

**INTERNAL ACCOUNTING CONTROL SYSTEMS, REGULATORY
FRAMEWORK AND FINANCIAL PERFORMANCE OF DEPOSIT TAKING
SACCOS IN KENYA**

MACKLINE WAMUKOTA

**A Thesis Submitted in Partial Fulfillment of the Requirement for the Award of the
Degree of Doctor of Philosophy in Business Management (Accounting Option) of
Masinde Muliro University of Science and Technology**

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Signed.....

Date.....

Prof. Benedict Alala

Department of Accounting and Finance

Masinde Muliro University of Science and Technology.

Signed.....

Date.....

Dr. Maniagi Musiega

Department of Accounting and Finance

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DEDICATION

This thesis is dedicated to the Almighty God, who gave me all the strength and courage. I also dedicate this thesis manuscript to my family for their moral and encouragement in the study period in particular and throughout my life in general.

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ABSTRACT

The internal accounting control system is the foundation of an effective system of internal control. Most of the well-publicized failures including not only Enron and WorldCom, but also the governance failures that led to the 2008 financial crisis were, at least in part, the result of weak internal accounting control system. In the absence of a demonstrably effective internal accounting control system, no level of “design and operating” effectiveness of controls within business can provide meaningful assurance to stakeholders of the integrity of an organization’s internal accounting control structure. The main objective of the study was to determine the effects of internal accounting controls on financial performance of deposit taking Sacco’s in Kenya. Specifically, How; Risk assessment, Accounting information system, Monitoring and control activities, control environment, and the moderating effect of regulatory frame work affects the financial performance of Sacco’s in Kenya. The study employed mixed research design targeting 175 Sacco’s with 875 respondents. A purposive sampling technique was used The participants were chosen based on the purpose, hence the name CEO, Finance Managers, Risk Managers, ICT Managers and Internal Auditor. Data was collected by use of both Primary and secondary techniques. A pilot study was conducted to establish validity and reliability of research instruments. Primary data collection was by use of questionnaires while secondary data involved documentary analysis to capture information on financial performance. Pilot study was conducted in Nairobi County. Validity was achieved using content and construct validity where KMO value was 0.870 which signified factor analysis was appropriate. Cronbach Alpha was applied to establish reliability which had a range between 0.848 to 0.916 for each variable. Data was analyzed by use of descriptive and inferential statistics. Descriptive analysis included; frequencies, Mean, standard error, Standard deviation and percentage while inferential analysis involved regression analysis. Prior to conducting regressions, the study ensured that the assumptions of regression are met through normality test, auto correlation test, Multi Collinearity and Homoscedastic. From the results, the test criteria were to reject the null hypothesis if the value of beta is not equal to zero ($\beta_1 \neq 0$). From the results, the beta value for risk assessment control from the regression model was 0.323 at $p < 0.05$. Risk assessments explains 58.4% ($R^2 = 0.584$) of variance in financial performance of DTS in Kenya. Therefore the hypothesis was rejected; the beta value for Accounting Information System from the regression model was 0.126 at $p < 0.05$. Accounting Information System explains 43.7% ($R^2 = 0.437$) of variance in financial performance of DTS in Kenya. Therefore the hypothesis was rejected; the beta value for management and control activities from the regression model was 0.094 at $p < 0.05$. Management and control activities explains 43.0% ($R^2 = 0.430$) of variance in financial performance of DTS in Kenya. Therefore the hypothesis was rejected; the beta value for control environment from the regression model was 0.218 at $p < 0.05$. Control environment explains 53.4% ($R^2 = 0.534$) of variance in financial performance of DTS in Kenya. Therefore the hypothesis was rejected. The study established a statistically significant correlation between internal accounting control systems and financial performance of deposit taking Sacco’s in Kenya. The findings of the study forms basis for reference in future by interested parties.

ABBREVIATIONS AND ACRONYMS

SACCO	Saving and Credit Cooperative Society
AMOS	Analysis of Moment Structures
SASRA	Sacco Societies Regulatory Authority
COSO	Committee of Sponsoring Organizations
ICS	Internal Control System
DTS	Deposit Taking Saccos.

OPERATIONAL DEFINITION OF TERMS

Internal accounting Control system: It refers to the mechanisms put in place by Saccos that accept deposits to guarantee that Risk assessment, Accounting information, Monitoring and Control Activities, and Control Environment Controls are met.

Financial Performance: is a purely arbitrary measurement for dividends per share and interest earned on member deposits.

Risk Assessment: The identification and analysis of relevant risks connected with a new information system, rapid expansion, reorganization of Sacco operations, new product lines, and the implementation of new accounting rules in accomplishing the goals of deposit-taking Saccos.

Information and communication System: Infrastructure, software, personnel, processes, and data are all included in an information and communication system. Manual systems place less emphasis on hardware and software infrastructure. The majority of information systems employ information technology (IT).

SACCO: a cooperative whose primary function is to pool members' resources and provide them with low-interest loans for community improvement initiatives.

Control Activities: Control activities are the plans, processes, and tools put in place to guarantee that management orders are carried out as intended.

Control Environment: Actions, policies, values, and management styles that influence and set the tone of a firm's day-to-day activities that involve, Commitment to integrity & ethical values, Oversight responsibility, Establish structure, authority and responsibilities, Enforces accountability and External influences

Regulations: Minimum operational conditions for a deposit-taking SACCO Society, including liquidity requirements, capital structure requirements, external borrowing requirements, and investment requirements, are outlined in the guidelines.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter includes the sub-sections: background of the study, statement of the problem, aims of the research, research hypotheses, significance of the study, scope of the study, constraints of the study, research assumptions, and conceptual framework.

1.2 Background of the Study

The primary goal of a Savings and Credit co-operative society (SACCOs) is to help its members save money, which the group can then use to provide loans to other members at a fair interest rate. In addition, SACCOs can serve customers in rural and low-income communities, which are often overlooked by conventional banks. The primary goal of SACCOs is to provide economic and social benefits to their members by pooling their resources and providing access to loans (Ofei, 2001). Kenyan SACCOs, in their pursuit of this goal, have amassed savings of more than Kshs.350 billion (Co-operative Bank of Kenya, 2010).

In addition, the Vision 2030 strategy calls for the financial services industry to play a crucial role in mobilizing savings and investments for development of the country by providing a better intermediary between saves and investments than is now available. Investment money necessary to carry out Vision 2030's initiatives will be mobilized with the help of this sector. Financial services methods including SACCOs will be introduced as part of this effort. Only 19% of Kenyans have access to formal financial services at now, thus the services provided

by SACCOs and other significant financial institutions will be vital in expanding these services to more people. It's worth noting that financial services provide around 4% to GDP and that the value of their assets contributes around 40% to GDP. SACCOs will play a vital role in the vision 2030's goal of creating a robust and stable financial system to mobilize savings and more effectively allocate these funds throughout the economy (Government of the Republic of Kenya, 2008). SACCO's continued existence is crucial to bringing the unbanked majority into the financial fold (those regarded as poor in the society).

The failure of financial institutions owing to inadequate management of financial and economic risk precipitated the 2008 financial crisis, which in turn led to the implementation of prudential rules (Farhi and Cintra, 2009). The commercial banking sector has been at the core of macro prudential regulation since the 1950s (White, 2014). Microfinance institutions and huge cooperative unions are progressively being brought into a formal regulatory framework as a result of the growing importance of Non Commercial Banking Institutions in national financial systems around the world (Rosengard, 2011). For cooperative societies in particular, the introduction of prudential regulation for hitherto unregulated parts of the financial system raises important questions about the scope and form of the oversight they will need to be subjected to (Alukwe et al. 2015).

The Sacco Societies Act No. 14 of 2008, which was passed with the intention of regulating Kenya's Savings and Credit Cooperatives Sector, was the legislation that gave rise to the Sacco Societies Regulatory Authority (SASRA). The Sacco societies (deposit taking SACCO business) regulations were published in 2010 as an exercise of the authority granted to the Minister of co-operative development and marketing by section 68 of the aforementioned act, with the express purpose of establishing more detailed provisions for

the protection of Sacco stakeholders' savings. Under the legislation, the Sacco Societies regulating Authority was established to issue licenses to SACCO societies so that they might engage in deposit taking activities in compliance with the act and to otherwise regulate and supervise SACCOs. The regulatory framework additionally defines the types of investments available to SACCOs, with the intention of reducing their exposure to unnecessary risk.

According to SASRA report 2020, The Sacco Societies Regulatory Authority (SASRA) has revoked the licenses of three societies; barring them from taking deposits. The three are Nandi Hekima, Miliki Sacco and Sukari Sacco. SASRA said deregistering the Sacco's was necessary since some of them were facing business shrinkage.

Secondly, Mwalimu Sacco executives, either naïve in such acquisitions, or driven by self-interest pushed on with the deal, ignored all red flags and bought 75 per cent of the bank in one fell swoop. It cost Sh2.4 billion. The Co-operative Alliance of Kenya, an umbrella of more than 14 million members of the cooperative movement, was among the first agencies to flag the transaction on grounds that due process was not followed

Each registrant is obligated under the Sarbanes-Oxley Act (SOX) of 2002 to implement and maintain adequate internal control. Internal control over financial reporting must be evaluated and reported on by management per SOX Section 404. Internal controls are a set of policies and processes established by an organization to increase the likelihood that it will accomplish its goals. The rules are in place to ensure that a company's financials are accurate reflections of its true success in the marketplace.

Cooperatives, like any other business, need to make a profit to ensure their continued existence and to enable them to achieve their social mission of maximizing the benefits to

their members and raising their standard of living. In most cases, the cooperative's income will be used to pay out dividends and other advantages to its members. Increasing the dividend payout to members will encourage them to take part in all of the cooperative's commercial endeavors. If you believe Siddaraju (2012).

1.2.1 Global Perspective of Internal Control System

The wave of corporate failures that hit the United States and Europe in the 1980s sparked a renewed interest in regulating public discourse and improving the quality of publicly available data. Due to this, international regulatory bodies like the Treadway Commission's Committee of Sponsoring Organizations were established to maintain order (COSO, 1992). Business management and internal auditors were expected to adhere to the risk control framework in order to lessen the occurrence of fraudulent financial reporting and subsequent corporate scandals (Enron, Worldcom, Tyco International in the United States and Maxwell Communications, Bank of Credit and Commerce International in Europe). In the late 1990s and early 2000s, there was extensive media coverage of several high-profile accounting scandals (Elmady & Thirivadi, 2014).

U.S. commercial banks' internal control quality was examined by Kalmetova and Zhussupova (2021), who found a correlation between it and the banks' financial results. The COSO Internal Control Framework is used to categorize control weaknesses in the study. With the help of a regression analysis, it determines if there is a connection between the problems pinpointed and the financial success of banks. Weaknesses in the study's risk management and information and communication components of the internal control system had a detrimental effect on bank performance.

Nguyen (2021) examined the influence of internal control on the performance of pharmaceutical enterprises, offering new empirical information regarding the effects of internal control on performance in Vietnam. The findings indicate that the variables with the greatest effects on the success of pharmaceutical enterprises are monitoring, information, and communication. The success of internal control in pharmaceutical businesses can be explained by the fact that good monitoring and information as well as good tradition significantly affect business performance. Using the findings of the study as a guide, the author suggests changes that may be made to enhance the efficiency of internal control and boost the effectiveness of pharmaceutical businesses.

Urquia (2018) looked on the connection between internal control systems and monetary results at Surigao del Sur State University in the Philippines. The analysis discovered that the institution's administration is dedicated to the control systems, takes part in monitoring and supervising University operations, and launches all of the institution's activities. However, the study also found that the internal audit department is not very effective at identifying and resolving systemic flaws. Assets of the University were found to have increased in general, and it was found that all revenues and expenditures are appropriately categorized. As a result, the study concluded that internal control systems do work, albeit with hiccups, and that there was a substantial association between internal control systems and financial success at a higher education institution.

Rosman, Shafie, Johari, and Omar (2016) conduct research in Malaysia to determine the connections between internal control (control environment, control activities, risk assessment, monitoring), budgetary participation, and the efficiency of non-profit organizations' (NGOs') performance (measured in term of financial and non-financial).

Results from a multiple regression study show a correlation between a company's control environment, control activities, risk evaluation, and monitoring, and the company's bottom line. Control environment, risk assessment, budgeting participation, and non-financial performance are also significantly related, as shown by the results.

Mahmood, Hamawanda, and Sedeeq, A. (2020) studied the impact of internal control on the financial performance of industrial enterprises in the Kurdistan Regional Government of Northern Iraq (KRG). It has been deduced that the success of Kurdish manufacturing enterprises can be improved by the implementation of internal control measures, which would ensure that both management and employees focused solely on the tasks at hand. The results demonstrated a positive relationship between financial performance and the control environment, control activities, and internal auditing.

Hanif (2015) made an effort to probe the connection between financial performance in Pakistan and the five components of an efficient internal control system. Results showed that commercial banks have the most effective internal controls, followed by public banks, and then Islamic institutions, in that order. The financial performance of private banks was also determined to be high; that of public banks was moderate; and that of Islamic banks was low. As a result, we found that the efficiency of the banks' internal controls was positively correlated with their financial results.

1.2.2 Regional Perspective of Internal Accounting Control System

Tjiueza (2018) analyzed the effectiveness of the internal controls of the Roads Contractor Company (RCC) Ltd on the company's financial results in Namibia. According to the results of the survey, RCC's upper management is aware of how well the company is doing in terms

of meeting its operational goals and staying in compliance with the law. The survey also found that authority and accountability are well-defined within the RCC's procurement and finance division, and that employees are properly supervised. To properly authorize and approve transactions, the policies and procedures in place are sufficient. The research shows that financial accounts are not consistently made public and that procurement procedures are not routinely checked. The research also found that management is not operating with much integrity when carrying out its responsibilities and that adequate remedial actions are not being taken to rectify deficiencies. It also shows that management isn't keeping an eye out for threats to the goal because internal controls aren't being closely watched.

Umar and Dikko (2018) analyzed the impact of an effective internal control system on the bottom line of publicly traded Nigerian manufacturing firms. The research concluded that the financial performance of Nigerian manufacturing firms listed on stock exchanges was significantly and positively impacted by the implementation of sound risk management practices. It was found that manufacturing firms who spent money on an efficient internal control system outperformed others with a less robust system financially.

Ibrahim, Diibuzie, and Abubakari (2017) reported that the positive effects of an efficient internal control system on a company's financial performance have been underlined continuously and extensively. The ability to detect and prevent fraudulent acts in the institution is made possible by strong internal control. Financial performance in health institutions in Ghana's Upper West Region has been dismal despite policymakers' best efforts to implement reforms that would strengthen the ministry of health's internal control system.

Alemu (2020) conducts research with the intent of determining the impact of Ethiopia's internal control system on business success. About two-thirds of respondents agreed that the firm reconciled physical cash with cash book balances, whereas 21% disagreed. This was because most businesses did not keep records of their purchases (receipts), making it impossible for accountants to determine the true value of the company's assets.

To this end, Beine (2018) examined ECOBANK's (a Rwandan financial institution) Internal Control System and Financial Performance. Research shows that male employees make up a disproportionate share of Ecobank's human resource, and that those between the ages of 16 and 35 make the greatest contributions to the bank's success. The study accomplished all three of the set goals, and the researcher should be commended for his or her efforts. The study determined that ECOBANK has excellent internal control systems (internal audits, control environment, control activities, and effective communication), that there is a substantial and statistically significant positive link between internal control systems and financial performance, and that the central bank has no statistically significant impact on internal control systems.

Nsubuga (2019) set out to analyze the impact of private companies' Internal Controls on their financial performance and to pinpoint the factors contributing to or detracting from this connection. The research showed that most private companies have a control environment, which is a crucial part of any company's internal controls because of the effect it has on the company's bottom line. The management's efforts to reduce the severe consequences of fraud were also verified. Private companies in Uganda were analyzed to see how their financial results changed after implementing various control activities. According to the

statistical findings of the regression research, private enterprises in Uganda benefit from stronger internal controls, which in turn boosts their financial success.

Kasoga (2020) analyzed the ways in which Local Government Authorities' (LGAs') internal control system affected their revenue collection performance. The research showed that control activities ensure LGAs follow revenue collecting rules and procedures such as personnel training and job classification. The research also showed that improved communication and knowledge sharing led to more accurate revenue records, transactions, and identifications. The research also revealed that revenue collection monitoring is an integral part of internal audit, supervision, and management processes. In light of these findings, the study indicates that the Local Government Authorities of Tanzania benefit greatly from instituting internal control systems to boost the efficiency with which they collect taxes and fees from the general public.

1.2.3 Local Perspective of Internal Control System.

In Kenya, SACCOs are the primary mechanism by which co-operatives gain access to loans for the purpose of advancing the economy. Kenya's cooperative sector is presently responsible for 4.5% of the country's GDP, or Ksh 43.6 billion annually (SASRA, 2013). Considering the importance of the movement to financial deepening and intermediation, this is a significant effect. Cooperatives have helped its members save over Ksh 350 billion and access over Ksh 180 billion in low-interest loans through their business activities. Over 1.8 million people are part of SACCOs, which collectively manage Ksh 250 billion. The government recognized the importance of the SACCO sector to financial development and established the SACCO societies regulatory authority to regulate it (SASRA).

Mbuti (2014) demonstrated that SACCOs continue to perform poorly financially as a result of ineffective management and fraud. Agrawal and Cooper (2007) note that the supply of audit services by internal auditors and the independence of boards and audit committees are critical governance qualities that affect performance. Audit reports are helpful because they give investors and creditors insight into how well a company is running and reporting its finances. Still, the internal audit function's reporting structure and the quality of its audit reports are critical considerations. Chen and Divanbeigi (2019) found that SACCOs' performance and expansion are stunted by their inadequate management and corporate governance.

Scandals involving poor governance have plagued a wide range of organizations. Not even SACCOs have been spared the taint of these scandals, since they, too, have experienced financial and corporate governance problems. How a SACCO is governed is called "SACCO governance," and it is similar to how other types of organizations are governed. With proper governance in place, a SACCO may be efficiently run, with the management team being held to account for their decisions and the organization being run in the best interests of its members (Odek & Anyira, 2017).

Marita (2016) argues that the best way to prevent revenue and asset losses due to fraud is through the establishment and maintenance of adequate internal controls. Increasingly, people are turning to internal control systems to address a wide range of issues. Coso (2004) elaborates by stating that instituting internal controls helps ensure the firm stays on track to meet its financial and operational objectives and reduces the likelihood of any unpleasant surprises. They improve productivity, lessen the possibility of lost assets, and guarantee truthful financial reports and adherence to regulations. Musa (2008) defines

internal control as a system that includes a control environment and control processes. the set of rules and regulations put in place by a company's board of directors and upper management. The study's author contended that an effective internal control system would have safeguards in place to enable timely feedback, error detection, and correction, as well as clearly defined roles and responsibilities that would be carried out by appropriately trained personnel. Maintaining and expanding an organization's viability serves its members and the community at large. Due to the cutthroat nature of the financial services industry, companies are constantly looking for ways to improve their operations.

Kiragu and Okimbo (2014) investigated the financial elements influencing the financial performance of deposit-taking savings and credit cooperative societies in Kenya and discovered that theft of funds affects the financial performance of SACCOs. Using the Altman Z Score Model of Corporate Bankruptcy, Kivuvo and Olweny (2014) analyzed the success of SACCOs in Kenya and identified factors that could lead to their collapse. Statistically significant relationships were established between liquidity and leverage and SACCO financial performance. Internal factors were found to have a significant impact on the financial outcomes of deposit-accepting savings and credit societies in Kenya. In addition, the study author notes that there is a dearth of data regarding the impact of internal control system on financial performance of deposit accepting savings and credit unions. Therefore, the study will be done to address this knowledge gap.

1.3 Statement of the Research Problem

SACCOs play a very significant role in the provision of financial services and also they have a role in the achievement of development goals. Despite the significant government initiative, SACCOs continues to frustrate SDGs and vision 2030 objectives of increasing financial inclusion. According to SASRA report (2020), Sacco's in Kenya have shown poor financial performance where it's apparent that the average growth rates of the Deposit Taking have continued to shrink over the three (3) years comparative period resting with an average growth rate of 5.23% in 2020. If the trend continues, then the market share Deposit Taking -SACCOs is likely to be greatly reduced which is likely to impair their competitiveness and sustainability. The Deposit Taking -SACCOs reported the lowest growth rates over the three (3) year periods at 8.69% in 2017/2018; 7.64% in 2018/2019 and resting at a low of 7.51% in 2019/2020. Secondly, Mwalimu National Sacco executives, either naïve in such acquisitions, or driven by self-interest pushed on with the deal, ignored all red flags and bought 75 per cent of the bank in one fell swoop which costed Sh2.4 billion violating all necessary procedures despite red flags being raised by other apex organizations . Further, basing on the inspection report compiled by the SACCO Societies Regulatory Authority SASRA (2018), it was indicated that poor performance of SACCOs in Kenya have been caused by mismanagement, fraud, corrupt practices and creative accounting tactics to cover up poor performance which led to various sanctions being undertaken including; revocation of licenses, deregistration of the Sacco's and others being put on a watch list. The affected Sacco's include; Elimu,Nandi Hekima, Miliki Sacco and Sukari ,Ainabkoi, Goodhope, Jitegemee, Kenya Midland, Orient, Uchongaji, Rachuonyo Teachers, Nyamira Teachers, Stake Kenya, Wevarsity, Telepost and Jumuika Sacco Society Limited. 7 Studies have identified the importance of internal control systems in the organizations operations (Chang, 2019; Masanja, 2018; Lakis, 2012) however specifically; there are few studies is any which have assessed the effect of internal accounting control systems, regulatory framework and financial performance of deposit taking Sacco's in Kenya. This study will establish the effect of internal accounting control systems, regulatory framework and financial performance of deposit taking Sacco's in Kenya.

1.4 Objective of the Study

The main objective of this study was to establish the influence of internal accounting control system on the financial performance of Sacco's in Kenya. The specific objectives are:

- i. To examine the effect of risk assessments on financial performance of Sacco's in Kenya
- ii. To determine the effect of accounting information and communication control on financial performance of Sacco's in Kenya
- iii. To determine the effect of monitoring and control activities on financial performance of Sacco's in Kenya
- iv. To determine the effect of Control environment on financial performance of Sacco's in Kenya
- v. To determine the moderating effect of regulatory framework on the relationship between internal accounting control system and financial performance of Sacco's in Kenya.

1.5 Research Hypotheses

H₀₁: Risk assessments have no significant effect on financial performance of Sacco's in Kenya

H₀₂: Accounting information and communication have no significant effect on financial performance of Sacco's in Kenya

H₀₃: Monitoring and Control activities have no significant effect on financial performance of Sacco's in Kenya

H04: Control environment have no significant effect on financial performance of Sacco's in Kenya

H05: Regulatory framework has significant moderating effect on the relationship between internal control system and financial performance of Sacco's in Kenya.

1.6 Significance of the Study

This research would be of importance to the following

1.6.1 Policy Makers

The importance of internal controls to the financial performance of SACCOs in Kenya can be better understood by government and policymakers. It is anticipated that the findings and recommendations of this study would aid policymakers and formulators in the creation of pertinent laws and a legislative framework to increase internal controls while limiting the risks resulting from the same. This report is crucial to SASRA and other regulatory authorities and policymakers because it will aid in the implementation of rules to protect the confidence of Sacco Sector investors. Thus, the findings of this study would be used to inform the revision of prudential regulations for SACCOs that accept deposits by policymakers.

1.6.2 Organization and Stakeholders

Directors and management of licensed SACCOs are expected to understand the significance of internal control system procedures and aid in comparing their degree of compliance to that of their rivals. This study is also crucial in supplying SASRA-regulated DT Saccos' management with essential information. They would be able to make informed decisions on risk mitigation and implement policies to minimize financial risk, which would have a beneficial impact on the Sacco sector and boost shareholder wealth.

The conclusions of the study would also boost member confidence and loyalty to the SACCO subsector as a result of the security of their deposits, which would be ensured by implementing suitable and rigorous internal controls. It also supports proactive management of fraud, as early detection measures employed by the SACCO when sending returns to SASRA anticipate their existence before it occurs.

1.6.3 Scholars and Academicians

This research contributes to the current body of knowledge regarding the impact of internal accounting controls and regulatory framework on financial performance. This study's findings are important as a source of knowledge for scholars in the domains of finance and accounting, and other researchers will utilize them as literature reviews when examining internal controls and financial performance in relation to DT Saccos in Kenya.

1.7 Scope of the Study

This study was confined to Deposit taking Saccos in Kenya since these Saccos are regulated by SASRA. It covered the internal accounting control systems and its effect on the financial performance of Saccos. Financial performance was measured using Dividend per share, interest on the member deposits. On the other hand, internal controls were conceptualized into control environment, control activities, risk assessment, accounting information and communication system and control environment. A third variable, SASRA regulation was used as a moderating variable. The study was conducted between June and December 2022.

1.8 Conceptual Framework

A conceptual framework is a set of assumptions about the nature of the model under investigation and the relationship between the model's dependent and independent variables (Mugenda & Mugenda 2003). A conceptual framework is a way to organize and describe key concepts for a study, as well as to sketch out connections between them. The concept could be defined, the research landscape or conceptual scope mapped, relations among concepts systematized, and gaps in the literature identified with the aid of such a framework (Tromp, 2012). In this study, the independent variable was internal control systems and the dependent variable was financial performance of Saccos while SASRA regulatory framework was used as moderating as indicated in figure 1.1. The independent variable was conceptualized into risk assessments (Akimana, 2019; Hanoon, Khalid & Al-Waeli, 2021), Accounting Information and Communication system (Muhunyo & Jagongo, 2018; Kendogor, 2018), monitoring and control activities (Segun, Kehinde & Alice, 2020; Jeanne, 2019) and control environment (Mauti & Muturi, 2019; Kinyua, 2018; Mawanda, 2018).

Financial performance was measured using profitability, dividend per share and interest on member of deposits (Hanoon et al., 2021; Fullerton & Wempe, 201. SASRA regulatory framework included, Liquidity Requirement, Capital Requirement, Loan Requirement and Investment Requirement (Nyakarimi, Kariuki & Wangâ, 2019; Muturi, 2019).

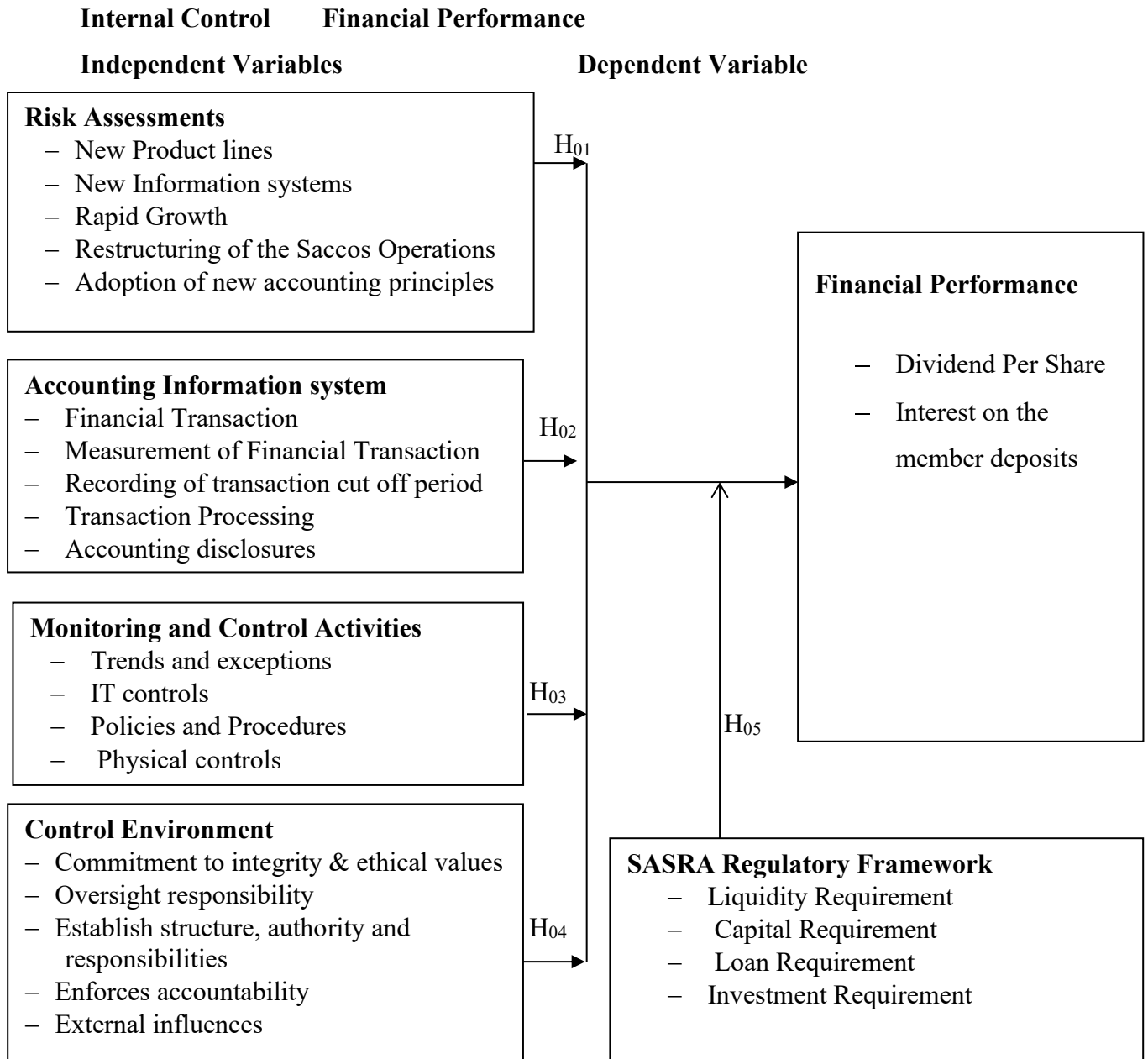


Figure1.1: Conceptual Framework

Source: Researcher (2021)

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter examines the impact of internal accounting controls on organizations' financial performance in light of research conducted by other scholars.

2.2 Theoretical Framework

The impact of internal accounting control on financial performance is the subject of numerous theories. There are a number of different schools of thought on accounting, the most prominent of which are financial, normative, and positive.

2.2.1 Positive Accounting Theory

Watts & Zimmerman (1986), the authors of positive accounting theory, argued that the field should focus on explaining accounting practice. Although it does explain and anticipate which companies will not utilize a certain accounting technique, it does not recommend any one way. ” To paraphrase the theory's own words, "the idea that all individual activities is driven by self-interest and that individuals will always engage in an opportunistic manner to the extent that the acts will improve their wealth" is at the heart of it (Santoso & Sebayang, 2017). According to the positive accounting theory, this means that businesses will try to implement measures that curb self-interested behavior. Firm managers' (agents') interests must be aligned with those of the firm's owners, hence this is essential (the principles). The

term "monitoring cost" refers to the expenses incurred in resolving issues that arise within the agency relationship and putting in place suitable methods.

In accounting, studies are classified in one of two ways: either as a positive or a normative study. Positive research attempts to foretell and provide an explanation for future events. Theoretical frameworks that are associated with this type of study are often optimistic (Deegan and Unerman, 2006). These theories are typically based on observations that can be tested and refined by more observation. In contrast to positive theories, others are not grounded in empirical evidence. One can think of these as the researcher's own personal theories of regulation. Theory of normative research is defined by Deegan and Unerman (2006) as an attempt to outline the steps necessary to implement a certain procedure. With the goal of elucidating sustainable business methods, this study relied on positive theory and collected empirical evidence.

Positive accounting ideas have formed the basis for a number of studies. Collin, Andersson, Cato, and Hansson (2009) stated that the selection of accounting standards is governed by two hypotheses that rarely coincide. These include institutional and positive accounting ideas. Modell (2010) also stated that accounting research is dialogue-based and can be attributed in part to the philosophical underpinnings that revolve around "mainstream" notions of the possibilities (and desirability). Therefore, the problem of desirability can be better addressed by positive accounting theories. Waweru, Prot Ntui, and Mangena (2011) conducted a study on the factors that influence the selection of accounting systems, and their research was grounded in positive accounting theories.

Watts and Zimmerman (1986) cite three main reasons for the transition from normative to positive approach: The normative approach cannot assess the validity of theory empirically because it is dependent on premise or erroneous assumptions. The normative strategy prioritizes the success of private investors over the success of society as a whole. No efficient deployment of capital market resources is promoted or permitted by the normative approach. There is a general consensus that in a market-based economy, accounting data can serve as a regulating instrument for the public good by facilitating the effective allocation of economic resources.

Moreover, (Watts and Zimmerman, 1986) claimed that the normative approach to accounting theory analysis was not supported by sound theory. Watts and Zimmerman developed a positive approach, which was more oriented towards empirical research, to bridge the gap between the normative and empirical approaches to accounting, and to justify the various accounting techniques and methods currently in use or sought out in the search for new models for the advancement of accounting theory.

The fundamental premise of positive accounting theory is that the field of accounting theory exists to provide an explanation for and a foresight into existing accounting procedures. The goal of positive accounting theory is to provide an explanation for how to deal with future circumstances in a way that makes the best use of one's accounting skills, knowledge, and the policies that best suit those circumstances. Businesses adopt internal control systems based on this idea so they can meet the needs of their management and their investors in terms of keeping tabs on the state of the control environment. The impact of the control environment on the financial performance of deposit-accepting Saccos is explained by this theory.

2.2.2 Attribution Theory

Heider (1958), an Austrian psychologist, first put up this idea in an attempt to explain why it is that people ascribe mental attributes to the physical objects they observe. Sullivan & Sheffrin (2003), for instance, argued for this theory in their research on how people attribute motives and intentions to others in social settings.

Young Shin Kim (2012) stated that when assessors believe that similar persons would have responded differently in each situation, they tend to attach responsibility for the outcome to the individual. Individuals' interpretations of events and behaviors, as well as the reasons they give for those interpretations, are at the heart of attribution theory. When evaluators are convinced that average people would have taken the same actions, they have a tendency to blame the circumstance rather than the actors.

Frenkel, Hommel, and Rudolf (2000) state that in the first scenario, internal or dispositional attributions are being discussed, while in the second scenario, external or situational attributions are being discussed. Previous research has shown that people are more likely to ascribe the actions of others to their inherent traits, whereas they are more likely to explain their own actions to external factors (Nyong'o, 2014). This is usually the case when unwanted acts constitute the experience. Consequently, evaluators are likely to draw the conclusion that managers and oversight bodies are negligent due to the failure to identify internal control on the security of assets. Therefore, according to the attribution theory, auditors should report on the efficacy of organizations' "internal control systems. An auditor's job is to learn as much as possible about the internal controls in place at a company they are auditing, then assess those controls, make recommendations for improvement, and

put those recommendations to the test. It is believed that this is important to ensure the auditors' "independence" and to permit for the possible reduction of other substantive audit procedures in order to provide the requisite confidence level in regards to security.

Raviv and Abudy (2016) suggest that evaluators can use audit processes to figure out if auditors were negligent if they didn't find internal control lapses and wrongdoings. According to the attribution theory, those responsible for acts of fraud or other wrongdoing should face consequences. Management, governing bodies, and auditors will all share responsibility. If auditors, as the "public watch dogs," are found to have offered subpar services, they will undoubtedly face consequences (MacKay, 2005).

Therefore, it is essential that they have a firm grasp of the inner workings of revenue generating within the corporation. To attribute the impact of accounting information and communication systems on asset security, the theory was crucial. Because it posits that information and communication networks are crucial components of internal control systems that serve to avoid fraud, this theory is pertinent to the study.

2.2.3 Enterprise Risk Management Theory

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) created the enterprise risk management (ERM) theory to give an all-encompassing method of mitigating risk. All potential risks to a company are considered in enterprise risk management, and countermeasures are implemented to ensure that these risks do not compromise the business's ability to achieve its goals (COSO, 2013). An organization's risk appetite is the level of risk it is willing to take in order to generate the desired rate of return. Having established its risk appetite, a company must then choose a measurement method to

aid its top management in making decisions (Bhasin, 2015). According to this view, the company's board of directors is responsible for setting the tone for enterprise-wide risk management and establishing policies and procedures related to risk governance.

Enterprise risk management techniques that are both efficient and thorough can lead to a prosperous business, according to this notion. A company's ability to carry out its future plans is improved by the systematic and structural evaluation and management of risks, as well as the dissemination of relevant information to decision makers. Bhasin (2015) asserts that building a taxonomy for risk management is crucial for all organizations because it establishes a transparent and standardized risk framework for all the organization's stakeholders. There are a lot of unknowns and hazards in the business world that could make running the business difficult. Therefore, managers can use ERM theory to evaluate and enhance their organizations' enterprise risk management. Enterprise risk management, when implemented correctly, can boost a company's competitive edge and, in turn, raise the value it brings to shareholders. Consequently, our research suggests that some local accountants and internal auditors may be singled out for failing to adequately plan for and respond to potential hazards.

This theory's supporters argue that better risk management is the key to avoiding catastrophes like these. In light of this, accountants and internal auditors at DT-SACCOs in Kenya were guided by the enterprise risk management theory to proactively consider and address gaps in the control of risks, thereby supplementing existing management control processes.

2.2.4 Control Theory

Rotter (2001), notes that the theory of control and experience predicts that someone who defies a control system will be disqualified from participating in collusion. He contended that the distinction between internal and external signifiers of control—perceived control vs. concept of external control—helps people make sense of their routine lives. Those who have an internal locus of control credit outcomes to their own efforts, whereas those with an external locus of control blame other forces like luck or more powerful actors. In recent years, institutional theory has gained traction as an explanation for the emergence of novel organizational controls and practices. Claims have been made that institutional theory will become an increasingly important theoretical perspective in the fields of organization theory and accounting (Dillard, Rigsby and Goodman, 2004). It has been argued that institutional theories pose a threat to the technical and economic reasoning used to understand business management and the structures that are incorporated into and described by institutions.

There is no requirement for a logical economic cost-benefit analysis to be made when implementing an internal control system, as its purpose is to introduce novel methods of working and procedures. They do, however, offer divergent features that point to the organization's growing sophistication in terms of its organizational structure and operational procedures.

Although institutions are often associated with permanence, they can undergo both ongoing and sudden shifts in their makeup and function. According to institutional and neo-institutional theory, there are three pressures or coercive forces at play when an organization adopts practices and environments from another institution. These forces are normative, and

they encourage conformity. These advantages, according to the hypothesis, might also help businesses adopt identical strategic activities that eventually lead to a lack of differentiation among companies (Adebanjo et al., 2013).

Through the years, initiatives by government and professional groups have increasingly represented the interests of shareholders. In particular, shareholder interests have been served by growing pressure on management to provide effective economic governance. societal expectations in the wake of recent corporate scandals are largely to blame for this intensity of the pressure (Christopher et al., 2009). Institutional theory, which forms the theoretical foundation of this research, is concerned primarily with the design and implementation of management and control systems within organizations, with an emphasis on how these systems conform to prevailing social norms. The notion was used for this research because it demonstrates how a company's demise can originate within its own internal control system, and how the same system can also serve as the basis for its triumph. As a result, the theory played a crucial role in elucidating the impact of monitoring and control actions on the bottom lines of Saccos that accept deposits.

2.3 Conceptual Review of Variables

2.3.1 Risk Assessment

An organization's management will conduct a risk assessment to determine how they can mitigate any threats to the success of its goals (Maitin, 2015). It involves figuring out what needs to be done and ranking those goals, as well as figuring out what threats there are and weighing how likely and how severe they are. In light of this, Menon & Williams (2016) define risk assessment as the detection, evaluation, and management of hazards. In addition,

he notes that dangers may stem from things like false financial reports or the theft of company funds. This is the process of recognizing and assessing the threats to goals in order to formulate a plan for dealing with them. The purpose of risk assessment is to provide a foundation for deciding how to manage risks by identifying and analyzing those that pose the greatest threat to the goal's successful completion. Due to the persistent flux in economic, industry, regulatory, and operating situations, tools to better detect and mitigate the unique dangers posed by these shifts are essential.

There have been several financial scandals involving publicly traded firms recently. The United States' Treadway Commission Report from 1987 indicated that a lack of internal controls or poor internal controls was the primary cause of many instances of fraudulent corporation financial reporting. This research will be informed by the recent widespread global corporate accounting scandals.

Some examples from throughout the world include the American companies Enron and WorldCom, the European firm Parmalat, and the Asian firm Chuoh Aoyama. U.S. investors lost a combined total of \$3.9 billion in the America International Group (AIG) scam of 2005 and \$180 billion in the WorldCom Scandal of 2002, \$150 million in the Tyco Scandal of 2002, and \$1.4 billion in the Heath South Scandal of 2003 (the largest publicly traded firm). Some investors, company employees, and other stakeholders lost a lot of money due to high-profile corporate accounting scandals in the early 2000s. An increased focus on corporate governance has been called for in the wake of these incidents. The Sarbanes-Oxley Act (SOX) was enacted in July 2002 by the United States Congress in response to public outcry over many high-profile company failures in the United States (COSO, 2013). Findings from audits, evaluations, and other forms of testing are used to identify risks (Member of Audit

Team, 2014). If you want to know where internal control activities are needed, you need to do a risk assessment. This lets the company zero in on the threats that truly threaten its future prosperity.

COSO (2011) states that a risk assessment is a necessary precursor to objective setting inside the entity. Risk identification and analysis are key to any effective internal control structure, which should be put in place by a firm if it wants to have reasonable assurance of achieving its goals. The goals of the entity and the risks it faces must be considered when evaluating the efficacy of internal control efforts.

Professional judgment regarding likely adverse conditions and events is integrated in a systematic process called risk assessment, which then evaluates the likelihood of potential losses (both monetary and otherwise) resulting from their occurrence. Identifying and mitigating potential threats is the focus of the second internal control requirement. The agency's internal controls should allow for an analysis of both the internal and external threats it faces. When potential dangers are found, they need to be examined for their impact. In order to ensure efficient and effective operations, trustworthy financial reporting, and compliance with laws and regulations, management must develop a strategy for managing risks and decide on the internal control actions necessary to counteract those risks.

Akimana (2019) aimed to determine the impact of internal controls on the financial results of SMEs in Nairobi County, Kenya. A descriptive research strategy was used for this investigation. One hundred small and medium-sized enterprises in Nairobi are home to 387 people. This study employed a statistical method known as probability, and within that, the Stratified Random Sampling technique was employed. For this analysis, we sought data

from 116 workers. Primarily, we used questionnaires to collect information. The results showed a favorable and statistically significant relationship between risk evaluation and financial output ($r = 0.616$, $p < 0.05$). The results demonstrate that risk assessment accounts for 36.9% of the variation in financial performance.

The relationship between Internal Control Components (ICC) and Financial Performance (FP) in the Iraqi banking sector was studied by Hanoon, Khalid, Rapani, Aljajawy, and Al-Waeli (2021). Risk evaluation was chosen as the part. The primary research strategy was a quantitative method called Structural Equation Modelling (SEM). A total of 365 people filled out the survey, and the results were analyzed with SEM to spot any correlations between the various aspects of internal control and the financial results. Financial performance were found to be significantly affected by Internal Control Factors. Risk evaluation was the significantly favorable relationship. Finally, the most important influence on financial performance from the ICC is the control activity.

Ahmed and Nganga (2019) aimed to build internal control techniques that encourage county governments to streamline their operations and execute efficiently and effectively in the public interest. Research was conducted using a descriptive method. Thirty people were selected at random from five different divisions of the Coastal region's Ministry of Finance, Budget, and Planning. Forty people participated in the survey. Questionnaires were the primary method of data collection. A positive and statistically significant relationship between risk assessments and financial outcomes was discovered in the research. The study found that the single most important factor in the County governments' financial performance was the identification and mitigation of risks. Counties can't control what they don't know about, so identifying risks is the first step in any risk management program.

Kamau (2019) aimed to determine how implementing internal controls affected the financial results of SMEs in Nairobi County, Kenya. A descriptive research strategy was used for this investigation. Workers in Nairobi County's small and medium-sized businesses were the subject of this research. Human resources, financial management, procurement, and accountants were among the targeted workforce. One hundred small and medium-sized enterprises in Nairobi are home to 387 people. This study employed a statistical method known as probability, and within that, the Stratified Random Sampling technique was employed. For this analysis, we sought data from 116 workers. Primarily, we used questionnaires to collect information. The findings demonstrated a positive and statistically significant relationship between risk assessment and financial success.

Bett and Memba (2017) intended to determine the influence of internal control systems on Menengai Oil Company, Kenya's financial performance. A survey research method was used for this investigation. The study relied on responses from a sample size of 189 participants. Initially, we tallied the data we had gathered, and then we used descriptive statistics and inferential statistics to examine the information we had uncovered. Indicators were displayed graphically in the form of charts, tables, and graphs. It was determined through analysis of variance that risk assessment had a noteworthy impact on Menengai Company's bottom line.

Mwakimasinde, Odhiambo, and Byaruhanga (2014) examined the impact of internal control systems on the financial performance of Kenyan sugarcane outgrower enterprises. A descriptive correlational survey format was used for this investigation. Each and every sugarcane outgrower firm was analyzed. A combination of primary and secondary sources was used to fill in the gaps. Key informants from each of Kenya's nine outgrower firms were

surveyed using questionnaires to provide the study's primary data. In this study, we used secondary sources such as annual reports, publications, and document analysis, to get our data. Using a key informant's approach, this research enlisted the participation of all Finance Managers and heads of internal audit at outgrower companies. All nine of the sugarcane outgrower organizations were given the data collection tools. Statistical analysis showed that the internal control system had a positive and substantial influence on financial performance (R and R square 0.428), with the result that the internal control components accounted for 42.8% of the variance in performance.

Masha (2018) aimed to research the efficacy of internal control systems for managing public finances at national and sub-county treasuries in Kenya. The study used a mixed qualitative and quantitative methodology, descriptive research design. Around six hundred and twenty accountants and internal auditors from three hundred and ten national sub county treasuries were aimed at. A total of 184 participants were randomly selected for the study using cluster and purposive selection methods. We employed surveys to collect primary data, and we combed through studies of internal control systems and reports on finances management at sub county treasuries to compile secondary data. Both quantitative and qualitative analysis were used to the basic data collected. The research found that evaluating risks was closely linked to budgeting. According to the results of the study, internal control systems are a robust predictor of financial management.

2.3.2 Accounting Information and Communication System.

Data, people, processes, and procedures are all essential parts of any information system (Fitrios, 2016). Manual systems place less emphasis on hardware and software infrastructure. The majority of information systems employ information technology (IT). The combination of processing power with lightning-fast communications networks capable of transmitting audio, video, and text. Therefore, an information system includes the procedures and data that: Recognize and document all legitimate exchanges. Correctly valuing transactions allows for accurate reporting of that value in financial reports. Find out when things happened to make sure they get recorded in the right accounting period. Accurately reflect monetary transactions and provide any relevant information in the financial statements. Azmi and Sri (2020) emphasize that the protection of an information system requires access control, audit controls that track servers and applications, and personnel controls (check level of training and separate employee functions, input controls, and output controls).

According to Taiwo (2016), in order for people to fulfill their financial reporting responsibilities, it is necessary for all relevant information to be identified, captured, and conveyed in a form and time frame that enables them to do so. In order to be effective, communications must take place at all levels of an organization, from the bottom up, side to side, and top to bottom (Diavastis, Anagnostopoulou, Drogas & Karagiorgos, 2016). Because of its potential to affect collaboration at all levels of an organization, information and communication have received some attention in recent research on internal control system frameworks (Amud & Inanga, 2009). Therefore, it is essential that such details are disseminated across the entire firm to provide employees with the knowledge they need to

fulfill their roles in achieving set goals. There are times when banks lose money because key employees either don't know or don't grasp the institution's policies.

Many often, information about illegal behaviors that should have been disclosed upward via organizational levels is not conveyed to the board of directors or senior management until the problems have become severe. When information in management reports is incomplete or inaccurate, it might provide the wrong impression about how things are going in a company. For an internal control system to perform as intended, it requires both sufficient information and good communication. From the bank's point of view, information is only helpful if it is accurate, up-to-date, easy to find, and presented in a uniform format. External market information on events and conditions that are relevant to decision making is included in the information. An organization's internal records are maintained as part of their general record-keeping practices, which should include formalized rules for document storage and deletion (Diavastis, Anagnostopoulou, Drogas & Karagiorgos, 2016).

Muhunyo and Jagongo (2018) aimed to determine the impact of internal control systems on the financial performance of public higher education institutions in Nairobi City County. Descriptive research methods were used for this investigation. It hired 96 people as a test group. Surveys, both open-ended and closed-ended, were distributed to the public at large to gather the primary data. As the research progressed, it became clear that the information and communication as indicators of internal control systems significantly impacted the financial performance of the universities and colleges in Nairobi City County, Kenya. The variables accounted for 99.1 percent of the variance in the institutions' financial results.

Kendogor (2018) aimed to learn how the administration of Kenya's Uasin Gishu County handles its finances and the role that internal controls play in it. Design wise, this study was a descriptive one. Those in charge of Uasin Gishu's six wards were the focus of this research. The study's respondents included the heads and deputy heads of finance, internal audit, and procurement, who were all given questionnaires to fill out. In conclusion, the findings indicate that an improvement in financial management is associated with a rise in accounting information system; so, an accounting information system is necessary but other techniques should also be employed to further improve financial management.

Kisanyanya (2018) aimed to investigate the influence of internal control systems on the economic success of Vihiga County's public universities. A descriptive research strategy was used for this investigation. A total of 140 people working at the four Vihiga County public universities were surveyed for this study. There were 96 workers included in the study. This research relied on semi-structured questionnaires to acquire primary data from the study's sample population. Researchers discovered that the institutions they examined had efficient methods for sharing and receiving information. Ample information was transferred, transactions were recorded meticulously, and assets were properly accounted for since the institutions had access to cutting-edge information and communication technologies. Moreover, the study discovered that the institutions' financial responsibility and performance were improved by the free flow of information and communication.

Githui (2019) set out to study how commercial banks in Kenya handle credit risk by examining their internal control systems. The study questions were looked at using a descriptive research design. For this research, a census was employed. The major data for this study came from questionnaires. Despite the positive correlation between information

and communication and credit risk management shown by the regression analysis, the two variables' associations were not statistically significant. When it comes to managing credit risk, control actions have a definite and beneficial impact.

Surigao del Sur State University's financial performance was studied by Urquia (2018), who looked into the connection between internal control systems and the institution's finances. The study employed a mix of quantitative and qualitative methods, including questionnaires, correlation analyses, and in-depth case studies. Using a questionnaire and interview guide, information was gathered from 13 members of the Surigao del Sur State University staff. Most of the respondents were deans and finance and accounts personnel. The study's findings indicate that the institution's leadership values its control systems. According to the results, accounting information systems do operate, albeit with interruptions, and there is a strong correlation between internal control systems and financial performance at a university.

Wanjohi (2014) analyzed banking fraud in Kenya with the primary goal of pinpointing root causes of fraud and identifying effective methods of prevention and management. The study was a case study of Commercial Bank of Africa (CBA), and the researcher chose a sample size of 68 workers from various CBA locations in Nairobi County. The information was gathered by means of questionnaires, and SPSS was used for analysis. Opportunities for fraud, poor personnel practices, and insufficient accounting systems and controls were shown to be the primary causes of fraud. Nearly half of respondents blamed inadequate internal controls and accounting systems for bank fraud. In addition, over 40% of respondents in the poll said that inefficient IT systems were a factor in fraud. The urge to commit fraud and the rationalization of the crime were found to be adversely connected with

weak IT architecture, as determined by the regression analysis. The use of IT systems for monitoring and controlling fraud effectively led to favorable results.

Mwazo, Weda, Omondi, and Njenga (2017) examined the function of internal controls in the provision of services at the Taita Taveta Treasury, they defined the information and communication system as including these components: a communication system; communication channels; communication structures; mutual relationships; and results demands. Based on the results of an opinion poll, it appears that the Treasury has successfully implemented effective communication systems, channels, and mutual understanding among institutional groups. Kiyieka and Muturi (2018) studied the impact of internal controls on the results of deposit-accepting SACCOs in Kisii, Kenya, and found that communication systems had a positive correlation with service delivery. As many as ten SACCOs that accept deposits were studied. The study revealed that deposit-taking SACCOs had a team of people in charge of managing the communication system's varied activities, that workers were aware of the significance of internal controls, and that there were policies and guidelines in place regarding communication. Regression analysis revealed a positive association between SACCOs' financial performance and their use of ICT in Kisii, Kenya.

2.3.3 Monitoring and Control Activities

Ray and Pany (2015) mentioned Control activities as another part of Internal controls. They point out that management's directions are carried out with the aid of control activities, which include policies and procedures. Organizational controls can be broken down into four broad categories: performance reviews (which compare actual performance to budgets, projections, and prior period performance), information processing (which is required to

ensure correctness, completeness, and authorization of transactions), physical controls (which are required to provide security over both records and other assets), and segregation of roles (where no one person should handle all aspects of a transaction from the beginning to the end).

The purpose of a company's control operations is to make sure that top management's orders are followed. Operations, financial reporting, and compliance are the three common buckets into which these tasks are typically sorted (Shelton & Whittington, 2018). They further contend that operations such as authorizing, verifying, reconciling, reviewing operating performance, securing assets, and segregating roles are all part of these control activities.

Segregation of roles, employment rotation, and internal checks are some of the more nuanced practices (Marita, 2016). The importance of segregation of duties as a central notion of internal control is reaffirmed by the same writers. Furthermore, they claim it is one of the most potent internal control mechanisms for preventing employee fraud. "splitting work among several personnel making it easier to limit risk of error and fraud," is how they explain segregation of duties. To a certain extent, segregation aids in the check and balances of a company. Asset custody, recordkeeping, authorization, and reconciliation are four functions that must be kept separate in every business operation. A "given process should not have any one individual responsible for more than one of the aforementioned" activities. Having employees work in separate areas deters and prevents theft. Young (2017) note that where segregation is not possible, alternative measures should be employed. An impartial individual or organization should handle any compensations. This refers to someone who is in charge of the process as a whole but has no hands-on involvement with custody, documentation, or balancing.

Huang, Tsaih, and Yu (2014) state that job rotation is a control that can be used to uncover errors and fraud. There is no way for one person to have complete control over a certain duty for an extended period of time, during which another person may conduct fraud while enjoying the benefits of his monopoly. Hsien and Chao (2014) point out that studies have shown that job rotation may provide advantages that are worth more than the time and money spent on retraining workers for new roles. Li, Liu, and Zhao (2016) contends that fraud risk increases when individuals are granted excessive rights. Reducing privilege allocation and the potential for fraud caused by multiple employees working together can be accomplished by duty rotation. Employees gain valuable experience in different roles, and security is boosted as a result. The same author also notes that mandated vacation is an important part of job rotation. The use of a substitute worker to cover for an absent worker during a required vacation could reveal previously concealed operations.

Segun, Kehinde, and Alice (2020) examined the connection between deposit money banks' internal control systems and their financial performance in the state of Osun. The study employed a mixed methodological approach, including quantitative survey data analysis and qualitative interviews. All deposit money banks in Osun State served as the study's population, and six were chosen at random to participate in the study for a period of five years (2014-2018). Multiple regressions were used to examine data acquired from a survey and the publicly available financial statements of the sampled institutions. According to the results, supervision has a beneficial effect on the liquidity and solvency of deposit money institutions.

Jeanne (2019) attempted to determine if internal control has any impact on the financial performance of public institutions. Secondary data were also employed alongside primary

data to help the study reach its goals. Primary data came from administering 30 copies of questionnaires to finance department and internal auditor officials, while secondary data came mostly from the RSSB's annual reports in 2015, 2016, and 2017. The study employed a descriptive research method, with a sample size of 30 people drawn from the study's target demographic of employees at the institution under investigation. In the end, the study suggests that there is a favorable correlation between monitoring and control and financial performance, and that the RSSB's solvency still has room for growth.

Internal control techniques were investigated by Andove (2019) to determine their impact on the financial outcomes of Faith Based Organizations in Kenya's Kakamega County. About 550 people working in Kakamega County's faith-based hospitals were the intended audience. Methods of stratified and simple random sampling were used. The total of 226 responders was calculated using Fisher's formula. Primary and secondary sources were used to compile the data. The beta value for keeping an eye on things was 0.426 at p 0.05 in the regression model's output. Based on these findings, it appears that control actions account for 42.6% of the variance in financial performance.

Kabue and Aduda (2017) aimed to examine the impact of internal controls on fraud detection and prevention in Kenyan commercial banks. The sample was made up of 43 banks. Control activities were broken down into their constituent parts, which the research identified as "reconciliation controls," "company governance controls," "reporting and budget controls," respectively. The results demonstrate that these factors are excellent predictors of spotting and stopping fraud. The level of fraud detection and prevention is negatively correlated with the degree to which reconciliation control is in place, according to a regression analysis. Financial governance control was significantly correlated with lower

levels of fraud prevention and detection, while reporting and budget control was significantly correlated with higher levels of fraud prevention and detection.

Mugo (2013) studied the financial performance of Kenya's Technical Training Institutions and the role that internal control systems had in that success. The study employed mixed-method research strategies, including surveys, correlation analyses, and case studies. The population of interest consisted of Finance Officers, Heads of Departments, Management Committee Members, and Finance and Accounts Staff from 37 Technical Training Institutions in Kenya, and data was obtained through questionnaires and an examination of papers and records. The results of the study showed that there is a strong connection between the effectiveness of an organization's internal control system and its bottom line.

Lagat and Okelo (2016) aimed to determine the influence of internal control systems on financial management in Kenya's Baringo County government. A public sector institution's management processes should include the establishment of internal control systems in order to provide reasonable confidence that financial activities are carried out in a transparent and accountable manner. The study used the COSO framework developed by the organizations that sponsor the Treadway Commission to evaluate internal control effectiveness. Control Environment, Control Activities, Risk Assessment, Information and Communication, and Monitoring are the 5 components of the COSO framework that are used to evaluate an organization's internal control system. Results from this analysis show that control actions and monitoring of information communication technologies have a substantial impact on financial management ($F=5.836$, $p=.000$).

Changes in financial management are significantly predicted by control activities ($\beta=.315$, $p = 0.045$) and ICS monitoring ($\beta=.432$, $p = 0.049$), but not by control environment ($\beta=.162$, $p = 0.286$) or information and communication ($\beta=.264$, $p = 0.128$).

Kalemeera (2018) investigated the link between internal controls and Uganda Management Institute's financial standing. Both qualitative and quantitative techniques were included in this correlational study's research methodology. Information was gathered through interviews and surveys filled out by participants themselves. Financial performance was found to have a moderately substantial positive association with internal control activities (48.5%), and a strong positive relationship with internal control monitoring (84.7%).

2.3.4 Control Environment

Kinyua, Gakure, Gekara, and Orwa (2018) observed that the control environment establishes the tone of an organization through affecting the control consciousness of individuals. Furthermore, they state that the control environment provides the basis for the rest of the internal control elements. The board of directors or audit committees, management philosophy and operating style, organizational structure, and the ethics of the people responsible for designing, implementing, and overseeing the controls are all elements of the control environment.

Wallace and Kreutzfeldt's (2019) research was one of the earliest to show that the control environment is crucial to understanding why an internal audit function even exists. Goodwin-Stewart & Kent (2016) offered evidence that the presence of an internal audit function correlates with a company's commitment to risk management.

Case studies on internal auditing conducted recently in Belgium shed light on the significance of the control environment in analyzing the effectiveness of internal control procedures.

Sarens and De Beelde (2017) found that the importance of the internal audit function is strongly correlated with various aspects of the control environment, such as the tone set by the top management, the degree to which risk and control awareness exists within the organization, and the clarity with which responsibilities for risk management and internal controls are communicated. A firm's code of conduct or ethics reflects the tone-at-the-top, which is comprised of the organization's ethical principles, management's attitude, and the way the company operates (Cohen et al., 2002).

Kinyua (2018) stated that there was a substantial correlation between internal control environment and financial performance and suggests that the internal control environment of companies listed on the Nairobi Securities Exchange be strengthened to further improve their financial performance. Khamis (2013) discovered that the financial performance of financial institutions is positively correlated with the quality of their internal control systems and control environments. Mawanda (2018) demonstrated through a case study of Uganda Martyrs University that there is a favorable correlation between the control environment and the financial performance of institutions of higher education in Uganda.

Mauti and Muturi (2019) evaluated the impact of internal controls on Kenyan tea factories' financial performance. This study employed a descriptive research strategy because it relies on existing data from the field. A total of 130 personnel from various accounting and auditing departments in tea companies made up the survey's target demographic. Stratified

sampling using the Yamane formula yielded a sample population of 99 workers from the accounts related, procurement, and auditing departments. Information was gathered by survey. In order to prevent the unintended consequences of this factor, it was determined that segregation of duties must be carried out with the utmost care. The study concluded that the tea companies' financial performance may be improved by instituting stricter compliance testing, as this variable was proven to have a beneficial impact on the companies' bottom lines. It was also discovered that internal controls and checks had a beneficial effect on financial results significantly.

Njiru (2016) aimed to examine the impact of internal controls on the bottom lines of Kenya's public water utilities. This research will make use of a descriptive survey approach. At the time of the study's completion in December 2014, the sample size will be 65 chief internal auditors from urban WSPs in Kenya. Purposeful sampling will be used to collect data from 60 chief internal auditors at Urban WSPs. Primary data will be collected via standardized questionnaires for this project. The study uses a correlational methodology, which assumes the existence of connections between different factors. All 66 of the agro-processing businesses in Kisumu County were considered as potential participants in the project. All the information we used came from credible books, newspapers, and online databases. Researchers employed both a stratified sampling method to ensure that every subset of the population was included and a simple random sample strategy because no complexity arose from the data collection process. A positive correlation was shown between the internal controls environment, risk assessment, monitoring, information and communication, control activities, and the financial performance of agro processing enterprises as determined by the results of a regression analysis.

Kinyua, Gakure, Gekara, and Orwa (2018) investigated the impact of internal control systems on the financial performance of Nairobi Securities Exchange-listed companies (NSE). Survey methodology was used for this investigation. All 62 of the quoted firms on the NSE were selected as the population. From the total of 62 companies listed on the NSE, 38 were chosen as the sample for the study. Using a method of random stratification, we selected our sample. Data from both primary and secondary sources were used to compile the study's findings. Structured questionnaires were used for primary data collection, while secondary data came from audited annual reports, publications, and document analysis. Based on the data and analysis, it was determined that a positive correlation existed between the quality of the organization's internal control systems and its financial results.

Nyakundi, Nyamita, and Tinega (2014) examined the influence of internal control systems on the financial performance of Small and Medium-Sized Enterprises in Kisumu, Kenya. The population was divided into strata, and then the sample was drawn at random from within those strata. The study employed a cross-sectional survey research design, incorporating both quantitative and qualitative methods. Both primary and secondary sources were consulted for this investigation. The financial accounts of the businesses in the sample were used to get secondary data, while a questionnaire and interview were used to collect primary data. Internal controls were found to have a considerable impact on financial performance, according to the study. The results of the study provide strong evidence that internal control systems have a major impact on the financial results of SMEs.

Eke (2018) investigated HOs in the Rivers State area to ascertain how internal control affected their bottom lines. This study used a survey as its primary method of data collection. All HOs in the state of Rivers were included in the study's population. Twenty

HOs were selected using a convenience sampling strategy for this research. The primary method of data collecting was a structured questionnaire, with secondary sources including journals, textbooks, and the internet. It was determined through this research that there is a favorable correlation between internal control and the financial performance of HOs in Rivers State, and that internal controls have a substantial impact on HOs' bottom lines. According to the results of the research, the control environment has a significant impact on a company's bottom line, and its absence or inadequacy could lead to the company's demise.

Mbaka (2019) looked into how SACCOs in Nyeri Central Sub-County, Kenya, used internal control systems to improve their operations. The surveyed population consisted of 78 SACCO personnel, split evenly between loan managers, internal auditors, and financial analysts, and the sample area covered all 26 active SACCOs in Nyeri Central Sub-County. The study adopted a cross-sectional survey research methodology and used both quantitative and qualitative methods. The data was gathered by surveys; 68 out of 78 employees replied (an 87.2% response rate). Descriptive statistics were calculated using the data collected and evaluated with the statistical software for the social sciences (SPSS). Using multiple regression analysis, we determined how much of an impact internal controls had on the bottom lines of SACCOs located in the center part of Nyeri County. Findings showed a favorable, statistically significant relationship between financial outcomes and internal control environment, risk assessment control, and activity control in SACCOs. When it came to SACCOs' bottom lines, monitoring had a beneficial effect that was merely marginal. The internal control systems of SACCOs should be reviewed on a regular basis and any issues that arise should be dealt with in a timely manner.

Mwichigi and Atheru (2019) aimed to evaluate the connection between internal controls and credit risk for commercial banks in Kenya that are members of the NSE. Agency theory, information theory, and contingency theory were all examined. The researcher chose to use a descriptive method. The research sampled all eleven of the banks that are active on the Kenya securities market. Commercial banks operating in the Nairobi area were surveyed, with particular emphasis on their risk management, compliance and monitoring managers, internal auditors, and loan managers. Questionnaires were used to gather information directly from respondents. The results of the inferential analysis show that each of the internal control factors examined significantly affected the level of credit risk. A substantial correlation between the dependent and independent variables was indicated by p-values of regression coefficients that were less than 0.05. A positive association value where an inverse one should exist is indicative of inefficient internal control systems, as shown by the study's findings, which suggest that bank inspections are not as successful as previously believed.

Agang and Njoka (2020) aimed to determine the impact of internal controls on credit risk for banks listed on the Nairobi Securities Exchange. The research method used in this study was a casual descriptive one. The eleven banks listed on the Nairobi Securities Exchange served as the census's primary population. The information gathered was a mix of primary and secondary sources. In order to collect information, questionnaires were used. Multiple collinearity and normality checks are part of the diagnostic battery. The SPSS statistical package was used for both descriptive and inferential analyses of the data. A positive and statistically significant correlation between monitoring and credit risk was discovered. According to the research, there is a substantial correlation between risk assessment and

credit risk, and weak internal controls, like lackluster moral standards, have been shown to encourage fraud and its attendant financial losses and abuses. The study concluded that risk assessment $P=.000 < 0.05$, control actions $P=.000 < 0.05$, and monitoring and control environment $P=.001 < 0.05$ have a substantial impact on credit risk among banks listed on the Nairobi Securities Exchange.

Atieno and Kiganda (2020) assessed the impact of internal control mechanisms on financial accountability in Kenyan secondary schools. The specific aims were to assess the impact of monitoring on financial accountability in Kenya's public secondary schools and to evaluate the impact of control environment on financial accountability. Many public secondary schools still struggle to hold their teachers accountable. A total of 103 Kenyan public secondary schools participated in the research. A total of 309 participants, including 103 principals, 103 bursars, and 103 BOM chairmen, were surveyed using a survey research design. Principals, bursars, and the BOM chair were chosen using a combination of systematic and random sampling. Questionnaires were used to gather primary data, while audited financial documents were used to compile secondary data. It was discovered that the components of internal control systems have a cumulative influence on financial transparency.

2.3.5 Financial Performance

Nyakundi (2014) asserts that performance is the ability to run well, make money, survive, grow, and respond to opportunities and threats in the environment. Sunday et al. (2010) agree that performance is a function of the effectiveness with which a business meets its goals through the application of its resources. It's the yardstick by which the success of a person, group, company, or procedure is measured. Working effectively, profitably, thriving, changing, and adapting to new possibilities and challenges in one's environment are all examples of what we mean by "performance" (Hanoon, Khalid, Rapani, Aljaway & Al-Waeli, 2021).

The Saccos may be able to maintain sufficient capitalization if they implement internal controls. This could be the consequence of fewer mistakes and less waste in their operations, or it could be the result of less fraud in all aspects of the company's dealings. This may boost member trust in the Sacco and lead to more deposits from members. This will lead to higher earnings at the conclusion of each fiscal year, which is the ultimate goal (Bhunja, Mukhuti & Roy, 2015).

Cost savings in operation are another byproduct of well-implemented internal controls. It will result in more accurate revenue reporting and fewer revenue leaks. Profitability improves as a result of higher revenue growth and lower operating expenses (Fullerton & Wempe, 2019). Members will receive higher dividends as a result. It's expected that shareholders' holdings would appreciate in value. Saccos' internal controls ensure that the organization is transparent with its members about how they're spending their money. Better management will result from assigning clear duties to each member of the board of

directors, the executive team, and all other staff. Because it would be simple to hold each office holder responsible in the event of mismanagement or misuse of financial resources, there would be enough money to go around, people would save more, and the company's revenues would rise.

Sethibe and Steyn (2016) discuss accounting-based performance with reference to three indicators: return on assets (ROA), return on equity (ROE), and return on sales (ROS). Divide the net profit by the total assets, common equity, or net sales to get each metric. According to Kotler (2016), companies with high performance are those that can remain in operation for an extended period of time. Nyakundi (2014) also discovered that a company's continued existence is an indication of financial health.

2.3.6 SASRA Regulatory Framework

The Government of Kenya recognized the significance of the Sacco sub-sector and consequently passed the Sacco Act (2008) and the Sacco Societies Regulations (2010). The Act established the Sacco Societies Regulatory Authority (SACRA) with the responsibility of licensing, regulating, and overseeing Sacco societies involved in deposit taking activities with the goal of preserving the interests of SACCO members and boosting public confidence in SACCOs (KUSCCO, 2020).

In an effort to reform SACCOs and restore public faith in the industry, the Kenyan government founded SASRA inside the Ministry of Cooperative Development and Marketing. This agency's primary function is to encourage the mobilization of domestic savings in Kenya, which in turn boosts the country's GDP growth rate. According to SASRA, the goal of instituting prudential regulation of deposit-taking SACCOs is to

improve SACCO subsector transparency and accountability, which is in line with vision 2030. To that end, this is in line with the ongoing reforms in the financial sector in Kenya. These reforms hope to increase the number of people who have access to financial services and the efficiency with which they are provided (KUSCCO, 2020). While allowing for the registration and licensing of new SACCOs, the Sacco Societies Act and the SASRA regulations compel the SACCOs that were already performing Front Office Services Activity (FOSA) as at the date of publication of the regulations, which was June 2010.

The KGS (2018) gives SASRA the authority to take action against SACCO societies that do not comply with the regulations. Leaving compliance up to the whim of the SACCOs accepting deposits is not an option. To be licensed is evidence that a SACCO has the human, technological, and organizational resources necessary to uphold the license's conditions, in addition to the financial resources necessary to do so. Any SACCO that accepts deposits must comply with the SASRA's monthly reporting requirements for their core capital and liquidity ratio within the bounds set forth by the regulator. A percentage of their investment portfolio must also be kept in liquid forms, and they are prohibited from putting too much money into illiquid assets. As a new law, SASRA understands that the regulations will present obstacles and have varying degrees of influence on the SACCOs. As part of the licensing process, the Authority looks to the SACCO's board of directors and management to assess the organization's current state against the operating norms and prudential standards, and to propose solutions in the form of business plans.

SACCO Societies Act of 2008 addresses such operational concerns as licensing, capital sufficiency, liquidity, and asset liability management. Furthermore, it emphasizes investments, credit management, risk categorization, and savings and bank accounts. Sixty-

three percent of the Kenyan population relies on cooperative activities for their livelihood, making it imperative that SACCOs be subject to regulation so that they can continue to serve the country's low-income population. This study will be grounded in the requirements set forth by the Societies Act of 2008. There will be a primary focus on the monetary factors that influence SACCO efficiency. Investors care more about the SACCO society's financial success because it reflects the organization's sustainability (Kamau, 2017).

Authorization; Capital Adequacy Requirements; Liquidity Management; Shares and Deposits; Credit Risk Management; Risk Classification and Assets and Provisioning; Investment and Associated Entities; Financial Performance Reporting; Governance; Consumer Protection; Information Security, Preservation, and Business Continuity; and Regulatory Oversight are all duties that SASRA is tasked with carrying out and supervising for the designated Non-Deposit Taking SACCOs in accordance with the Regulations 2020 (SASRA, 2020).

Nyakarimi, Kariuki, and Wangâ (2019) set out to determine whether or not government rules acted as a moderating factor between an organization's internal accounting control system and the prevention of fraud in the baking industry. A questionnaire with predetermined questions was utilized to compile the information. All Kenyan banks were included in the survey, and the questions were directed at the branch managers, operations managers, and cash managers in the banks' central offices. One hundred seventeen surveys were sent out, with officers from 33 of 39 banks returning 33 of those with complete responses. Structural Equation Modeling was utilized in the analysis of the questionnaire data (SEM). According to the research's conclusions, regulatory frameworks significantly moderate the relationship between control environment and risk assessment. The moderating

effect was small, however, and only applied to the activities of control, communication, and monitoring. In order to improve the effectiveness of internal control systems, the study recommended conducting additional research and analysis to identify existing laws and regulations that could be strengthened or eliminated, as well as any gaps in the legal framework that would benefit from the introduction of new laws.

Mugo, Muathe, and Waithaka (2017) aimed to assess the moderating effect of government regulations on the association between mobile technology services and performance of Deposit-Taking Savings and Credit Cooperative Societies (SACCOs) in Kenya. A total of 86 Deposit-Taking SACCOs were used to inform both descriptive and explanatory research designs. All of the information was gathered by means of a structured questionnaire given to two managers at each SACCO. According to the results, government regulations mediate the connection between mobile technology services and the performance of Deposit-Taking SACCOs, suggesting that the government should craft rules that are beneficial to these institutions.

Kimani, Mouni, Wanjau, and Mung'atu (2015) investigated the moderating effect of government rules on the association between cost recovery and financing of water initiatives in Kenya. The research method used in this study was a descriptive survey. The population of small-scale water service providers was sampled in two stages. Content analysis and a self-administered questionnaire were used to compile the study's findings. Relationship between cost recovery and financing of water investments was analyzed using structural equation modeling. Poor water pricing, a lack of a users' charge, and externalities were all identified as reasons preventing cost collection in the study.

Muturi (2019) set out to investigate how government rules in Kenya affect the connection between mortgage contract terms and the performance of real estate enterprises. In order to verify hypotheses and adjust theoretical models, this research used hierarchical moderated multiple regression (MMR) analyses and structural equation modeling (SEM). Data was collected from 138 real estate managers working for companies that are members of the Kenya Property Developers Association (KPDA). The results showed that government regulations played a substantial moderating role in the connection between mortgage contract terms and the success of Kenyan real estate companies. According to the results of the research, if Kenyan real estate companies accept government rules, they will be able to increase their competitiveness, provide more affordable homes, and still make a profit.

In Chuol, Wanyama, and Chebet's (2021) study of the relationship between SME financial performance and strategic planning methods in Juba, South Sudan, they attempted to determine the moderating impact of government restrictions. The researchers here conducted their research using a cross-sectional survey design. Our focus is on the 4,951 small and medium-sized businesses (SMEs) that have called Juba, South Sudan, home since its inception. In order to collect data from the SME's involved in the study, questionnaires were administered. The results showed that neither strategic planning nor strategic formulation techniques moderated the association between financial performance and financial performance among SMEs in Juba, South Sudan.

Chacha, Nyangau, and Omare (2021) examined the function of government (logistics) regulation in mitigating the impact of supply chain collaboration on the performance of dry port firms. The research design was either causal, quantitative, or cross-sectional. Questions were sent out to a selected group of people to get a representative sample for the survey.

Fifty-five people who have an interest in the dry port company were polled as part of the study's sample. SEM-PLS software was utilized to analyze the data in this investigation. According to the findings, the influence of supply chain collaboration on the performance of dry port firms was moderated by government (logistics) regulation. This study went on to analyze the implications and restrictions of the findings.

2.4 Review of Empirical Studies

Nguyen (2021) examined the influence of internal control on the performance of pharmaceutical businesses and provided additional empirical evidence on the effects of internal control on performance. Researchers evaluate pharmaceutical businesses' internal controls and subsystems using questionnaire surveys. SPSS 25 was used for the quantitative analysis. The findings reveal that pharmaceutical company performance is most affected by monitoring, information, and communication. The success of internal control in pharmaceutical businesses can be explained by the fact that good monitoring and information and good tradition significantly enhance company performance. The findings of this study have inspired the author to make some suggestions for enhancing the efficiency of internal control, which should help pharmaceutical businesses function better.

Umar and Dikko (2018) analyzed the impact of an internal control system on the financial performance of Nigerian public manufacturing enterprises. The study used an ex-post facto research approach, with the population consisting of all 43 manufacturing firms listed on the Nigerian Stock Exchange and the sample consisting of 15 randomly chosen firms. The information was collected from the sample manufacturing companies' audited financial reports for a period of ten (10) years. Stata software was used for inferential statistics,

including the multiple linear regression approach, to test the study's hypotheses, while the descriptive method was used to describe the data. The 10% level of significance was used for the inferences. F-statistics of 7.212 at a significance level of 0.000 and an adjusted r^2 of 0.151 indicate that risk management positively impacts the financial performance of Nigerian manufacturing firms listed on the stock market. There is a considerable influence, hence we can't accept the alternative that there is no effect. The F-statistic for the relationship between board independence and financial success is 5.441, with a significance level of 0.000 and an adjusted r^2 of 0.113. This means that we cannot accept the hypothesis that there is no effect. From the results, the researchers drew the conclusion that manufacturing firms that had invested in efficient internal control systems fared better financially than their counterparts that had not.

Urquia (2018) looked on the connection between internal control systems and financial performance at Surigao Del Sur State University, Philippines. The research employed a mix of quantitative and qualitative methods, including questionnaires, correlation analyses, and in-depth case studies. 13 employees from Surigao del Sur State University filled out questionnaires and followed an interview guide to obtain the data. Using the Statistical Package for Social Scientists, we were able to compile our findings in tabular form. The study found that the institution's leadership is dedicated to the control systems, takes an active role in the monitoring and supervision of the University's operations, and that all of the Institution's activities are driven by the leadership team. However, the study also found that the internal audit department is not very effective at identifying and resolving systemic flaws. It was found, however, that the University's assets have grown generally and that all earnings and expenditures are appropriately categorized. Therefore, the study indicates that,

despite some problems, internal control systems do work, and that there is a strong correlation between such systems and the financial success of educational institutions.

Julie (2019) investigated the impact of internal control practices on the bottom lines of agro-processing companies in Kisumu, Kenya. Specifically, we aim to examine the effects of the control environment, risk management, internal control activities, information and communication, and monitoring on the financial performance of agro-processing enterprises in Kisumu, Kenya. The study uses a correlational methodology, which assumes the existence of causal connections between study variables. There are 66 agro-processing businesses in operation in Kisumu County, and their employees made up the study's primary population. Data was gathered from primary and secondary sources, including county government papers, publications, and journals, using structured questionnaires informed by agency theory, stewardship theory, and positive accounting theory. The researcher utilized both a stratified sampling strategy to ensure that every subset of the population was included and a basic random sample technique to avoid any unnecessary complications. According to the results of the regression model, the variables of internal control environment, risk assessment, monitoring, information and communication, control activities, and financial performance are positively correlated with one another and with the performance of agro-processing enterprises.

Muhunyo and Jagongo (2018) attempted to determine the influence of internal control systems on the financial performance of public higher education institutions in Nairobi City County. The particular goals of the study were to ascertain the impact on financial performance of higher education institutions in Nairobi City County of control activities, risk assessment, control environment, information and communication, and monitoring.

Descriptive research methods were used for this investigation. The researchers in this study used a sampling technique to collect data from the population they were interested in studying: the public university faculty and staff of Nairobi County, Kenya. A random group of 96 people were hired. In order to get the primary data, researchers used both open-ended and closed-ended questionnaires to survey the population. Institutional financial performance at Nairobi City County, Kenya's educational institutions was found to be significantly impacted by indicators of internal control systems including control environment, risk assessment, control activities, and information and communication. The variables accounted for 99.1 percent of the variance in the institutions' financial results.

Alemu (2020) conducts research with the goal of identifying the impact of Ethiopia's internal control system on business outcomes. In order to understand how an internal control system impacts an organization's performance, this study adopted a descriptive research approach. Questionnaires were used to collect data from the respondents, and descriptive statistics were used to analyze the results. From what we can see from our research, the company followed all of the appropriate procedures for authorizing and approving financial transactions. There was possibility for fraudulent acts like misappropriations to occur when transactions were made without adequate authorization and sometimes there was no approval. Nearly two-thirds of respondents believed that the company reconciled physical cash with cash book balances, whereas 21% disagreed with this statement. Most business expenditures (receipts) were not kept, making it difficult for accountants to determine the true value of the company's assets.

Beine (2018) aimed to determine how ECOBANK's internal control system correlates with the bank's financial performance in Rwanda. Data was collected from 70 randomly selected employees of ECOBANK out of a total population of 110. Quantitative research methods were used for both the correlational and descriptive analyses. Questionnaires, interviews, and written records were the main sources of information for this study. In order to complete the study, we employed both original and previously collected information. Due to limitations in available resources, purposeful sampling methods were also employed. Measures of validity and reliability have been performed on the data collection tools to guarantee their precision and accuracy. The analysis showed that male employees make up a larger proportion of the human resource, and that employees aged 16–35 make the greatest contributions to Ecobank's bottom line. As a result of this investigation, the researcher has accomplished all three aims. The research found that ECOBANK's internal control systems were effective across all four categories examined (internal audits, control environment, control activities, and effective communication), that there was a positive correlation between internal control systems and financial performance, that the central bank did not have a statistically significant impact on internal control systems, and that there was no correlation between the two.

Nsubuga (2019) sought to explore the advantages, limitations, problems, and opportunities of Internal Controls in private enterprises and their relationship to financial performance. The research was non-experimental, and the researcher had three particular objectives: to identify the distinct series of internal controls used by Imperial Paints, to determine the company's financial performance, and to establish the relationship between internal controls and Imperial Paints' financial performance.

Twenty participants were chosen at random from a pool of forty employees for the study. Purposive sampling method was used to choose the participants. Primary and secondary sources were used interchangeably throughout the study. Secondary data was derived from publicly available sources, such as financial documents, while primary data was gathered through the use of questionnaires. According to the research, most private companies cited a firm's control environment as a key functionality of internal controls that had a significant effect on the company's financial results. It was also determined that management had taken measures to reduce serious losses that could have been the consequence of fraud. The purpose of the research was to analyze how control efforts affect the profitability of private enterprises in Uganda. Positive correlations between internal control and the financial performance of private enterprises in Uganda were found in the statistical analyses conducted using a regression model. There was a good prediction ability in the model since the independent variables (Control Environment, Risk Assessment, Control Activities, Information and Communication, and monitoring) accounted for 75.7% of the variance in financial performance.

In 2017, Yemer looked into how different internal control methods at hotels in Ethiopia's Bahir Dar and Gondar cities impacted their bottom lines. Thirty hotels across the two cities participated in the study, which used a logistic regression model to look at the correlations and correlation coefficients between various factors influencing hotel revenue, such as the control environment, risk assessment, controlling activity, information and communication systems, and monitoring activity. Some aspects of internal control were shown to have a positive substantial effect on revenue growth for hotels, while others were found to have no

such effect. Revenue at hotels was found to be predictably related to control activities, information and communication, and internal control monitoring.

Rosman, Shafie, Johari, and Omar (2016) investigate the links between internal control (control environment, control activities, risk assessment, and monitoring), budgetary participation, and the performance effectiveness of non-profit organizations (measured in term of financial and non-financial). Nonprofit organizations based in Malaysia and in good standing with the Registrar of Society or the Company Commission of Malaysia make up the sample. Just 96% of the 150 questionnaires sent out were returned. Control environment, control activities, risk assessment, monitoring, and financial performance all have substantial relationships with one another, as shown by the results of a multiple regression analysis. Control environment, risk assessment, budgeting participation, and non-financial performance are also significantly related, as shown by the results. The study's findings can be used by regulators and other authoritative entities to better oversee these groups and increase nonprofits' openness and accountability.

Kasoga (2020) analyzed how Tanzania's local governments' revenue-gathering capabilities benefited from instituting an internal control system. The research looked into how actions related to control, information and communication, and monitoring affected revenue collection rates. This study used a cross-sectional methodology, and its 152 participants were drawn at random from three local government areas (LGAs). Interviews, questionnaires, and document reviews were all used to compile the data. Quantitative data was evaluated using a multiple linear regression model, while qualitative data was subjected to thematic analysis. According to the results, LGAs are more likely to follow revenue collecting policies and procedures when control actions are in place. The research also

showed that improved communication and knowledge sharing led to more accurate revenue records, transactions, and identifications. The research also shown that revenue collection is improved by the incorporation of monitoring, auditing, and management practices into the normal workflow. As a result, the research shows that the Local Government Authorities of Tanzania are able to increase their income collection efficiency thanks to their new internal control system. As a result, the Local Government Authorities in Tanzania should think about the three parts of an internal control system—control activities, information and communication, and monitoring activities—to ensure the long-term viability of their revenue collecting efforts. It is also important for LGAs to improve their internal audit unit, providing training and education to the officials responsible for overseeing revenue collection and making sure budget projections are reasonable.

Asegdew (2016) aimed to analyze the impact of an effective internal control system on the bottom lines of privately held manufacturing enterprises. To accomplish the purpose of this study, a quantitative research methodology was utilized. The study included 46 individuals from the finance and internal audit departments at four different privately held manufacturing companies, with an 89% response rate. Structured questionnaires and the most recent five years of audited financial statements from the sample companies were utilized to collect the data for this survey, which followed an exploratory research methodology. Correlation analysis was used to examine the connection between privately held manufacturing companies' financial success and the independent variables (predictors) of internal control, including control environment, control activity risk assessment, information & communication, and monitoring activity. While the study found a good correlation between internal control systems and the financial success of privately held

manufacturing share companies, it also found that certain aspects of such systems made only a minor impact on the bottom line.

Abdullahi, Abdullahi, and Muturi (2016) examine the impact of internal control mechanisms on the financial performance of Puntland's higher education institutions. Information and communication systems, internal auditing and monitoring, and financial performance were all included as dimensions of internal controls. Quantitative survey methodology was used for this study's investigation. The study used a sample size of 30 participants. Questionnaires were used to collect the data. The results were derived from a combination of correlation and regression analysis. According to the findings, the institution's administration is invested in its control systems, plays an active role in supervising and monitoring the universities' operations, and has reliable communication channels in place. The internal auditing division functions smoothly, has sufficient personnel, performs routine audits, and issues timely audit reports. It was also found that there is a distinct division of labor, that systemic flaws are being remedied, and that performance evaluations can be made more accurately thanks to monitoring. However, the research also revealed that universities are not taking proper precautions to protect their assets and that the prices they charge students are not sufficient to pay those expenditures. It was found, however, that the University's assets have grown generally and that all earnings and expenditures are appropriately categorized. Therefore, the study indicates that internal control systems do work, albeit slowly, and that there is a substantial relationship between internal control systems and financial success at a higher education institution.

Kalmetova and Zhussupova (2021) looked at the relationship between the quality of internal control and the performance of commercial banks in the U.S. Thirty of the top publicly

traded banks in the United States had their internal control over financial reporting reports analyzed in this research, which covers the years 2013 through 2017. The research also looks at social media for any mentions of problems with internal controls at the bank. This study sorts control failures according to the COSO Internal Control Framework. It employs a regression analysis to determine if there is a connection between the problems found and the success of banks. Deficits in the study's risk management and information and communication components of the internal control system had a detrimental effect on the bank's performance.

Mahmood, Hamawanda, and Sedeeq (2020) investigated the impact of internal control on the financial performance of industrial enterprises in the Kurdistan Regional Government of Northern Iraq (KRG). This is in response to the difficulties encountered by the KRG industrial sector, which includes issues with capacity utilization and inadequate funding. It has been deduced that the success of manufacturing companies in Kurdistan can be improved through the implementation of internal control measures that ensure both management and employees stay focused on their goals. The 142 replies were analyzed using SPSS 22's regression features. The results demonstrated a positive relationship between financial performance and the control environment, control activities, and internal auditing.

Hanif (2015) examines the functionality of each of the five internal control components, the efficacy of the control system, and its relationship to financial performance. The 210 respondents in this study are drawn from 6 different banks in Hyderabad. These institutions represent the public and private sectors, respectively, and include the National Banking Corporation (NBC), Sindh Bank (SB), Meezan Bank (MB), and HBL. We use a five-factor

model to assess internal control, and we use three profitability ratios to evaluate financial success. Data is gathered from both primary and secondary sources. The main data source is a questionnaire selected from multiple instruments created by Baker, Castro, Labrena, and Meyer (2005). Data is derived from a secondary source—specifically, four years' worth of bank financial statements from the sampled institutions. Some common profitability measures are return on assets (ROA), return on equity (ROE), and profit expense ratio (PER). The results showed that the efficacy of internal controls was highest in commercial banks, then public banks, and finally islamic banks, in that order. Financial performance was also measured, and it was discovered that private banks performed well, state banks performed moderately, and islamic banks performed poorly. As a result, it was determined that successful internal controls are correlated with better financial results for banks.

Tjiueza (2018) evaluated the adequacy of the Roads Contractor Company Ltd.'s internal controls in meeting procurement needs and the impact of those controls on the company's operations and financial results. Questionnaires and in-person interviews were used to compile the data. Responses to questionnaires were analyzed in more depth. The data was broken down into percentages for easy interpretation. According to the results of the study, RCC's upper management is aware of the compliance with applicable rules and regulations and the degree to which their organization is meeting its operational goals. The survey also found that the RCC's procurement and finance department had clear division of jobs, roles, and responsibilities, as well as proper supervision from higher-ups. Transactions can be properly authorized and approved due to the policies and procedures in place. Financial statements are not consistently released, and the report also finds that the procurement processes are not routinely checked. Regarding asset security, the current setup does not

track and protect RCC property, and there are no checks and balances in place to prevent wasteful or illegal spending. The research also showed that neither suitable corrective steps nor management's lack of integrity were done to deal with the identified flaws. It also shows that management isn't keeping an eye on internal controls, so they aren't aware of any threats to the goal until it's too late. Employees are oblivious to internal controls and their significance since they are not aware of how responsibilities are divided.

Researcher(s)	Focus of Study	Methodology	Findings	Knowledge Gaps	How Current Study will address the Gaps
Akimana (2019)	Effect of internal controls on financial performance of small and medium enterprises in Nairobi county in Kenya	The study adopted a descriptive research design. A population of 387 employees for the hundred SMEs in Nairobi	The findings revealed that there was a positive and significant influence between risk assessment and financial performance. The result of the findings shows that 36.9% of the variability in financial performance can be attributed to risk assessment	The study focused on SMEs in Nairobi County The study did not indicate how risk assessment was operationalized. There are no practical recommendations made for further research work to be done	The study will focus on deposit taking Saccos in Nairobi County The study will operationalized study variables
Hanoon et al (2021)	Impact between Internal Control Components (ICC) and the Financial Performance (FP) of the Iraqi banking sector	A quantitative approach using Structural Equation Modelling (SEM). The actual survey questionnaire was distributed to 365 respondents, and the data were analysed using SEM to determine the impact between Internal Control Components and Financial Performance.	The study results indicated that the Internal control components have a significant impact on Financial Performance. The positive significant relation was risk assessment.	The study was conducted in Iraqi The study did conduct assumptions of SEM. The researchers failed to include the most relevant literature regarding each of the study's variables and constructs.	The study will be conducted in Kenya Diagnostic assumption will be presented in Chapter Three
Ahmed and Nganga (2019)	Internal control practices that influence county governments	Descriptive research design. The target population of the study was 30 employees A census of 40	The study found a positive and significant effect between risk assessments on financial performance.	The study did not provide rationale of coast county governments as study area The study used census	The study will provide rationale for Deposit taking Saccos as study area The sample population will be

		respondents was carried out. Primary data was collected using questionnaires		sampling comprising of 30 respondents	more than 30 as recommended by Sekaran (2005)
Bett and Memba (2017)	effects of internal control systems on the financial performance of Menengai Oil Company, Kenya	Survey research design A census of 189 respondents was used in the study	ANOVA tests confirmed that risk assessment have a significant influence on the financial performance of Menengai Company.	The study used census sampling on a target population of 189 respondents. The study was conducted in organization making it difficult to generalize the findings	The study will use stratified random sampling. The study will be conducted in all deposit taking Saccos in Kenya
Masha (2018)	Effectiveness of internal control systems in management of funds in the public sector at national sub county treasuries in Kenya	Descriptive research design using qualitative and quantitative approach. The target population was 620 accountants and internal auditors from 310 national sub county treasuries. Both primary and secondary sources of data were used.	The study revealed that risk assessment had a significant relationship with the management of funds. The research findings imply that internal control systems are a significant positive predictor of funds management.	The study did not indicate how qualitative data was collected, analyzed and presented. It is clear that there is no pilot study done. The results have little support for their validity and may reflect a bias.	The study will use two sources of data, primary collected through questionnaires and secondary as obtained from audited reports for purposes of triangulations.
Muhunyo and Jagongo (2018)	Effect of internal control systems on financial performance in public institutions of higher learning in Nairobi City County	Descriptive research design. It took on a sample of 96 employees. Primary data was collected from sample population using open and closed ended questionnaires.	The study realized that the information and communication have a significant influence on the financial performance of the institutions of higher learning in Nairobi City	The study was conducted in institutions of higher learning which is non-financial. The study did not indicate how information and	The study will be conducted in financial institutions in this case deposit taking SACCOs. The study will show how accounting information system

			County, Kenya	communication measured	was	will be operationalized
Kendogor (2018)	Influence of internal controls on financial management in Uasin Gishu county government of Kenya	Descriptive research design The target population for this study consisted of the six administrative divisions in the County Government of Uasin Gishu	Results shows that an increase in accounting information system positively influences financial management and therefore accounting information system is essential but other strategies must be applied to enhance financial management.	The study was in a conducted of County Government Context There was no theories or theory was associated with Accounting information system		The study will be conducted in deposit taking Saccos In this study, theories underpinning the study will be discussed extensively Financial performance was used as dependent variable instead of financial management
Kisanyanya (2018)	Effect of internal control systems on financial performance of public institutions of higher learning in Vihiga County	Descriptive research design. The target population comprised of 140 employees. The study had a sample of 96 employees. Semi-structured questionnaires	The study found that the institutions under study had effective flow of information and communication channels.	The study lacked adequate problem definition from the background The theoretical was not related with study objectives		The theories will be anchored to specific objectives of the study
Githui (2019)	Effect of internal control system on credit risk management among commercial banks in Kenya	Descriptive research design was used in investigating the research questions. The study used census. Questionnaires were used to collect primary data in this study	The regression findings showed that the Information and communication had a positive influence on credit risk management, but the relationship was not statistically	Credit risk management was used as dependent variable The study lacked theoretical framework to support the study findings		The study will use financial performance as dependent variable. The theories will be anchored to specific objectives of the study

Urquia (2018)	Relationship between internal control systems and financial performance in Surigao del Sur State University	Both quantitative and qualitative approaches using survey, correlation and case study as research designs. Data were collected using questionnaires and interview guide	significant The Study therefore concludes that accounting information systems do function although with hiccups and that there was a significant relationship between internal control systems and financial performance in an Institution of higher learning.	The study did not indicate rationale of using more than one research design. The study did not indicate which respondents were questionnaire administered and interview conducted	The study will use explanatory research design which will aid in explain findings descriptively and inferentially.
Segun, Kehinde anf Alice (2020)	Relationship between internal control systems and financial performance of deposit money banks in Osun state	The study was conducted using both quantitative and qualitative approaches using Survey type and ex-post facto research design. The population of the study included all the deposit money banks in Osun State, out of which 6 banks were randomly selected for a period of 5 years from 2014 to 2018	The study found that monitoring exerts a significant positive influence on deposit money banks liquidity and positive effect on their solvency.	Financial performance was measured using liquidity and solvency. There was no triangulation of outcome from qualitative and quantitative sources	The current study will use Profitability, Dividend Per Share and Interest on the member deposits as measure of financial performance
Jeanne (2019)	whether internal control plays any role in financial performance in public institution	Both primary and secondary data. The primary data was collected using, the distribution of 30 copies of questionnaires. The study used	The study concludes that there is a significant positive relationship between monitoring and control and financial performance; it concluded that RSSB	The study did not indicate constructs that were used to meant monitoring and control. The sample size used was small, 30. The study lacked	The study has clear problem definition from global, regional and local. The sample size will be more than 30

		descriptive research; the target population of respondent was employees in institution studied whereas the sample size was 30 employees.	solvency is still need improvement	adequate problem definition from the background	
Andove (2019)	Effect of internal control practices on financial performance of Faith Based facilities in Kakamega County, Kenya	Target population was 550 employees in Faith Based health facilities Stratified and simple random sampling techniques were used. A sample size of 226 respondents. Data collection instruments were both primary and secondary	From the results, the beta value for monitoring control activities from the regression model. These results imply 42.6% of change in financial performance is attributed to monitoring control activities	The study was conducted in non-profit making organization. There was no evidence of secondary data The researchers failed to include the most relevant literature regarding each of the study's variables and constructs.	The study will be conducted in deposit taking Saccos where financial performance will measured using Profitability, Dividend Per Share and Interest on the member deposits
Kabue and Aduda (2017)	Effect of internal controls on fraud detection and prevention among commercial banks in Kenya	The sample consisted of 43 banks	The findings show that these dimensions are strong predictors of fraud detection and prevention. Regression analysis indicate a negative but significant link between reconciliation control and level of detecting and preventing fraud	The study failed to give a sample population and sample size. It is clear that there is no pilot study done. The results have little support for their validity and may reflect a bias.	The study will provided both sample size and target population from which scientific formula will be used arrive at a sample size Data quality will be established through validity and reliability
Kalemeera (2018)	Relationship between internal controls and the financial performance of	A correlation research design was adopted and both qualitative and	The conclusions of the study were that there was a very strong	The study only factored on relationship and not effect of control and	The study will use SEM model to establish how control

	UMI	quantitative approaches were used. The data was collected using self-administered questionnaires and an interview guide	positive relationship between internal control monitoring and financial performance (84.7%),	significant monitoring on financial performance. There was no triangulation of qualitative and quantitative data There are no practical recommendations made for further research work to be done.	and monitoring influence financial performance. Both contribution and implications of the study will be established.
Mauti and Muturi (2019)	Influence of internal controls on financial performance of Kenya tea factories	Descriptive research design. The target population was comprised of 130 respondents sections, and audit sections of the tea factories. The sample size for this study was 98 employees. Data was collected by use of a research questionnaire	It was concluded that segregation of duties need to be done with utmost care to avoid the negative impacts of this variable	The study measure control environment using segregation of duties only There was no adequate theory to support the study outcome	The study will measure segregation using commitment to integrity & ethical values, oversight responsibility, establish structure, authority and responsibilities, enforces accountability and external influences
Njiru (2016)	Effect of internal controls on financial performance of public water companies in Kenya	The study will use a descriptive survey study research design. The population of the study will be 65 chief internal auditors in Urban WSPs in Kenya as at December 2014	The finding indicated that regression model show that there is a positive relationship between internal controls environment, risk assessment, and financial performance of agro processing firms	The study focused on non-profit making organization, public water companies The researcher did not exhaust all the identified aspects of control activities.	The study will focus on financial performance of Saccos Different measures were employed to conceptualize control activities
Kinyua et al (2018)	Effect of internal control systems on financial	Survey research design All 62 companies quoted	The results and findings concluded that there was	The study focused on listed firms which DT	The current study will focus on all DT-

	performance of companies quoted in the Nairobi Securities Exchange (NSE)	in NSE. The study used a sample of 38 companies from a target population of 62 companies quoted in NSE. The sample was drawn using stratified random sampling technique. The study relied on both primary and secondary data.	significant association between internal control environment and financial performance.	Saccos are not included. The study did not indicate how stratified random sampling was achieved	Saccos in Kenya Stratified random sampling will be used based on employee's cadre
Nyakundi et al. (2014)	Effect of internal control systems on financial performance among Small and Medium scale Enterprises in Kisumu city, Kenya	Stratified and simple random sampling techniques. The research was conducted using both quantitative and qualitative approaches; adapting cross-sectional survey research design. The study used both primary and secondary data. Primary data was collected using structured questionnaire and interview	A significant change in financial performance is linked to internal controls systems. Based on the findings of the study, it is concluded that internal control systems as supported by the study findings significantly influence the financial performance of Small and Medium scale Enterprises	The study did not indicate which respondents were given questionnaires and which respondents were sampled for interviews There was triangulation of qualitative and quantitative data The study focused on SMEs	The study will use only structured questionnaire to collect data The study will focus on DT-Saccos
Eke (2018)	Effect of internal control on financial performance of hospitality organisations (HOs) in Rivers State	Survey research design The population of the study was made up of all HOs operating in Rivers State. Convenience sampling technique was adopted in selecting twenty HOs that constitute the sample of	The study concluded that the control environment affects total revenue as such influences the financial performance of HOs, its nonexistence or inadequacy may spell doom for an	The study did not apply inferential analysis to examine influence of internal control on financial performance	The study will use linear regression analysis to establish influence of internal control on financial performance

			this study. Structured questionnaire and secondarily sources	organization		
Nyakarimi et al.(2019)	Moderating effect of government regulations on the relationship between internal control system and fraud prevention in banking sector	Structured questionnaire All banks registered and operating in Kenya. One hundred and seventeen questionnaires were distributed The questionnaires were analyzed using Structural equation Model (SEM)	The findings indicated that the regulations frameworks have significant moderating effect of control environment and risk assessment. However, there was insignificant moderating effect on control activities, communication and monitoring of activities	The study did not specify which specific regulations The study focused on commercial banks The independent variables was fraud prevention	The study will focus on SASRA regulation frameworks The independent variables will be financial performance	
Mugo et al. (2017)	Moderating effect of government policies on the relationship between mobile technology services and performance of Deposit-Taking Savings and Credit Cooperative Societies (SACCOs) in Kenya	Descriptive and explanatory research designs were adopted based on a sample of 86 Deposit-Taking SACCOs. A structured questionnaire administered to two managers in each SACCO was used for data collection	The study found that government policies positively moderates the relationship between mobile technology services and performance of Deposit-Taking SACCOs	The study did not indicate why two research designs were used. The study did not indicate which managers were sampled and why The study did not indicate which aspects of performance was measured	The study will sample respondents from finance and account departments The study will use financial performance as metric for performance variable.	
Kimani et al. (2015)	Moderating effect of government regulations on the relationship between cost recovery and financing of water investments in Kenya	Descriptive survey research design. A two stage sampling technique was used to obtain a sample population of 150 small scale water service	The findings of the study indicated that factors inhibiting cost recovery includes poor water pricing, low users' charge and externalities.	The independent variable was cost recovery which is not a component of internal control system The study did not	The study will use internal control as independent variables Moderating effect will be achieved using Structural	

		providers. The study utilized self-administered questionnaire and content analysis for collecting data. SEM was used to analyse the relationship among variables		indicate how qualitative data was analyzed The study did not indicate how moderating effect of government regulation was achieved	Equation Modeling
Muturi (2019)	Explore the relationship between mortgage contract terms and performance of real estate firms in Kenya with government regulations moderating this relationship	The study sample comprised of 138 real estate managers drawn from firms registered with Kenya Property Developers Association (KPDA)	The study revealed that government regulations significantly moderated the relationship between mortgage contract terms issues and performance of real estate firms in Kenya	The study did not indicate how performance was measured The study used mortgage contract as independent variable	The study will measure performance using financial metrics The study will use internal contract as independent variable
Chuol et al (2021)	Moderating effect of government regulations on the relationship between strategic planning practices and financial performances of SME's in Juba South Sudan	This study used a Cross-Section Survey. The target population consists of 4,951 small and medium enterprises founded in Juba, South Sudan. The study used the questionnaires to get information from the SME's	Findings illustrated that Government Regulations had no significant moderation effect on the relationship between strategic planning practices and the financial performance and between strategic formulation practices and the financial performance among the SMEs in Juba, South Sudan	Government regulation was found to have no significant moderating effect The independent variable was strategic planning The study focused on SMEs	The study will use internal contract as independent variable The study focused on DT-SACCOs

2.5 Summary of Research Gaps

Public and governmental focus on corporate governance has increased in the wake of high-profile business scandals and the worldwide financial crisis. As a result of growing scrutiny from regulators, more information is being made public about corporate governance, and with that comes a greater need for and interest in internal auditing of governance procedures.

Nyakarimi and Karwirwa (2015) discovered that a strong internal control system may avoid frauds, errors, and eliminate wastes, while also bolstering the custody of assets, ensuring management of the dependability of accounting data, and preserving enough and trustworthy accounting records. However, Kabue and Aduda (2017) point out that a lack of an efficient and effective internal control system has a negative impact on organizational performance and raises the likelihood of losses. Kamau (2014), Kinyua (2015), and Magu and Kibati (2016) are just a few of the research that have indicated that internal control has a favorable and statistically significant effect on financial performance. The majority of risk assessment and performance studies did not find consistent patterns.

Amposah (2012) investigated the role of internal control systems in establishing successful risk management and discovered flaws in the performance of risk analysis while loaning money to clients. Muraguri (2016) did not identify a significant relationship between the internal control system and the performance of state-owned firms, indicating that risk assessment is not a reliable predictor of performance. However, the majority of research has focused on the impact on organizational performance, with just a small percentage of attention paid to the financial success of DT-Saccos in Kenya. Internal control systems have an impact on the financial performance of deposit-taking Saccos in Kenya, although the

extent to which they have an impact is unclear. The first step in filling these voids is the conceptualization of a relationship between SACCOs' internal control environment and their financial performance. This research will use a mix of descriptive and inferential statistics to examine the connections between the variables in an effort to fill in the methodological gaps.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a formal summary of the analysis methodologies that was employed throughout the thesis. Analysis methods include research design, demographic, and sample size, as well as data collection strategies and procedures.

3.2 Research Philosophy

According to Suri (2011), research philosophy is the model that can strengthen a research project. A research philosophy is a set of beliefs about the best ways to obtain, analyze, and apply information about the world. It is connected to epistemology, the study of the relationship between the researcher and established facts, and ontology, the study of the nature of truth itself. Creswell and Poth (2017) state that the research challenges and research questions determine the appropriate paradigm and methodology to use.

Basic ontological and epistemological viewpoints of the researcher often guide their choice of research philosophy (Thorpe et al, 2008). One's ontology describes their beliefs about the nature of reality, and in particular whether they believe in an objective reality that actually exists or if they believe that reality is entirely mental (Easterby-Smith et al, 1997). The term "epistemology" is used to refer to the study of the foundations and methods of knowledge, as well as the underlying assumptions about how information about the world can be acquired, what qualifies as "knowledge," and so on (Blaikie, 1993).

Not all viewpoints on ontology and epistemology are explicitly stated; rather, they manifest through the way theories are approached and the methods used (Marsh et al, 2002). Pragmatism is a post-positivist position that has gained acceptance as a viable alternative to positivism and phenomenology/interpretivism in the realm of research philosophy. A key goal of positivist methods is to explain how and why one theory or practice relates to another, or how one variable affects another (Hammersley, et al, 2006). One of the key tenets of interpretivism is the idea that the researcher has a privileged position inside the social milieu they are studying. Research conducted in accordance with this idea is driven by and shaped by the researcher's own personal passions and areas of interest. Mixed-methods studies should be grounded in pragmatism, a worldview or paradigm. This problem-oriented perspective maintains that the most successful research strategies are those that directly contribute to answering the study's central topic.

This study employed a positivist approach to research. Positivism is a research philosophy that represents the view that the world is unchanging. Since positivists believe that new hypotheses may be tested by comparing them to established theories, the practice of positivism can be traced back to the natural sciences. One can look at this world objectively and explain it without tampering with it in any way (Eriksson & Kovalainen, 2015). Generally speaking, the philosophical attitude of the natural sciences is taken up by a research philosophy that adheres to the positivist principles. Researchers that take this approach prefer to study social phenomena that can be directly observed, and they believe that their findings, like those of physical and natural scientists, can be generalized into laws (Creswell & Creswell, 2017). An additional tenet of the positivist methodology is that it is conducted without regard to any particular values. The researchers insist they are

dispassionate observers of the data collection process because they have no control over the accuracy or completeness of the information gathered.

In addition, positivism served as the theoretical foundation for this investigation because it creates a buffer zone between the researcher's own prejudices and the study's objective findings. Theory-setting, hypothesis-making, and hypothesis-testing are typical components of the positivist method. As a rule, quantitative approaches are preferred. Positivists hold that knowledge of an objective world is possible for the researcher if he or she employs adequate procedures and applies them properly (Cohen & Crabtree, 2006).

By using scientific methodologies and quantifying the knowledge-gathering process, positivists increase the accuracy with which they describe parameters and the relationships between them (Thomas, Silverman, & Nelson, 2015). Additionally, positivism can be understood as a research methodology predicated on the ontological theory that reality exists apart from the observer, with an emphasis on using quantitative methods to study social phenomena (Shamsudin, Chauhan & Kura, 2012). Therefore, positivism's most significant aspect, the rejection of metaphysical inquiry in favor of science, is what makes this philosophy suitable for this investigation.

The study's philosophical stance was crucial in reaching research objectives, from which research hypotheses were generated. The study's overarching goal is to examine how Saccos in Kenya might improve their bottom lines by instituting better internal accounting control systems. Based on this overarching goal, the research set out to examine four specific hypotheses about risk assessments; accounting information system controls; monitoring and control activities; and the Control environment. The purpose of this research was to examine the moderating influence of the SASRA regulatory framework on deductive arguments. Due

to the exploratory nature of this study's aim, quantifiable data was possible to be gathered from both primary and secondary sources.

3.3 Research Design

Research designs are used to establish the conditions under which data will be collected and analyzed in a way that seeks to balance efficiency with fidelity to the research's stated goals (Orodho, 2008). The study used a combination of the exploratory and descriptive research methods. The purpose of this study is to examine the relationship between Saccos that accept deposits in Kenya and their financial performance, therefore a casual research methodology will be used to arrive at the necessary conclusions. Observing and describing a subject's behavior without attempting to change it is the goal of the descriptive study approach used in the scientific method.

3.4 Study Area

The research was carried out in Kenya focusing on 175 SASRA licensed DT-SACCO as indicated in Appendix I. The Deposit Taking Sacco's (DTS) besides the basic savings and credit products, also provide basic 'banking' services (demand deposits, payments services and channels such as quasi banking services commonly known as ATMs) and operate FOSA.

3.5 Target Population

According to Saleemi (2008), the population is the total number of items in a particular area of study. The population of this study was constituted of 175 deposit-taking SACCOs in Kenya from the SASRA data listed in Appendix I (SASRA, 2021) and 875 respondents from the individual SACCOs. CEOs, finance managers, internal auditors, ICT managers, and risk managers comprised the sampling frame.

3.6 Sample Size and Sampling Methods

3.6.1 Sample Size

A sample size is a specific subset of the complete population from which data may be collected easily and precisely. The sample size should be established accurately so that the obtained data accurately represent the population under study (Kontari, 2009). The sample size was determined using Yamane's formula for estimating sample size (Yamane, 1967), and the sample size to be employed in the study is depicted in the table below.

$$n = \frac{N}{1 + N(e^2)}$$

Where;

n= sample size

N= population

e= Margin of error, taken as 0.05

Substituting the values in the formula;

$$n = \frac{175}{1+175(0.05^2)} = 121.7391304$$

n = 122 Saccos translating to 610 respondents.

3.6.2 Sampling Techniques

A purposive sampling technique was used. The participants were chosen based on the purpose, hence the name CEO, Finance Managers, Risk Managers, ICT Managers and Internal Auditor chosen from 175 Deposit taking Sacco's in Kenya.

3.7 Data Collection Instruments and Procedures

3.7.1 Types and Sources of Data

A data set is a collection of information that may be analyzed and utilized to answer questions or guide decision-making (Kothari, 2004). Primary and secondary data are the two main categories of information. To conduct this research, data was gathered from two primary resources. There are two types of sources: main and secondary. Data that is considered primary has been obtained in a brand new way, making it unique (Kothari, 2007). The data analysis relied heavily on the responses to the researcher's own questionnaire, which he developed as part of the research process.

3.7.2 Instrumentation

Specifically, questionnaires were used to obtain primary data for the study. It was decided to employ a questionnaire for this study because it was expected that the participants could read and understand the questions. There were sections one through four of the questionnaire. A broad set of questions (Part 1), a set of closed-ended questions (Part 2), a set of questions (Part 3) on a moderating variable, and a set of questions (Part 4) about the financial performance of SACCOs were all included. All of the constructs were rated on a five-point Likert scale, with five being a strong endorsement and one a strong disapproval.

Financial performance-related secondary research was also used in the analysis. Everything from profits to dividends to interest on member savings were accounted for. The audited financial statements of Kenyan Saccos that accept deposits served as the secondary source of information. The published report was sourced from both the DT-Sacco and SASRA websites. Secondary information gleaned from published yearly reports for the years 2016-2020.

3.7.3 Data Collection Procedures

Quantitative data was gathered in this study via a self-administered questionnaire. The researcher assured participants that their comments would be kept confidential and that the instruments being used were for research reasons exclusively. The University and NACOSTI provided the researcher with a cover letter to send out to potential respondents. The questionnaires were handed to the respondents by four research assistants, who then used the "drop and pick" procedure to collect the completed forms later. In order to guarantee that every question was answered, the research assistant oversaw the entire data gathering process. There were several files for the SACCOs' questionnaires. Both the DT-Sacco websites and the SASRA websites were scoured for further information, such as financial statements. Analyses made use of computed ratios.

Table 3. 1: Quantitative Measures of Variables for Primary Data.

Variable	Item	Method of testing	Questionnaire Item
Risk Assessments	i) New Product lines ii) New Information systems iii) Rapid Growth iv) Restructuring of the Saccos Operations v) Adoption of new accounting principles	5 point likert	SECTION II; PART A
Accounting Information system	i) Financial Transaction ii) Measurement of Financial Transaction iii) Recording of transaction cut off period iv) Transaction Processing v) Accounting disclosures	5 point Likert	SECTION II; PART B
Monitoring and Control Activities	i) Trends and exceptions ii) IT controls iii) Policies and Procedures iv) Physical controls	5 point Likert	SECTION II; PART C
Control Environment	i) Commitment to integrity & ethical values ii) Oversight responsibility iii) Establish structure, authority and responsibilities iv) Enforces accountability v) External influences	5 point Likert	SECTION II; PART D
SASRA Regulatory Framework	i) Liquidity Requirement ii) Capital Requirement iii) Loan Requirement iv) Investment Requirement	5 point Likert	SECTION III

Source: Researcher (2021)

Table: 3. 2: Operationalization and Measurement of Secondary Variables

Variable	Name of Variable	Operationalization	Measurement
Dependent variables	Financial performance of deposit taking SACCOs in Kenya	Dividend Per Share	Total Dividends Paid
		Interest on Member Deposit	Interest on Member Deposit
Moderating Variable	SASRA Regulations	Liquidity Requirement	Liquidity Risk against minimum requirement
		Capital Requirement	Institutional and core capital against minimum requirement
		Loan Requirement	Portfolio Risk against minimum requirement

Source: Researcher (2021)

3.8 Piloting

A pilot study was conducted on 12 Deposit Taking Saccos representing 10% of the entire sample size from Nairobi County as recommended by Arain, Campbell, Cooper and Lancaster (2010). The piloted respondents were excluded from the main study sample. This took two weeks prior to actual data collection. The results of the pilot study aided in restructuring the instruments for data collection. Piloting also entailed reliability and validity of research instrument.

3.8.1 Validity

The term "validity" is used to describe the extent to which a measuring device provides reliable results when used for its intended purpose (Burton and Mazerolle, 2011; Bolliger and Inam, 2012). A construct's validity can be measured by how successfully it has been

turned from an abstract idea or theory into a practically applicable framework (Aila & Ombok, 2015). According to Drost (2011), researchers should think about four different kinds of validity. Internal validity, construct validity, and external validity are four of them. The validity of a statistical result is assessed by determining if, with the chosen alpha level and with the obtained variances, it is plausible to expect covariation. The reliability of the study itself is what internal validity is trying to convey. To have external validity, a study needs to be applicable to a wider range of people and situations than just the ones the researchers initially anticipated. When a test can be counted on to accurately measure its target, it is said to have construct validity. Construct validity can be broken down into convergent validity and discriminant validity, the two most common types. Convergent validity compares hypothesized relationships between constructs, while discriminant validity looks at actual differences between groups. The goal of the discriminant validity analysis is to determine if two ostensibly unrelated constructs are, in fact, distinct.

Both construct validity and content validity were used to evaluate the reliability and accuracy of the study instrument. The content validity of the questionnaire was calculated to determine how well the responses reflected the research questions. The research instruments were meticulously designed to measure and collect the correct data. Masinde Muliro University of Science and Technology's faculty and staff in the fields of business and economics were enlisted to provide content assessment from an expert perspective.

Factor analysis and confirmatory factor analysis were used to assess and validate the construct validity of the instruments used in the study; both methods are advised for use with high sample sizes ($n > 50$) to ensure that the instruments under study accurately measure the phenomena under study (Aila & Ombok, 2015). Convergent validity was evaluated in this

study by use of the Average Variance Extracted (AVE). As stated by Parvadavardini, Vivek, and Devadasan (2016), the structures can only be justified if the AVE value is more than 0.5. Discriminant validity examines the extent to which one notion in a research instrument is distinct from other, conceptually similar concepts. Fornell and Larcker's (1981) methods of evaluating discriminant validity were used in this study. Fornell and Larcker's (1981) criterion is based on comparing the square root of AVE to construct correlations, while cross-loading assessments need indicators to have higher loadings on their particular constructs than on other constructs.

3.8.2 Reliability

Reliability is often discussed in connection with the question of whether or not sample results can be expected to be replicated. This is the point at which a testing instrument, after being put through its paces multiple times, consistently yields accurate results. An academic instrument is reliable if it can be tested by the same scholar twice with the same results (Mugenda & Mugenda, 1999). With the use of pilot study results, we calculated the instruments' internal consistency using Cronbach's alpha. Santos (1999) indicated 0.7 to be an acceptable reliability co-efficient. According to Wikipedia (2013), Cronbach's alpha of $\alpha \geq 0.9$ is excellent, $0.7 \leq \alpha < 0.9$ is good, $0.6 \leq \alpha < 0.7$ is acceptable, $0.5 \leq \alpha < 0.6$ is poor, and $\alpha < 0.5$ is unacceptable. Santos asserts that if the instrument shows poor reliability, then individual items within the scale must be re-examined and modified or completely changed as needed.

3.9 Data Analysis

Data analysis is the act of examining, cleansing, manipulating, and modeling data in order to highlight relevant information, offer conclusions, and aid in decision-making. This study's data were initially categorized, tabulated, and aggregated. Examining the acquired raw data for errors and omissions and correcting them was used to edit the data. This entailed a thorough examination of the filled questionnaires. Then, data was coded by assigning numbers to responses so that they could be classified into a restricted number of categories or classes. The statistical analysis was performed with SPSS 23. The information was presented as tables, models, and charts. The data analysis was conducted in accordance with the objectives.

3.9.1 Descriptive Statistics

The major purpose of this was to demonstrate the general trend of the underlying data. The researcher employed descriptive statistics such as the mean and the standard deviation to get insight into the data. Measures and indices were derived from the collected data using descriptive statistics (Kothari, 2007). The average value, or mean, characterizes the centre value of a data set. Distance from the mean is measured by the standard deviation. Tables and charts were used to display the information.

3.9.2 Correlation Analysis

The Pearson Correlation Coefficient (Pearson r) is utilized to analyze the relationship between two variables (Jahangir & Begum, 2008). When comparing two continuous variables, Pearson r is used to determine the strength and direction of the linear relationship between them (Mugenda & Mugenda, 2008). Both the magnitude and direction of the link between the variables were analyzed using bi-variate correlational analysis in this study. With a large significance level, say 0.50 or more, Sporta, Ngugi, Ngumi, and Nanjala (2017) conclude that the correlation is not significant and the two variables are not linearly connected.

3.9.3 Simple Linear Regression Analysis

An effective statistical method, simple linear regression analysis examines the relationships between a single set of independent variables and a single set of dependent variables (Lind, 2008). Independent variables that may be measured separately were utilized in a simple linear regression model to determine the relationship between internal control systems and financial performance. The study relied on the R square, and the significance level. The four models are as shown in below;

$$Y = \beta_0 + \beta_1 X_1 + e$$

$$Y = \beta_0 + \beta_2 X_2 + e$$

$$Y = \beta_0 + \beta_3 X_3 + e$$

$$Y = \beta_0 + \beta_4 X_4 + e$$

Where,

Y = Financial Performance

B_0 = Constant

β_1 to β_9 = Regression Coefficients

X_1 to X_4 = Independent variables as mentioned above

ε = the error of term

3.9.4 Standard Multiple Regression Model

The purpose of multiple linear regression analysis is to examine the relationships between multiple independent variables and a single dependent variable (Lind, 2008). Alusa and Kariuki (2015) state that multiple regression analysis entails including a number of predictor variables in a single regression equation. Our research utilized Multiple Regression analysis to determine if and how independent variables influenced the dependent variable. The goal of this research was to determine if there was a correlation between the quality of an organization's internal control system and its financial results for DT-SACCOs in Kenya. The model is as shown in Table 3.4.

3.9.5 Hierarchical Multiple Regression Technique

SASRA rules were found to moderate the correlation between the Internal Control System and Financial performance through the application of the Hierarchical Multiple Regression Method. If the interaction impact is substantial in the model, then there is a moderating effect. Four-step analyses were performed for each moderating variable. Step one involved

including a set of control variables in the model. Step two involved the incorporation of internal control system components into the model; step three involved the introduction of a moderating variable as a dependent; and step four involved the introduction of an interactions impact as a multiplicative. The research aimed to determine the significant level, the rate of change (F), and the rate of change (R square). The three models are as shown in Table 3.4.

3.9.6 Regression Model

Equation 1 represents the general model that was used for examining the causal relationships between the latent dependent and independent variables;

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

Where;

Y = Financial Performance

$\beta_1, \dots, \beta_4$ = Regression Coefficients

X_1 = Risk Assessment

X_2 = Accounting information system

X_3 = Monitoring and Control Activities

X_4 = Control Environment

ε = the error of term.

To assess the moderating effect of SASRA regulations as detailed in the hypothesized (theoretical) model, a hierarchical regression modeling technique was adopted. In this technique, a step wise approach was taken where the moderating variable SASRA

regulations (Z) was added to the first model represented in equation 1 followed by introduction of the interactions between the SASRA regulations and each of the independent variables. The influence of SASRA regulations as a moderating variable was determined by examining the effect of the introduction of its interaction terms with the independent variables. The model to assess the moderating effect of SASRA regulations is shown by the equation below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Z + \beta_6 X_1 Z + \beta_7 X_2 Z + \beta_8 X_3 Z + \beta_9 X_4 Z + \varepsilon$$

Where;

Y = Financial Performance

B₀ = Constant

β₁ to β₉ = Regression Coefficients

X₁ to X₄ = Independent variables as mentioned above

Z = SASRA regulations (the moderating variable)

X_i*Z = the interaction term between the ith independent variable and the moderating variable

ε = the error of term.

The following is the table presenting the summarized latent and observed variables together with their measurement scale. Note that both the constructs were further measured in a five Likert scale and level of analysis included descriptive, correlation analysis (Observed Index Matrix -OIM calculation) and structural modeling.

3.9.8 Diagnostic Tests

In order to verify the validity of the Pearson correlation and the multiple regression analyses' underlying assumptions, diagnostic analyses were run before the inferential statistics were done. The fitted model was also put through a battery of diagnostic tests to make sure it holds true to the standard assumption upon which linear regressions are built. Linearity was tested with scatter plots, and homogeneity was checked with P-P plots and the multicollinearity test was conducted with VIF and tolerance.

3.9.8.1 Multi-collinearity:

The correlation between the many explanatory factors is referred to as multi-collinearity. Multi-collinearity occurs when there is a significant degree of correlation between the independent variables. Standard errors for each independent variable are inflated when multicollinearity is present, making it more difficult to determine which factors actually affect the dependent variable (Yoo et al., 2014). Excluding a correlated independent variable or variables from the regression model is one way to deal with multicollinearity (Cai, Wu, Xu & Zeng, 2017). Assessing the potential for multicollinearity Both the Tolerance level and the Variance Inflation Factor were implemented. Tolerance intervals larger than 0.1 or VIFs less than 10 are considered suitable.

3.9.8.2 Normality:

The assumption of normality is necessary for the majority of parametric tests. In statistical terms, a normal distribution is a bell-shaped distribution with a mean of zero, a standard deviation of one, and the distribution itself being symmetrical (Garson, 2012). The following procedures and tests were used to check the normalcy assumption: Analyzing data with the Kolmogorov-Smirnov statistic: The K-S test was used to verify whether or not the data were normally distributed in the case of a sizable sample. The assumption of normalcy dictates that this test should not be statistically significant. If the residuals are regularly distributed, then the scores on the anticipated dependent variable are also normally distributed.

3.9.8.3 Linearity

When using linear regression, the connection between the independent and dependent variables must be linear. Linear regression is very vulnerable to the effects of outliers, hence it is crucial to look for them. Scatter plots are the most effective tool for verifying whether or not the linearity assumption holds (Chatterjee & Hadi, 2015).

3.9.8.4 Homoscedasticity:

The linear regression model relies heavily on the homoscedasticity assumption. Homoscedasticity describes a circumstance in which the error term is the same for all values of the independent variables. Heteroscedasticity, on the other hand, manifests itself when the magnitude of the error term varies across the values of the independent variables. The degree to which a violation of the assumption of homoscedasticity impacts results is proportional to the degree of heteroscedasticity (Gelfand, 2015). When the dependent

variable's variance changes in different samples, we say that the data is heteroscedastic. Instead, homoscedasticity describes when the dependent variable's variance is constant across all observations. Linear Homoscedasticity is the assumption of best linear unbiased estimate models (BLUE models) (Belsley, Kuh, and Welsch's, 1980). The Breusch-Pagan test can be used to check for heteroscedasticity. Calculations were made using the BP Lagrange multiplier (LM) statistic for the residuals (Razitis & Kalantzi 2012). In order to determine whether or not H_0 : residuals are heteroscedastic, the BP does a test (residuals are homoscedastic). If the BP-LM test's P-value is smaller than 0.05, then the residuals are homoscedastic, as assumed.

3.9.9 Hypothesis Testing

The five hypotheses were tested using the following framework indicated in Table 3.5:

Table 3. 3: Hypothesis testing

	Hypothesis Statement	Model	Hypothesis Testing
i	H ₀₁ : Risk assessment have no significant influence on financial performance of Saccos in Kenya	$FP = \beta_0 + \beta_1 X_1 + \epsilon$	H₀₁ : $\beta = 0$ H_{0A} : $\beta \neq 0$ Reject H₀₂ if $\beta \neq$ and P value ≤ 0.05 otherwise fail to reject H₀₁ if $\beta = 0$ and P value $> \alpha$ $\alpha = 0.05$
ii	H ₀₂ : Accounting information systems have no significant influence on financial performance of Saccos in Kenya	$FP = \beta_0 + \beta_1 X_2 + \epsilon$	H₀₂: $\beta = 0$ H_{0A}: $\beta \neq 0$ Reject H₀₁ if $\beta \neq 0$ and P value ≤ 0.05 otherwise fail to reject H₀₂ if $\beta_2 = 0$ and P value $> \alpha$ $\alpha = 0.05$
iii	H ₀₃ : Monitoring and Control activities have no significant influence on financial performance of Saccos in Kenya	$FP = \beta_0 + \beta_1 X_3 + \epsilon$	H₀₃ : $\beta = 0$ H_{0A} : $\beta \neq 0$ Reject H₀₃ if $\beta = 0$ and P value ≤ 0.05 otherwise fail to reject H₀₃ if $\beta = 0$ and P Value $> \alpha$ $\alpha = 0.05$
iv	H ₀₄ : Control environment have no significant influence on financial performance of Saccos in Kenya.	$FP = \beta_0 + \beta_1 X_4 + \epsilon$	H₀₄: $\beta = 0$ H_{0A}: $\beta \neq 0$ Reject H₀₄ if $\beta = 0$ and P value ≤ 0.05 otherwise fail to reject H₀₄ if $\beta = 0$ and P Value $> \alpha$ $\alpha = 0.05$
v	H ₀₅ : Internal Control System has no significant influence on the financial performance of Saccos in Kenya.	$FP = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$	H₀₅ : $\beta_{i...4} = 0$ H_{0A} : $\beta_{i...4} \neq 0$ Reject H₀₂ if $\beta_{i...4} = 0$ and P value ≤ 0.05 otherwise fail to reject H₀₅ if $\beta_{i...4} = 0$ and P Value $> \alpha$ $\alpha = 0.05$
iv	H ₀₆ : SASRA Regulation has no significant moderating effect on the relationship between Internal control system and financial performance of Saccos in Kenya.	$FP = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Z + \beta_6 X_1 Z + \beta_7 X_2 Z + \beta_8 X_3 Z + \beta_9 X_4 Z + \epsilon$	If X*M has a p value ≤ 0.05, then there is a significant moderating effect. $\beta_i > 0$ signifies positive moderating effect

Source: Researcher (2021)

3.10 Ethical Consideration

When working with human subjects, it is of the utmost importance to conduct research in compliance with established ethical norms. These moral concerns ensured that researchers maintained their integrity while conducting their studies.

Everyone who took part in the study had their anonymity and respect maintained. It was our policy to protect the privacy of those whose information we collected. Participants' permission to participate in the study was sought in advance. No person was recruited as a research subject unless they were informed of the study's existence in advance. No one who agreed to participate in a study was coerced or bribed in any way. A research authorization was received from NACOSTI after the appropriate people, authorities, and committees were consulted. Subjects were informed of the study's goals, procedures, and potential outcomes before they agreed to participate.

All research conformed to the respondents' ethical standards, and all authors and sources were properly credited to protect their intellectual property. At all costs, we avoided practices of scientific dishonesty such as plagiarism, fabrication, falsification, improper data collection, and misrepresenting authorship. The study was carried out skillfully, as a scientifically objective endeavor free of bias in its conception, interpretation, analysis, and methods.

CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4.1 Introduction

Results from the data analysis are presented and discussed in this chapter. A quantitative and qualitative analysis was conducted for each variable to describe its connection to the financial performance of Deposit taking Saccos in Kenya. Descriptive statistics let the researcher see trends and connections, which clarified the data and informed their interpretation. Descriptive statistics were generated using SPSS version 21, which aided in generalizations and inferences about the research population. To understand the characteristics of the variables under investigation, descriptive statistics such as frequency distributions, percentage breakdowns, means, and standard deviations were calculated. Figures and tables illustrated the gathered data. There are descriptive and inferential analyses of study variables and diagnostic tests, as well as data from reliability and validity testing in this section.

4.2 Response Rate

The study administered 610 questionnaires to respondents of the Deposit Taking Saccos in Kenya out of which 473 responded. The researcher obtained data from 77.5% of the administered questionnaires. Mugenda and Mugenda (2004) assert that a response rate of more than 50% is adequate for analysis. Babbie (2004) also asserts that a 60% return rate is good and a 70% return rate is very good. Information from the questionnaires was used for analysis and presentation of data. The drop and pick method was used in administering questionnaires and this partly contributed to the good response rate achieved in this study and also due to assurance of anonymity and the respondents were not required to disclose traceable identities.

Table 4. 1: Response Rate

	Frequency	Percentage
Sample size	610	100%
Collected	473	77.5%
Uncollected	137	22.5%

Source: Field Data (2022)

4.3 Demographic factors

The respondents were asked in the questionnaire to provide information based on their gender, age and the period in their current organization. The analysed data produced results in Table 4.2.

Table 4. 2: Gender of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	281	59.4	59.4	59.4
	Female	192	40.6	40.6	100.0
	Total	473	100.0	100.0	

Source: Field Data (2022)

As indicated in Table 4.2, 59.4 % of the respondents were male while female were 40.6 % of the respondents. It is evident that male were more as compared to female respondents although a third gender rule has been attained. The representation was therefore fair and exceeded the recommended a third threshold as stipulated in 2010 Kenyan constitution.

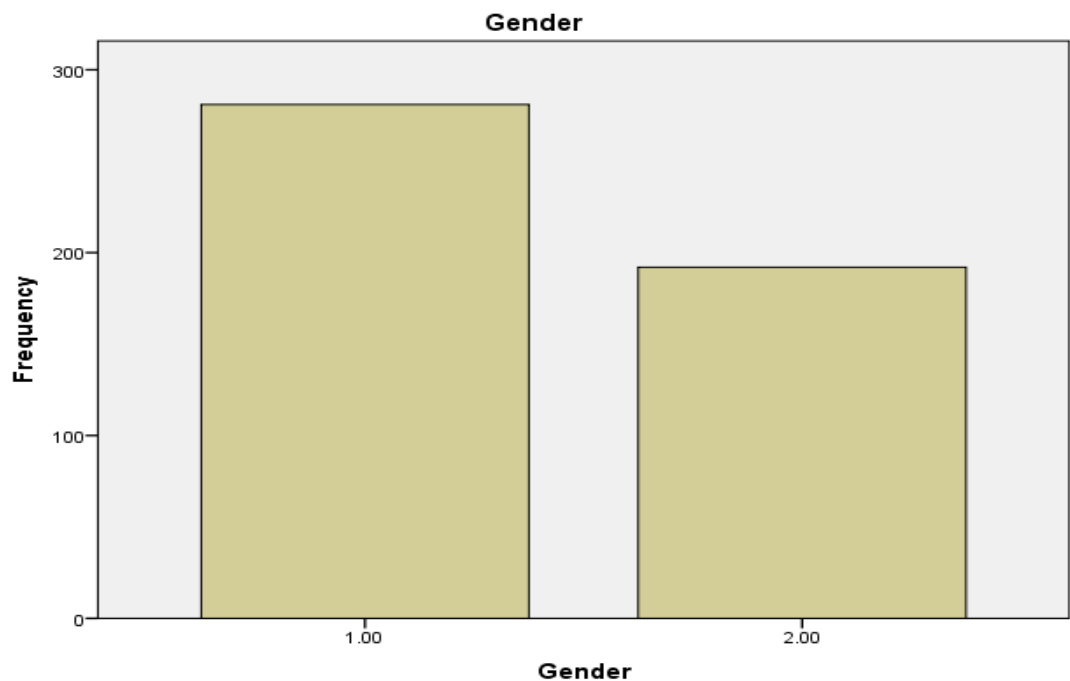
**Figure 4. 1: Gender of the Respondents**

Table 4. 3: Age of Respondents

	Frequency	Percent	Cumulative Percent
Valid	Below 25 Years	5	1.1
	25-34 Years	179	37.8
	35-44 Years	122	25.8
	45-54 Years	150	31.7
	Above 55 Years	17	3.6
	Total	473	100.0

Source: Field Data (2022)

From Table 4.3 the results indicated that 1.1% of the respondents were 25years and below,37.8% of the respondents had less than 34 years, and 25.8% were aged between 35 to 44 years, 45 to 54 years bracket accounted for 31.7 % while above 54 years accounted for only 3,6 %. The study findings show that most of the respondents 179(37.8%) were aged between 25-44 years implying that majority of the respondents were in their youthful age especially among the ICT Managers, Internal Auditors, and Risk/Credit Managers. The finding also depicted that majority of CEO and Finance Managers aged above 35 years. The results reveal that younger employees are more attracted to work in top level management in DT-SACCOs in Kenya. These younger carders of employees are more energetic and innovative thus needed for better financial performance of SACCOs.

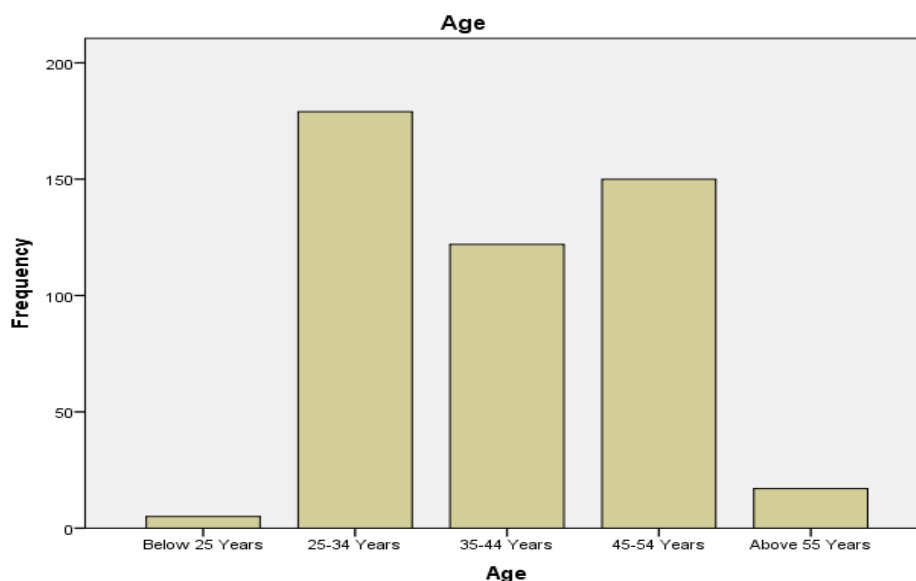


Figure 4. 2: Age of the Respondents

Table 4. 4: Period of Service

	Frequency	Percent	Cumulative Percent
Below 1 Year	25	5.3	5.3
1-5 Years	80	16.9	22.2
6-10 Years	181	38.3	60.5
11-15 Years	94	19.9	80.3
Over 15 Years	93	19.6	100.0
Total	473	100.0	

Source: Field Data (2022)

From Figure 4.4, the results indicated that 5.3% of the respondents are below one year, 16.9% of the respondents have been in their current position for less than 5 years, 38.3% of the respondents have been in their current position for between 6 and 10 years, 19.9% of the

respondents have been in their current position for between 10 and 15 years while, 19.6% have been in their current position for over 15 years.

The study sought to determine the respondents' period of service in their organization. Experience level is very important because more experienced employees are likely to be aware of the internal accounting control systems and its effect on financial performance. Employees who have worked in the organization for a long time have experience and knowledge on organization internal accounting control systems. According to Ibua (2014), respondents work experience is associated with length of service and knowledge acquired over time.

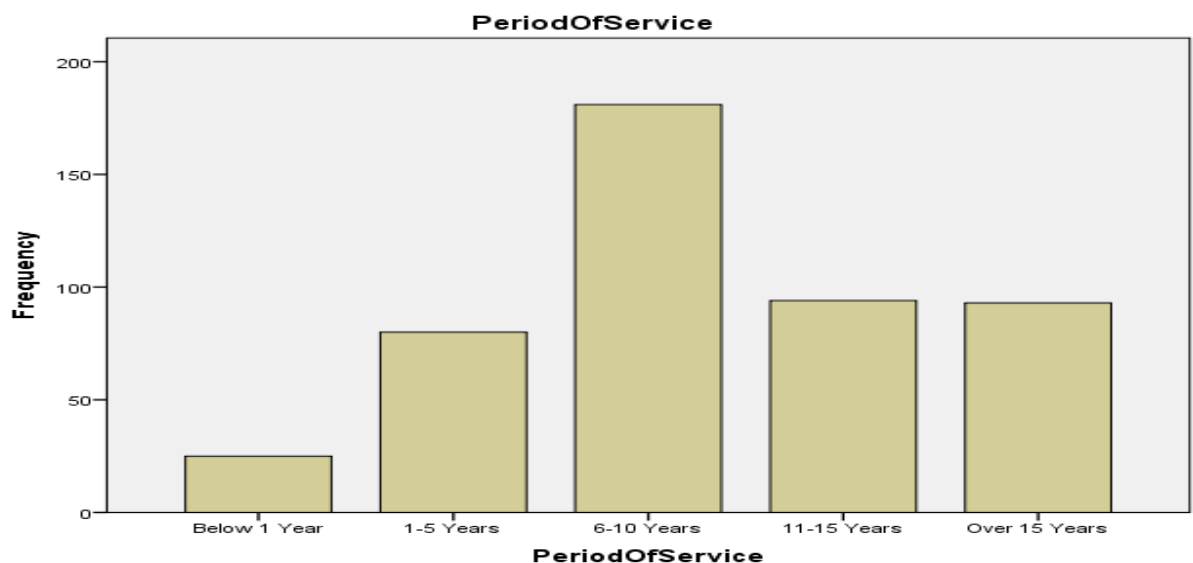


Figure 4. 3: Period of service

4.4: Pilot Test Results

A pilot study was undertaken to check the validity and reliability of the test items used in primary data collection. A pilot study was conducted on 12 Deposit Taking Saccos representing 10% of the entire sample size from Nairobi County as recommended by Arain, Campbell, Cooper and Lancaster (2010). The response rate during the pilot was 100%.

4.4.1 Reliability

For reliability tests, Cronbach alpha was applied for each variable which had a range 0.848 to 0.916. Santos (1999) indicated 0.7 to be an acceptable reliability co-efficient. The test items were retained hence considered reliable as shown in the table 4.5 below.

Table 4. 5: Reliability Table

Variable	No of items	Cronbach alpha
Risk Assessment	8	0.848
Accounting information system	8	0.859
Monitoring and control	8	0.896
Control environment	8	0.905
SASRA Regulation	9	0.860
Performance	7	0.916

Source: Field Data (2022)

4.4.2 Validity

Main component analysis was applied and the results for Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) are shown in the table below.

Table 4. 6: KMO Table for Performance

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.870
	Approx. Chi-Square	3007.958
Bartlett's Test of Sphericity	Df	21
	Sig.	.000

Source: Field Data (2022)

Table 4.6 presents the results of a Kaiser-Meyer-Olkin (KMO), this measures sampling adequacy which examine appropriateness for the use of factor analysis. A range of 0.5 – 1.0 in KMO indicates the use of factor analysis is appropriate (Tanasă. Horomnea & Ungureanu, 2012).

The KMO value of 0.870 signified factor analyses was appropriate for this research. Considering Bartlett's test of sphericity the chi-square value was 3007.958 and p-value of .000 which was significant at 99% confidence level indicating that items used in the study, independent and dependent variables were correlated.

Table 4. 7: Communalities

	Initial	Extraction
Number of Members	1.000	.179
Gross Income	1.000	.846
Share Capital	1.000	.808
Members Deposit	1.000	.587
Interest on Deposit	1.000	.809
Rate of Rebates	1.000	.810
Rate of Dividend	1.000	.801

Extraction Method: Principal Component Analysis.

Source: Field Data (2022)

Factor analysis was done to test the suitability of the test items where a variable had many observed constructs. In factor analysis communalities show the extent which a test item correlates with all other test item. The varimax rotation method developed by Kaiser in 1958 was used to discourage the detection of factors influencing all variables as most construct validation assumes simple (rotated) structure (Tanasă. Horomnea & Ungureanu, 2012). This means that each factor has a small number of large loadings but after varimax rotation each original variable is associated with one of the factors with large value hence variance of loadings is maximized as shown in the table 4.8 below.

Table 4. 8: Rotated component matrix

	Component 1
Number of Members	.423
Gross Income	.920
Share Capital	.899
Members Deposit	.766
Interest on Deposit	.900
Rate of Rebates	.900
Rate of Dividend	.895

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Source: Field Data (2022)

In this study, items with factor loadings larger than 0.40 were deemed to be superior. Thus, the factor loadings for the seven build factors ranged between 0.423 and 0.920. These factors were kept for future examination. Tabachnick and Fidell (2007) suggest that factors with factor loadings greater than 0.40 should be maintained for further research, whilst those with factor loadings less than 0.40 should be eliminated. Thus no factor was dropped. Thus they were considered reliable. This procedure was also done to all other variables as shown in appendix .

4.5 Descriptive Analysis

Descriptive statistics are used to define and describe the properties of a set of data (Mboya, 2019). To describe a distribution of the scores of measurements using indices or statistics, the study entailed use of descriptive statistics to present findings using percentages, frequencies, mean and standard deviations.

4.5.1 Risk assessments

The study's initial purpose was to analyze the impact of risk assessments on the financial performance of Saccos in Kenya. This purpose was achieved by requesting responses to many statements regarding risk assessments in the respondents' organizations. This variable's impacts were evaluated using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Table 4.9 summarizes the relevant findings.

Table 4. 9: Risk Assessment

	5	4	3	2	1	Mean	Stdev
SACCO has risk identification and analysis policy	25.8% (122)	57.7% (273)	9.3% (44)	6.1% (29)	1.1% (5)	4.0	0.8
SACCO evaluates risks before taking actions	37.8% (179)	45.2% (214)	9.7% (46)	5.9% (28)	1.3% (6)	4.1	0.9
SACCO takes precautions before opening branches	50.7% (240)	37% (175)	5.1% (24)	4.7% (22)	2.5% (12)	4.3	0.9
Instructions from clients thoroughly scrutinized before execution	39.1% (185)	44.8% (212)	11.8% (56)	3.2% (15)	1.1% (5)	4.2	0.8
Performs compliance test before adopting new accounting principles	26.8% (127)	51.4% (243)	15.4% (73)	5.1% (24)	1.3% (6)	4.0	0.9
SACCO management has risk mitigation mechanism to avoid losses	43.6% (206)	32.6% (154)	18% (85)	4.9% (23)	1.1% (5)	4.1	0.9
SACCO has an operational risk management department	18.8% (89)	36.2% (171)	22.4% (106)	20.9% (99)	1.7% (8)	3.5	1.1
Frequent escalation and reporting of risks in SACCOs departments	29.2% (138)	46.7% (221)	14.6% (69)	8.5% (40)	1.1% (5)	3.9	0.9

Source: Field Data (2022)

From the table 4.9 when asked on whether the SACCO has risk identification and analysis policy 25.8% strongly agreed, 57.7% agreed, 9.3% moderately agreeing, 6.1% disagreed and 1.1% Strongly disagreeing. On the question whether the SACCO evaluates risks before taking actions 37.8% strongly agreed 45.2% agreed thus a high percentage 80% agreed to this statement. 9.7% moderately agreed, 5.9% disagreed and 1.3 % strongly disagreeing to the statement. The third question respondents were asked on whether SACCO takes precautions before opening branches 50.7% strongly agreed 37% agreed thus a high

percentage 87.7% agreed to this statement. 5.1% moderately agreed, 4.7% disagreed and 2.5% strongly disagreeing to the statement, and as to if Instructions from clients thoroughly scrutinized before execution: 39.1% strongly agreed, 48.8% agreed with the statement, 11.8% moderately agreed, 3.2% disagreed and only 1.1% strongly disagreed.

And on the section on whether the organization performs compliance test before adopting new accounting principles, 26.8 strongly agreed and 51.4% agreed with it, 15.4 neither agreed nor disagreed with it, 5.1% disagreed and 1.3 strongly disagreed with the statement. On another statement if SACCO management has risk mitigation mechanism to avoid losses 43.6% strongly agreed with the statement with 32.4% agreeing to that, 18% neither agreed or disagreed, with 4.9% disagreeing and only 1.1% strongly disagreeing to the statement. When asked whether the SACCO has an operational risk management department 18.8% strongly agreed, 36.2% agreed 22.4% neither agreed nor disagreed, 20.9% disagreed with only 1.7% strongly disagreeing to the statement. And on whether there has been frequent escalation and reporting of risks in Sacco's departments 29.2% strongly agreed, 46.7% agreed, 14.6% neither agreed nor disagreed, 8.5% disagreed and only 1.1% strongly disagreed.

This research supports the work of Akimana (2019), who sought to determine the impact of internal controls on the financial performance of small and medium-sized businesses in Nairobi County, Kenya. 36.9% of the variance in financial performance can be ascribed to risk assessment, according to the data. Similarly, Ahmed and Nganga (2019) discovered a substantial and favorable relationship between risk assessments and financial success. The conclusion of the study was that risk identification and reduction had the greatest impact on the financial performance of county governments. As a result, risk identification is the

fundamental beginning point for every risk management program, as Counties cannot manage the unknown.

Additionally, Masha's (2018) research showed that risk assessment was highly correlated with the administration of financial resources. According to the data, internal control systems are a powerful indicator of sound financial management practices. Research by Kalmetova and Zhussupova (2021), which this one refutes, found that flaws in the bank's internal control system's risk management and information and communication infrastructure had a detrimental effect on the institution's performance.

4.5.2 Accounting Information and Communication Control

The second purpose was to discover how Saccos in Kenya would fare if they were subject to stricter controls over their accounting data and internal communications. This was accomplished by having respondents provide answers to a series of questions designed to elucidate the accounting data and communication regulation. All of the data for this measure was collected using a 5-point Likert scale, where 1 was a strong disagreement and 5 was a strong agreement. These results are presented in Table 4.10.

Table 4. 10: Accounting Information System

	5	4	3	2	1	Mean	Stdev
An accounting information System for collection and follow up for due accounts	55.8% (264)	29.2% (138)	8.7% (41)	2.7% (13)	3.6% (17)	4.3	1.0
SACCO Reporting system spells out responsibilities of each department	55.4% (262)	18% (85)	19.2% (91)	6.1% (29)	1.3% (6)	4.2	1.0
SACCO has policies and guidelines for effective communication	23.3% (110)	48.4% (229)	22.2% (105)	5.1% (24)	1.1% (5)	3.9	0.9
Management practice demands that all relevant information is conveyed in accurate, clear and reliable manner	33.4% (158)	45% (213)	14.6% (69)	5.7% (27)	1.3% (6)	4.0	0.9
SACCO ensures that all relevant information is conveyed in a timely manner	26.8% (127)	49.3% (233)	17.1% (81)	5.7% (27)	1.1% (5)	4.0	0.9
Management Provides feedback to employees on operation of accounting information system	29.2% (138)	55% (260)	9.5% (45)	5.3% (25)	1.1% (5)	4.1	0.8
Information can be disclosed to both internal and external interested parties	17.3% (82)	63% (298)	11.2% (53)	6.8% (32)	1.7% (8)	3.9	0.8
SACCO conducts periodic review of effectiveness of its accounting information system	29.6% (140)	53.3% (252)	6.1% (29)	10.4% (49)	0.6% (3)	4.0	0.9

Source: Field Data (2022)

On questionnaire on accounting information system section on whether there is accounting information System for collection and follow up for due accounts in their organization, 55.8% strongly agreed, 29.2% agreed, 8,7% neither agreed nor disagreed, 2.7% disagreed and 3.6% strongly disagreed. On the statement if SACCO Reporting system spells out responsibilities of each department, 55.4 % strongly agreed with the statement, 18 % agreed, 19.2% neither agreed nor disagreed, 6.1% disagreed and 1.3% strongly disagreed.

And on whether the SACCO has policies and guidelines for effective communication 23.3% of the respondents strongly agreed, 48,4% agreed, 22.2% neither agreed nor disagreed, 5.1% disagreed and 1.1% strongly disagreed. On the other hand when asked if Management practice in their organization demands that all relevant information is conveyed in accurate, clear and reliable manner 33.4% of the respondents strongly agreed, 45 % agreed, 14.6 % neither agreed nor disagreed, 5.7 % disagreed and 1.3 % strongly disagreed.

When asked whether their SACCO ensures that all relevant information is conveyed in a timely manner 26.8% of the respondents strongly agreed with the statement, 49.3 % agreed with it, 17.1 % neither agreed nor disagreed, 5.7 % disagreed and 1.1 % strongly disagreed. On the other hand when asked on whether the management of their organization provides feedback to employees on operation of accounting information system 29.2% of the respondents strongly agreed with the statement, 55 % agreed with it, 9.5 % neither agreed nor disagreed, 5.3 % disagreed and 1.1 % strongly disagreed.

On the statement whether Information can be disclosed to both internal and external interested parties, 17.3% of the respondents strongly agreed, 63 % agreed, 11.2% neither agreed nor disagreed, 6.8 % disagreed and 1.7% strongly disagreed. On whether the

SACCO conducts periodic review of effectiveness of its accounting information system 29.6% of the respondents strongly agreed with the statement, 53.3 % agreed with it, 6.1 % neither agreed nor disagreed, 10.4 % disagreed and 0.6 % strongly disagreed.

Results are comparable to Muhunyo and Jagongo (2018) who discovered that information and communication as indicators of internal control systems had a substantial impact on the financial performance of higher education institutions in Nairobi City County, Kenya. The variables accounted for 99.1 percent of the variance in the institutions' financial results. Accounting information systems are crucial, but other measures must also be employed to improve financial management, as demonstrated by Kendogor (2018).

Kisanyanya (2018) discovered that the studied institutions have efficient information and communication channels. The institutions possessed state-of-the-art means of communicating and sharing data, so data could be shared effectively, transactions could be recorded meticulously, and assets could be accounted for accurately. The study also indicated that better communication and information sharing improved institutions' financial responsibility and performance.

4.5.3 Monitoring and Control Activities

The study's third aim was to learn how Saccos in Kenya's financial performance is affected by monitoring and control operations. In order to gauge progress toward this goal, we asked respondents to rate their level of agreement with statements on the frequency, nature, and effectiveness of various monitoring and control activities performed by their Saccos. On a 5-point Likert scale, 1 indicated strong agreement and 5 indicated severe disagreement. These results are presented in Table 4.11.

Table 4. 11: Monitoring and Control

	5	4	3	2	1	Mean	Stdev
There is segregation of responsibilities on collections, general accountings and general ledger posting of record	40% (189)	26.6% (126)	27.3% (129)	4.9% (23)	1.3% (6)	4.0	1.0
Management has a strict supervisory role over operations	52.4% (248)	26% (123)	15.6% (74)	4.9% (23)	1.1% (5)	4.2	1.0
There is effective internal and external audit system of controls in the SACCO	46.7% (221)	31.5% (149)	15.9% (75)	4.9% (23)	1.1% (5)	4.2	0.9
Our SACCO has password access control	38.9% (184)	39.3% (186)	13.5% (64)	6.8% (32)	1.5% (7)	4.1	1.0
our SACCO carries out periodic counting of assets	10.6% (50)	53.3% (252)	30.7% (145)	4.4% (21)	1.1% (5)	3.7	0.8
Employees in the SACCO are responsible for security of all assets assigned to them	38.9% (184)	53.3% (252)	1.7% (8)	4.4% (21)	1.7% (8)	4.2	0.8
SACCO mgt. assigns responsibilities for timely review of audit reports and resolution of any non-compliance	41.4% (196)	49.3% (233)	3.8% (18)	4.4% (21)	1.1% (5)	4.3	0.8
Reconciliation is done on separate records to properly resolve any differences in the SACCO	54.1% (256)	30.4% (144)	10.6% (50)	3.6% (17)	1.3% (6)	4.3	0.9

Source: Field Data (2022)

On questionnaire on monitoring and control activities section when the respondents were asked on whether There is segregation of responsibilities on collections, general accountings and general ledger posting of record 40 % strongly agreed with the statement, 26.6 % agreed, 27.3 % neither agreed nor disagreed, 4.9 % disagreed and 1.3% strongly disagreed, On whether Management has a strict supervisory role over operations 52.4 % of the respondents strongly agreed with the statement, 26 % agreed, 15.6 % neither agreed nor disagreed, 4.9 % disagreed and 1.1% strongly disagreed,

On whether there is effective internal and external audit system of controls in the SACCO 46.7 % of the respondents strongly agreed with the statement, 31.5 % agreed, 15.9 % neither agreed nor disagreed, 4.9 % disagreed and 1.1% strongly disagreed, on the other hand, when the respondents were asked on whether there organization or SACCO has password access control 38.9 % of the respondents strongly agreed with the statement, 39.3 % agreed with the statement, 13.5 % neither agreed nor disagreed, 6.8 % disagreed and 1.5% strongly disagreed.

When the respondents were asked on whether there SACCO carries out periodic counting of assets 10.6 % of the respondents strongly agreed with the statement, 53.3 % agreed with the statement, 30.7 % neither agreed nor disagreed, 4.4 % disagreed and 1.1% strongly disagreed,

When asked about whether employees in the SACCO are responsible for security of all assets assigned to them 38.9 % of the respondents strongly agreed with the statement, 53.3 % agreed with the statement, 1.7 % neither agreed nor disagreed, 4.4 % disagreed and 1.7 % strongly disagreed, On whether the SACCO management assigns responsibilities for timely

review of audit reports and resolution of any non-compliance 41.4 % of the respondents strongly agreed with the statement, 49.3 % agreed with the statement, 3.8 % neither agreed nor disagreed, 4.4 % disagreed and 1.1% strongly disagreed.

When an inquiry is made on Reconciliation is done on separate records to properly resolve any differences in the SACCO 54.1 % of the respondents strongly agreed with the statement, 30.4 % agreed with the statement, 10.6 % neither agreed nor disagreed, 3.6 % disagreed and 1.3% strongly disagreed.

These results show that the Saccos had generally effective communication strategies, however this may not have translated into sufficient staff interaction. Management should report on the identification, capture, and flow of financial information, as determined by COSO (2014), who noted that open channels of communication are important to allow information to flow throughout the company and into the financial statements. Identifying, capturing, and disseminating relevant information in a suitable form and timing to achieve financial reporting objectives is what Gaskill (2010) calls the "information and communication component."

Many researches have found a positive correlation between information and communication and performance indicators. Information and communication are stressed by Mwazo et al. (2017) as being crucial to internal control systems. The examination of correlations showed that increased transparency and open lines of communication improved service delivery. Kiyieka and Muturi (2018) found a favorable correlation between SACCOs' ICT infrastructure and their financial performance in Kisii County through their research on deposit-taking SACCOs. Similar results about SACCOs were found by Nyakarimi and

Karwirwa (2015). Rather, research conducted on Commercial Bank of Africa found a negative correlation between IT frameworks and fraud prevention and control, suggesting that weak IT frameworks are linked to a higher incidence of fraud (Wanjohi, 2014).

4.5.4 Control Environment

The study's fourth goal was to examine how much of an impact the Control environment has on the financial results of Saccos in Kenya. Its impact was evaluated by having respondents evaluate a series of assertions about the impact of control environment utilization on financial performance at their respective Saccos. graded from 1 (strongly agree) to 5 (strongly disagree) on a 5-point Likert scale. These results are presented in Table 4.12.

Table 4. 12: Control Environment

	5	4	3	2	1	Mean	Stdev
There is adequate communication and enforcement of integrity and ethical values in our SACCO	40.8% (193)	32.6% (154)	22.4% (106)	3.2% (15)	1.1% (5)	4.1	0.9
There is enough participation in SACCO activities by those in governance	18.6% (88)	70.2% (332)	1.3% (6)	8.7% (41)	1.3% (6)	4.0	0.8
SACCO organization structure has well established lines of reporting and decision making hierarchies	24.5% (116)	49.7% (235)	21.6% (102)	3% (14)	1.3% (6)	3.9	0.8
There are formalized policies and procedures for all major operations of the SACCO	29% (137)	63.8% (302)	3.2% (15)	3% (14)	1.1% (5)	4.2	0.7
Our SACCO accounting records are limited to employees with designated responsibility for the records	45.9% (217)	41.4% (196)	8.2% (39)	3.2% (15)	1.3% (6)	4.3	0.8
Our SACCO conducts periodic stock taking in the presence of internal auditor	23.5% (111)	55.6% (263)	17.1% (81)	2.3% (11)	1.5% (7)	4.0	0.8
Our SACCO system access is only allowed to the authorized personnel	56.9% (269)	34% (161)	5.7% (27)	2.3% (11)	1.1% (5)	4.4	0.8
Employees in our SACCO are responsible for security of SACCO asset assigned to them	62.4% (295)	17.3% (82)	15.6% (74)	2.5% (12)	2.1% (10)	4.4	1.0

Source: Field Data (2022)

Integrity and ethical ideals are adequately communicated and upheld in our SACCO. The statement had a mean of 4.1 and a standard deviation of 0.8. Of the respondents, 40.8% strongly agreed with it, 32.6% agreed, 22.4% neither agreed nor disagreed, 3.2% disagreed, and 1.1% severely disagreed. Those in governance participate sufficiently in SACCO activities. 18.6% of respondents highly agreed with the statement, 70.2% agreed with the statement, 1.3% neither agreed nor disagreed, 8.7% disagreed, and 1.3% strongly disagreed, with a mean of 4.0 and standard deviation of 0.8.

According to the claim, the hierarchies of reporting and decision-making inside the SACCO organization are well-established. The statement had a mean of 3.9 and a standard deviation of 0.8. It was strongly agreed upon by 24.5% of respondents, agreed with by 49.7% of respondents, by 21.6% of respondents, and disagreed upon by 3% of respondents and 1.1% of respondents. Whether there are documented policies and procedures in place for all significant SACCO operations The statement's mean was 3.9 and its standard deviation was 0.8. Of the respondents, 29% strongly agreed with the statement, 63.8% agreed, 3.2% neither agreed nor disagreed, 3% disagreed, and 1.1% strongly disagreed.

Employees with authorized accountability for the records are the only ones who have access to our SACCO accounting records. According to the respondents, 45.9% strongly agreed with the statement, 41.4% agreed, 8.2% were undecided, 3.2% disagreed, and 1.3% severely disagreed. The statement's standard deviation was 0.7 and its mean was 4.2. Regarding the claim that our SACCO takes regular stock in the presence of an internal auditor. The statement had a mean of 4.3 and a standard deviation of 0.8. It was strongly agreed upon by 23.5% of respondents, agreed upon by 55.6% of respondents, by 2.3% of respondents, and strongly disagreed upon by 1.5% of respondents.

When asked whether employees in our SACCO are responsible for security of SACCO asset assigned to them 56.9 % of the respondents strongly agreed with the statement, 34 % agreed with the statement, 5.7 % neither agreed nor disagreed, 2.3 % disagreed and 2.1% strongly disagreed, the statement had a mean of 4.4 and standard deviation of 0.8. On the other hand, SACCO system access is only allowed to the authorized personnel 62.6 % of the respondents strongly agreed with the statement, 17.3 % agreed with the statement, 15.6 % neither agreed nor disagreed, 2.5 % disagreed and 2.1% strongly disagreed, The statement had a mean of 4.4 and standard deviation of 0.8.

Njiru (2016) observed a favorable association between internal controls environment, risk assessment, monitoring, information and communication, control activities, and financial performance of agro processing enterprises, which is consistent with the results of the present study. There is a positive correlation between internal control and HO financial success, as discovered by Eke (2018). According to the results of the research, the control environment has a significant impact on a company's bottom line, and its absence or inadequacy could lead to the company's demise. Internal control environment was found to have a substantial correlation with financial performance by Kinyua, Gakure, Gekara, and Orwa (2018).

4.5.5 SASRA regulatory framework

The final purpose of the study was to ascertain the moderating effect of regulatory framework on the association between internal accounting control system and financial performance of Saccos in Kenya..

This objective was tested by requesting responses to several statements detailing the regulatory structure of SASRA. On a 5-point Likert scale, 1 indicated strong agreement and 5 indicated strong disagreement. These results are presented in Table 4.13.

Table 4. 13: SASRA Regulation

	5	4	3	2	1	Mean	Stdev
Minimum capital (core capital-10m ksh. not less than 8%total assets, Institution capital Not<8% of Total Assets)	57.5% (272)	26.8% (127)	9.9% (47)	4.9% (23)	0.8% (4)	4.4	0.9
SACCO maintains 15% of its savings, deposits and short term liabilities in liquid assets	43.3% (205)	45% (213)	8.7% (41)	2.5% (12)	0.4% (2)	4.3	0.8
SACCO has a written credit policy that is consistent with provisions of the SASRA Act	55.2% (261)	31.9% (151)	8.9% (42)	3% (14)	1.1% (5)	4.4	0.8
External borrowing in our SACCO does not exceed 25% of its total assets	57.3% (271)	27.5% (130)	9.5% (45)	5.3% (25)	0.4% (2)	4.4	0.9
Our SACCO adheres to minimum capital requirements in regards to core capital and Institutional capital	46.3% (219)	38.5% (182)	11.8% (56)	3% (14)	0.4% (2)	4.3	0.8
Our SACCO reviews its credit portfolio at least once every quarter year	36.4% (172)	35.3% (167)	19.5% (92)	8.2% (39)	0.6% (3)	4.0	1.0

Our SACCO does not invest in non-earning assets in excess of 10% of the total assets	31.7% (150)	40.2% (190)	11.4% (54)	15.6% (74)	1.1% (5)	3.9	1.1
Our SACCO adheres to financial performance reporting that is Daily, Monthly, Quarterly and Annually.	64.9% (307)	21.1% (100)	10.6% (50)	2.1% (10)	1.3% (6)	4.5	0.9
Our Sacco is Licensed to protect the interest of members	65.5% (310)	17.8% (84)	14.2% (67)	2.1% (10)	0.4% (2)	4.5	0.8

Source: Field Data (2022)

When asked in on SASRA regulation whether minimum capital (core capital-10m ksh. not less than 8%total assets, Institution capital Not<8% of Total Assets) 57.3 % of the respondents strongly agreed with the statement, 27.5 % agreed with the statement, 9.5 % neither agreed nor disagreed, 5.3 % disagreed and 0.4% strongly disagreed, the statement had a mean of 4.4 and standard deviation of 0.9. When asked whether SACCO maintains 15% of its savings, deposits and short term liabilities in liquid assets 46.3 % of the respondents strongly agreed with the statement, 38.5 % agreed with the statement, 11.8 % neither agreed nor disagreed, 3 % disagreed and 0.4% strongly disagreed, the statement had a mean of 4.3 and standard deviation of 0.8.

When asked whether SACCO has a written credit policy that is consistent with provisions of the SASRA Act 55.2 % of the respondents strongly agreed with the statement, 31.9 % agreed with the statement, 8.9 % neither agreed nor disagreed, 3 % disagreed and 1.1% strongly disagreed, the statement had a mean of 4.4 and standard deviation of 0.8. When

asked whether External borrowing in our SACCO does not exceed 25% of its total assets 57.3 % of the respondents strongly agreed with the statement, 27.5 % agreed with the statement, 9.5 % neither agreed nor disagreed, 5.3 % disagreed and 0.4% strongly disagreed, the statement had a mean of 4.4 and standard deviation of 0.9.

On the other hand, when asked if Our SACCO adheres to minimum capital requirements in regards to core capital and Institutional capital 46.3 % of the respondents strongly agreed with the statement, 38.5 % agreed with the statement, 11.8 % neither agreed nor disagreed, 3 % disagreed and 0.4 % strongly disagreed, the statement had a mean of 4.3 and standard deviation of 0.8. If the SACCO reviews its credit portfolio at least once every quarter year 36.4 % of the respondents strongly agreed with the statement, 35.3 % agreed with the statement, 19.5 % neither agreed nor disagreed, 8.2 % disagreed and 0.6 % strongly disagreed, the statement had a mean of 4.0 and standard deviation of 1.0

When the respondent was asked if Our SACCO does not invest in non-earning assets in excess of 10% of the total assets 31.7 % of the respondents strongly agreed with the statement, 40.2 % agreed with the statement, 11.4 % neither agreed nor disagreed, 15.6 % disagreed and 1.1% strongly disagreed, the statement had a mean of 3.9 and standard deviation of 1.1. while whether the SACCO adheres to financial performance reporting that is Daily, Monthly, Quarterly and Annually 64.9 % of the respondents strongly agreed with the statement, 21.1 % agreed with the statement, 10.6 % neither agreed nor disagreed, 2.1 % disagreed and 1.3% strongly disagreed, the statement had a mean of 4.5 and standard deviation of 0.9.

Whether the Sacco is licensed to protect the interest of members 65.5 % of the respondents strongly agreed with the statement, 17.8 % agreed with the statement, 14.2 % neither agreed nor disagreed, 2.1 % disagreed and 0.4 % strongly disagreed, the statement had a mean of 4.5 and standard deviation of 0.8. The findings are in line with the study conducted by Nyakarimi, Kariuki and Wangâ (2019) set out to determine if there is a moderating influence of government restrictions on the connection between internal accounting control system and fraud prevention in the baking sector. According to the research's conclusions, regulatory frameworks significantly moderate the relationship between control environment and risk assessment. Mugo, Muathe, and Waithaka (2017) aimed to assess the moderating effect of government regulations on the association between mobile technology services and performance of Deposit-Taking Savings and Credit Cooperative Societies (SACCOs) in Kenya. The research concluded that government regulations positively moderate the connection between mobile technology services and the success of Deposit-Taking SACCOs.

Muturi (2019) set out to investigate how government rules in Kenya affect the connection between mortgage contract terms and the performance of real estate enterprises. The results showed that government regulations played a substantial moderating role in the connection between mortgage contract terms and the success of Kenyan real estate companies. In Chuol, Wanyama, and Chebet's (2021) study of the relationship between SME financial performance and strategic planning methods in Juba, South Sudan, they attempted to determine the moderating impact of government restrictions. The results showed that neither strategic planning nor strategic formulation techniques moderated the association between financial performance and financial performance among SMEs in Juba, South Sudan.

Chacha, Nyangau, and Omare (2021) looked into how government regulation of logistics affects the effect of supply chain collaboration on the performance of dry port firms. The findings demonstrated that the government's regulation of logistics played a beneficial and significant contribution in reducing the performance impact of supply chain collaboration for dry port firms. This study elaborated on the implications and limitations of the results.

4.5.6 Financial Performance

This study aimed to determine the impact of internal accounting controls on the financial performance of Saccos in Kenya. This was the dependent variable, and it was examined by requesting responses to statements detailing the financial position of the respondents' Saccos. This variable's status was evaluated using a 5-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). These results are presented in Table 4.14.

Table 4. 14: Financial Performance

Financial Performance	5	4	3	2	1	Mean	Stdev
1. Number of Members	37.6% (178)	51.4% (243)	3.4% (16)	6.3% (30)	1.3% (6)	4.2	0.9
2. Gross Income	38.3% (181)	52.6% (249)	5.3% (25)	3.4% (16)	0.4% (2)	4.2	0.7
3. Share Capital	42.9% (203)	52.4% (248)	0.4% (2)	4.2% (20)	0% (0)	4.3	0.7
4. Members Deposit	40.6% (192)	49.7% (235)	5.5% (26)	3% (14)	1.3% (6)	4.3	0.8
5. Interest on Deposit	26.6% (126)	52.2% (247)	19.5% (92)	1.3% (6)	0.4% (2)	4.0	0.7
6. Rate of Revert	20.9% (99)	54.1% (256)	17.8% (84)	5.1% (24)	2.1% (10)	3.9	0.9

7. Rate of Dividend	26.2%	43.3%	22.4%	6.3%	1.7%		
	(124)	(205)	(106)	(30)	(8)	3.9	0.9

Source: Field Data (2022)

Results in Table 4.14 indicated that number of members had a mean of 4.2 and standard deviation of 0.9. The results further indicated that 37.6% of the respondents strongly agreed and 51.4% of them agreed on the membership of their Saccos increasing. However, 3.4% neither agree or disagree, 6.3% disagree and 1.3% strongly disagree. On the other hand, gross income had a mean of 4.2 and standard deviation of 0.7. This was further supported by 38.3% of the respondents who strongly agreed and 52.6% agreed that gross income has increased. However, 5.3% of the respondents neither agree or disagree, 3.4% disagree and 0.4% disagreed on the same.

The results also revealed that share capital had a mean of 4.3 and standard deviation of 0.7. This was also supported by 52.4% of the respondents who agreed and 42.9% who strongly agreed that share capital has increased. On the other hand, 0.4% of the respondents neither agree or disagree, 4.2% disagreed and none of the respondents strongly disagreed. Similarly, member's deposit had a mean of 4.3 and 0.8. This further confirmed by 40.6% of the respondents who strongly agreed and 49.7% who strongly agreed that member's deposit has increased while 5.5% of the respondents neither agreed or disagreed, 3.0% disagreed and 1.3% strongly disagreed.

Interest on deposit had a mean of 4.0 and standard deviation of 0.7. This was further supported by 52.2% of the respondents who agreed and additional 26.6% of the respondents who strongly agreed that interest on deposit has increased. However, 19.5% of the

respondents neither agreed nor disagreed, 1.3% disagreed and 0.4% strongly disagreed on the same. The results also revealed that rate of revert had a mean of 3.9 and standard deviation of 0.9. This was further supported by 54.1% of the respondents who agreed and 20.9% of strongly agreed on rate of revert while 17.8% neither agreed or disagreed, 5.1% disagreed and 2.1% strongly disagreed on the same. Similarly, rate of dividend had a mean of 3.9 and standard deviation 0.9. This was also supported by 43.3% of the respondents who agreed and 26.2% of the respondents who strongly agreed that rate of dividend has increased. However, 22.4% of the respondents neither agreed nor disagreed, 6.3% disagreed and 17% strongly disagreed.

These results point to improvements in the Saccos' financial standing, but they also show that many liabilities remain, most likely due to underperforming or non-performing assets. According to the data, the Sacco sub-sector in this country has grown rapidly over the past few years, corroborated by the findings of Kimani (2017). A recent study by ICA (2017) found that Saccos mobilized % of total national savings. As a result, the Saccos will be an important actor in the implementation of Kenya's Vision 2030 and will continue to play a significant role in mobilizing financial resources (ICA, 2017).

Similarly, research on the impact of internal control systems on Mombasa Teachers Sacco Limited's credit business performance found a positive correlation between the two. Another study that looked at commercial banks was conducted by Muthusi (2017), who looked into how internal controls affected the banks' bottom lines. Commercial bank performance was found to be positively and significantly impacted by the control environment, according to regression analysis. Muhunyo and Jagongo (2018) came to similar conclusions on the

impact of the control environment on the financial performance of universities and colleges in Nairobi County.

4.6 Inferential Results for Primary Data

This section presents the results, correlation analysis where the relationships between the dependent variable Financial performance and the independent variables represented by the Risk assessment, accounting information system, monitoring and control and control environment was presented. Regression was done first for each individual independent variable with performance then multiple regressions.

4.7 Correlation Analysis

This sub section presents the results, correlation analysis where the relationships between the dependent variable Financial performance and the independent variables represented by the Risk assessment, accounting information system, monitoring and control and control environment was presented.

4.7.1 Correlation for Risk assessments

The first objective of the study sought to examine the effect of risk assessments on financial performance of Sacco's in Kenya. The study presented inferential statistics which include Pearson Correlation Analysis.

Table 4. 15: Correlation for Risk assessments

		Risk Assessments	Financial Performance
Risk assessments	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	473	
Financial Performance	Pearson Correlation	.764**	1
	Sig. (2-tailed)	.000	
	N	473	473

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

Source: Field Data (2022)

From the table 4.15 above showed that risk assessment was positively correlated to Financial performance ($r=0.764$, $p < 0.01$) and it was significant at 99% confidence level thus increase in risk assessments makes financial performance to increase. Research by other scholars, such as Akimana (2019), which establishes the impact of internal controls on the financial performance of SMEs in Nairobi County, Kenya, agrees with these results. According to the results, there is a positive and statistically significant correlation between risk evaluation and economic output. Hanoon, Khalid, Rapani, Aljaway, and Al-Waeli (2021) discovered a similar positive significant link between risk assessment and financial performance in the Iraqi banking sector, lending credence to the previous research.

While Sigilai (2017) looked at the impact of internal control mechanisms on revenue collection at Nakuru Level Five Hospital, our data contradict his conclusions. Research conducted at Nakuru Level Five Hospital found that risk assessment influences revenue collection in a positive, but not statistically significant, way.

Internal management controls and the effectiveness of commercial banks' service delivery were also studied by Serem (2016).

The study revealed that risk assessment has positive and insignificant effect on efficiency of service delivery of commercial banks in Kenya.

4.7.2 Correlation for Accounting Information and Communication Control

The second objective of the study sought to determine the effect of accounting information and communication control on financial performance of Sacco's in Kenya. The study presented inferential statistics which include Pearson Correlation Analysis.

Table 4. 16: Correlation for accounting information system

		Accounting information system	Financial Performance
Accounting information system	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	473	
Financial Performance	Pearson Correlation	.661**	1
	Sig. (2-tailed)	.000	
	N	473	473

Source: Field Data (2022)

From the table 4.16 above it shows that accounting information system was positively correlated to financial performance ($r=0.661$, $p < 0.01$) and it was significant at 99% confidence level thus increase in accounting information system makes financial performance to increase. Results are consistent with those found by Muhunyo and Jagongo (2018), who set out to determine the impact of internal control systems on the financial performance of public universities in Nairobi County. The research found that the financial performance of universities and colleges in Nairobi City County, Kenya was significantly affected by information and communication as indicators of internal control systems. In addition, Kendogor (2018) demonstrated that an improvement in financial management was associated with an increase in accounting information system, demonstrating the importance of accounting information systems while also requiring the application of additional strategies to improve financial management.

While some research has found a correlation between the use of an accounting information system and improved financial performance, other studies have found the opposite to be true. Internal control system implications on revenue collection at Nakuru Level Five

Hospital were the primary topic of Sigilai's (2017) research. Based on the findings, it can be concluded that the Nakuru Level Five Hospital's accounting information system has a negative and negligible impact on the institution's revenue collection. Internal controls were analyzed by Ng'etich (2017), who looked at how they affected the financial results of companies traded on the Nairobi Securities Exchange. In this study, we found that accounting information systems have a positive and statistically insignificant effect on the financial performance of companies trading on the Nairobi Securities Exchange.

4.7.3 Correlation for Accounting Information and Communication Control

The third objective of the study sought to determine the effect of monitoring and control activities on financial performance of Sacco's in Kenya. The study presented inferential statistics which include Pearson Correlation Analyses.

Table 4. 17: Correlation for Monitoring and control activities and Financial performance

		Monitoring and control activities	Financial Performance
Monitoring and control activities	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	473	
Financial Performance	Pearson Correlation	.656**	1
	Sig. (2-tailed)	.000	
	N	473	473

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

Source: Field Data (2022)

From the table 4.17 above it shows that monitoring and control activities was positively correlated to financial performance ($r=0.656^{**}$, $p\text{-value}<0.01$) and it was significant at 99% confidence level thus increase in monitoring and control activities makes financial performance to increase. The findings showed a positive relationship between monitoring and control activities and financial performance. This study bolsters the work of Segun, Kehinde, and Alice (2020), who looked into the connection between Osun state deposit money banks' internal control systems and their financial performance. According to the results, monitoring has a favorable impact on the liquidity and solvency of deposit money banks. In addition, the study is corroborated by the findings of Jeanne (2019), who discovered a positive correlation between monitoring and control and monetary output, and who consequently stated that RSSB solvency still requires enhancement.

Nonetheless, the study ran counter to the findings of other researchers, such as Ambuso (2021), who looked at how internal controls affected the financial success of Kenya's cement manufacturers. The research showed that monitoring activities have a small and unfavorable impact on the bottom lines of private hospitals in Kenya's Western Region. Sigilai (2017) also found that the monitoring and control actions at Nakuru Level Five Hospital positively and marginally impacted revenue collection. Asiligwa and Rennox (2017) found that the financial performance of commercial banks in Kenya is negatively impacted by monitoring and control efforts.

4.7.4 Control environment and Financial Performance

The fourth objective of the study sought to determine the effect of Control environment on financial performance of Sacco's in Kenya. The study presented inferential statistics which include Pearson Correlation Analysis.

Table 4. 18: Correlation for Control environment

		Control Environment	Financial Performance
Control	Pearson Correlation	1	
Environment	Sig. (2-tailed)		
	N	473	
Financial	Pearson Correlation	.731**	1
Performance	Sig. (2-tailed)	.000	
	N	473	473

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

Source: Field Data (2022)

From the table 4.18 above it showed that control environment was positively correlated to financial performance ($r=0.731$, $p < 0.01$) thus significant at 99% confidence level thus increase in control environment makes financial performance to increase in the same direction. These results have been supported by other studies investigating relationship between control environment and financial performance. Kinyua (2018) stated that there was a substantial correlation between internal control environment and financial performance and suggests that the internal control environment of companies listed on the Nairobi Securities Exchange be strengthened to further improve their financial performance. A good correlation between a financial institution's financial performance and its internal control system (control environment) was discovered in a study conducted by Khamis (2013). Mawanda (2018) used a case study of Uganda Martyrs University to show that the control environment at the university correlates positively with the university's financial performance.

However, there are studies that have indicated the opposite. Such as. Internal control system implications on revenue collection at Nakuru Level Five Hospital were the primary topic of Sigilai's (2017) research. The results of the study showed that risk assessment at Nakuru Level Five Hospital has a negligible impact on revenue collection due to the hospital's well-controlled environment. Ambuso (2021), who studied Kenya's cement industry, found a correlation between strong internal controls and increased profits. According to the results, the control environment has a small but detrimental impact on the bottom lines of private hospitals in Kenya's Western Region.

4.7.5 Overall Correlation Analysis

Linearity in the relationship between the variables was tested using a correlation analysis. Coefficients of correlation can take on values between -1 and 1, with +1 indicating an absolutely positive association between the variables and -1 indicating an absolutely negative one. If the value of the correlation coefficient is zero, then there is no connection between the variables. The correlation coefficient is considered to be very weak when it falls within the range of 0.0 to 0.19, weak when it falls within the range of 0.20 to 0.39, moderate when it falls within the range of 0.40 to 0.59, strong when it falls within the range of 0.60 to 0.79, and very strong when it falls within the range of 0.80 to 1.0. In the research, we used Pearson's product-moment correlation. In this study, we used the correlation coefficient to look for evidence of a connection between the study's predictor factors and its response variable (financial performance) (Internal Accounting Control). The pertinent results are summarized in Table 4.19.

Table 4. 19: Correlations Table.

		RA	AIS	MCA	CE	SRF
Risk	Pearson Correlation	1				
Assessment	Sig. (2-tailed)					
	N	473				
Accounting	Pearson Correlation	.724**	1			
Information	Sig. (2-tailed)	.000				
System	N	473	473			
Monitoring	Pearson Correlation	.727**	.706**	1		
& Control	Sig. (2-tailed)	.000	.000			
Activities	N	473	473	473		
Control	Pearson Correlation	.846**	.678**	.692**	1	
Environment	Sig. (2-tailed)	.000	.000	.000		
	N	473	473	473	473	
SASRA	Pearson Correlation	.653**	.636**	.732**	.639**	1
Regulations	Sig. (2-tailed)	.000	.000	.000	.000	
	N	473	473	473	473	473
Financial	Pearson Correlation	.764**	.661**	.656**	.731**	.717**
Performance	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	473	473	473	473	473

Source: Field Data (2022)

From the correlation table 4.19, risk assessments (RA) was positively correlated to financial performance the coefficient was 0.764 (p value < 0.01) this was significant at 99% confidence level. Thus increase in risk assessments make financial performance to increase in same direction. Umar and Dikko (2018) investigated at how a company's internal control system affected the bottom line of Nigerian manufacturing firms listed on the stock market, and their findings corroborate these findings.

Financial performance of industrial companies listed in Nigeria demonstrated a strong and favorable influence of risk management. However, research by Lagat (2018) showed that the financial performance of Kenya's state-owned sugar companies improved after risk assessments were implemented.

There is a statistically significant positive relationship between an accounting information system and financial success (coefficient = 0.661, p value <0.01). As a result, a better accounting information system correlates positively with improved financial results. Nguyen's (2021) analysis of the impacts of internal control on the performance of pharmaceutical companies lends credence to these findings and provides further empirical proof of the benefits of strong internal control. Based on the data, it is clear that information and communication are the most influential aspects in the success of the pharmaceutical industry. Though Mogunde (2016) examined at how internal controls affected the financial performance of Kenya's cement manufacturers, his findings contradict those of the present study. Based on the results, it can be concluded that the accounting information system has a favorable and negligible impact on the financial performance of cement manufacturing enterprises in Kenya.

The coefficient for the correlation between monitoring and control activities and financial performance was 0.656 (p value <0.01), which was statistically significant at the 99% confidence level. Therefore, a rise in monitoring and control activities leads to an increase in financial performance in the same direction. The results were consistent with Julie (2019) investigated the impact of internal control measures on the financial performance of agro-processing companies in Kisumu, Kenya. The regression model revealed a positive association between internal controls monitoring and the financial performance of agro

processing companies. Matata (2015), who evaluated the effect of internal controls on the performance of water firms in Kenya, contradicts these findings. The study found that monitoring and control operations have a positive and negligible effect on the financial performance of Kenyan commercial banks.

The coefficient for the relationship between control environment and financial performance was 0.731 (p value <0.01), which was statistically significant at the 99% confidence level. Therefore, when the Control environment improves, so does the financial performance. Muhunyo and Jagongo (2018) aimed to determine the impact of internal control systems on the financial performance of public higher education institutions in Nairobi City County. The study revealed that the control environment has a substantial impact on the financial performance of higher education institutions in Nairobi County, Kenya. Ng'etich (2017), however, found that control environment has a positive and insignificant effect on financial performance of enterprises listed on the Nairobi Securities Exchange by analyzing the correlation between the two.

The coefficient for the correlation between SASRA regulation and financial success was 0.717 (p 0.01), which was statistically significant at the 99% confidence level. Thus, an increase in SASRA regulations leads to an increase in financial performance in the same direction. Buluma, Kung'u, and Mungai (2017) studied the impact of SASRA laws on the financial performance of deposit-taking Saccos in Kenya's Nyandarua County. The study indicated that cooperatives fully comply with SASRA requirements and that there is a substantial positive link between SASRA regulations and financial performance and ROA at a 95% confidence level. Beine (2018), on the other hand, aimed to determine the connection between the internal control system and the financial performance of the ECOBANK in

Rwanda. The regulatory framework has no statistically significant impact on commercial banks' internal control systems, and the central bank has no statistically significant impact on the internal control systems of commercial banks.

4.8 Tests for Regression for Primary Data

4.8.1 Autocorrelation Test

The Durbin-Watson test was used to examine the assumption of independence between observations and error factors. The Durbin-Watson test looked to see if the models' residuals were independent of each other, which is one of the main ideas behind regression analysis (Akter, 2014).

Table 4. 20: Autocorrelation Test

Std. Error of the Estimate	Durbin-Watson
.20106	1.513

Source: Field Data (2022)

Table 4.20 displays the outcomes of an auto-correlation test, which checks the independence of the residuals from a linear regression. If the Durbin-Watson value is close to 2, there is no serial correlation (Alsaeed, 2005 Cameron, 2005; Curwin & Slater, 2008; Garson, 2012). A Durbin-Watson test was applied to the residuals of the data collected by Ogundipe, Idowu, and Ogundipe (2012). According to their findings, the data residuals did not demonstrate any autocorrelation (Durbin-Watson coefficient value of 1.961; range: 1.5–2.5). Table 4.15

shows that the Durbin-Watson value is 1.513, which is between 1.5 and 2.5 and hence not an autocorrelation problem.

4.8.2 Multi-collineality Test

In cases of multi-collinearity, significant correlations exist between multiple independent variables. The instability of the regression coefficient, and hence its use as an indicator of predictor variables, arises from an increase in multi-collinearity (Cooper & Schindler, 2011). Variance inflation factors (VIFs) or tolerance values were used to examine multi-collinearity.

Table 4. 21: Collineality Statistics

Independent variable	Tolerance	VIF
Risk assessment	.228	4.378
Accounting information system	.403	2.482
Monitoring and control activities	.394	2.540
Control environment	.268	3.726

Dependent variable: Financial performance

Source: Field Data (2022)

Table 4.21 displays the results of a test for multi-collinearity, which is present when there is a close relationship between three or more previously unrelated variables. The coefficient of regression fluctuates and becomes harder to interpret when multi-collinearity is high (Cooper & Schindler 2011). Taking off a correlated independent variable or variables from a regression model is one way to deal with multicollinearity (Lind, Marchal & Wathen, 2008).

Values of variance inflation factors (VIFs) or tolerance intervals were used to check for multi-collinearity. As a general rule, multi-collinearity is not an issue when the VIF number is less than 10, or when the tolerance value is less than 1.

4.8.3 Homoscedastic Test of Financial performance

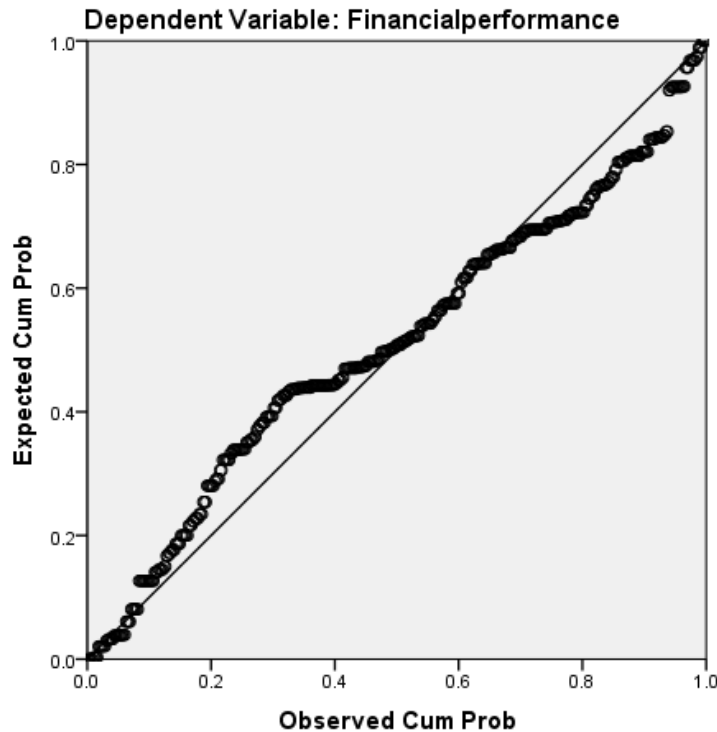


Figure 4. 4: Homoscedastic Test of Financial performance

Source: Field Data (2022)

The above figure 4.4 for the p-p plot demonstrates the results of the Homoscedasticity test, which determines whether or not independent variables have the same variance; if not, there will be a heteroscedasticity issue. The residual variance in a regression model can be tested with a homoscedasticity test. Homoscedasticity of data is represented by the probability versus probability plot (P-P Plot) (Park, 2008). Financial performance is shown on a standard P-P plot, where the points deviate only slightly from a straight line.

Since there was no evidence of heteroscedasticity in the data, a multiple linear regression model was utilized for the analysis.

4.8.4 Normality test.

Parametric procedures like correlation, regression, analysis of variance, and t-test sometimes rely on the incorrect assumption of a Gaussian or normal distribution, which is widespread in the published literature. It is impossible to reach a solid judgment if this presumption does not hold. The normality of test results is assumed to be constant throughout the Shapiro-Wilk procedure. After Lilliefors correction, the Shapiro-Wilk test yields a higher power. In their paper, Ghasemi and Zahedias (2012) argue that the Kolmogorov-Smirnov test is widely used because it is particularly sensitive to extreme values and because the Lilliefors correction makes it less conservative. This method of assessing normality has low power and should be disregarded for estimating parameters from data, regardless of the size of the sample. It is recommended that visual inspection of data be used to determine whether or not it is normal, as Kolmogorov-Smirnov has a low level of statistical significance. Table 4.22 shows that when the Kolmogorov-Smirnov test and the Shapiro-Wilk test are performed, the null hypothesis that the data sets for the seven variables are not normally distributed is rejected at the <0.05 level of significance. Elliot and Woodward (2007) concur that parametric techniques may be utilized even if the data are not regularly distributed.

Table 4. 22 :Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Risk Assessment	.172	473	.000	.861	473	.000
Monitoring and Control Activities	.173	473	.000	.819	473	.000
Accounting Information System	.229	473	.000	.825	473	.000
Control Environment	.150	473	.000	.866	473	.000
SASRA Regulation	.157	473	.000	.847	473	.000
Financial Performance	.160	473	.000	.861	473	.000

a. Lilliefors Significance Correction

Source: Field Data (2022)

Normality should be evaluated visually, as suggested by Ghasemi and Zahedias (2012) in their paper Normality tests for statistical analysis, a guide for non-statisticians. There should be no serious issues with large samples (> 30 or 40) if the normalcy assumption is violated (Oztuna, Elhan & Tuccar, 2006). As a result, we can employ parametric techniques, as the sampling distribution tends to be normal in relatively large samples (30 or 40). Figure 4.5 shows a normally distributed Q-Q plot of accounting information systems, indicating that the departure from normalcy is not as large as would be expected from an approximation to the line of fit. As a result, the data was sufficiently close to normal for use in a regression analysis.

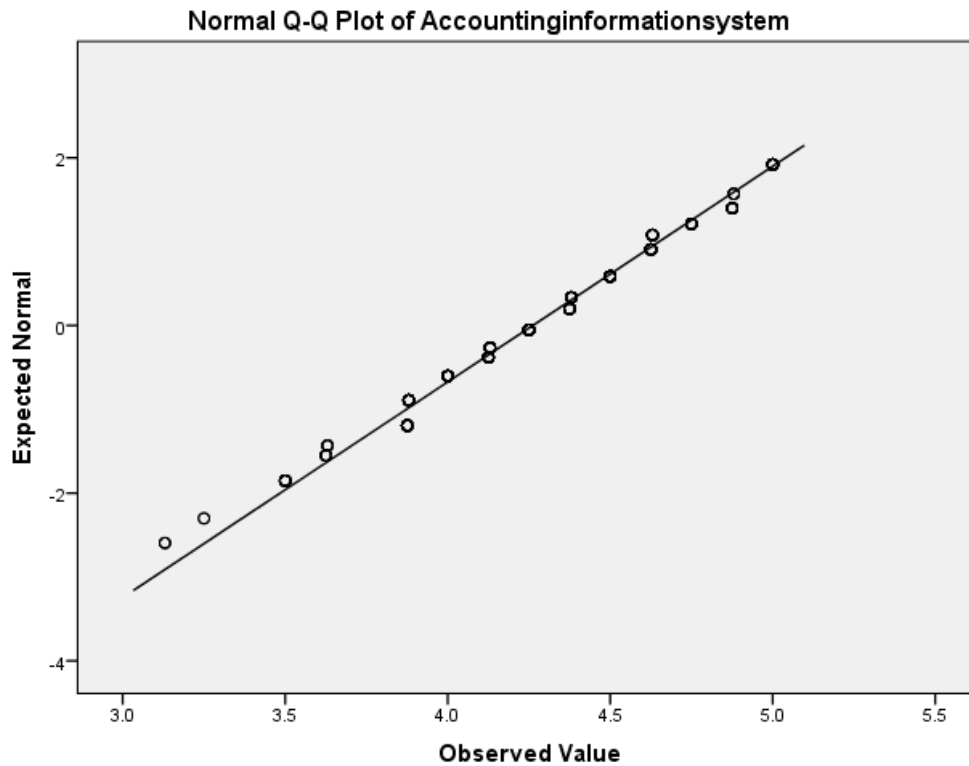


Figure 4. 5: Normal Q-Q plot of accounting information system

Source: Field Data (2022)

Figure 4.6, displayed beneath the typical Q-Q plot of monitoring and control activities, demonstrates that the deviation from normality from the approximate line of fit on the Q-Q plot was minimal. Parametric techniques in correlation, regression, analysis of variance, and t-test can be used on the data because it is reasonable to infer that the data are close to normal.

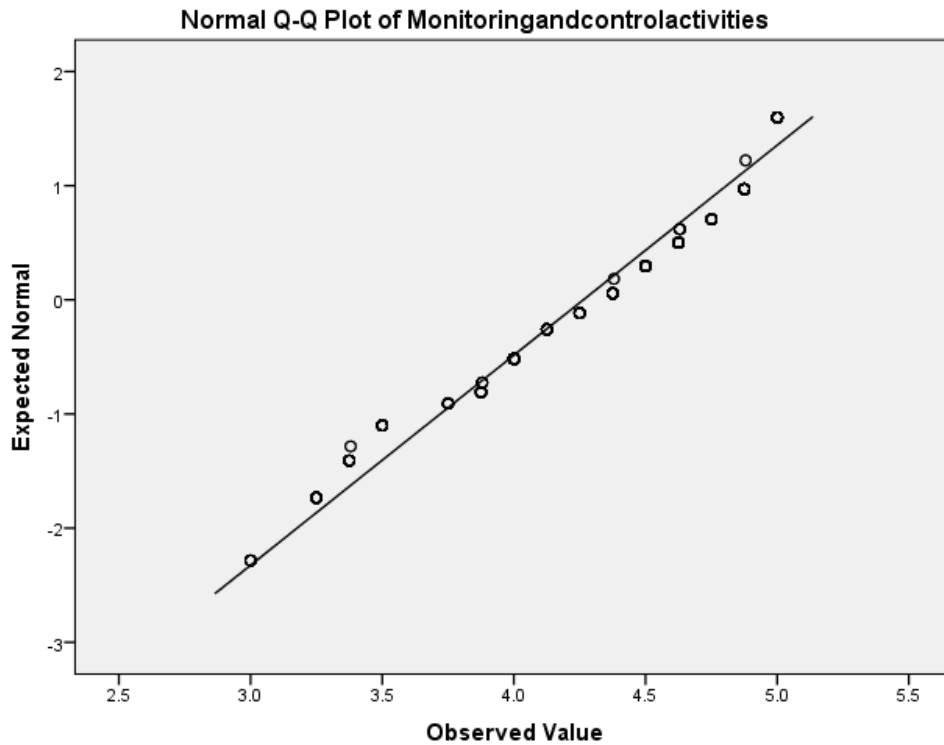


Figure 4. 6: Normal Q-Q plot of monitoring and control activities

Source: Field Data (2022)

According to Figure 4.7 Normal Q-Q plot of the control environment, the deviation from normality from the approximate line of fit on the Q-Q plot was minimal. On the assumption that the data are close to normal, parametric correlation, regression, analysis of variance, and t-test techniques can be applied.

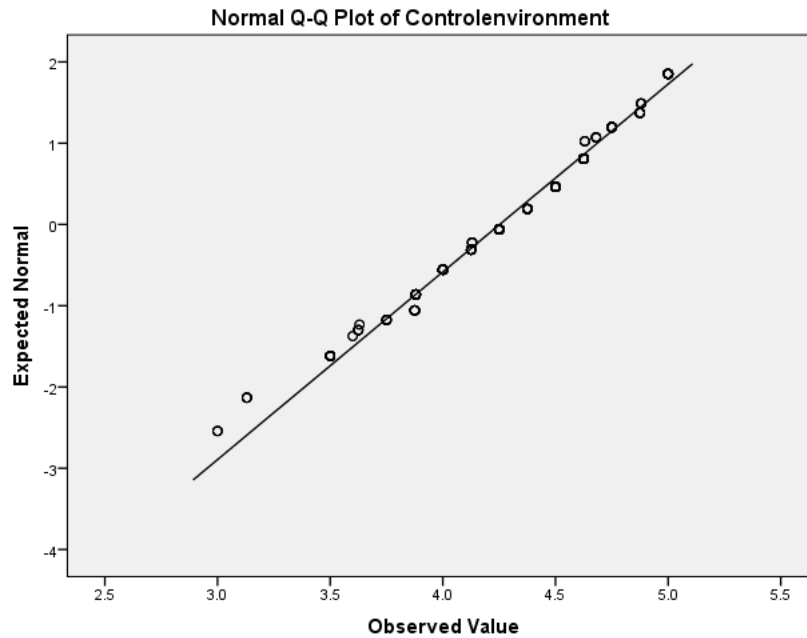


Figure 4. 7: Normal Q-Q plot of control environment

Source: Field Data (2022)

From Figure 4.8 Normal Q-Q plot of SASRA regulatory framework below, the deviation from normality was minimal based on the line of best fit. Consequently, the data was close to a normal distribution and could be utilized in a regression analysis.

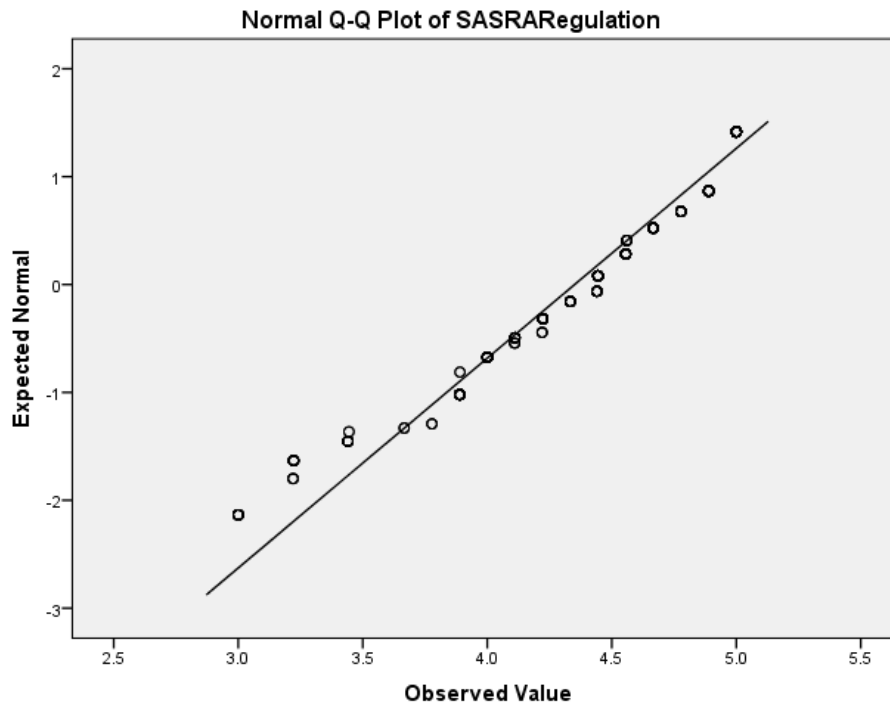


Figure 4. 8 Normal Q-Q plot of SASRA regulatory framework

Source: Field Data (2022)

From Figure 4.9 Normal Q-Q plot of bank SASRA regulatory framework, the deviation from normality from the Q-Q plot's approximate line of fit is modest. On the assumption that the data are close to normal, parametric correlation, regression, analysis of variance, and t-test techniques can be applied.

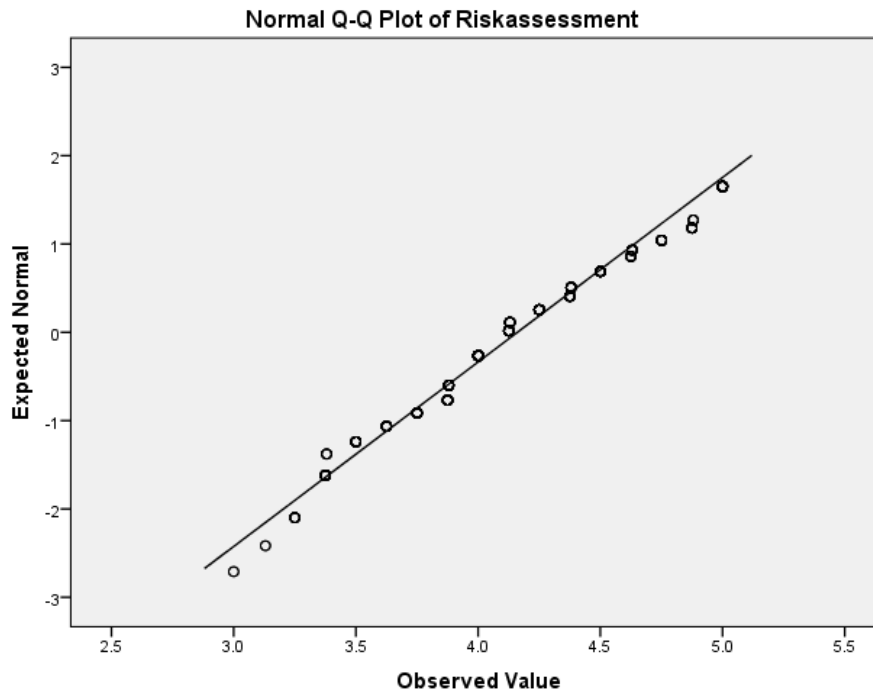


Figure 4. 9: Normal Q-Q plot of bank SASRA regulatory framework

Source: Field Data (2022)

Figure 4.10 Normal Q-Q plot of risk assessments indicates that the divergence from normalcy was not as great as the deviation from the line of best fit. Therefore, the data was close to a normal distribution and could be utilized for regression analysis.

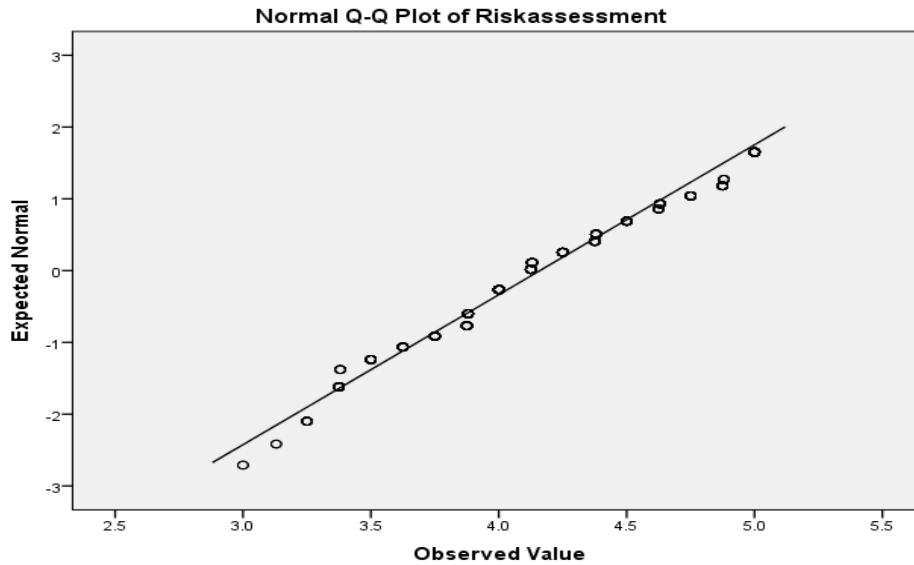


Figure 4. 10: Normal Q-Q plot of risk assessments

Source: Field Data (2022)

Figure 4.11 Normal Q-Q plot of financial performance indicates that the deviation from normalcy was not as great as the deviation from the line of best fit. Therefore, the data was close to a normal distribution and could be utilized for regression analysis.

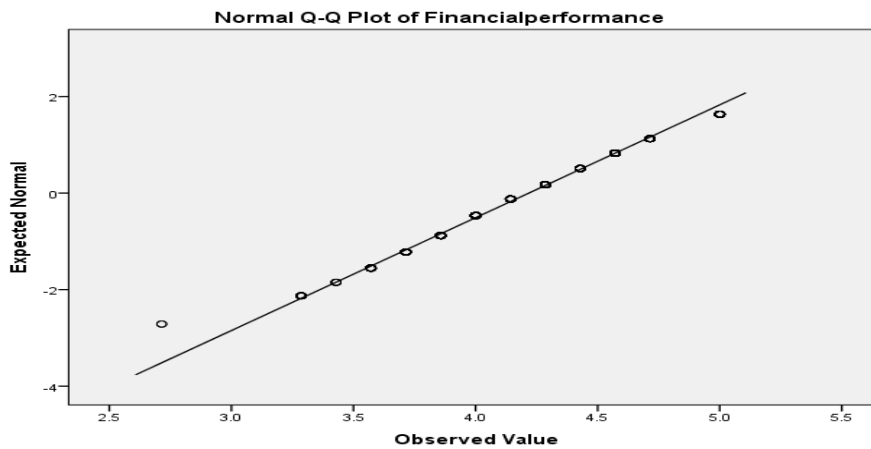


Figure 4. 11: Normal Q-Q plot of financial performance

Source: Field Data (2022)

4.9 Simple Linear Regression

This study aimed to determine the impact of internal accounting controls on the financial performance of Saccos in Kenya. Individual internal accounting control systems have a direct effect on the financial performance of Saccos in Kenya, as determined by simple linear regression. Test the null research hypotheses utilizing Beta coefficients and t-statistics. This helped to determine the study model coefficients and R square.

4.9.1 Risk assessments and Financial Performance

The first objective of the study was to investigate the influence of risk assessments on the financial performance of Saccos in Kenya. To fulfill its purpose and hence test the null hypothesis, the study offered inferential statistics, which included linear regression analysis.

Table 4. 23: Regression for Risk assessments and Financial performance Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.764 ^a	.584	.583	.40354

Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		.764 ^a	.584	.583	.40354	
ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	107.660	1	107.660	661.104	.000 ^b
	Residual	76.701	471	.163		
	Total	184.361	472			
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.471	.104		14.104	.000
	Risk assessments	.656	.026	.764	25.712	.000

Sour
ce:
Field

Sour
ce:
Field

Data (2022)

According to Table 4.23 above, where the R square value was 0.584, risk assessments account for 58.4% of the variation in the financial performance of Deposit Taking Saccos in Kenya. The model's significance was confirmed by analysis of variance ($F(1,471) = 661.104$, $p < 0.01$), indicating its viability at the 99% confidence level. The regression equation for risk assessments becomes;

$$Y_{\text{Per}} = 1.471 + 0.656RA$$

From the regression equation it means that when risk assessments increase by 0.584% financial performance would increase by 1% in same direction thus the relationship was

positive and significant. Both regression and correlation result show that risk assessments has a significant positive relationship with financial performance. This postulated that deposit taking Sacco's which has risk identification and analysis policy, evaluates risks before taking actions, takes precautions before opening branches, Performs compliance test before adopting new accounting principles and scrutinized instruction from client thoroughly before execution are likely to experience enhanced financial performance.

These results are consistent with those of a study by Kamau (2019), which intended to determine the impact of internal controls on the financial performance of SMEs in Nairobi County, Kenya. According to the results, there is a positive and statistically significant correlation between risk evaluation and economic output. This is consistent with the findings of Bett and Memba (2017), who discovered that risk assessment significantly affects Menengai Company's financial performance.

Matata (2015), who looked at how internal controls affect water company performance in Kenya, disagrees with the study's findings. According to the results, risk assessment has a small, negative impact on the efficiency of Kenya's water utilities. Additionally, Kemboi (2019) analyzed how Saccos in Nairobi County that are registered with the Sacco Society Regulatory Authority perform when it comes to internal controls. The research found that Saccos registered with the Sacco Society Regulatory Authority in Nairobi County saw a small but positive boost in operational efficiency after implementing risk assessments.

4.9.2 Accounting Information and Communication Control and Financial Performance

The second objective of the study sought to determine the effect of accounting information and communication control on financial performance of Sacco's in Kenya. The study

presented inferential statistics which include linear regression analysis to achieve the objective and therefore, test the null hypothesis that posits H_{02} : Accounting information and communication have no significant influence on financial performance of Sacco's in Kenya.

Table 4. 24: Regression for Accounting information system and Financial performance

Model Summary						
				Std. Error of the		
Model		R	R Square	Adjusted R Square	Estimate	
1		.661 ^a	.437	.436	.46951	
ANOVA ^b						
		Sum of				
Model		Squares	Df	Mean Square	F	Sig.
1	Regression	80.534	1	80.534	365.336	.000 ^b
	Residual	103.827	471	.220		
	Total	184.361	472			
		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.886	.118		15.925	.000
	Accounting information system	.551	.029	.661	19.114	.000

Source: Field Data (2022)

From the table above 4.24 the value of R square is 0.437 shows that accounting information system explains 43.7% of variance in financial performance of Deposit Taking Sacco's in Kenya. From the ANOVA table the significance of the model has a value ($F(1,471) = 365.336$, $p < 0.01$) thus it is significant at 99% confidence level this shows that the model was feasible. From the coefficient table accounting information system was significant at

99% confidence level (p value < 0.01). The regression equation for accounting information system becomes;

$$Y_{\text{Per}} = 1.886 + .551 \text{ AIS}$$

From the regression equation it means that when accounting information system increase by 0.551% financial performance would change by 1% in the same direction. This result is similar to correlation findings where accounting information system was positively correlated to financial performance. In this regards, an accounting information System for collection and follow up for due accounts, reporting system spells out responsibilities of each department, policies and guidelines for effective communication and presence of periodic review of effectiveness of its accounting information system enhance financial performance of deposit taking Sacco's in Kenya.

These findings are corroborated by the work of other researchers. For example, Githui (2019) set out to study how commercial banks in Kenya with different internal control systems fared financially. Although the favorable impact of information and communication on credit risk management was observed in the regression analysis, the link was not statistically significant. Kisanyanya (2018) also showed that institutions' financial accountability and performance improved when there was a free flow of information and communication inside them.

The findings are consistent with those of other researchers who have looked into the impact of internal controls on the financial performance of commercial banks in Kenya, such as Asiligwa and Rennox (2017). Based on the findings, it appears that information and communication have a marginally beneficial impact on the financial results of Kenya's

commercial banks. Serem (2016) investigated how well commercial banks in Kenya were able to meet customer needs in terms of both speed and accuracy by analyzing the effectiveness of their internal management controls. A favorable and negligible impact of accounting information systems on the financial performance of Kenya's commercial banks was found in the research.

4.9.3 Monitoring and Control Activities and Financial Performance

The third objective of the study sought to determine the effect of monitoring and control activities on financial performance of Sacco's in Kenya. The study presented inferential statistics which include linear regression analysis to achieve the objective and therefore, test the null hypothesis that posits H_{03} : Monitoring and Control activities have no significant influence on financial performance of Sacco's in Kenya.

Table 4. 25: Regression for Monitoring and control activities and Financial performance

Model Summary ^b					
Adjusted R					
Model	R	R Square	Square	Std. Error of the Estimate	
1	.656 ^a	.430	.429	.47246	
a. Predictors: (Constant), Monitoring and control activities					
b. Dependent Variable: Financial performance					
ANOVA ^a					
		Sum of			
Model		Squares	Df	Mean Square	Sig.
1	Regression	79.226	1	79.226	.000 ^b
	Residual	105.135	471	.223	
	Total	184.361	472		
a. Dependent Variable: Financial performance					
b. Predictors: (Constant), Monitoring and control activities					
Coefficients					
		Unstandardized		Standardized	
		Coefficients		Coefficients	
Model		B	Std. Error	Beta	Sig.
	(Constant)	1.943	.117		.000
	Monitoring and control activities	.526	.028	.656	.000
a. Dependent Variable: Financial performance					

Source: Field Data (2022)

From the table 4.25 the value of R square was 0.430, this means that monitoring and control activities explains 43.0% of variance in dependent variable financial performance. From the

ANOVA table the F value of the model was $F(1,471)= 354.932$, $p < 0.01$) this shows that it was significant at 99% confidence level hence the model is feasible.

Thus the model is stable and significant at 99 % confidence level. The regression equation for monitoring and control activities becomes;

$$Y_{\text{Per}} = 1.943 + 0.526 \text{ MCA}$$

From the regression equation it means that when monitoring and control activities increase by 0.526% financial performance would change by 1% in the same direction thus foreign exchange has a positive relationship to financial performance for commercial bank in Kenya. The above result concurs with the correlation results of monitoring and control activities and financial performance where a positive relation was shown. It is evident most of Deposit Taking Saccos have segregation of responsibilities on collections, general accountings and general ledger posting of record, strict supervisory role over operations, effective internal and external audit system of controls in the SACCO, employees in the SACCO are responsible for security of all assets assigned to them.

Numerous previous investigations sufficiently support these findings. Andove (2019) aimed to determine the impact of internal control practices on the financial performance of faith-based institutions in Kakamega County, Kenya. The beta value for monitoring control operations derived from the findings of the regression model. These data suggest that changes in financial performance are attributable to monitoring and control actions. The results are reinforced by Kabue and Aduda (2017), who found a substantial correlation between internal control system and financial performance of Technical Training Institutions in Kenya.

Ng'etich (2017), who evaluated the effect of internal controls on the financial performance of enterprises listed on the Nairobi Securities Exchange, discovered contradictory outcomes in his study. The findings revealed that monitoring operations have a favorable and negligible impact on the financial performance of Nairobi Securities Exchange-listed companies. Monitoring and evaluation have a favorable and minor impact on the financial performance of Kenyan commercial banks, according to Serem (2016). Ndembu (2015) also found that monitoring had a negative and negligible impact on the financial performance of Kenyan commercial banks.

4.9.4 Control Environment and Financial Performance

The fourth objective of the study sought to determine the effect of Control environment on financial performance of Sacco's in Kenya. The study presented inferential statistics which include linear regression analysis to achieve the objective and therefore, test the null hypothesis that posits H_{04} : Control environment have no significant influence on financial performance of Sacco's in Kenya.

Table 4. 26: Regression for Control Environment and Financial performance

Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		.731 ^a	.534	.533	.42723	
ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	98.391	1	98.391	539.055	.000 ^b
	Residual	85.970	471	.183		
	Total	184.361	472			
Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.230	.126		9.785	.000
	Control environment	.695	.030	.731	23.218	.000

Source: Field Data (2022)

From the table 4.26 above the value of R square is 0.534 shows that control environment explains 53.4% of variance in financial performance of Deposit Taking Saccos in Kenya. From the ANOVA table significance of the model has a value ($F(1,471) = 539.055$, $p < 0.01$) this shows that it was significant at 99% confidence level hence the model was feasible. From the coefficient table control environment was significant at 99% confidence

level (p value < 0.01). There was a positive relationship between control environment and financial performance. The regression equation for control environment becomes;

$$Y_{\text{Per}} = 1.230 + 0.695\text{CE}$$

From the regression equation it means that when control environment increase by 0.695% financial performance would change by 1% in the same direction. The result concurs with the one for correlation above where control environment had a positive relationship with financial performance thus managers should expect to maximize financial performance when control environment increases. To enhance financial performance of deposit taking Saccos, the study established that reconciliation is done on separate records to properly resolve any differences in the SACCO, there is segregation of responsibilities on collections, general accountings and general ledger posting of record, there is effective internal and external audit system of controls in the SACCO and employees in the SACCO are responsible for security of all assets assigned to them.

These findings corroborate those of Njiru (2016), who investigated the impact of internal controls on the bottom lines of Kenya's public water utilities. The results of the regression model reveal a favorable connection between the quality of the internal controls system and the profitability of agro-processing businesses. The aim of the study by Kinyua, Gakure, Gekara, and Orwa (2018) was to examine the impact of internal control systems on the financial performance of companies listed on the Nairobi Securities Exchange (NSE). Internal control environment was found to have a substantial correlation with financial performance.

Nonetheless, the findings of other investigations have not corroborated those of the current investigation. According to research conducted by Kiyieka and Muturi (2018) in Kisii County, Kenya, deposit-taking saving and credit cooperative societies were found to have higher financial performance when internal controls were in place. Savings and credit cooperatives in Kisii County, Kenya that accept deposits were found to benefit from a control environment, however the effect was small and positive. Asiligwa and Rennox (2017) found that the financial performance of commercial banks in Kenya was negatively impacted by the control environment. According to Serem (2016), commercial banks in Kenya's control environment have a positive and negligible impact on their financial performance.

4.10 Multiple Regression of Internal Accounting Control System and Financial Performance

This study aimed to determine the impact of internal accounting controls on the financial performance of Saccos in Kenya. This was accomplished using conventional multiple regressions. The purpose of the study was to determine the impact of each internal accounting control system construct on financial performance when all four constructs (Risk assessment, Accounting information system, control environment, and monitoring and control activities) were entered into the model as a block. Test the null research hypotheses utilizing Beta coefficients and t-statistics. This helped to determine the study model coefficients and R square. The results are as shown in Table 4.27.

Table 4. 27: Multiple Regression of Internal accounting control system and financial performance of Deposit taking Sacco's in Kenya.

Model Summary ^b						
Adjusted R						
Model	R	R Square	Square	Std. Error of the Estimate		
1	.794 ^a	.631	.628	.38118		
ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	116.362	4	29.090	200.213	.000 ^b
	Residual	67.999	468	.145		
	Total	184.361	472			
Coefficient						
		Unstandardized		Standardized		
		Coefficients		Coefficients		t
Model		B	Std.Error	Beta		Sig.
1	(Constant)	1.013	.116		8.733	.000
	RA	.323	.050	.376	6.398	.000
	AIS	.126	.037	.151	3.409	.001
	MCA	.094	.036	.117	2.621	.009
	CE	.218	.052	.229	4.230	.000

Source: Field Data (2022)

The first regression model then becomes;

$$Y_{\text{Per}} = 1.013 + 0.323\text{RA} + 0.126\text{AIS} + 0.094\text{MCA} + 0.218\text{CE}$$

From the table 4.27 above the value of R square was 0.631 this means that risk assessments, accounting information system, monitoring and control activities, and control environment

explain 63.1% of variance in financial performance of deposit taking Saccos in Kenya while other factors not included in this model explains 36.9%. From the ANOVA table significance of the model had a value ($F(4,468) = 200.213$, $p < 0.01$) this shows that it was significant at 99% confidence level this proves that the model is stable.

The coefficient of risk assessments was 0.323 and the probability was 0.000 thus it's significant at 99% confidence level. This means that when risk assessments increase by 0.323% it makes financial performance to increase by 1% in same direction. Masha's (2018) research found that a high correlation existed between risk analysis and money management, lending credence to these results. According to the data, internal control systems are a powerful indicator of sound financial management practices. Internal control systems were studied by Mwakimasinde, Odhiambo, and Byaruhanga (2014), who discovered a favorable, statistically significant effect of risk assessment on the financial performance of sugarcane outgrower enterprises in Kenya. In addition, Bett and Memba (2017) verified the importance of risk assessment to Menengai Company's bottom line.

These findings, however, have not been corroborated by additional research. Internal control systems were studied by Lagat (2018) and shown to have a positive effect on the financial results of Kenya's state-owned sugar companies. Based on the results, risk assessment has a positive and negligible impact on the bottom lines of Kenya's state-owned sugar companies. Risk assessment has been shown by Ambuso (2021) to have a positive and negligible impact on the bottom lines of private hospitals in Kenya's Western Region. Internal control and commercial bank performance in the United States was studied by Kalmetova and Zhussupova (2021). Deficits in the study's risk management and

information and communication components of the internal control system had a detrimental effect on the bank's performance.

With a probability of 0.001, accounting information systems have a coefficient of 0.126, making them statistically significant at the 99% level. As a result, a rise of 0.126% in the accounting information system results in a rise of 1% in financial performance. Similar findings have been seen in other research. Regression study revealed a favorable correlation between the information and communication system and the financial performance of SACCOs in Kisii, Kenya. Kiyieka and Muturi (2018) evaluated the effect of internal controls on the performance of deposit accepting SACCOs in Kisii, Kenya. In addition, Mwazo, Weda, Omondi, and Njenga (2017) discovered a positive correlation between communication systems and service provision. Githui (2019) found that there was a positive correlation between I&C and credit risk management, albeit the significance of the link was not statistically significant.

This study's findings are at odds with those of other research. For instance, Mogunde (2016) found that accounting information systems have a positive and minor effect on the financial performance of Kenya's cement manufacturing enterprises. According to Yemer (2017), both information and communication failed to be important determinants of hotel revenue. Asegdew (2016) also set out to investigate the impact of private manufacturing companies' internal control systems on their bottom lines. The research showed that a manufacturing company's financial performance was not significantly impacted by some aspects of accounting information systems.

With a probability of 0.009 and a coefficient of 0.094, the monitoring and control operations were found to be statistically significant at the 99% level of certainty. Thus, a rise of 0.094% in monitoring and control activities results in a rise of 1% in financial performance. These results are consistent with those found by Kalemeera (2018), who investigated the connection between internal controls and Uganda Management Institute's financial performance. The findings of the study indicated that the monitoring of internal controls had a highly substantial favorable effect on financial outcomes. Internal control systems and financial performance in Kenya's Technical Training Institutions were the focus of Mugo's (2013) research. The results of the study showed a correlation between the effectiveness of an organization's internal control monitoring and control system and its financial performance.

A closer look at the impact of internal controls on the efficiency of water firms in Kenya was conducted by Matata (2015), who found the opposite to be true. Researchers found that the financial performance of commercial banks in Kenya was positively affected by monitoring and control efforts, however the effect was small. Findings from a study conducted by Kemboi (2019) show that the financial performance of commercial banks in Kenya benefits from Kemboi's team's monitoring efforts. It was found by Kiyieka and Muturi (2018) that the financial performance of deposit-accepting saving and credit cooperative societies in Kisii County, Kenya, was positively impacted by monitoring and control efforts.

The control environment coefficient was 0.218, and the probability was 0.000, so it is significant with a 99% level of confidence. Therefore, a 0.218% improvement in the control environment results in a 1% improvement in financial performance. Internal control

environment is positively related to financial performance of private enterprises in Uganda, according to a regression study conducted by Nsubuga (2019). Based on multiple regression analysis, Rosman, Shafie, Johari, and Omar (2016) conclude that there is a correlation between a company's control environment, control activities, risk assessment, monitoring, and financial performance. According to research by Mahmood, Hamawandy, and Sedeeq (2020), an organization's financial results can improve with the help of an improved control environment, enhanced control activities, and regular internal auditing.

The impact of internal controls on the efficiency of water utilities in Kenya was investigated by Matata (2015), although the study's findings were inconsistent with those of other research. The results showed that the control environment has a negative and negligible impact on the performance of water firms in Kenya. The financial performance of commercial banks in Kenya (Kemboi, 2019) was shown to be positively and insignificantly impacted by the control environment, and the same was found to be true for companies listed on the Nairobi Securities Exchange (Ng'etich, 2017).

4.11 Moderating Influence of SASRA regulatory framework on the Relationship between Internal Accounting Control System and the Financial Performance

The fifth objective of the study was to determine the moderating effect of regulatory framework on the relationship between internal accounting control system and financial performance of Sacco's in Kenya. Hierarchical regression analysis was performed to determine whether SASRA regulations had a moderation role on the relationship between internal accounting control system and financial performance of Deposit Taking Saccos in Kenya. The fifth null hypothesis denoted, **H₀₅**: Regulatory framework has significant

moderating effect on the relationship between internal control system and financial performance of Sacco's in Kenya. The following regression model was estimated:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Z + \beta_6 X_1 Z + \beta_7 X_2 Z + \beta_8 X_3 Z + \beta_9 X_4 Z + \varepsilon$$

Where;

Y = Financial Performance

B₀ = Constant

β₁ to β₉ = Regression Coefficients

X₁ to X₄ = Independent variables

Z = SASRA regulations (the moderating variable)

X_i*Z = the interaction term between the ith independent variable and the moderating variable

ε = the error of term.

To test this hypothesis, the researcher utilized SPSS to analyze the influence of moderation on the connection between the dependent and independent variables. This was accomplished by a four-stage hierarchical regression analysis giving four models. Changes in R², F, and the significance level were recorded at each stage.

In the first stage, a control variable, in this case the respondents' length of service, was introduced into the model. This resulted in model 1.

In the second phase, the dependent variables (risk assessment, control environment, accounting information system, and monitoring and control activities) were incorporated into the model. This resulted in model 2.

In the third stage, the moderator variable in this instance, SASRA regulations, was included to the model to produce the third model.

In the fourth stage, the interaction effect between independent and moderating variables was incorporated into the model. The cross product of SASRA regulations and independent variables. The result was the fourth model.

The predictor variables in this study were first normalized to remove the multi-collinearity problem before the moderation test was conducted. A z-score was calculated to indicate the precise location of each value within the distribution by noting whether the score is above the mean (positive) or below the mean (negative). The numerical value of the z-score specifies the distance from the mean by counting the number of standard deviations between X and μ . The resultant scores give a distribution that has a mean score of zero and a standard deviation of one.

Table 4.28: Hierarchical Regression Model Summary

Model	R	R ²	Std. Error		R ²	F	Change Statistics		Sig. F Change
			Adj. R ²	of the Estimate			df1	df2	
1	.112 ^a	.012	.010	.62172	.012	5.950	1	471	.015
2	.798 ^b	.636	.632	.37905	.624	200.03	4	467	.000
3	.828 ^c	.686	.682	.35261	.050	73.676	1	466	.000
4	.850 ^d	.722	.716	.33325	.036	14.931	4	462	.000

a. Predictors: (Constant), Period Of Service (PS)

b. Predictors: (Constant), PS, Accounting information system (AIS), Control environment (CE), Monitoring and control activities (MCA), Risk assessment (RA)

c. Predictors: (Constant), PS, AIS, CE, MCA, RA, SASRA Regulation Framework (SRF)

d. Predictors: (Constant), PS, AIS, CE, MCA, RA, SRF, Zscore(CE*SASRA), Zscore(AIS*SASRA), Zscore(MCA*SASRA), Zscore(RA*SASRA)

Source: Field Data (2022)

From Table 4.28, In Model 1, the association between tenure and financial performance was found to be positive and significant ($p=0.015$). This model produced an R^2 value of 0.012. This demonstrated that model 1 could account for 1,2% of the variance in the dependent variable (financial performance).

All independent factors were shown to have a positive and statistically significant connection with financial success in Model 2 ($p=0.000$). This model produced an R^2 value of 0.636. This demonstrated that the model's independent variables contributed 62.4% of the variance, increasing the R square to 63.6%, which was also significant at $P=0.000$.

In addition, as mentioned in 4.23 of Model 3, when SASRA regulations were added as a moderator, the results indicated that tenure, independent variables, and the moderating

variable were significantly and jointly related to financial performance ($p < 0.05$). R^2 increased from 0.636 (63.5%) to 0.686 (68.6%), indicating that 0.05 (5.0%) was added to the model.

Finally, model 4 was obtained by including the interaction terms of the independent variables (particular variables) and the moderator (SASRA rules) in the regression model to examine how the SASRA laws moderate the link between the internal accounting control system and financial performance. The results of the model suggested that there may be a considerable moderation effect of SASRA rules on the link between internal accounting control system and financial performance of Deposit Taking Sacco's, as the interaction between these two factors accounted for significantly more variance than did SASRA regulations and internal accounting control system alone ($R^2 = 0.716$, $p = .000$).

The investigation of the influence of prudential regulatory framework on the financial performance of deposit-taking SACCOs in Kenya makes a substantial contribution to the theory of prudential regulatory framework in Kenyan financial management. The contribution enriches the practice of financial management, and exposing the difficulties of adopting a prudential regulatory framework in the financial system is particularly beneficial to the stakeholders.

Minimum liquidity restrictions were found to affect all Deposit Taking SACCOs identically, as evidenced by the relatively similar proportions of deposits to loans. In addition, the analysis discovered that the levels of investment requirements for all Deposit Taking SACCOs were comparable. Indicative of the impact of prudential regulatory framework on loan provisioning requirements was the low levels of non-performing loans among the Deposit Taking SACCOs analyzed. The influence of the prudential regulatory framework on

the financial performance of the industry was therefore visible in the regulation of the capital structure. In addition, the capital requirement ratio calculated by dividing equity by total assets was determined to be extremely high.

Table 4. 29: Regression Coefficient of Moderating influence

Model	Unstandardized		Standardized		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	4.317	.089		48.493	.000
Period of Service	-.062	.025	-.112	-2.439	.015
2 (Constant)	1.162	.130		8.955	.000
Period of Service	-.039	.016	-.070	-2.503	.013
Risk assessment	.324	.050	.377	6.462	.000
AIC	.131	.037	.157	3.560	.000
MCA	.096	.036	.119	2.677	.008
Control environment	.206	.051	.216	3.996	.000
3 (Constant)	.812	.127		6.379	.000
Period Of Service	-.041	.015	-.073	-2.807	.005
Risk assessment	.300	.047	.349	6.406	.000
AIC	.088	.035	.106	2.562	.011
MCA	-.034	.036	-.042	-.930	.353
Control environment	.158	.048	.166	3.271	.001
SASRA Regulation	.318	.037	.345	8.583	.000
4 (Constant)	-.133	.653		-.203	.839
Period of Service	-.032	.014	-.057	-2.289	.023
Risk assessment	2.092	.265	2.435	7.880	.000
AIC	-.792	.198	-.951	-3.998	.000
MCA	-.072	.212	-.090	-.341	.733
Control environment	-.566	.181	-.595	-3.119	.002
SASRA Regulation	.418	.079	.453	5.279	.000
Zscore(RA*SASRA)	-2.056	.301	-3.290	-6.833	.000
Zscore(AIS*SASRA)	1.014	.233	1.623	4.359	.000
Zscore(MCA*SASRA)	.028	.262	.045	.108	.914
Zscore(CE*SASRA)	.797	.214	1.275	3.726	.000

a. Dependent Variable: Financial performance

The study second regression model is as shown below from regression coefficient of Table 4.29.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Z + \beta_6 X_1 Z + \beta_7 X_2 Z + \beta_8 X_3 Z + \beta_9 X_4 Z + \epsilon$$

$$Y = -.133 + 2.092X_1 - 0.792X_2 - .072X_3 - .566X_4 + 0.418Z - 2.056X_1 Z + 1.014X_2 Z + .028X_3 Z + .797X_4 Z$$

Where

Y=Financial Performance of Deposit taking Saccos

X₁=Risk Assessment

X₂= Accounting information system

X₃= Monitoring and Control Activities

X₄= Control Environment

Z= SASRA Regulation Framework

The results in Table 4.29 indicate coefficient result for the moderation effect of SASRA regulatory framework on the relationship between internal accounting control system and financial performance of Sacco's in Kenya. In step 1, after entering period of service, it was found to have negative and significant predicative power ($P < 0.05$). In step 2, after entering the internal accounting control system constructs, all the constructs were found to have positive and significant predicative power ($P < 0.05$). In step 3, when SASRA regulatory framework was entered in the model, it also had a positive and significant effect on financial performance ($\beta = 0.318$, $P = 0.000$). This implies that if SASRA regulatory framework changes by one unit, the financial performance levels significantly changes by 0.318 units in same direction.

In step four, upon the introduction of the interaction term (cross-product between SASRA regulatory framework and Internal Accounting Control system constructs), SASRA regulatory framework is still significant and its predictive power increases ($B=0.418$). Three of the added interaction terms were found to be significant. Risk Assessment interaction SASRA Regulatory framework ($\beta = -2.056$, $t = -6.833$, $p = .000$), Accounting information system interaction SASRA Regulatory framework ($\beta = 1.014$, $t = 4.359$, $p = .000$) and control environment interaction SASRA Regulatory framework ($\beta = .797$, $t = 3.726$, $p = .000$) all have p-values less than 0.05 implying significant influence. The results of model 4 therefore show that SASRA Regulatory framework has a significant moderating effect on the relationship between risk assessment and financial performance, accounting information system and financial performance as well as between control environment and financial performance.

From model 4, various deductions can be made; first, the risk assessment*SASRA regulatory framework coefficient is negative, meaning that the interactive effect is negative, therefore, as SASRA Regulatory framework decreases by one unit, the level of risk assessment effect on financial performance significantly increases by 2.056 ($P=0.000$). However, Accounting Information System *SASRA regulatory framework coefficient is positive, meaning that the interactive effect is positive, therefore, as SASRA Regulatory framework increases by one unit, the level of Accounting information system effect on financial performance significantly increases by 1.014 units, $P=0.000$. Similarly, control environment*SASRA regulatory framework coefficient is positive, meaning that the interactive effect is positive, therefore, as SASRA Regulatory framework increases by one unit, the level of control environment effect on financial performance significantly increases by 0.797 units, $P=0.000$.

A moderator is a variable that specifies conditions under which a given predictor is related to an outcome. The moderator explains when a dependent and independent variables are related. Moderation implied an interaction effect, where introducing a moderating variable changes the direction or magnitude of the relationship between two variables.

HAYES MODEL

Further, Hayes macros process was used to investigate moderation effect on each variable

Risk assessment

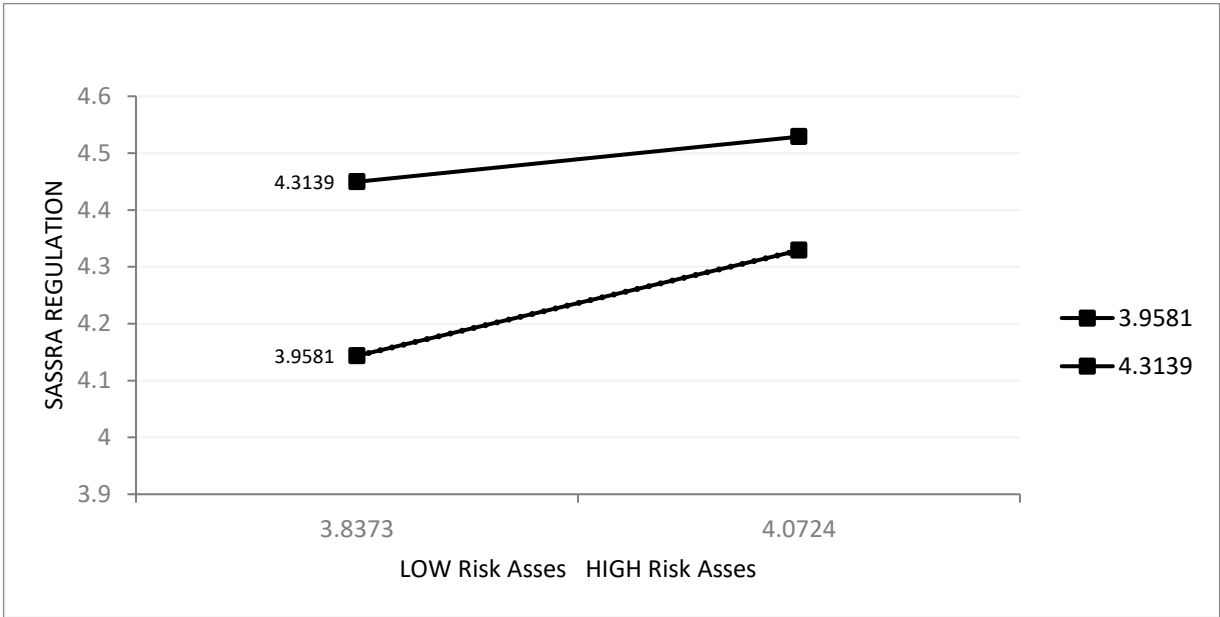


Figure 4. 12: Moderating Effect of SASRA on Risk Assessment

Source: Field Data (2022)

When the SASRA regulation is high the relationship between performance and accounting information system is high and when SASRA regulation is low risk assessment is found to have a positive influence on performance of Saccos. The SASRA regulation was found to

have a moderating influence on the relationship between risk assessment and performance of Saccos in Kenya. Thus moderation is strong at high values of risk assessment.

Source: Field Data (2022)

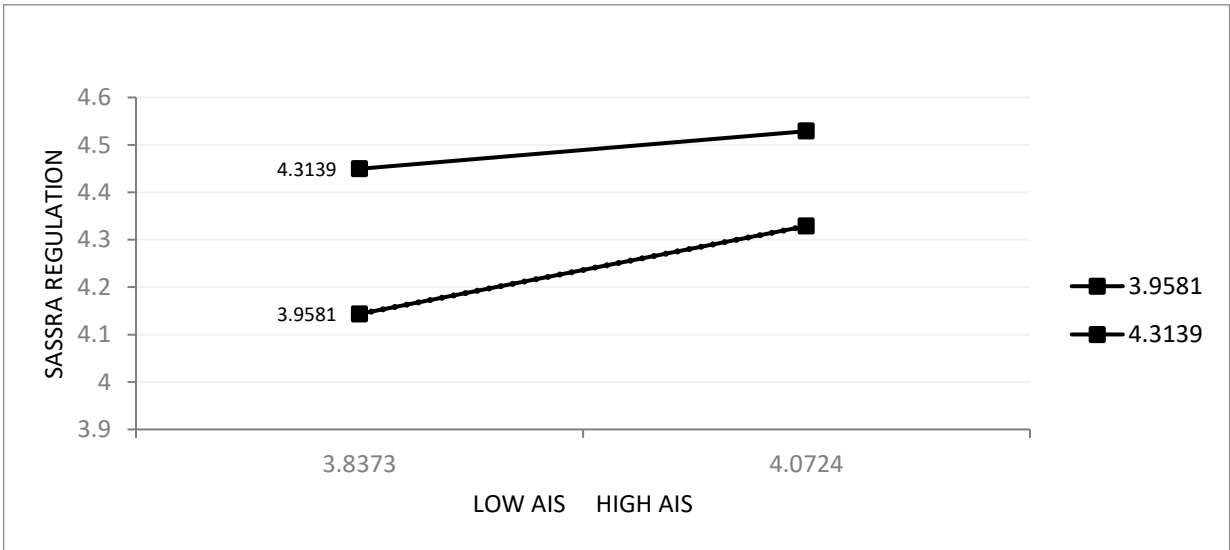


Figure 4. 13: Moderating Effect of SASRA Regulations on Accounting information system (AIS)

Source: Field Data (2022)

Source: Field Data (2022)

When the SASRA regulations is high the relationship between performance and accounting information system is high and when SASRA regulations is low accounting information system is found to have a positive influence on performance. The SASRA regulation was found to have a moderating influence on the relationship between performance and accounting information system. Thus moderation is strong at high values of accounting information system.

Monitoring and control

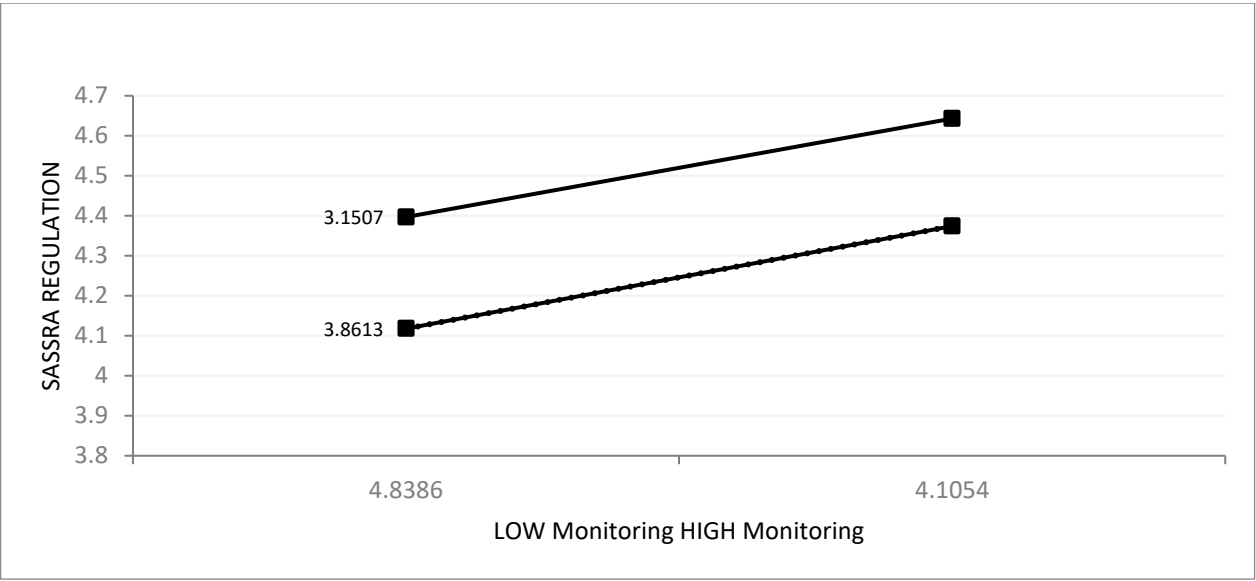


Figure 4. 14: Moderating Effect of SASRA Regulations on Monitoring and Control Activities

Source: Field Data (2022)

When the SASRA regulations is high the relationship between performance and monitoring and control is high and when SASRA regulations is low monitoring and control is found to have a positive influence on performance. The SASRA regulations were found to have a moderating influence on the relationship between performance and monitoring and control. Thus moderation is weak at high values of monitoring and control.

Control Environment

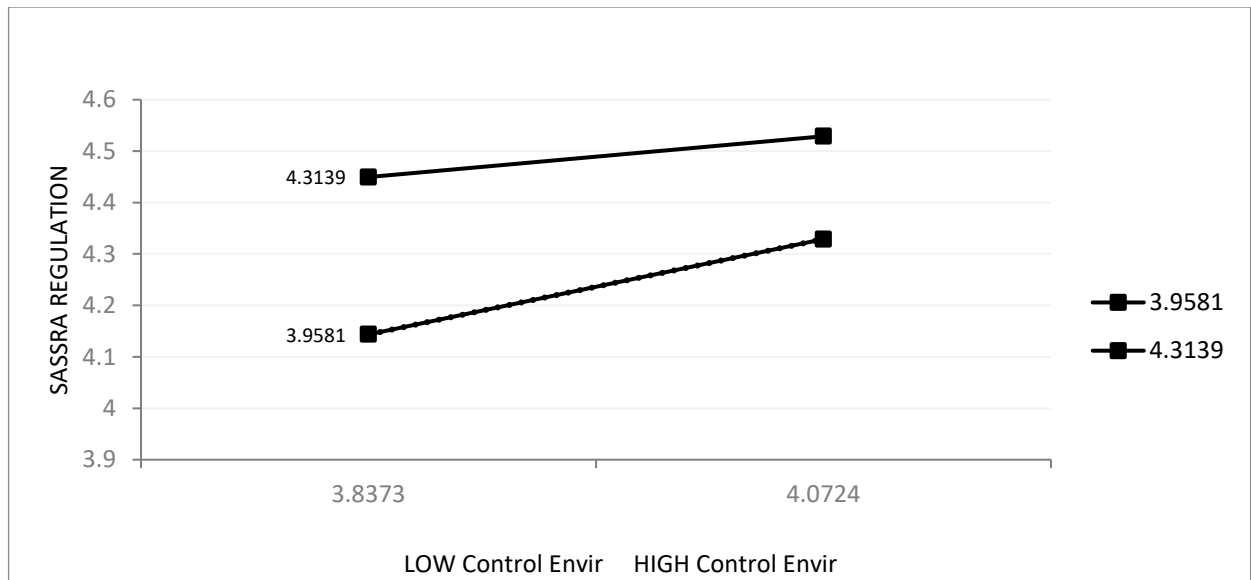


Figure 4. 15: Moderating Effect of SASRA Regulations on Control Environment

Source: Field Data (2022)

There is a strong correlation between performance and control environment when SASRA laws are strict, and a positive correlation between control environment and performance when SASRA restrictions are lax. It was discovered that the SASRA regulations moderate the relationship between performance and control environment. Thus, moderation is robust at high control environment levels.

The results are consistent with earlier research. By implementing this model, Nyakarimi, Kariuki, and Wangâ (2019) attempted to determine the moderating influence of governmental rules on the relationship between internal accounting control system and fraud prevention in the baking sector. The results suggested that regulatory frameworks have a substantial moderating effect on the control environment and risk assessment. Chacha, Nyangau, and Omare (2021) demonstrated that government regulation played a beneficial and significant influence in moderating the impact of the internal control system on the

performance of dry port firms. In addition, Muturi (2019) found that government restrictions significantly influenced the association between control environment and performance of Kenyan real estate enterprises. Mugo, Muathe, and Waithaka (2017) discovered that government policies positively impact the link between Accounting information system and performance of Deposit-Taking SACCOs, meaning that favorable government policies should be created for Deposit-Taking SACCOs.

However, the results contrasted previous research, such as According to research by Chuol, Wanyama, and Chebet (2021), SMEs in Juba, South Sudan, lacked a moderating influence from government regulations on the connection between accounting information systems and financial performance, or between strategic formulation methods and financial performance. The results are consistent with earlier research. For instance, Nyakarimi, Kariuki, and Wangâ (2019) looked at the impact of government rules on the relationship between internal accounting control systems and fraud prevention in the baking sector, finding that such regulations had a negligible impact on control activities, communication, and monitoring of activities.

4.12 Stepwise Regression

Stepwise regression is a method for fitting regression models in which the selection of predictive variables is determined automatically. The fundamental objective of stepwise regression is to identify, through a series of tests (e.g. F-tests), the independent variables (Risk assessment, Control environment, Accounting information System, Monitoring and control Activities) that significantly influence the dependent variable (Financial Performance). In this instance, the research seeks to determine which internal accounting

control system variable has the biggest contribution (R square to the model). In each phase, a variable is considered for inclusion in or exclusion from the set of explanatory variables based on a predetermined criterion. The results are as shown in Table 4.30.

Table 4. 30: Stepwise Regression

Variable	R²	F Statistics	df1	df2	Sig. F
Risk assessment	.584	661.104	1	471	.000
Control environment	.025	29.787	1	470	.000
Accounting information System	.017	21.296	1	469	.000
Monitoring and control Activities	.005	6.869	1	468	.009
Overall	0.631	200.213	4	468	0.000

Source: Field Data (2022)

Based on the above values in Table 4.30, it shows that Risk assessment contributes 58.4% in explaining variance in financial performance of Deposit Taking Savings and Credit Co-Operative Societies in Kenya, while the contribution of control environment is 2.5%, the contribution of accounting information system to the model is 1.7% and monitoring and control activities is 0.5%. This shows that risk assessment contributed the highest followed control environment, accounting information system and monitoring and control activities had the least contribution to the overall R square of the study.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter serves as a summary of the information presented in the preceding chapters. This section includes features the study's conclusions, as well as its suggestions for and recommendations of future research.

5.1 Summary of findings

The primary purpose of this research was to determine whether or not Kenyan Sacco Deposit-Taking Institutions' (Saccos) Internal Accounting Control System had any impact on their financial results. The particular goals were to investigate the impact of risk assessments on the financial performance of deposit-taking Saccos in Kenya, to ascertain the impact of accounting information and communication controls on the financial performance of deposit-taking Saccos in Kenya, to ascertain the impact of monitoring and control activities on the financial performance of deposit-taking Saccos in Kenya, and to ascertain the impact of the control environment on the financial performance of Deposit Taki. Deposit-taking saccos in Kenya were surveyed using a standardized questionnaire, and both descriptive and inferential analyses were performed on the resulting data. All hypotheses about the independent and interactive effects were tested at the $p < 0.050$ (95 percent confidence) level. In the next sections, the findings are summarized in the same format.

5.1.1 Influence of risk assessment on performance

The first objective of the study was to examine the effect of risk assessments on financial performance of Deposit Taking Sacco's in Kenya. Results from descriptive statistics

indicated that majority of the respondents agreed that SACCO has risk identification and analysis policy (Mean=4.0), SACCO evaluates risks before taking actions (Mean=4.1), SACCO takes precautions before opening branches (Mean=4.3), Instructions from clients thoroughly scrutinized before execution (Mean=4.2), Performs compliance test before adopting new accounting principles (Mean=4.0) and SACCO management has risk mitigation mechanism to avoid losses (Mean=4.1)

The inferential results revealed that there is direct relationship between risk assessment and financial performance of Deposit Taking Sacco's in Kenya ($r=0.764$, $P=0.000$). This implies that increase in risk assessment would results to increase in the financial performance of Deposit Taking Sacco's in Kenya. The coefficient of determination through the R square indicated that up to 58.4% of change in financial performance of Deposit Taking Sacco's in Kenya is significantly accounted for by risk assessment ($R^2=0.584$, $P=0.000$). This implies that risk assessment is a significant predicator of financial performance of Sacco's in Kenya. Multiple linear regression indicated that when accounting information system, control environment and monitoring and control activities are controlled, a unit increase of risk assessment will result to significant increase in performance by 0.323 units ($\beta_1=0.323$, $P=0.000$). Therefore, therefore the study failed to accept the first null hypothesis that posits: **H₀₁**: Risk assessments have no significant influence on financial performance of Deposit Taking Sacco's in Kenya.

5.1.2 Influence of accounting information system on performance

The second objective of the study was to determine the effect of accounting information and communication control on financial performance of Deposit Taking Sacco's in Kenya. From

the descriptive analysis, the respondents confirmed that there is an accounting information System for collection and follow up for due accounts, SACCO Reporting system spells out responsibilities of each department, SACCO has policies and guidelines for effective communication, management. Practice demands that all relevant information is conveyed in accurate, clear and reliable manner; SACCO ensures that all relevant information is conveyed in a timely manner and management Provides feedback to employees on operation of accounting information system. The SACCO also conducted periodic review of effectiveness of its accounting information system.

The inferential results revealed that there is direct relationship between accounting information system and financial performance of Sacco's in Kenya ($R=0.661$, $P=0.000$) as indicated by Pearson Correlation analysis. This implies that increase in accounting information system would make financial performance of Deposit Taking Sacco's in Kenya to increase significantly. The coefficient of determination through the R square value revealed that up to 43.7% of variation in financial performance of Deposit Taking Sacco's in Kenya is significantly accounted for by risk assessment ($R^2=0.437$, $P=0.000$). This postulates that accounting information system is useful predicator of financial performance of Deposit Taking Sacco's in Kenya. From Multiple regression results, when control environment, risk assessment and monitoring and control activities are controlled, a unit increase of accounting information system will result to significant increase in performance by 0.126 units ($\beta_2=0.126$, $P=0.000$). Therefore, there was adequate evident to reject the second null hypothesis that posits: **H₀₂**: Accounting information and communication have no significant influence on financial performance of Deposit Taking Sacco's in Kenya.

5.1.3 Influence of monitoring and control activities on the Financial performance

The third objective of the study was to determine the effect of monitoring and control activities on financial performance of Deposit Taking Sacco's in Kenya. Results from descriptive results indicated that majority of the respondents was in agreement that there is segregation of responsibilities on collections, general accountings and general ledger posting of record, management has a strict supervisory role over operations; there is effective internal and external audit system of controls in the SACCO, SACCO has password access control, employees in the SACCO are responsible for security of all assets assigned to them, SACCO management assigns responsibilities for timely review of audit reports and resolution of any non-compliance and reconciliation is done on separate records to properly resolve any differences in the SACCO.

.The inferential results revealed that there is direct significant relationship between monitoring and control activities and financial performance of Deposit Taking Sacco's in Kenya ($R=0.656$, $P=0.000$) as provided for by the Pearson Correlation analysis. This postulated that increase in monitoring and control activities would results to significant increase in the financial performance of Deposit Taking Sacco's in Kenya. The coefficient of determination through the R square indicated that up to 43.0% of change in financial performance of Sacco's in Kenya is significantly accounted for by monitoring and control activities ($R^2=0.430$, $P=0.000$). This implies that monitoring and control activities are a significant predictor of financial performance of Sacco's in Kenya. Multiple regression coefficient results indicated that when risk assessment, control environment and accounting information system are controlled, a unit increase of monitoring and control activities will result to significant increase in performance by 0.094 units ($\beta_1=0.094$, $P=0.009$). Therefore,

there was sufficient evidence to reject the third null hypothesis that posits: **H₀₃**: Monitoring and Control activities have no significant influence on financial performance of Sacco's in Kenya.

5.1.4 Influence of Control Environment on the Financial Performance

The fourth objective of the study was to determine the effect of control environment on financial performance of Deposit Taking Sacco's in Kenya. Results from descriptive results indicated that majority of the respondents confirmed that there is adequate communication and enforcement of integrity and ethical values in our SACCO, there is enough participation in SACCO activities by those in governance, SACCO organization structure has well established lines of reporting and decision making hierarchies, there are formalized policies and procedures for all major operations of the SACCO, their SACCO accounting records are limited to employees with designated responsibility for the records, SACCO conducts periodic stock taking in the presence of internal auditor, SACCO system access is only allowed to the authorized personnel and employees in their SACCO are responsible for security of SACCO asset assigned to them.

The inferential results revealed that control environment is positively and significantly related to financial performance of Sacco's in Kenya ($R=0.731$, $P=0.000$) as indicated Pearson Correlation analysis results. This postulated that increase in control environment would result to significant increase in the financial performance of Sacco's in Kenya. The coefficient of determination through the R square indicated that up to 53.4% of change in financial performance of Sacco's in Kenya is significantly accounted for by control environment ($R^2=0.534$, $P=0.000$). This implies that control environment is a significant

predicator of financial performance of Deposit Taking Sacco's in Kenya. Multiple regression coefficient results indicated that when risk assessment, accounting information system, monitoring and control activities are controlled, a unit increase of control environment will result to significant increase in performance by 0.214 units ($\beta_1=0.214$, $P=0.000$). Therefore, there was sufficient evidence to reject the third null hypothesis that posits: **H₀₄**: Control environment have no significant influence on financial performance of Deposit Taking Sacco's in Kenya.

5.1.5 Moderating effect of SASRA Regulations on the relationship between Internal Accounting control system and Financial performance of Deposit Taking Saccos.

The fifth objective of the study was to determine the moderating effect of regulatory framework on the relationship between internal accounting control system and financial performance of Deposit Taking Sacco's in Kenya. Respondents agreed that minimum capital (core capital-10m ksh. not less than 8%total assets, Institution capital Not<8% of Total Assets), SACCO maintains 15% of its savings, deposits and short term liabilities in liquid assets, SACCO has a written credit policy that is consistent with provisions of the SASRA Act, external borrowing in SACCO does not exceed 25% of its total assets, SACCO adheres to minimum capital requirements in regards to core capital and Institutional capital, SACCO reviews its credit portfolio at least once every quarter year, SACCO does not invest in non-earning assets in excess of 10% of the total assets, SACCO adheres to financial performance reporting that is Daily, Monthly, Quarterly and Annually and Sacco is Licensed to protect the interest of members.

Pearson correlation analysis revealed that there is direct relationship between SASRA regulatory framework and financial performance of Sacco's in Kenya ($R=0.717$, $P=0.000$). This implies that increase in SASRA regulatory framework would results to increase in the financial performance of Deposit Taking Sacco's in Kenya. Hierarchical regression analysis revealed that SASRA regulatory framework significantly accounts for 8.6% change in financial performance bringing the overall percentage change which is accounted for by SASRA regulatory framework and internal accounting control system in the model to be 68.6% ($R^2=0.686$, $P=0.000$). On the other hand, the interaction between internal accounting control system and SASRA regulatory framework constructs results to an R square of 0.722 implying the interaction accounts for additional 3.6% change in the financial performance of Sacco's in Kenya.

Further, risk assessment interaction SASRA regulatory framework coefficient has negative coefficient, meaning that the interactive effect is negative, therefore, as SASRA Regulatory framework decreases by one unit, the level of risk assessment effect on financial performance significantly increases by 2.056 ($P=0.000$). However, Accounting Information System interaction SASRA regulatory framework coefficient is positive, meaning that the interactive effect is positive, therefore, as SASRA Regulatory framework increases by one unit, the level of Accounting information system effect on financial performance significantly increases by 1.014 units, $P=0.000$. Similarly, control environment interaction SASRA regulatory framework coefficient is positive, meaning that the interactive effect is positive, therefore, as SASRA Regulatory framework increases by one unit, the level of control environment effect on financial performance significantly increases by 0.797 units, $P=0.000$. Therefore, there was sufficient evident to reject the fifth null hypothesis that

posits: **H05:** Regulatory framework has significant moderating effect on the relationship between internal control system and financial performance of Deposit Taking Sacco's in Kenya.

5.2 Conclusion

The study concluded that risk assessments have significant influence on financial performance of Deposit Taking Sacco's in Kenya. Risk assessment practices adopted by Sacco's in Kenya affected the level of the Sacco's financial performance. Sacco's with effective measured of risk assessment in their operations are in better financial performance chances as these are able to detect risks in their operations that might contribute to their losses and therefore will put in place measures to deal with these risks. With minimal risks in operation, a Sacco is guaranteed with increased financial performance. Presence of risk identification and analysis policy, evaluation of risks before taking actions and taking precautions before opening branches has enhanced financial performance of Deposit Taking Sacco's in Kenya. However, not all SACCO have a functional and robust operational risk management department and area which need to be considered so as enhance their financial performance.

The study concluded that accounting information and communication has no significant influence on financial performance of Deposit Taking Sacco's in Kenya. The level of information accessibility to the employees as well as the effectiveness of the Sacco's' communication system contributes greatly to the ability of the banks to grow financially. The study gives evidence that the Sacco's in Kenya' confidential information is a key asset to the Sacco's as access to unauthorized personnel may ruin the Sacco and contribute to the

threats of losses. To enhance financial performance, Sacco's ensure information is disclosed to both internal and external interested parties and conducts periodic review of effectiveness of their accounting information system. The study also established not all Sacco's have an accounting information System for collection and follow up for due accounts and SACCO Reporting system does not adequately spells out responsibilities of each department

The study concluded that monitoring and control activities have significant influence on financial performance of Deposit Taking Sacco's in Kenya. With appropriate monitoring and control activities against frauds and other threats to the Sacco's' operations, Sacco's are in better financial performance position. The presence of monitoring system for the Sacco's' operation is critical for the Sacco's' financial performance. Internal controls need to be adequately monitored in order to assess the quality and the effectiveness of the system's performance over time. The study established that monitoring and control practices such reconciliation being done on separate records to properly resolve any differences in the SACCO, assigns responsibilities for timely review of audit reports and resolution of any non-compliance and effective internal and external audit system of controls in the SACCO positively influence financial performance. However, not all Sacco's have segregation of responsibilities on collections, general accountings and general ledger posting of record and management does not have strict supervisory role over operations.

The study concluded that control environment within the Sacco's in Kenya is positively and significantly related to the financial performance of the Sacco's. The ability of the Sacco's to maintain a conducive environment for the internal control systems to be applied determines the ability of the Sacco's to meet the customer needs and execute duties efficiently thus leading to improved financial performance of the organization. The financial

performance of Saccos is largely determined adequacy of communication and enforcement of integrity and ethical values in our SACCO, formalized policies and procedures for all major operations and system access is only allowed to the authorized personnel. However, not employees in the SACCOs are responsible for security of SACCO asset assigned to them.

Lastly, the study concluded that regulatory framework has significant moderating effect on the relationship between internal control system and financial performance of Deposit Taking Sacco's in Kenya. This was evident by significant increase in the coefficient of determination from 63.1% to 71.5% significantly. The results revealed as SASRA Regulatory framework decreases by one unit, the level of risk assessment effect on financial performance significantly increases. Similarly, as SASRA Regulatory framework increases by one unit, the level of control environment effect on financial performance significantly increases. However, as SASRA Regulatory framework decreases by one unit, the level of risk assessment effect on financial performance significantly increases. Most of the Sacco's were found to maintain minimum capital, maintain 15% of its savings, deposits and short term liabilities in liquid assets, have a written credit policy, external borrowing does not exceed 25% of its total assets. However, some Sacco did not review their credit portfolio at least once every quarter year and invested in non-earning assets in excess of 10% of the total assets.

5.3 Implication of the Study and Contribution to New Knowledge

This study contributes to knowledge in the areas of methodology, theory, and practice. The approach employed in this study consisted of giving questionnaires to Saccos in Kenya to

maximize the generalizability of the findings and so extract more relevant and comprehensive conclusions. As the absence of a strong internal control system contributes to Sacco's poor financial performance, this research is of scholarly interest as it identifies additional unexplored aspects that contribute to better internal control systems. Likewise, assessing a potential relationship between internal control systems and financial performance requires a large sample size. This research gap is addressed in this thesis by conducting individual-level surveys in addition to quantitative analysis.

5.3.1 Contribution to New Knowledge

The research of the relationship between the internal accounting control system, the SASRA regulatory framework, and financial performance is crucial because it not only bridges the two types of literature, but also offers practitioners and policymakers with solid evidence for enhancing both activities. In order to fill this information gap, this study examined the connections between Saccos' internal accounting control systems, the SASRA regulatory framework, and their financial performance. The majority of the research on the internal accounting controls systems and regulatory framework has thus far been on the other sub-sector of the Kenyan financial sector that is governed by the Central Bank, the Saccos. Instead than examining IACs and financial success, which have been studied extensively elsewhere, this study tries to shift attention to the regulatory framework.

This study's findings raise a variety of difficulties with consequences for accounting practices. Particularly useful in filling in those previously recognized knowledge gaps, this study's findings have pushed the boundaries of our understanding. This research has done more than only increase our understanding of internal accounting control processes; it has

also empirically tested this understanding. Findings show that strong SASRA regulatory framework on liquidity, credit, and capital need is necessary for better financial performance, whereas internal accounting control practices alone do not ensure appropriate financial performance. Given the existence of internal accounting control processes, managers need to comprehend the key drivers of financial performance and those that worked against it.

5.3.2 Implications of the Study to Practice

The conclusions and findings of this study indicate that the management of Saccos in Kenya should incorporate an internal accounting control system into their daily operations, since it is a crucial aspect in Saccos' financial performance. In addition, the SASRA regulatory framework and internal control system must be prioritized, as they cannot be effective without a solid regulatory framework and a robust internal control environment.

The top management should ensure that the business has the appropriate structures to support a solid SASRA regulatory framework and an effective internal accounting control system. This would contribute to the development of a culture that assures management does not circumvent internal control measures, resulting in robust financial performance. All management should ensure that proper internal control procedures exist to protect the company's assets against misuse and fraud. The internal audit function should conduct routine assessments of the complete system of internal controls in order to provide the board and management with assurance regarding the sufficiency and efficacy of the mitigation controls in place. Having identified the moderating role of government policy, those

building internal control systems should also take note. Managers should create and implement internal control systems that are adaptable to regulatory framework changes.

5.3.3 Theoretical Implications

This research has made significant contributions to the internal control mechanisms, regulatory framework, and financial performance of the SASRA. This study verifies prior research regarding the favorable relationship between internal control systems and financial performance. Additionally, the study demonstrated the importance of the SASRA regulatory framework to the financial performance of the Sacco by enhancing the influence of the internal accounting control system. This study demonstrates conclusively that the SASRA regulatory framework has a moderating influence on internal control systems and financial performance. This research also contributed to a deeper understanding of the predictors of internal control systems. This data confirms certain predictors of the existing model of internal control system, on the one hand. On the other side, the favorable effect of internal control systems on financial performance expands our understanding of the internal control systems' antecedents. In addition, the results of the quantitative analysis suggest that the regulatory framework of SASRA should be added to the list of major predictors of financial performance.

5.4 Recommendations

After reaching conclusions consistent with the aims of the study, the researcher has provided applicable recommendations. The recommendations are based on the inferences and findings made from the regression analysis.

This study advises that Saccos embrace risk assessment procedures since it is essential for boosting financial performance without exposing them to environmental risks in their operating environments. Key financial risks in Saccos must be identified, and risk-prone regions and activities must be anticipated so that preventative actions can be implemented well in advance. Frequent risk assessment is required so that Saccos can develop new risk mitigation strategies. This would guarantee that hazards are anticipated and mitigation strategies are developed in advance. Frequent evaluation of internal controls will help ensure the adoption of new technological advances for enhanced risk management. The report also proposed that risk assessment procedures be proactive, which would limit the possibility and rationale for fraud, hence enhancing financial performance.

Information and the flow of information are essential to the efficient operation of an internal control system. Continuous improvements should be made to staff communication and information flow across organizational hierarchies. The report advised that anti-fraud ICT policies be continuously revised to reflect the altering nature of hazards and susceptibility to risk. In addition, the study advised that SACCO perform periodic reviews of the effectiveness of its accounting information system. This would guarantee that management obtains timely, accurate, and relevant reports for decision-making purposes.

This report advises that Saccos continuously check their financial performance by adopting audit reviews and performance reviews to ensure that Sacco goals are met. This study also suggests that Saccos build procedures for monitoring events and transactions to ensure financial performance inside the organization. During monitoring, SACCOs must conduct periodic asset counts. As they understand the Sacco's internal operations better than outsiders, there should be a greater emphasis on following the recommendations of the internal audit report when it comes to Sacco control actions.

Concerning the Saccos' control environment, the managements must allocate authority and duty to qualified persons, as this component was surrounded by more uncertainty than other aspects of the control environment. Continuously engaging in control environment activities will go a long way toward ensuring that Saccos are financially successful, as recommended by the research. The reporting and decision-making tiers of a SACCO's organizational structure should be well-established.

The report advised that Saccos conform to SASRA requirements regarding minimum capital requirement, liquidity, external borrowing, and investment in non-core assets. Government of Kenya, through the SASRA, the regulator, should increase implementation and conduct frequent onsite assessments on SACCOs in order to enjoy the full benefits of regulation, as the SASRA regulatory framework is a major moderator. In the midst of SASRA laws, policymakers should also develop trainings and policies on how control environments should be managed. Regulations should continue to be strengthened in SACCOs because they contribute significantly to the financial health of these entities.

The government should also provide adequate support to the regulatory authority so that their efforts are not halted by a shortage of funds.

5.5 Areas of Further Studies

Despite its contributions, this study raises a few points that future researchers should examine. In the first place, this study emphasizes the significance of Saccos having efficient and effective internal accounting control systems. The four features of the internal accounting control system accounted up to 63.1% of the variance, indicating that additional factors may have influenced the financial performance of Saccos despite the internal accounting control system, which future research should investigate.

Methodologically, the study focused on Sacco's which are regulated by SASRA. This limits the applicability and generalizability of the study recommendation to the other financial institutions which are not regulated by SASRA. This includes commercial banks and microfinance banks which are regulated by Central Bank of Kenya.

The study findings established that SASRA regulation has significant moderating effect on financial performance. However, SASRA has significant negative moderating effect on the relationship between risk assessment and financial performance while insignificant positive moderating effect on the relationship between monitoring and control activities and financial performance in Sacco's. Similar studies should be conducted in other financial institutions so as to establish whether similar results can be replicated. Similarly, further study can focus on individual SASRA regulations such as liquidity requirement, credit requirement or capital requirements.

Researchers could equally consider using other statistical tools to analyse data such as structural equation modelling, Tobin Q or factor analysis. A purely qualitative approach would also provide a rich insight in the relationship internal accounting control practices, SASRA regulatory framework structures and financial performance of Sacco.

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APPENDICES

APPENDIX i: QUESTIONNAIRE

SECTION I. BACKGROUND INFORMATION

1. What is your gender?

Male ☐ Female ☐

2. What is your age? Below 25years ☐ 25-34 years ☐ 35-44 years
45-54 years ☐ above 55years ☐

3 a) what is your highest level of education?

Secondary education ☐ Certificate ☐

Diploma ☐ Bachelor's degree ☐ Master's Degree ☐

b) If other, please explain

.....

3. How long have you worked for this Sacco?

Below 1 year ☐ 1-5 years ☐ 6-10 years ☐

11-15 years ☐ Over 15years ☐

Please indicate on scale of 1 to 5 whether you Strongly Agree (SA), Agree (A), Not sure (NS), disagree (D) or strongly disagree (SD) to the following statements relating to financial performance.

SECTION II

PART A: RISK ASSESSMENT

	Risk Assessment	SA	A	S	D	SD
1	The SACCO has used product development strategies to improve existing products					
2	The SACCO is creating product/service awareness					
3	The SACCO has introduced a new product/ service in the last one year.					
4	The SACCO is reducing interest rates on loans to attract more client					
3	Accounting information systems are flexible in data processing.					
4	Data processed through accounting systems are consistent with the accounting policies.					
5	Accounting systems provides accounting information that is comparable.					
6	Accurate accounting information help the Sacco make financial decision.					
7	Increasing the number of branches in different locations					
8	Do you think finances have any effect on the growth of Sacco's?					
9	Aggressive marketing to attract new members.					
10	The risk management committee assesses and identifies risks and thus takes appropriate action and decision to mitigate them					
11	The management carries out a comprehensive and systematic identification of its risks					
12	SACCOs risk management policy is made known to all staff					

PART B: ACCOUNTING INFORMATION SYSTEM AND COMMUNICATION

In your opinion, do you think the information systems of Sacco has ability of to provide necessary reports to the right on time to enable them to carry out their responsibilities efficiently and effectively?.....

Explain.....

In your opinion, do you think the use of Information systems at the Sacco enhances performance?.....

To what extent has the Sacco implemented the use of ICT in its operations?

Great Extent [] Moderate extent [] Lesser Extent [] No extent []

	Information System	G	M	L	N
1	Using of accounting information contribute significantly in increasing planning operation effectiveness at the Sacco				
2	The management depends on accounting information to estimate the numbers of planning budgets for the Sacco				
3	The accounting information system at the Sacco provides predictable financial information which assists the management in finalizing the bank future plans				
4	Our management practice demand that all relevant information is conveyed in accurate, clear and reliable manner				
5	We strive to ensure that all relevant information is conveyed in a timely manner				
6	Whistle blowing has been an effective way to obtain critical and sensitive information necessary for curbing cases of fraudulent activities.				
7	The accounting information has a great significance by the Sacco management perspective in improving level of strategic plans.				
8	Sharing of information across departments is not encouraged in our organization				
9	Communications feedback is poor in our organization				
10	The quality of information generated by an institution's				

	information systems is critical to the institution's operations and success				
11	External and internal information obtained from the information systems provide management with necessary reports on the Sacco performance relative to ensuring reliable financial reporting and safeguarding of assets				
12	Accounting data have an importance at year-end Closing.				

PART C: MONITORING AND CONTROL ACTIVITIES

Do you consider that the control activities of your institution have a significant influence on financial performance of your institution? [Y] [N]

Do you consider control activities to be effective in your institution? [Y] [N]

In your opinion, how has control activities affected financial performance of your institution? _____

To what extent do you agree with the statements below relating to effect of control activities? (Tick once against each factor as appropriate)

	Monitoring and Control Activities	SA	A	NS	D	SD
1	There is segregation of responsibilities on collections, general accounting, and general ledger posting of record					
2	Management has a strict supervisory role over operations					
3	Our Sacco has in place adequate procedures to carry out internal checks, such as, authorizations and verifications for every transaction					
4	There is effective internal audit of controls in the Sacco					
5	There is an effective external audit system in the Sacco.					
6	We have installed appropriate ICT controls, such as, password access and relevant software to restrict information access to authorized persons only					
7	Departments have budget reviews where actual expenditure is compared with budgeted expenditure and explanations for the variances given					
8	Control activities has affected institution's operating costs for the last five years					
9	They are periodic monitoring activities, such as self-assessments by various departments and internal audit appraisals					

10	Our institution carries out periodic counting of assets					
11	In our institution, employees are responsible for security of all assets assigned to them					
12	Management has assigned responsibilities for the timely review of the audit reports and resolution of any non-compliance items noted in those audit reports					
13	Reconciliation is done monthly to reconcile separate records and properly resolve any differences					
14	There is establishment of planning and reporting systems to identify variances from planned budget and operating goals, and communicate any variances to the appropriate level of management within the Sacco for investigation and timely corrective action(s).					

PART D: CONTROL ENVIRONMENT

Please rank the following on a scale ranging from strongly agree to strongly disagree.
1=Strongly Disagree, (SD) 2=Disagree, (D) 3=Not Sure, (NS), 4=Agree, (A), 5=Strongly Agree (SA)

	Control Environment	SA	A	NS	D	SD
1	There is adequate communication and enforcement of integrity and ethical values in our Sacco					
2	Our Sacco management is committed to ensuring employee competence in financial matters					
3	There is enough participation in our Sacco's activities by those charged with governance					
4	Our management's philosophy and operating style foster's the Sacco's advancement while upholding rules and regulations					
5	Our Sacco's' organization structure has well established lines of reporting and decision making hierarchies					
6	The management of our Sacco properly assigns authority and responsibility to qualified individuals					
7	We have well designed human resource policies that are easy to implement and practice in our Sacco					
8	Management acts with a great degree of integrity in execution of their role					
9	Sacco has an objective, independent and active audit committee					
10	Specific lines of authority and responsibility have been established to ensure compliance with the policies and procedures					
11	Management act with great degree of integrity in execution of their roles.					

12	There are formalized policies and procedures for all major operations of the Sacco.					
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SECTION III: SASRA REGULATIONS

		SA	A	S	D	SD
1	Maintaining minimum capital (Core capital - Ksh 10m and not less than 8% of total assets, Institutional capital of not less than 8% of total assets)					
2	Maintaining 15% of savings deposits and short term liabilities in liquid assets					
3	Having a written credit policy that is consistent with provisions of the Act					
4	External borrowing not exceeding 25% of its total assets					
5	Sacco adheres to minimum capital requirements in regard to core capital and institutional capital					
6	Reviewing of credit portfolio at least once every quarter year.					
7	Not investing in non-earning assets in excess of 10% of the total assets					
8	Sacco adheres to financial performance reporting that is daily, monthly, quarterly and Annually.					
9	Licensing of deposit-taking Sacco's protects the interests of members					

APPENDIX II: SECONDARY DATA COLLECTION TOOL

	2016	2017	2018	2019	2020
Total Assets					
Net Income					
Dividend Per Share					
Interest on members Deposits					
Portfolio at Risk					
Core Capital					
Institutional Capital					
Liquidity Risk					
Members Deposits					

**APPENDIX III: LICENSED SACCO SOCIETIES FOR PERIOD ENDING 31ST
DECEMBER, 2021**

LICENSED SACCO SOCIETIES FOR PERIOD ENDING 31ST DECEMBER, 2021		
NO.	NAME OF SOCIETY	POSTAL ADDRESS
1.	2NK Sacco Society Ltd	P.O Box 12196 – 10109, Nyeri
2.	Acumen Sacco Society Ltd	P.O. Box 1325 – 00200, Nairobi
3.	Afya Sacco Society Ltd	P.O. Box 11607 – 00400, Nairobi.
4.	Agro-Chem Sacco Society Ltd	P.O Box 94 – 40107, Muhoroni.
5.	Ainabkoi Sacco Society Ltd	P.O. Box 120 – 30101, Ainabkoi
6.	Airports Sacco Society Ltd	P.O. Box 19001 – 00501, Nairobi
7.	Amica Sacco Society Ltd	P.O. Box 816 – 10200, Murang’a.
8.	Ammar Sacco Society Ltd	P.O Box 6957 – 01000, Thika.
9.	Ardhi Sacco Society Ltd	P.O. Box 28782 – 00200, Nairobi.
10.	Asili Sacco Society Ltd	P.O. Box 49064 – 00100, Nairobi.
11.	Azima Sacco Society Ltd	P.O. Box 1124 – 01000, Thika.
12.	Bandari Sacco Society Ltd	P.O. Box 95011 – 80104, Mombasa.
13.	Baraka Sacco Society Ltd	P.O. Box 1548 – 10101, Karatina.
14.	Baraton University Sacco Society Ltd	P.O Box 2500 – 30100, Eldoret.
15.	Biashara Sacco Society Ltd	P.O. Box 1895 – 10100, Nyeri.

LICENSED SACCO SOCIETIES FOR PERIOD ENDING 31 ST DECEMBER, 2021		
NO.	NAME OF SOCIETY	POSTAL ADDRESS
16.	Biashara Tosha Sacco Society Ltd	P.O Box 189 – 60101, Manyatta.
17.	Bi-High Sacco Society Ltd	P.O. Box 90 – 60500, Marsabit.
18.	Bingwa Sacco Society Ltd	P.O. Box 434 – 10300, Kerugoya.
19.	Boresha Sacco Society Ltd	P.O. Box 80 – 20103, Eldama Ravine.
20.	Capital Sacco Society Ltd	P.O Box 1479 – 60200, Meru.
21.	Centenary Sacco Society Ltd	P.O. Box 1207 – 60200, Meru.
22.	Chai Sacco Society Ltd	P.O. Box 278 – 00200, Nairobi.
23.	Chuna Sacco Society Ltd	P.O. Box 30197 – 00100, Nairobi.
24.	Comoco Sacco Society Ltd	P.O. Box 3334 – 00200, Nairobi
25.	Cosmopolitan Sacco Society Ltd	P.O. Box 1931 – 20100, Nakuru.
26.	County Sacco Society Ltd	P.O. Box 21 – 60103, Runyenjes.
27.	Daima Sacco Society Ltd	P.O. Box 2032 – 60100, Embu.
28.	Dhabiti Sacco Society Ltd	P.O. Box 353 – 60600, Maua.
29.	Dimkes Sacco Society Ltd	P.O. Box 886 – 00900, Kiambu.
30.	Dumisha Sacco Society Ltd	P.O Box 84 – 20600, Mararal.
31.	Eco-Pillar Sacco Society Ltd	P.O. Box 48 – 30600, Kapenguria
32.	Egerton Sacco Society Ltd	P.O. Box 178 – 20115, Egerton.
33.	Elimu Sacco Society Ltd	P.O Box 10073 – 00100, Nairobi.
34.	Enea Sacco Society Ltd	P.O. Box 1836 – 10101, Karatina.
35.	Faridi Sacco Society Ltd	P.O. Box 448 – 50400, Busia.
36.	Fariji Sacco Society Ltd	P.O. Box 589 – 00216, Githunguri.
37.	Fortitude Sacco Society Ltd	P.O. Box 237 – 40305, Mbita.
38.	Fortune Sacco Society Ltd	P.O. Box 559 – 10300, Kerugoya.
39.	Fundilima Sacco Society Ltd	P.O. Box 62000 – 00200, Nairobi.
40.	GDC Sacco Society Ltd	P.O.Box896 – 00216, Githunguri.
41.	Golden Pillar Sacco Society Ltd	P.O. Box 3192 – 60200, Meru.
42.	Good Faith Sacco Society Ltd	P.O. Box 224 – 00222, Uplands

43.	Goodhope Sacco Society Ltd	P.O. Box 158 – 20500, Narok.
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LICENSED SACCO SOCIETIES FOR PERIOD ENDING 31ST DECEMBER, 2021		
NO.	NAME OF SOCIETY	POSTAL ADDRESS
44.	Goodway Sacco Society Ltd	P.O Box 626 – 10300, Kerugoya.
45.	Gusii Mwalimu Sacco Society Ltd	P.O. Box 1335 – 40200, Kisii.
46.	Harambee Sacco Society Ltd	P.O. Box 47815 – 00100, Nairobi.
47.	Hazina Sacco Society Ltd	P.O. Box 59877 – 00200, Nairobi.
48.	Ilkisonko Sacco Society Ltd	P.O Box 91 – 00209, Loitokitok.
49.	Imarika Sacco Society Ltd	P.O. Box 712 – 80108, Kilifi.
50.	Imarisha Sacco Society Ltd	P.O. Box 682 – 20200, Kericho.
51.	Invest and Grow (IG) Sacco Society Ltd	P.O. Box 1150 – 50100, Kakamega.
52.	Jacaranda Sacco Society Ltd	P.O. Box 1767 – 00232, Ruiru
53.	Jamii Sacco Society Ltd	P.O. Box 57929 – 00200, Nairobi.
54.	Jitegemee Sacco Society Ltd	P.O. Box 86937 – 80100, Mombasa.
55.	Joinas Sacco Society Ltd	P.O. Box 669 – 00219, Karuri.
56.	Jumuika Sacco Society Ltd	P.O. Box 14 – 40112, Awasi
57.	Kencream Sacco Society Ltd	P.O. Box 300131 – 00200, Nairobi
58.	Kenpipe Sacco Society Ltd	P.O. Box 314 – 00507, Nairobi.
59.	Kenversity Sacco Society Ltd	P.O. Box 10263 – 00100, Nairobi.
60.	Kenya Achievas Sacco Society Ltd	P.O. Box 3080 – 40200, Kisii.
61.	Kenya Bankers Sacco Society Ltd	P.O. Box 73236 – 00200, Nairobi.
62.	Kenya Highlands Sacco Society Ltd	P.O. Box 2085 – 002000, Kericho.
63.	Kenya Midland Sacco Society Ltd	P.O Box 287 – 20400, Bomet.
64.	Kenya Police Sacco Society Ltd	P.O. Box 51042 – 00200, Nairobi.
65.	Kimbilio Daima Sacco Society Ltd	P.O. Box 81 – 20225, Kimulot.
66.	Kimisitu Sacco Society Ltd	P.O. Box 10454 – 00200, Nairobi
67.	Kingdom Sacco Society Ltd	P.O. Box 8017 – 00300, Nairobi.
68.	Kipsigis Edis Sacco Society Ltd	P.O Box 228 – 20400, Bomet.
69.	Kite Sacco Society Ltd	P.O. Box 2073 – 40100, Kisumu.
70.	Kitui Teachers Sacco Society Ltd	P.O. Box 254 – 90200, Kitui.
71.	Kolenge Tea Sacco Society Ltd	P.O Box 291 – 30301, Nandi Hills.

LICENSED SACCO SOCIETIES FOR PERIOD ENDING 31ST DECEMBER, 2021		
NO.	NAME OF SOCIETY	POSTAL ADDRESS
72.	Koru Sacco Society Ltd	P.O. Box Private Bag-40100, Koru
73.	K-Pillar Sacco Society Ltd	P.O. Box 83 – 20403, Mogogosiek.
74.	K-Unity Sacco Society Ltd	P.O. Box 268 – 00900, Kiambu.
75.	Kwetu Sacco Society Ltd	P.O Box 818 – 90100, Machakos.
76.	Lainisha Sacco Society Ltd	P.O. Box 272 – 10303, Wang'uru.
77.	Lamu Teachers Sacco Society Ltd	P.O. Box 110 – 80500, Lamu
78.	Lengo Sacco Society Ltd	P.O. Box 1005 – 80200, Malindi.
79.	Mafanikio Sacco Society Ltd	P.O Box 86515 – 80100, Mombasa.
80.	Magadi Sacco Society Ltd	P.O. Box 13 – 00205, Magadi.
81.	Magereza Sacco Society Ltd	P.O. Box 53131 – 00200, Nairobi.
82.	Maisha Bora Sacco Society Ltd	P.O. Box 30062 – 00100, Nairobi.
83.	Mentor Sacco Society Ltd	P.O. Box 789 – 10200, Murang'a.
84.	Metropolitan National Sacco Society Ltd	P.O. Box 871 – 00900, Kiambu.
85.	MMH Sacco Society Ltd	P.O. Box 469 – 60600, Maua.
86.	Mombasa Port Sacco Society Ltd	P.O. Box 95372 – 80104, Mombasa.
87.	Mudete Factory Tea Growers Sacco Society Ltd	P.O. Box 221 – 41053, Khayega.
88.	Muki Sacco Society Ltd	P.O Box 398 – 20318, North Kinangop
89.	Mwalimu National Sacco Society Ltd	P.O. Box 62641 – 00200, Nairobi.
90.	Mwietheri Sacco Society Ltd	P.O. Box 2445 – 60100, Embu.
91.	Mwito Sacco Society Ltd	P.O. Box 56763 – 00200, Nairobi.
92.	Nacico Sacco Society Ltd	P.O. Box 34525 – 00100, Nairobi.
93.	Nafaka Sacco Society Ltd	P.O. Box 30586 – 00100, Nairobi.
94.	Nandi Farmers Sacco	P.O Box 333 – 30301, Nandi Hills
95.	Nanyuki Equator Sacco Society Ltd	P.O Box 1098 – 10400, Nanyuki
96.	Nation Sacco Society Ltd	P.O. Box 22022 – 00400, Nairobi.
97.	Nawiri Sacco Society Ltd	P.O Box 400 – 60100, Embu.
98.	Ndege Chai Sacco Society Ltd	P.O. Box 857 – 20200, Kericho.
99.	Ndosha Sacco Society Ltd	P.O. Box 532 – 60401, Chogoria– Maara.

LICENSED SACCO SOCIETIES FOR PERIOD ENDING 31 ST DECEMBER, 2021		
NO.	NAME OF SOCIETY	POSTAL ADDRESS
100.	New Forties Sacco Society Ltd	P.O. Box 1939 – 10100, Nyeri.
101.	Nexus Sacco Society Ltd	P.O Box 251 – 60202, Nkubu.
102.	Ng’arisha Sacco Society Ltd	P.O. Box 1199 – 50200, Bungoma.
103.	Noble Sacco Society Ltd	P.O. Box 3466 – 30100, Eldoret.
104.	NRS Sacco Society Ltd	P. O Box 575 – 00902, Kikuyu.
105.	NSSF Sacco Society Ltd	P.O. Box 43338 – 00100, Nairobi.
106.	Nufaika Sacco Society Ltd	P.O Box 735 – 10300, Kerugoya.
107.	Nyala Vision Sacco Society Ltd	P.O Box 27 – 20306, Ndaragwa.
108.	Nyambene Arimi Sacco Society Ltd	P.O. Box 493 – 60600, Maua.
109.	Nyamira Tea Farmers Sacco Society Ltd	P.O. Box 633 – 40500, Nyamira
110.	Nyati Sacco Society Ltd	P.O. Box 7601 – 00200, Nairobi
111.	Ollin Sacco Society Ltd	P.O Box 83 – 10300, Kerugoya.
112.	Orient Sacco Society Ltd	P.O. Box 1842 – 01000, Thika.
113.	Patnas Sacco Society Ltd	P.O Box 601 – 20210, Litein.
114.	Prime Time Sacco	P.O. Box 512 – 30700, Iten
115.	PUAN Sacco Society Ltd	P.O Box 404 – 20500, Narok.
116.	Qwetu Sacco Society Ltd	P.O Box 1186 – 80304, Wundanyi
117.	Rachuonyo Teachers Sacco Society Ltd	P.O. Box 147 – 40332, Kosele
118.	Safaricom Sacco Society Ltd	P.O. Box 66827 – 00800, Nairobi.
119.	Sheria Sacco Society Ltd	P.O. Box 34390 – 00100, Nairobi.
120.	Shirika Deposit Taking Sacco Society Ltd	P.O Box 43429 – 00100, Nairobi.
121.	Shoppers Sacco Society Ltd	P.O. Box 16 – 00507, Nairobi
122.	Simba Chai Sacco Society Ltd	P.O. Box 977 – 20200, Kericho.
123.	Siraji Sacco Society Ltd	P.O. Box Private Bag, Timau.
124.	Skyline Sacco Society Ltd	P.O. Box 660 – 20103, Eldama Ravine.
125.	Smart Champions Sacco Society Ltd	P.O Box 64 – 60205, Githingo
126.	Smart-Life Sacco Society Ltd	P.O Box 118 – 30705, Kapsowar.
127.	Solution Sacco Society Ltd	P.O. Box 1694 – 60200, Meru.

LICENSED SACCO SOCIETIES FOR PERIOD ENDING 31 ST DECEMBER, 2021		
NO.	NAME OF SOCIETY	POSTAL ADDRESS
128.	Sotico Sacco Society Ltd	P.O. Box 959 – 20406, Sotik.
129.	Southern Star Sacco Society Ltd	P.O Box 514 – 60400, Chuka
130.	Stake Kenya Sacco Society Ltd	P.O. Box 208 – 40413, Kehancha
131.	Stawisha Sacco Society Ltd	P.O Box 27 – 50203, Kapsokwony.
132.	Stima Sacco Society Ltd	P.O. Box 75629 – 00100, Nairobi.
133.	Suluhu Sacco Society Ltd	P.O Box 489 – 90400, Mwingi.
134.	Supa Sacco Society Ltd	P.O. Box 271 – 20600, Maralal.
135.	Tabasamu Sacco Society Ltd	P.O. Box 123 – 80403, Kwale.
136.	Tabasuri Sacco Society Ltd	P.O. Box 80862 – 80100, Mombasa.
137.	TAI Sacco Society Ltd	P.O. Box 718 – 00216, Githunguri.
138.	Taifa Sacco Society Ltd	P.O. Box 1649 – 10100, Nyeri.
139.	Taqwa Sacco Society Ltd	P.O. Box 10180 – 00100, Nairobi
140.	Taraji Sacco Society Ltd	P.O. Box 605 – 40600, Siaya.
141.	Telepost Sacco Society Ltd	P.O. Box 49557 - 00100, Nairobi
142.	Tembo Sacco Society Ltd	P.O. Box 91 – 00618, Ruaraka Nairobi.
143.	Tenhos Sacco Society Ltd	P.O. Box 391 – 20400, Bomet.
144.	Thamani Sacco Society Ltd	P.O. Box 467 – 60400, Chuka.
145.	The Apple Sacco Society Ltd	P.O Box 153 – 50305, Sirwa.
146.	Times-U Sacco Society Ltd	P.O. Box 310 – 60202, Nkubu.
147.	Tower Sacco Society Ltd	P.O. Box 259 – 20303, Ol'kalou.
148.	Trans- Elite County Sacco Society Ltd	P.O Box 547 – 30300, Kapsabet.
149.	Trans Nation Sacco Society Ltd	P.O. Box 15 – 60400, Chuka.
150.	Trans-Counties Sacco Society Ltd	P.O. Box 2965 – 30200, Kitale.
151.	Trans-National Times Sacco Society Ltd	P.O. Box 2274 – 30200, Kitale
152.	Uchongaji Sacco Society Ltd	P.O. Box 92503 – 80102, Mombasa.
153.	Ufanisi Sacco Society Ltd	P.O Box 2973 – 00200, Nairobi.
154.	Ukristo Na Ufanisi Wa Anglicana Sacco Society Ltd	P.O Box 872 – 00605, Nairobi.
155.	Ukulima Saco Society Ltd	P.O. Box 44071 – 00100, Nairobi.

LICENSED SACCO SOCIETIES FOR PERIOD ENDING 31ST DECEMBER, 2021		
NO.	NAME OF SOCIETY	POSTAL ADDRESS
156.	Unaitas Sacco Society Ltd	P.O. Box 38791 – 00100, Nairobi.
157.	Uni-County Sacco Society Ltd	P.O Box 10132 – 20100, Nakuru
158.	Unison Sacco Society Ltd	P.O Box 414 – 10400, Nanyuki.
159.	United Nations Sacco Society Ltd	P.O. Box 2210 - 00621, Nairobi.
160.	Universal Traders Sacco Society Ltd	P.O. Box 2119 – 90100, Machakos.
161.	Ushuru Sacco Society Ltd	P.O. Box 52072 – 00200, Nairobi.
162.	Vihiga County Farmers Sacco Society Ltd	P.O Box 309 – 50317, Chavakali.
163.	Viktas Sacco Society Ltd	P.O Box 2183 – 20300, Nyahururu.
164.	Vision Africa Sacco Society Ltd	P.O Box 18263 – 20100, Nakuru.
165.	Vision Point Sacco Society Ltd	P.O. Box 42 – 40502, Nyansiongo.
166.	Wakenya Pamoja Sacco Society Ltd	P.O. Box 829 – 40200, Kisii.
167.	Wakulima Commercial Sacco Society Ltd	P.O. Box 232 – 10103, Mukurweni.
168.	Wana-anga Sacco Society Ltd	P.O. Box 34680 – 00501, Nairobi.
169.	Wananchi Sacco Society Ltd	P.O. Box 910 – 10106, Othaya.
170.	Wanandegge Sacco Society Ltd	P.O. Box 19074 – 00501, Nairobi.
171.	Washa Sacco Society Ltd	P.O. Box 83256 – 80100, Mombasa.
172.	Waumini Sacco Society Ltd	P.O. Box 66121 – 00800, Nairobi.
173.	Wevarsity Sacco Society Ltd	P.O Box 873 – 50100, Kakamega
174.	Winas Sacco Society Ltd	P.O. Box 696 – 60100, Embu.
175.	Yetu Sacco Society Ltd	P.O. Box 511 – 60202, Nkubu.

Dated:21stJanuary,2022

APPENDIX IV: VALIDITY TEST

RISK ASSESSMENT

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.812
Approx. Chi-Square		1572.198
Bartlett's Test of Sphericity	Df	28
	Sig.	.000

Communalities

	Initial	Extraction
SACCO has risk identification and analysis policy	1.000	.511
SACCO evaluates risks before taking actions	1.000	.493
SACCO takes precautions before opening branches	1.000	.522
Instructions from clients thoroughly scrutinized before execution	1.000	.659
Performs compliance test before adopting new accounting principles	1.000	.632
SACCO management has risk mitigation mechanism to avoid losses	1.000	.696
SACCO has an operational risk management department	1.000	.785
Frequent escalation and reporting of risks in SACCOs departments	1.000	.763

Extraction Method: Principal Component Analysis.

SASRA REGULATION

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.829
	Approx. Chi-Square	1954.133
Bartlett's Test of Sphericity	Df	36
	Sig.	.000

Communalities

	Initial	Extraction
Minimum capital(core capital-10m ksh. not less than 8%total assets, Institution capital Not<8% of Total Assets)	1.000	.560
SACCO maintains 15% of its savings, deposits and short term liabilities in liquid assets	1.000	.486
SACCO has a written credit policy that is consistent with provisions of the SASRA Act	1.000	.634
External borrowing in our SACCO does not exceed 25% of its total assets	1.000	.813
Our SACCO adheres to minimum capital requirements in regards to core capital and Institutional capital	1.000	.617
Our SACCO reviews its credit portfolio at least once every quarter year	1.000	.582
Our SACCO does not invest in non-earning assets in excess of 10% of the total assets	1.000	.600
Our SACCO adheres to financial performance reporting that is Daily, Monthly, Quarterly and Annually.	1.000	.649
Our Sacco is Licensed to protect the interest of members	1.000	.618

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component	
	1	2
Minimum capital(core capital-10m ksh. not less than 8%total assets, Institution capital Not<8% of Total Assets)	.494	.563
SACCO maintains 15% of its savings, deposits and short term liabilities in liquid assets	.539	.443
SACCO has a written credit policy that is consistent with provisions of the SASRA Act	.762	.230
External borrowing in our SACCO does not exceed 25% of its total assets	-.060	.900
Our SACCO adheres to minimum capital requirements in regards to core capital and Institutional capital	.700	.357
Our SACCO reviews its credit portfolio at least once every quarter year	.762	.044
Our SACCO does not invest in non-earning assets in excess of 10% of the total assets	.774	.002
Our SACCO adheres to financial performance reporting that is Daily, Monthly, Quarterly and Annually.	.625	.509

Our Sacco is Licensed to protect the interest of members	.644	.451
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Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

CONTROL ENVIRONMENT

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.872
	Approx. Chi-Square	2231.722
Bartlett's Test of Sphericity	Df	28
	Sig.	.000

Communalities		
	Initial	Extraction
There is adequate communication and enforcement of integrity and ethical values in our SACCO	1.000	.608
There is enough participation in SACCO activities by those in governance	1.000	.444
SACCO organization structure has well established lines of reporting and decision making hierarchies	1.000	.567

There are formalized policies and procedures for all major operations of the SACCO	1.000	.690
Our SACCO accounting records are limited to employees with designated responsibility for the records	1.000	.689
Our SACCO conducts periodic stock taking in the presence of internal auditor	1.000	.451
Our SACCO system access is only allowed to the authorized personnel	1.000	.708
Employees in our SACCO are responsible for security of SACCO asset assigned to them	1.000	.679

Extraction Method: Principal Component Analysis.

MONITORING AND CONTROL

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.890
	Approx. Chi-Square	2131.153
Bartlett's Test of Sphericity	Df	28
	Sig.	.000

Communalities		
	Initial	Extraction
There is segregation of responsibilities on collections, general accountings and general ledger posting of record	1.000	.586
management has a strict supervisory role over operations	1.000	.666
There is effective internal and external audit system of controls in the SACCO	1.000	.641

Our SACCO has password access control	1.000	.559
our SACCO carries out periodic counting of assets	1.000	.561
Employees in the SACCO are responsible for security of all assets assigned to them	1.000	.615
SACCO mgt. assigns responsibilities for timely review of audit reports and resolution of any non-compliance	1.000	.709
Reconciliation is done on separate records to properly resolve any differences in the SACCO	1.000	.508

Extraction Method: Principal Component Analysis.

ACCOUNTING INFORMATION SYSTEM

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.881
	Approx. Chi-Square	2334.591
Bartlett's Test of Sphericity	Df	28
	Sig.	.000

Communalities		
	Initial	Extraction
An Accounting Information System for collection and follow up for due accounts	1.000	.675
SACCO Reporting system spells out responsibilities of each department	1.000	.596
SACCO has policies and guidelines for effective communication	1.000	.742
Mgt. practice demands that all relevant information is conveyed in accurate, clear and reliable manner	1.000	.771

SACCO ensures that all relevant information is conveyed in a timely manner	1.000	.777
Management Provides feedback to employees on operation of accounting information system	1.000	.636
Information can be disclosed to both internal and external interested parties	1.000	.962
SACCO conducts periodic review of effectiveness of its accounting information system	1.000	.595

Extraction Method: Principal Component Analysis.

APPENDIX V: RESEARCH LICENSE FROM NACOSTI

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 194977	Date of Issue: 04-May-2022
RESEARCH LICENSE	
	
This is to Certify that Mr. WAMUKOTA MACKLINE MULONGO of Masinde Muliro University of Science and Technology, has been licensed to conduct research in Baringo, Bomet, Bungoma, Busia, Elgeyo-Marakwet, Embu, Garissa, Hamarbay, Isiolo, Kakamega, Kericho, Kiambu, Kilifi, Kirinyaga, Kisii, Kisumu, Kitui, Kwale, Laikipia, Lamu, Machakos, Malindi, Mandera, Marsabit, Meru, Migori, Mombasa, Murang'a, Nairobi, Nakuru, Nandi, Narok, Nyamira, Nyandarua, Nyeri, Samburu, Siaya, Taita-Taveta, Tanariver, Tharaka-Nithi, Transnasia, Turkana, Uasin-Gishu, Vihiga, Wajir, Westpokot on the topic: INTERNAL ACCOUNTING CONTROL SYSTEMS, REGULATORY FRAMEWORK AND FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS IN KENYA for the period ending : 04-May-2023.	
License No: NACOSTI/P/22/17181	
194977 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code 
NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.	

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
2. The License any rights thereunder are non transferable
3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies
5. The License does not give authority to transfer research materials
6. NACOSTI may monitor and evaluate the licensed research project
7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one year of completion of the research
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation
off Waiyaki Way, Upper Kabete,
P. O. Box 30623, 00100 Nairobi, KENYA
Land line: 020 4807000, 020 2241349; 020 3310571, 020 8001077
Mobile: 0713 788 787 / 0715 404 245
E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke
Website: www.nacosti.go.ke

**APPENDIX VI: APPROVAL FROM DIRECTORATE OF POST GRADUATE
STUDIES**



MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

Tel: 056-30870
Fax: 056-30153
E-mail: directordps@mmust.ac.ke
Website: www.mmust.ac.ke

P.O Box 190
Kakamega – 50100
Kenya

Directorate of Postgraduate Studies

Ref: MMU/COR: 509099

18th May 2022

Wamukota Mackline
PBA/H/01-54135/2019,
P.O. Box 190-50100,
KAKAMEGA.

Dear, Mr. Wamutoka,

RE: APPROVAL OF PROPOSAL

I am pleased to inform you that the Directorate of Postgraduate Studies has considered and approved your Ph.D. proposal entitled '*Internal Accounting control systems and Financial Performance of Deposit Taking SACCOs in Kenya*' and appointed the following as supervisors:

- | | |
|------------------------|---------------|
| 1. Prof Benedict Alala | - SOBE, MMUST |
| 2. Dr. Maniagi Musiega | - SOBE, MMUST |

You are required to submit through your supervisor(s) progress reports every three months to the Director Postgraduate Studies. Such reports should be copied to the following: Chairman, School of Business and Economics Graduate Studies Committee and Chairman, Accounting and Finance Department. Kindly adhere to research ethics consideration in conducting research.

It is the policy and regulations of the University that you observe a deadline of three years from the date of registration to complete your PhD thesis. Do not hesitate to consult this office in case of any problem encountered in the course of your work.

We wish you the best in your research and hope the study will make original contribution to knowledge.

Yours Sincerely,




Prof. Stephen O. Odebero, PhD, FIEEP
DIRECTOR, DIRECTORATE OF POSTGRADUATE STUDIES

APPENDIX VII: LETTER OF INTRODUCTION

3 ✓

THE CEO

NG'ARISHA SACCO

P.O BOX 1199

Dear Sir/Madam



Permission granted

RE: PERMISSION TO COLLECT DATA

Good morning Sir/Madam,

I'm Mackline Wamukota a PHD student at Masinde Muliro University of Science and Technology. I'm seeking authority to collect data from your institution pertaining "Internal Accounting Control Systems, Regulatory Framework and Financial Performance of deposit taking Sacco's in Kenya".

I will be glad if granted permission. Attached is authority letter from the University and NACOSTI.

Regards


Mackline Wamukota