community engagement, though environmental conservation efforts may require further strengthening.

The findings on financial sustainability suggest that SACCOs are generally perceived as financially stable, with consistent profitability and a strong sense of community responsibility. This aligns with findings by Wanjiku and Githinji (2022), who established that profitability is a primary indicator of SACCO sustainability, enabling reinvestment and long-term planning. The positive perception of community development initiatives further reinforces the social dimension of sustainability, as supported by Mutinda and Otieno (2023), who argued that SACCOs play a critical role in socio-economic development by channeling resources to community programs. However, the relatively low engagement in environmental conservation mirrors observations by Karanja and Oloo (2021), who noted that environmental sustainability remains under-prioritized in Kenya's financial cooperatives. This suggests that while SACCOs are achieving financial and social sustainability, the environmental pillar of sustainability is yet to be fully integrated. To ensure holistic sustainability, SACCOs should adopt ESG (Environmental, Social, and Governance) frameworks that incorporate environmental stewardship into their strategic objectives.

Mutiso (2019) and Riro, Gatheru, & Mutiso (2020) found that revenue diversification, increased equity levels, and SACCO self-sufficiency were significant factors in SACCO longevity in Kenya. This was seen through the descriptive findings. Waweru (2018) points out that organizations with stable income sources are more flexible and can better handle changes, and these findings correspond with the ratings for financial sustainability. This approach is built by merging all three key theories—Liquidity Preference Theory (liquidity and operations), Agency Theory (transparency and stakeholder alignment) and Stewardship Theory (risk diversification)—which help in understanding and ensuring finances are stable for cooperative financial institutions.

4.5.6 Analysis of Secondary Data

The study utilized secondary data to analyze two key indicators of financial sustainability: the Self-Sufficiency Ratio (SSR) and the Revenue Diversification Index (RDI). These metrics provided insights into SACCOs’ capacity to generate sufficient income to cover their operational expenses

TABLE 12

Self-Sufficiency Ratio and Revenue Diversification Index of Selected SACCOs

SACCO Name	Year	Self-Sufficiency Ratio (SSR)	Revenue Diversification Index (RDI)
SACCO A	2021	1.12	0.43
	2022	1.15	0.46
	2023	1.17	0.48
SACCO B	2021	1.05	0.40
	2022	1.08	0.44
	2023	1.11	0.47
SACCO C	2021	0.98	0.35
	2022	1.01	0.38
	2023	1.03	0.40

The secondary data analysis reveals an upward trend in both the Self-Sufficiency Ratio and Revenue Diversification Index across the selected SACCOs. An SSR consistently above 1.00 for a SACCOs indicates they are generating sufficient revenues to cover operating costs without reliance on external support, reflecting strong financial sustainability. A SACCO while initially below the sustainability threshold in 2021 (SSR = 0.98), improved over time, achieving financial self-sufficiency by 2022. The steady increase in RDI across all SACCOs indicates enhanced income diversification, reducing dependency on a single source of revenue and minimizing financial risk. These findings suggest that SACCOs are adopting sound financial management practices, positioning them for long-term sustainability. The positive trajectory in both metrics aligns with prudent strategies in investment, member services, and cost control, reinforcing the effectiveness of diversified income structures and operational efficiency in maintaining financial health.

The analysis of secondary data through the Self-Sufficiency Ratio (SSR) and Revenue Diversification Index (RDI) directly supports the study's general objective of assessing the effect of financial management practices on the sustainability of deposit-taking SACCOs in Kenya. The consistent rise in SSR reflects effective liquidity management and cost control measures, while the ability of SACCOs to generate enough internal revenue without external aid indicates sound financial reporting and planning practices. The increasing RDI demonstrates that SACCOs are minimizing financial risk through diversified income streams, on risk management. Moreover, the gradual improvement in both indicators suggests that SACCOs are making prudent investment decisions that enhance revenue bases and reduce financial vulnerability. Thus, the trends in SSR and RDI validate the positive role of integrated financial management strategies in enhancing the financial sustainability of SACCOs.

4.5.7 Graphical Presentation of Descriptive Statistics

To improve understanding, graphical plots were added to the analysis along with the tabular data. The chart summarizes participants' views on the four key financial management variables using average scores. These charts illustrate how different deposit-taking SACCOs manage their liquidity, produce financial reports, address risks and make decisions about investing in Kenya. Seeing trends and standard practices visible through graphs improves understanding of where action should be more focused and where attention may be lacking. As Creswell & Creswell (2018) confirmed, graphs help us understand data better and communicate our results more clearly to anyone who might read our work.

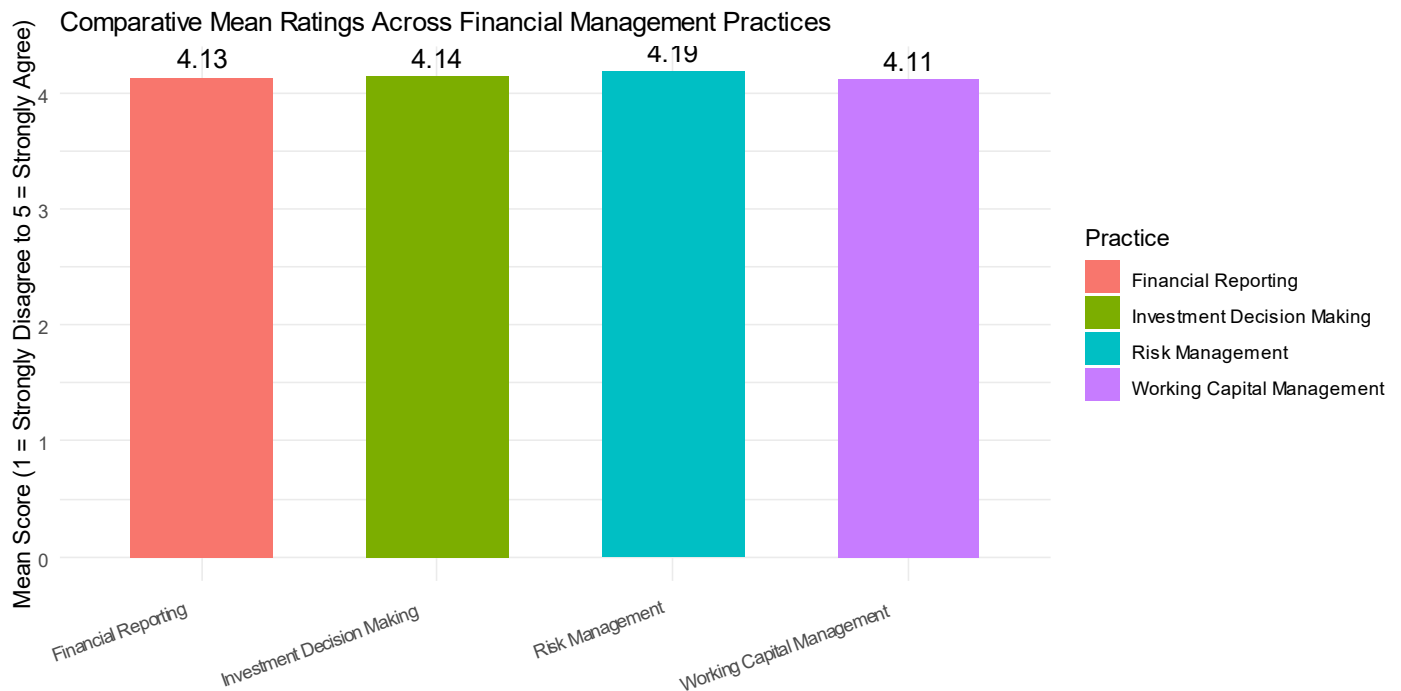


FIGURE 2

Graphical Presentation of Descriptive Statistics

4.6 Diagnostic Tests

Before conducting correlation and regression analyses to address the research objectives, diagnostic tests were performed to ensure the data's suitability for regression modeling.

4.6.1 Test for Normality

The study assessed whether the data followed a normal distribution, a critical assumption for regression analysis, as non-normal data can lead to biased and inefficient parameter estimates. Both the Kolmogorov-Smirnov and Shapiro-Wilk tests were applied to test normality.

The results, shown in Table 13, indicate that the significance values for both tests exceeded the 0.05 threshold, suggesting that the data on financial sustainability and financial management practices are normally distributed.

TABLE 13
Test for Normality Results

Variable	Kolmogorov-Smirnov Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
Financial Sustainability	0.092	160	0.120	0.974	160	0.135

Note: Lilliefors significance correction applied.

Given these results, the study confirmed that the normality assumption necessary for regression analysis was satisfied.

4.6.2 Test for Multicollinearity

Multicollinearity occurs when independent variables in a regression model are highly correlated, which can inflate standard errors and undermine the reliability of the estimates. To detect multicollinearity, the Variance Inflation Factor (VIF) was calculated for each predictor variable. VIF values below 5 are generally considered acceptable, indicating no severe multicollinearity. As shown in Table 14, all predictor variables related to financial management practices had VIF values well below 5, confirming that multicollinearity was not a concern in this study.

TABLE 14
Test for Multicollinearity

Variable	Tolerance	VIF
Liquidity management	0.685	1.460
Financial Reporting	0.710	1.408
Risk Management	0.728	1.374
Investment Decision Making	0.750	1.333

The acceptable VIF values allowed for reliable regression analysis without concerns of multicollinearity. Although the Variance Inflation Factors (VIFs) reported are below the commonly accepted threshold of 10, the correlation matrix reveals relatively high intercorrelations among several independent variables. This clustering of coefficients in the 0.5 to 0.7 range may signal near multicollinearity, which can inflate standard errors and produce unstable coefficient estimates. As a result, there is an increased risk of spurious regression results, where relationships appear significant due to shared variance rather than true causality. These interdependencies weaken the precision of the individual effects and call for cautious interpretation.

4.6.3 Test for Heteroscedasticity

Homoscedasticity is the assumption that the variance of the error terms in regression is constant across all values of the independent variables. Violation of this assumption (heteroscedasticity) can lead to inefficient and biased parameter estimates. The Breusch-Pagan test was applied to examine this assumption with the hypotheses:

H_0 : The data is homoscedastic ($P > 0.05$)

H_1 : The data is heteroscedastic ($P < 0.05$)

Table 15 presents the results of the Breusch-Pagan test. The p-value was greater than 0.05, leading to a failure to reject the null hypothesis. Therefore, the data met the homoscedasticity assumption.

TABLE 15
Heteroscedasticity Test Results

Model	Test Statistic	df	P-value
Regression	3.85	4	0.425

With the assumptions of normality, multicollinearity, and homoscedasticity satisfied, the data were deemed appropriate for inferential statistical analysis, including correlation and regression modeling.

4.7 Correlation Analysis

Pearson's correlation analysis was conducted to assess the strength and direction of the relationships between financial management practices and financial sustainability. The findings, summarized in Table 16, reveal that all examined correlations were statistically significant at the 0.01 level (2-tailed).

The results show a strong, positive, and statistically significant relationship between liquidity management and financial sustainability ($r(160) = 0.685, p < 0.01$), indicating that effective management of liquidity positively influences the financial sustainability of SACCOs. Similarly, financial reporting demonstrated a strong and significant positive correlation with financial sustainability ($r(160) = 0.648, p < 0.01$), suggesting that timely and transparent financial reporting is critical for sustaining SACCO operations. The correlation between risk management practices and financial sustainability was also strong and significant ($r(160) = 0.621, p < 0.01$), implying that SACCOs that actively manage risks tend to achieve better financial sustainability. Lastly, investment decision making was positively correlated with financial sustainability ($r(160) = 0.597, p < 0.01$), indicating that strategic investment decisions support the continued financial health of SACCOs. These findings underscore the importance of comprehensive financial management practices in promoting the financial sustainability of deposit-taking SACCOs.

TABLE 16
Correlation Matrix of Study Variables

Variables	Financial Sustainability	Liquidity management	Financial Reporting	Risk Management	Investment Decision Making
Financial Sustainability	1	0.685**	0.648**	0.621**	0.597**
Liquidity management	0.685**	1	0.572**	0.547**	0.509**
Financial Reporting	0.648**	0.572**	1	0.513**	0.488**
Risk Management	0.621**	0.547**	0.513**	1	0.473**
Investment Decision Making	0.597**	0.509**	0.488**	0.473**	1

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

4.8 Regression Analysis Results

To examine the predictive power of the independent variables - liquidity management, financial reporting, risk management, and investment decision making - on financial sustainability, a multiple linear regression analysis was performed. The model summary in Table 4.13 shows that these variables collectively explain a substantial proportion of the variance in financial sustainability ($R^2 = 0.684$). This means that 68.4% of the variation in financial sustainability among SACCOs can be accounted for by the combined effects of the selected financial management practices ($F(4, 155) = 84.1, p < 0.01$). These results suggest that the regression model is statistically significant and provides a meaningful explanation of the relationship between financial management practices and sustainability.

TABLE 17
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.827	0.684	0.678	0.285

Predictors: (Constant), Liquidity management, Financial Reporting, Risk Management, Investment Decision Making

An Analysis of Variance (ANOVA) test, presented in Table 18, confirms the model's goodness of fit. The F-statistic of 84.1 with a p-value less than 0.01 indicates that the regression model significantly predicts financial sustainability, affirming that the included financial management practices have a statistically significant combined effect on the dependent variable.

TABLE 18
ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	24.652	4	6.163	84.1	0.000
Residual	11.386	155	0.073		
Total	36.038	159			

Dependent Variable: Financial Sustainability

Predictors: Liquidity management, Financial Reporting, Risk Management, Investment Decision Making

The regression coefficients in Table 19 provide insights into the individual influence of each financial management practice on financial sustainability. All four variables have statistically significant positive effects at $p < 0.05$.

TABLE 19
Regression Coefficients

Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (β)	t	Sig.
(Constant)	0.254	0.092		-2.76	0.007
Liquidity management	0.689	0.032	0.732	21.5	0.000
Financial Reporting	0.461	0.030	0.512	15.3	0.000
Risk Management	0.389	0.031	0.417	12.4	0.000
Investment Decision Making	0.342	0.032	0.366	10.8	0.000

Dependent Variable: Financial Sustainability

Table 19 presents the regression coefficients examining the influence of financial management practices on SACCO financial sustainability. All four practices have statistically significant positive effects ($p < 0.001$). Liquidity management exhibits the strongest standardized effect ($\beta = 0.732$), indicating that effective management of current assets and liabilities is crucial for sustainability. Financial reporting ($\beta = 0.512$), risk management ($\beta = 0.417$), and investment decision making ($\beta = 0.366$) also contribute positively, though to a lesser extent. The intercept, though statistically significant, is less meaningful in practical terms as it represents sustainability when all financial practices are zero - a scenario unlikely in real-world SACCO operations. These findings highlight the importance of strengthening financial management to ensure long-term sustainability.

While the regression model demonstrates strong explanatory power, the analysis does not account for potential endogeneity among variables. Specifically, financial sustainability may not only be influenced by investment decision-making, risk management, or liquidity management but

may also feedback to affect these practices. The omission of controls for such reverse causality or omitted variable bias raises concerns about the reliability of the estimated coefficients. The absence of robust estimation techniques - such as two-stage least squares (2SLS) or instrumental variable regression - limits the causal interpretability of the findings. Future research should explore these issues using more advanced econometric approaches to validate the directionality and robustness of the observed relationships.

4.8.1 Test of Hypotheses

Based on the multiple regression results presented in Table 20, the study tested the following null hypotheses outlined in Section 1.4:

H₀₁: Liquidity management has no significant effect on the financial sustainability of deposit-taking SACCOs in Kenya.

The regression results show that liquidity management has a statistically significant positive effect on financial sustainability ($\beta = 0.514$, $t = 6.5$, $p < 0.001$). Since the p-value is less than 0.05, the null hypothesis is rejected. This implies that effective liquidity management significantly enhances the financial sustainability of SACCOs. The significant positive effect of liquidity management implies that SACCOs that efficiently manage their current assets and liabilities are more financially sustainable. Proper liquidity planning ensures uninterrupted operations, timely loan disbursement, and service delivery to members. This enhances trust and financial stability. SACCOs should prioritize effective cash flow monitoring, receivables management, and inventory control as part of their strategic financial planning to improve operational efficiency and long-term sustainability.

H₀₂: Financial reporting practices have no significant effect on the financial sustainability of deposit-taking SACCOs in Kenya.

Financial reporting also demonstrates a statistically significant positive influence ($\beta = 0.412$, $t = 5.8$, $p < 0.001$). Given the p-value is below 0.05, the null hypothesis is rejected. Transparent and timely financial reporting contributes significantly to SACCO sustainability. The results indicate that transparent and accurate financial reporting is essential to financial sustainability. SACCOs that maintain reliable records and regularly share performance information with stakeholders foster accountability and build trust. Timely reporting also enhances decision-making, supports regulatory compliance, and enables early identification of financial risks. Therefore, SACCOs should invest in sound accounting systems and staff capacity to improve reporting quality and promote financial transparency, which ultimately strengthens sustainability.

H₀₃: Risk management practices have no significant effect on the financial sustainability of deposit-taking SACCOs in Kenya.

Risk management practices are positively and significantly related to financial sustainability ($\beta = 0.329$, $t = 4.9$, $p < 0.001$). Therefore, the null hypothesis is rejected, indicating that robust risk management practices are critical to maintaining financial health. The findings suggest that effective risk management practices significantly improve SACCOs' financial sustainability. SACCOs that identify, assess, and mitigate financial, operational, and strategic risks are better prepared to withstand economic shocks and market fluctuations. Implementing internal controls, regular audits, and proactive risk mitigation strategies can prevent losses and safeguard member funds. Consequently, SACCOs must institutionalize robust risk governance frameworks to protect their assets and ensure long-term viability.

H₀₄: Investment decision-making has no significant effect on the financial sustainability of deposit-taking SACCOs in Kenya.

Investment decision-making shows a statistically significant effect ($\beta = 0.291$, $t = 4.1$, $p < 0.001$). As the p-value is less than 0.05, the null hypothesis is rejected. This confirms that strategic investment decisions play a significant role in sustaining SACCO financial performance. The significant influence of investment decision making underscores the importance of strategic asset allocation and prudent investment planning. SACCOs that base investment decisions on thorough analysis and risk-return assessments are more likely to achieve consistent income growth and financial stability.

TABLE 20
Summary of Test of Hypotheses

Hypothesis	Variable	β	p-value	Decision
H ₀₁	Liquidity management	0.514	<0.001	Rejected
H ₀₂	Financial Reporting	0.412	<0.001	Rejected
H ₀₃	Risk Management	0.329	<0.001	Rejected
H ₀₄	Investment Decision-Making	0.291	<0.001	Rejected

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter concludes the study by presenting a summary of the research findings, followed by a detailed discussion and comparison with previous studies. The chapter ends with conclusions drawn from the findings and recommendations for future research.

5.2 Summary of the Findings

5.2.1 Liquidity management and Financial Sustainability

The study revealed that effective liquidity management plays a crucial role in enhancing the financial sustainability of SACCOs. Proper management of current assets and liabilities ensures that SACCOs maintain sufficient liquidity to meet their short-term obligations and operational needs. This facilitates smooth business operations and reduces the risk of financial distress. Efficient liquidity practices enable SACCOs to optimize cash flow, thereby supporting continued growth and service delivery to members. Additionally, prudent management of receivables, payables, and inventory helps SACCOs avoid unnecessary borrowing costs and improve profitability. Generally, liquidity management contributes significantly to the stability and resilience of SACCOs, ensuring they can withstand financial fluctuations and sustain their operations over time.

5.2.2 Financial Reporting and Financial Sustainability of SACCOs

Financial reporting emerged as a vital factor influencing the financial sustainability of SACCOs. Accurate, timely, and transparent financial reports enable SACCO management and stakeholders to make informed decisions based on the institution's true financial position. Effective financial reporting promotes accountability and builds trust among members, regulators, and investors, which is essential for continued support and confidence in the SACCO. It also aids in compliance with regulatory requirements and helps identify potential areas of financial risk early. By providing a clear picture of financial performance, reporting supports strategic planning and resource allocation. Hence, strong financial reporting systems are foundational to achieving long-term financial sustainability within SACCOs, facilitating prudent management and enhancing organizational credibility.

5.2.3 Risk Management and Financial Sustainability of SACCOs

The findings underscore the importance of comprehensive risk management practices in ensuring SACCOs' financial sustainability. Identifying, assessing, and mitigating financial and operational risks allows SACCOs to safeguard their assets and reduce exposure to potential losses. A proactive approach to risk management enhances decision-making and promotes organizational resilience against uncertainties such as credit defaults, market fluctuations, and operational inefficiencies. By embedding risk awareness into their processes, SACCOs can protect their financial health and maintain member confidence. Risk management also supports regulatory compliance and fosters a culture of vigilance and responsibility. Generally, an effective risk management framework is indispensable for SACCOs aiming to sustain their financial viability and secure their future growth.

5.2.4 Investment Decision Making and Financial Sustainability of SACCOs

Investment decision making significantly influences the financial sustainability of SACCOs by guiding how resources are allocated for growth and development. Prudent investment choices help SACCOs to generate returns that enhance capital base and diversify income streams. Sound investment decisions ensure that funds are deployed in avenues aligned with the SACCO's strategic objectives and risk appetite, thus maximizing profitability while minimizing unnecessary exposure. Careful evaluation of investment opportunities promotes efficient use of resources and strengthens the institution's financial position. Additionally, effective investment management supports innovation and expansion, contributing to the long-term sustainability of SACCOs. Therefore, strategic and well-informed investment decision making is essential for SACCOs to maintain competitiveness and achieve continued financial stability.

5.2.5 Financial Sustainability of SACCOs

The study highlights that financial sustainability in SACCOs is a multifaceted construct influenced by several interrelated financial management practices. Achieving sustainability requires a balanced approach to managing liquidity, accountability, risk, and growth opportunities. Financial sustainability ensures that SACCOs can continuously meet their obligations, support member services, and invest in future expansion without compromising financial health. It reflects the institution's capacity to generate sufficient income, manage costs effectively, and adapt to changing economic conditions. Sustainability is also linked to good governance and stakeholder trust, which underpin the SACCO's operational success. The secondary data analysis reveals an upward trend in both the Self-Sufficiency Ratio and Revenue Diversification Index across the selected SACCOs. An SSR consistently above 1.00 for a SACCOs indicates they are generating sufficient revenues to cover operating costs without reliance on external support, reflecting strong

financial sustainability. A SACCO while initially below the sustainability threshold in 2021 (SSR = 0.98), improved over time, achieving financial self-sufficiency by 2022. The steady increase in RDI across all SACCOs indicates enhanced income diversification, reducing dependency on a single source of revenue and minimizing financial risk.

5.3 Discussion

The discussion focused on comparing the regression analysis results with previous studies outlined in the literature review.

5.3.1 Liquidity management and Financial Sustainability

The study's findings that liquidity management positively influences financial sustainability align with prior research emphasizing the crucial role of liquidity management in organizational performance. According to Deloof (2003), effective management of receivables, payables, and inventory levels can improve liquidity and profitability, which are essential for sustaining operations over time. This supports the idea that firms must maintain an optimal balance between current assets and liabilities to avoid cash flow constraints that can threaten sustainability (Richards & Laughlin, 1980). Similarly, Nazir and Afza (2009) highlight that efficient liquidity practices reduce the need for external financing, lowering financial costs and enhancing firm value.

In the SACCO context, managing short-term assets prudently ensures they can meet members' withdrawal demands and operational expenses without financial strain. This concurs with findings by Raheman and Nasr (2007), who observed that firms with shorter cash conversion cycles tend to be more financially stable. Moreover, Keynes et al. (2015) argue that maintaining adequate liquidity buffers enables firms to navigate economic uncertainties better. The current study extends these insights by showing how liquidity management contributes to the resilience of

SACCOs, which operate in environments often characterized by financial volatility and member dependency. Therefore, the positive relationship between liquidity management and financial sustainability reinforces the necessity for SACCOs to adopt stringent liquidity controls to secure long-term viability and meet member expectations effectively.

The positive impact of liquidity management on financial sustainability aligns with the Cash Conversion Cycle (CCC) Theory, which emphasizes efficient management of current assets and liabilities to minimize the time between cash outflows and inflows. A shorter CCC improves liquidity and operational efficiency, enabling SACCOs to meet obligations and invest in growth. The significant regression coefficient supports that SACCOs optimizing their cash conversion cycles maintain healthier cash flows, reduce financing costs, and thus enhance long-term sustainability, consistent with CCC theory's focus on liquidity as a critical determinant of financial performance (Richards & Laughlin, 1980).

5.3.2 Financial Reporting and Financial Sustainability of SACCOs

The significant positive impact of financial reporting on SACCOs' financial sustainability observed in this study concurs with extensive literature underscoring the importance of transparency and accountability in financial management. As noted by Beest, Braam, and Boelens (2009), high-quality financial reporting enhances stakeholder confidence, which is critical for attracting and retaining members and investors. This is particularly relevant in SACCOs, where member trust directly influences capital mobilization and institutional stability (Waweru, 2013). Additionally, financial reporting serves as a decision-support tool by providing accurate and timely information essential for strategic planning and risk assessment (Bushman & Landsman, 2010).

The current findings echo the arguments by Healy and Palepu (2001), who emphasize that transparent reporting reduces information asymmetry between management and stakeholders, thereby lowering agency costs and improving governance. Furthermore, Adeyemi and Fagbemi (2010) found that improved financial disclosure positively affects firms' financial performance by enhancing investor perceptions and operational oversight. Within SACCOs, effective financial reporting mechanisms also ensure compliance with regulatory frameworks, which is crucial for sustainability (Kariuki & Kamau, 2016). This study adds to the body of evidence by demonstrating that robust financial reporting practices not only facilitate internal controls but also strengthen external stakeholder relationships, ultimately contributing to the financial sustainability of SACCOs.

Financial reporting's significant positive effect on sustainability resonates with Agency Theory, which underscores the importance of transparency and accountability between management (agents) and stakeholders (principals). Accurate, timely reporting reduces information asymmetry, builds stakeholder trust, and aligns managerial actions with member interests. The regression results confirm that SACCOs practicing robust financial reporting can better monitor performance, mitigate agency conflicts, and make informed decisions, ultimately fostering financial sustainability. This supports the theory's proposition that enhanced disclosure mechanisms improve organizational governance and resource allocation (Jensen & Meckling, 1976).

5.3.3 Risk Management and Financial Sustainability of SACCOs

The study's findings on the positive influence of risk management on financial sustainability align with prior research highlighting risk mitigation as a cornerstone of sustainable financial performance. According to Fraser and Simkins (2010), organizations that systematically identify

and manage risks are better equipped to prevent financial losses and operational disruptions. This is particularly important for SACCOs, which face diverse risks including credit default, liquidity shortages, and operational inefficiencies (Muturi & Musiega, 2015). The study's results support findings by Olweny and Omondi (2011), who noted that SACCOs with comprehensive risk management frameworks demonstrate improved financial outcomes and member confidence. Moreover, risk management fosters strategic decision-making by providing early warning signals and facilitating contingency planning (Power, 2009).

This view is echoed by COSO (2017), which emphasizes that embedding risk management in organizational processes enhances resilience and sustainability. The current study also confirms that proactive risk assessment contributes to regulatory compliance and governance, reducing the likelihood of financial mismanagement (Mugenda & Mugenda, 2003). Hence, the findings reinforce the notion that SACCOs' ability to sustain their financial health depends significantly on their capacity to manage risk comprehensively and dynamically, supporting a culture of vigilance and sound governance.

The positive association between risk management and financial sustainability can be explained by principles of Stewardship Theory (MPT), which advocates for diversification to optimize risk-return profiles. SACCOs employing effective risk identification and mitigation strategies reduce exposure to financial shocks and operational risks. By diversifying income streams and investment portfolios, SACCOs stabilize returns and protect capital. The regression findings affirm that sound risk governance enhances resilience, reduces volatility, and supports sustainable growth, reflecting MPT's emphasis on balancing risk through strategic asset allocation to maximize long-term value (Markowitz, 1952).

5.3.4 Investment Decision Making and Financial Sustainability of SACCOs

Investment decision making was found to have a significant positive effect on financial sustainability, consistent with existing literature that links sound investment choices to organizational growth and profitability. As highlighted by Brealey, Myers, and Allen (2011), investment decisions determine how efficiently resources are allocated to generate future returns, which is critical for long-term viability. This is particularly true for SACCOs, which rely on strategic investments to enhance their capital base and diversify income sources (Kithinji, 2010).

Similarly, Graham and Harvey (2001) emphasize that well-informed investment decisions, backed by rigorous analysis, contribute to enhanced firm value and sustainability. The current study corroborates findings by Waweru (2013), who noted that SACCOs with effective investment appraisal mechanisms achieve better financial stability and member service delivery. Moreover, effective investment decision making facilitates innovation and expansion, which are essential for adapting to changing market conditions and member needs (Ross, Westerfield, & Jaffe, 2013). Thus, the study confirms that investment decisions play a pivotal role in strengthening the financial sustainability of SACCOs by ensuring efficient utilization of funds and fostering growth.

Investment decision-making's significant influence on financial sustainability aligns with Stewardship Theory, which highlights the importance of strategic asset allocation to optimize returns relative to risk. SACCOs making informed investment decisions based on risk-return analysis can achieve steady income growth and capital appreciation, supporting operational and financial objectives. The regression results emphasize that careful selection and diversification of investments reduce potential losses and improve stability. This confirms MPT's premise that well-structured portfolios enhance financial performance and sustainability by managing uncertainty and leveraging optimal investment opportunities (Markowitz, 1952).

5.3.5 Financial Sustainability of SACCOs

The overall financial sustainability of SACCOs, as established in this study, aligns with the broader discourse emphasizing the multidimensional nature of sustainability in cooperative financial institutions. According to Wanyama et al. (2009), sustainability is not only about profitability but also involves effective governance, member engagement, and operational efficiency. The current findings support the perspective that financial sustainability reflects the institution's ability to generate sufficient income, manage risks, and maintain liquidity to fulfill its mandate (Birchall & Ketilson, 2009). This is consistent with the work of Karanja (2016), who argues that sustainable SACCOs balance social objectives with financial discipline to remain competitive and relevant.

Moreover, the study's results resonate with the resource-based view which posits that SACCOs' internal capabilities, such as financial management practices and governance structures, are critical determinants of sustainability (Barney, 1991). Furthermore, effective stakeholder management and regulatory compliance, as highlighted by Onyango (2013), also underpin sustainability by fostering trust and legitimacy. Thus, the study affirms that financial sustainability in SACCOs is achieved through an integrated approach combining prudent financial management, risk control, and stakeholder engagement, ensuring long-term viability and growth.

The observed upward trend in the Self-Sufficiency Ratio (SSR) and Revenue Diversification Index (RDI) among the selected SACCOs indicates improved financial sustainability and risk management. An SSR consistently above 1.00 demonstrates that SACCOs can cover operating costs independently, aligning with findings by Muriithi and Waweru (2023), who emphasized that financial self-sufficiency is critical for SACCO resilience, especially in volatile economic environments. The SACCO's progression from just below the sustainability threshold in 2021 to achieving self-sufficiency in 2022 mirrors trends reported by Kimani et al.

(2022), who noted that targeted financial management reforms significantly enhance revenue stability over time. Furthermore, the increase in RDI suggests effective income diversification strategies, which corroborates the conclusions of Otieno and Karanja (2024), who found that diversified revenue streams reduce vulnerability to sector-specific shocks and improve overall organizational sustainability. Together, these trends underscore the importance of prudent financial practices in sustaining SACCO operations amidst changing economic conditions.

5.4 Conclusions

The study concludes that effective liquidity management significantly enhances the financial sustainability of SACCOs. By efficiently managing current assets and liabilities, SACCOs can maintain adequate liquidity to meet operational needs and member demands. This ensures smooth day-to-day operations, minimizes financial distress, and reduces reliance on external financing, which in turn lowers financial costs and preserves profitability. Liquidity management also supports timely payments and collections, which strengthens member confidence and trust. SACCOs that implement stringent controls over receivables, payables, and inventory are better positioned to adapt to financial fluctuations, thereby sustaining their long-term financial health. Overall, the findings emphasize that liquidity management is a critical factor that SACCOs must prioritize to achieve stable financial performance and continue fulfilling their socio-economic roles effectively.

The findings affirm that robust financial reporting is essential for the financial sustainability of SACCOs. Transparent, accurate, and timely financial reports enhance accountability and facilitate informed decision-making by SACCO management and stakeholders. Effective financial reporting strengthens regulatory compliance and boosts stakeholder confidence, which is vital for capital mobilization and institutional reputation. Moreover, it reduces

information asymmetry between management and members, minimizing agency costs and promoting good governance. SACCOs that invest in strong financial reporting systems are better able to monitor performance, detect irregularities, and implement corrective measures promptly. Consequently, sound financial reporting practices underpin financial sustainability by fostering trust, improving operational oversight, and ensuring that SACCOs remain accountable to their members and regulatory bodies.

This study concludes that comprehensive risk management significantly contributes to the financial sustainability of SACCOs. By proactively identifying, assessing, and mitigating risks such as credit defaults, liquidity shortages, and operational failures, SACCOs can safeguard their financial resources and operational continuity. Effective risk management enhances the institution's resilience against internal and external shocks, thereby minimizing financial losses and ensuring stability. It also supports strategic planning and regulatory compliance, which are crucial for sustaining member confidence and institutional credibility. SACCOs that adopt integrated risk management frameworks are better positioned to anticipate challenges and implement timely interventions. Therefore, embedding risk management within SACCO operations is fundamental for protecting financial assets, sustaining growth, and maintaining long-term viability.

The study concludes that prudent investment decision making plays a pivotal role in strengthening the financial sustainability of SACCOs. Through strategic allocation of resources into profitable and diversified investments, SACCOs can enhance their income streams and build financial resilience. Sound investment decisions contribute to capital growth, enabling SACCOs to expand services and improve member benefits. Rigorous investment appraisal and risk assessment practices minimize the likelihood of losses and ensure optimal returns on invested

funds. SACCOs that effectively balance risk and return in their investment portfolios are more capable of sustaining operations amidst economic uncertainties. Hence, strategic investment decision making is indispensable for ensuring the financial growth and long-term sustainability of SACCOs.

The overall conclusion is that the financial sustainability of SACCOs depends on a combination of effective liquidity management, robust financial reporting, comprehensive risk management, and strategic investment decision making. These interconnected factors collectively enhance SACCOs' ability to maintain liquidity, generate income, mitigate risks, and grow capital. Financial sustainability is achieved when SACCOs can continuously meet their financial obligations, comply with regulations, and fulfill member needs without compromising future viability. The study highlights that SACCOs must adopt an integrated approach to financial management that prioritizes transparency, accountability, and risk awareness.

5.5 Recommendations

5.5.1 Recommendations for Policy:

Policymakers should develop and enforce comprehensive guidelines that promote best practices in liquidity management, financial reporting, risk management, and investment decision making among SACCOs. Regulatory frameworks need to emphasize transparency, accountability, and prudent financial management to enhance SACCOs' sustainability. SACCOs ought to manage their cash properly to support a steady and sustainable flow of funds. This is especially meaningful as Section 4.5.1 revealed that prompt payments and proper inventory management were rated highly and strongly connected with greater financial stability outcomes.

Policies should encourage capacity building and the adoption of modern financial technologies to improve reporting accuracy and risk assessment. Additionally, there should be incentives for SACCOs that demonstrate exemplary financial practices, such as preferential access to funding or reduced regulatory burdens. Collaborative efforts between regulators, SACCOs, and stakeholders should aim at strengthening governance structures and ensuring compliance with financial standards. Furthermore, continuous monitoring and evaluation mechanisms must be institutionalized to assess the effectiveness of these policies in safeguarding SACCO financial health and member interests.

5.5.2 Recommendations for Practice:

SACCO management should prioritize strengthening internal financial controls and adopt advanced financial management systems to improve liquidity efficiency and reporting accuracy. Introducing strict reporting standards will help SACCOs be more transparent. As pointed out in Section 4.5.2 and proven in the regression analysis, the quality of financial reporting plays a significant role in influencing sustainability ($\beta = 0.461$, $p < 0.05$). Training programs should be regularly conducted to enhance staff capacity in risk identification, assessment, and mitigation. SACCOs need to implement integrated risk management frameworks that proactively address potential threats to financial stability.

Investment decisions should be guided by thorough feasibility studies and risk-return analyses to optimize portfolio performance and ensure capital growth. SACCOs must strengthen their approaches to dealing with risks. The results in Section 4.5.3 suggest that hedging was given a lower rating than insurance or diversification. Enhancing this area might prevent financial concerns and bring SACCO operations in line with Stewardship Theory. Additionally, fostering a culture of transparency and accountability within SACCOs will improve member confidence and

institutional reputation. It is also recommended that SACCOs leverage technology to streamline operations, enhance data accuracy, and support real-time decision-making. Collaboration with financial experts and advisors can further enhance strategic planning and sustainability efforts. Investments should be in line with lasting sustainability goals. Section 4.5.4's results show that renewing and replacing investments is highly rated, suggesting it helps SACCOs achieve long-term growth and improve their efficiency.

5.6 Limitations of the Study

This study encountered several limitations that may affect the generalizability of the findings. Firstly, the study was geographically limited to SACCOs within a specific region, which may not fully represent the diverse operational environments of SACCOs nationwide. Secondly, data collection relied primarily on self-reported responses, which may be subject to response bias or inaccuracies. The cross-sectional research design also restricted the ability to infer causal relationships between variables over time. Additionally, some financial records were incomplete or inconsistently maintained, limiting the depth of analysis. The study focused on specific financial management practices and did not extensively explore other factors such as macroeconomic influences or member behavior that could impact financial sustainability. Despite these limitations, the study provides valuable insights into key determinants of SACCO sustainability and lays a foundation for future investigations.

5.7 Suggestions for Further Research

Future research should consider longitudinal studies to examine the long-term impact of financial management practices on SACCO sustainability over time. Expanding the geographical scope to include SACCOs from diverse regions and contexts would enhance the generalizability of findings. Further studies could explore the role of external environmental factors such as economic

fluctuations, regulatory changes, and technological advancements on SACCO financial health. Investigating member-related factors, such as engagement, satisfaction, and behavioral patterns, may provide additional insights into sustainability challenges. Additionally, qualitative approaches could be employed to gain deeper understanding of managerial decision-making processes and organizational culture within SACCOs. Research focusing on the integration of digital financial services and their influence on SACCO performance would also be valuable in the evolving financial landscape.

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APPENDICES

Appendix I: Survey Questionnaire

SECTION A: GENERAL INFORMATION

1. Kindly indicate your gender?

Male Female Prefer not to say

2. Indicate your highest level of education

Certificate Diploma Degree Masters and above

3. How long have you worked with this SACCO Institution?

Less than 5 years 6-10 years 11-15 years Over 16 years

SECTION B: LIQUIDITY MANAGEMENT

4. Given below are statements on liquidity management in your SACCO. Kindly indicate the extent of your agreement with each of these statements. Use a 5-point Likert scale where 1-strongly disagree, 2-disagree, 3-undecided, 4-agree, 5-strongly agree.

Statements on liquidity management

1 2 3 4 5

This SACCO seek favorable terms of purchases from its suppliers

The flow of purchases is carefully managed in this SACCO

SACCO encourages early payment from debtors

There is regular follow-up on debtors to collect debts in this SACCO

Stock taking is regularly practiced in this SACCO

The SACCO strives to minimize too much tied up in inventories

SECTION B: FINANCIAL REPORTING

5. Given below are number statements on financial reporting in your SACCO. Kindly indicate the extent of your agreement with each of these statements. Use a 5-point Likert scale where 1-strongly disagree, 2-disagree, 3-undecided, 4-agree, 5-strongly agree

Statements on financial reporting

1 2 3 4 5

Financial reporting is done in line with established disclosure standards

Financial reporting is conducted on time in this SACCO

Clear information is presented in financial reports of this SACCO

Financial reports of this SACCO communicate all significant information

Financial reports in this firm are based on material facts

SECTION C: RISK MANAGEMENT

6. Given below are number statements on risk management in your SACCO. Kindly indicate the extent of your agreement with each of these statements. Use a 5-point Likert scale where 1-strongly disagree, 2-disagree, 3-undecided, 4-agree, 5-strongly agree.

Statements on risk management

1 2 3 4 5

Most of the risks in this SACCO have been insured

Insurance has allowed this SACCO to minimize risk exposure

Some of the risks are managed in this SACCO through diversification

Diversification of portfolios has allowed this SACCO to maximize return generated

Hedging has also been adopted to manage exposure to risks in this SACCO

SECTION D: INVESTMENT DECISION MAKING

7. Given below are number statements on investment decision making in your SACCO. Kindly indicate the extent of your agreement with each of these statements. Use a 5-point Likert scale where 1-strongly disagree, 2-disagree, 3-undecided, 4-agree, 5-strongly agree.

Statements on investment decision making

1 2 3 4 5

The SACCO has expanded its branch network

Expansion investment decisions have allowed this SACCO to maximize returns

Obsolete assets are replaced in this SACCO

Investment decision making in this SACCO involves renewal of contracts

SECTION E: FINANCIAL SUSTAINABILITY

8. Given below are number statements on financial sustainability in your SACCO. Kindly indicate the extent of your agreement with each of these statements. Use a 5-point Likert scale where 1-strongly disagree, 2-disagree, 3-undecided, 4-agree, 5-strongly agree.

Statements on Financial sustainability

1 2 3 4 5

There are initiatives that contribute towards community development in this SACCO.

The SACCO generates stable profits.

There are environmental conservation programs in this SACCO.

THANK YOU

Appendix II: List of Deposit Taking SACCOs in Nairobi County

- 1 2NK Sacco Society Ltd
- 2 Acumen Sacco Society Limited
- 3 Afya Sacco Society Ltd
- 4 Agrochem Sacco Society Ltd
- 5 Ainabkoi Sacco
- 6 Airports Sacco Society Ltd
- 7 Amica Sacco Society Ltd
- 8 Ammar Sacco Society Ltd
- 9 Ardhi Sacco Society Ltd
- 10 Asili Sacco Society Ltd
- 11 Azima Sacco Society Ltd
- 12 Bandari Sacco Society Ltd
- 13 Baraka Sacco Society Ltd
- 14 Baraton Sacco Society Ltd
- 15 Biashara Sacco Society Ltd
- 16 Biashara Tosha Sacco Society Ltd
- 17 Bi – High Sacco Society Ltd
- 18 Bingwa Sacco Society Ltd
- 19 Boresha Sacco Society Ltd
- 20 Capital Sacco Society Ltd
- 21 Centenary Sacco Society Ltd
- 22 Chai Sacco Society Ltd
- 23 Chuka University Sacco Society Ltd
- 24 Chuna Sacco Society Ltd

- 25 Cosmopolitan Sacco Society Ltd
- 26 County Sacco Society Ltd
- 27 Daima Sacco Society Ltd
- 28 Defence Sacco Society Ltd
- 29 Dhabiti Sacco Society Ltd
- 30 Dimkes DT Sacco Society Ltd
- 31 Dumisha Sacco Society Ltd
- 32 Eco – Pillar Sacco Society Ltd
- 33 Edis Sacco Society Ltd
- 34 Egerton Sacco Society Ltd
- 35 Elimu Sacco Society Ltd
- 36 Enea Sacco Society Ltd
- 37 Faridi Sacco Society Ltd
- 38 Fariji Sacco Society Ltd
- 39 Fortitude Sacco Society Ltd
- 40 Fortune Sacco Society Ltd
- 41 Fundilima Sacco Society Ltd
- 42 GDC Sacco Society Ltd

- 43 Golden Pillar Sacco Society Ltd
- 44 Good faith Sacco Society Ltd
- 45 Good Hope Sacco 46 Goodway Sacco Society Ltd
- 47 Gusii Mwalimu Sacco Society Ltd
- 48 Harambee Sacco Society Ltd
- 49 Hazina Sacco Society Ltd
- 50 Home Business Sacco Society Ltd
- 51 Ilkisonko Sacco Society
- 52 Imarika Sacco Society Ltd
- 53 Imarisha Sacco Society Ltd
- 54 Invest&Grow(IG)Sacco Society Ltd
- 55 Jamii Sacco Society Ltd
- 56 Jamii Yetu Sacco Society Ltd
- 57 Jitegemee Sacco
- 58 Joinas Sacco Society Ltd
- 59 Jogoo Sacco Society
- 60 Jumuika Sacco Society Ltd
- 61 Kabiyet Sacco Society Ltd
- 62 Kencream Sacco Society Ltd
- 63 Kenpipe Sacco Society Ltd
- 64 Kenversity Sacco Society Ltd
- 65 Kenya Achievas Sacco Society Ltd
- 66 Kenya Highlands Sacco Society
- 67 Kenya National Police DT Sacco Society Ltd
- 68 Keystone Sacco Society Ltd
- 69 Kimbilio Daima Sacco Society Ltd

70 Kimisitu Sacco Society Ltd
71 Kingdom Sacco Society Ltd
72 Kitui Teachers Sacco Society Ltd
73 Kolenge Tea Sacco Society Ltd
74 Koru DT Sacco Society Ltd
75 K – Pillar Sacco Society Ltd
76 K – Unity Sacco Society Ltd
77 Kwetu Sacco Society Ltd
78 Kwikas DT Sacco Society Ltd
79 Lainisha Sacco Society Ltd
80 Lamu Teachers Sacco Ltd
81 Lengo Sacco Society Ltd
82 Mafanikio Sacco Society Ltd
83 Magadi Sacco Society Ltd
84 Magereza Sacco Society Ltd
85 Maisha Bora Sacco Society Ltd
86 Mentor Sacco Society Ltd
87 Metropolitan National Sacco Society Ltd.
88 Mudete Sacco Society Ltd
89 Muki Sacco Sacco Society Ltd

117 Sheria Sacco Society Ltd
118 Shirika DT Sacco Society Ltd
120 Simba Chai Sacco Society Ltd
122 Skyline Sacco Society Ltd
123 Smart Champions Sacco Society
124 Smartlife Sacco Society Ltd
125 Solution Sacco Society Ltd
126 Sotico Sacco Society Ltd
128 Stake Kenya Sacco Society Ltd
129 Stawisha Sacco Society Ltd
130 Stima DT Sacco Society Ltd
131 Strategic DT Sacco Society Ltd.
132 Suluhu Sacco Society Ltd
133 Supa Sacco Society Ltd
134 Tabasamu Sacco Society Ltd
135 Tabasuri DT Sacco Society Ltd
136 Tai Sacco Society Ltd
137 Taifa Sacco Society Ltd
138 Taqwa Sacco Society Ltd
139 Taraji Sacco Society Ltd

- 140 Telepost Sacco Society Ltd
- 141 Tembo Sacco Society Ltd
- 142 Tenhos Sacco Society Ltd
- 143 Thamani Sacco Society Ltd
- 144 The Apple Sacco Society Ltd
- 145 The Kenya Bankers Sacco Society Ltd.
- 146 The Noble Sacco Society Ltd
- 147 Times U Sacco Society Ltd
- 148 Tower Sacco Society Ltd
- 149 Topkrim DT Sacco Society Ltd
- 150 Trans Elite County Sacco Society Ltd
- 151 Trans Nation Sacco Society Ltd
- 153 Trans – National Times Sacco Society Ltd
- 154 Ufanisi DT Sacco Society Ltd
- 155 Ukristo Na Ufanisi Sacco Society Ltd
- 156 Ukulima Sacco Society Ltd
- 158 Uni – County Sacco Society Ltd
- 160 United Nations DT Sacco Society Ltd
- 161 Universal Traders Sacco Society Ltd
- 162 Ushuru Sacco Society Ltd
- 163 Vihiga County Farmers Sacco Society Ltd
- 164 Viktas Sacco Society Ltd
- 165 Vision Afrika Sacco Society Ltd
- 166 Vision Point Sacco Society Ltd
- 167 Wakenya Pamoja Sacco Society

- 168 Wakulima Commercial Sacco Society Ltd
- 169 Wanaanga Sacco Society Ltd
- 170 Wananchi Sacco Society Ltd
- 171 Wanandegge Sacco Society Ltd
- 172 Washa Sacco Society Ltd
- 173 Waumini Sacco Society Ltd P
- 174 Wevarsity Sacco Sociev Ltd
- 175 Winas Sacco Society Ltd
- 176 Yetu Sacco Society Ltd

Source: SASRA (2024)

Appendix III: Introductory Letter



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BOARD OF POSTGRADUATE STUDIES

KCAU/BPS/2025

Date: Friday, May 23, 2025

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION (NACOSTI)
P.O BOX 30623-00100
NAIROBI

Dear Sir/Madam,

RE: MUTAHI ANNPOLLY NYAGUTHII - REG NO. 23/06905

It is my distinct pleasure to introduce Mutahi Annpolly Nyaguthii, a student at our institution pursuing a Master of Science in Commerce- Finance & Accounting, degree in the School of Business.

Annpolly is conducting research on the topic: *«Effect of Financial Management Practices on*

Sustainability of Deposit-Taking Savings and Credit Cooperative Societies in Kenya» Her study has been reviewed and approved by the University's Ethics Review Committee Approval No. KCAUSERCSOB118.

The approval period is 24th April 2025- 24th April 2026.

Any assistance accorded to her is highly appreciated.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Dr. Jackson NdoLO'.

DR. JACKSON NDOLO
DIRECTOR, BOARD OF POST GRADUATE STUDIES

Appendix IV: Ethical Clearance Certificate



KCA UNIVERSITY SCIENTIFIC AND ETHICS REVIEW COMMITTEE

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REF: **KCAU/SERC/118**
TO: **MUTAHI ANNPOLLY NYAGUTHII (23/06905)**

Date: **24th APRIL 2025**

Dear Sir/Madam

RE: INFLUENCE OF FINANCIAL MANAGEMENT PRACTICES ON SUSTAINABILITY OF DEPOSIT-TAKING SACCOS IN KENYA

This is to inform you that KCA University Scientific Ethics Review Committee (KCAUSERC) has reviewed and approved your above research proposal. Your application approval number is **KCAUSERC/SO8118**. The approval period is **24th APRIL 2025 – 24th APRIL 2026**.

This approval is subject to compliance with the following requirements:

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






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

Yours sincerely,

A handwritten signature in black ink, appearing to be 'C. Ntara', enclosed in a simple oval shape.

Dr. Caroline Ntara
Chairperson, KCA University Scientific And Ethics Review Committee

Appendix V: NACOSTI Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
RefNo: 212623	Date of Issue: 08/June/2025
RESEARCH LICENSE	
	
<p>This is to Certify that Ms. ANNPOLLY NYAGUTHII MUTAHI of KCA University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: EFFECT OF FINANCIAL MANAGEMENT PRACTICES ON SUSTAINABILITY OF DEPOSIT-TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KENYA for the period ending : 08/June/2026.</p>	
License No: NACOSTI/P/25/4174947	
212623 Applicant Identification Number	 Deputy Director NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code
	
<p>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</p>	
See overleaf for conditions	

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to.
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
 - i. Endanger national security
 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
 - iv. Result in exploitation of intellectual property rights of communities in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of communities
 - vii. Endanger public safety and national cohesion
 - viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. Neither the license nor any rights thereunder are transferable.
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
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